

# development report 2014



Development Report 2014 (Poročilo o razvoju 2014)  
Ljubljana, July 2014

Published by: IMAD, Ljubljana, Gregorčičeva 27  
Responsible Person: Boštjan VASLE, MSc, Director  
Editor: Rotija Kmet Zupančič, MSc  
Assistant Editor: Matevž Hribernik

**Authors of the Development Report 2014:** *Lidija Apohal Vučkovič* (Summary, Labour market and a welfare state, Social protection systems, Living conditions, social exclusion and social risks); *Marijana Bednaš, MSc* (Macroeconomic stability); *Jure Brložnik* (Macroeconomic stability, Real GDP growth); *Gonzalo Capriolo, MSc* (General government balance, General government debt, Yields of 10-year government bonds, Quality of public finance); *Tanja Čelebič, MSc* (Education and training, Research, development, innovation and use of ICT, Social protection systems, Quality of life, Culture, Share of the population with tertiary education, Expenditure on education, Adult participation in education, Capacities of the education system); *Janez Dodič* (Inflation); *Lejla Fajjić* (Macroeconomic stability, Efficiency of the state, Quality of public finance, General government expenditure by function, Economic structure of taxes and contributions, Taxes and social security contributions); *Barbara Ferk, MSc* (Social protection systems, Living conditions, social exclusion and social risks, Sustained population growth, Pension expenditure, Age dependency ratio, Life expectancy and healthy life years, Fertility rate, Migration coefficient); *Marko Glažar, MSc* (Synthetic estimate of development); *Marjan Hafner, MSc* (Financial markets and corporate sector indebtedness, Development of the financial system, Loan-to deposit ratio, Non-performing claims); *Matevž Hribernik* (Indicators of Slovenia's development, Competitiveness of the corporate sector, Institutional competitiveness, Efficiency of the judiciary, Spatial management); *Katarina Ivas, MSc* (Summary, Integration of measures to achieve sustainable development, Integrating environmental criteria with sectoral policies, Greenhouse gas emissions, Environmental taxes); *Slavica Jurančič* (Competitiveness of the corporate sector, Market share, Unit labour costs); *Alenka Kajzer, PhD* (Education and training, Labour market, Temporary employment, Part-time employment); *Rotija Kmet Zupančič, MSc* (Introductory remarks, Main findings, Summary, Development by the priorities of Slovenia's Development Strategy, Economic growth and the competitiveness of the economy, Competitiveness of the corporate sector, Use of Internet and e-services); *Mojca Koprivnikar Šušteršič* (Competitiveness of the corporate sector, Knowledge-intensive services, Spatial management); *Mateja Kovač, MSc* (Integrating environmental criteria with sectoral policies, Spatial management, Agricultural intensity, Tree-felling intensity); *Valerija Korošec, PhD* (Living conditions, social exclusion and social risks, Risk of poverty, Material deprivation, Life satisfaction); *Janez Kušar* (Financial markets and corporate sector indebtedness); *Arjana Masten, PhD* (Competitiveness of the corporate sector); *Jože Markič, PhD* (Macroeconomic stability, Balance of payments, Gross external debt); *Helena Mervic* (Social protection systems, Living conditions, social exclusion and social risks, Culture, Social protection expenditure); *Ana Murn, PhD* (Quality of public finance, State aid, Subsidies); *Tina Nenadič, MSc* (Competitiveness of the corporate sector); *Janja Pečar* (More balanced regional development, Spatial management, Regional variation in GDP, Regional variation in the registered unemployment rate); *Mitja Perko, MSc* (Labour market, Employment rate, Unemployment rate, Long-term unemployment rate); *Jure Povšnar* (Competitiveness of the corporate sector, Network industries, Energy intensity, Renewable energy sources, Share of road transport in total goods transport); *Matija Rojec, PhD* (Competitiveness of the corporate sector, Institutional competitiveness, Foreign direct investment); *Urška Sodja* (Living conditions, social exclusion and social risks); *Metka Stare, PhD* (Competitiveness of the corporate sector, Research, development, innovation and use of ICT); *Dragica Šuc, MSc* (Quality of public finance, Integrating environmental criteria in sectoral policies, Regional development); *Branka Tavčar* (Gross domestic product per capita in PPS); *Ana Tršelič Selan, MSc* (Macroeconomic stability, Living conditions, social exclusion and social risks, Regional development, Minimum wage); *Miha Trošt* (Integrating environmental criteria in sectoral policies); *Ana Vidrih, MSc* (Research, development, innovation and use of ICT, Integrating environmental criteria in sectoral policies, Entrepreneurial activity, Gross domestic expenditure on research and development, Intellectual property); *Ivanka Zakotnik* (Economic growth and the competitiveness of the economy, Competitiveness of the corporate sector, Integrating environmental criteria in sectoral policies, Labour productivity, Structure of merchandise exports according to factor intensity, Emission intensive industries); *Eva Zver, MSc* (Social protection systems, Living conditions, social exclusion and social risks, Health expenditure, Expenditure on long-term care, Health care resources).

**Editorial board:** Lidija Apohal Vučkovič; Marijana Bednaš, MSc; Jure Brložnik; Katarina Ivas, MSc; Alenka Kajzer, PhD; Janez Kušar; Ana Murn, PhD; Metka Stare, PhD; Boštjan Vasle, MSc

**Translated by:** Translation and Interpretation Division of the Secretariat-General of the Government of the RS; Nina Barlič, Marija Kavčič, Sebastijan Razboršek Maček, Boris Panič  
**Language Editing:** Amidas d.o.o.

**Figures:** Marjeta Žigman  
**Concept and design:** Katja Korinšek, Pristop  
**DTP:** Ema Bertina Kopitar, Bibijana Cirman Naglič



## Contents

Introductory remarks.....	7
Main findings.....	9
Summary .....	11

## I. Development according to the priorities of Slovenia's Development Strategy ..... 15

1 The macroeconomic framework and the competitiveness of the economy.....	17
1.1 Macroeconomic framework.....	18
1.2 Financial markets and corporate sector indebtedness .....	24
1.2.1 Financial markets .....	24
1.2.2 Corporate sector indebtedness .....	27
1.3 Competitiveness of the corporate sector .....	28
2 Use of knowledge for economic development .....	37
2.1 Education and Training .....	37
2.2 Research, development, innovation and use of information-communication technologies .	40
3 The efficiency of the state .....	44
3.1 The quality of public finances.....	44
3.1.1 Expenditure .....	45
3.1.2 Revenues .....	48
3.2 Institutional competitiveness.....	51
3.3 The efficiency of the judiciary.....	55
4 The labour market and welfare state.....	57
4.1 The labour market.....	57
4.2 Social Protection Systems .....	59
4.3 Living conditions, social exclusion and social risks .....	64
4.3.1 Material living conditions .....	64
4.3.2 Quality of life .....	70
5 The integration of measures to achieve sustainable development .....	73
5.1 Integrating environmental criteria with sectoral policies.....	73
5.2 Sustained population growth.....	82
5.3 More balanced regional development .....	84
5.4 Spatial management .....	86
5.5 Culture.....	89

## II. Indicators of Slovenia's development ..... 91

1 PRIORITY: Economic growth and the competitiveness of the economy .....	93
1.1 Gross domestic product per capita in purchasing power standards .....	94
1.2 Real GDP growth .....	96
1.3 Inflation.....	98
1.4 General government balance .....	100
1.5 General government debt.....	102

1.6 Balance of payments .....	104
1.7 Gross external debt .....	106
1.8 Yield on ten-year government bonds .....	108
1.9 Development of the financial sector .....	110
1.10 Loan-to-deposit ratio .....	112
1.11 Non-performing claims .....	114
1.12 Labour productivity .....	116
1.13 Market share .....	118
1.14 Unit labour costs .....	120
1.15 Structure of merchandise exports by factor intensity .....	122
1.16 Knowledge-intensive market services .....	124
1.17 Network industries .....	126
1.18 Foreign direct investment .....	128
1.19 Entrepreneurial activity .....	130
<b>2 PRIORITY: Use of knowledge for economic development.....</b>	<b>133</b>
2.1 Share of the population with tertiary education .....	134
2.2 Education expenditure .....	136
2.3 Adult participation in education.....	138
2.4 Gross domestic expenditure on R&D .....	140
2.5 Intellectual property .....	142
2.6 Use of the Internet and e-services .....	144
<b>3 PRIORITY: An efficient state .....</b>	<b>147</b>
3.1 General government expenditure by function (COFOG) .....	148
3.2 Economic structure of taxes and contributions .....	150
3.3 Taxes and social security contributions .....	152
3.4 State aid .....	154
3.5 Subsidies.....	156
<b>4 PRIORITY: Labour market and a welfare state .....</b>	<b>159</b>
4.1 Employment rate.....	160
4.2 Unemployment rate .....	162
4.3 Long-term unemployment rate .....	164
4.4 Temporary employment .....	166
4.5 Part-time employment.....	168
4.6 Social protection expenditure.....	170
4.7 Pension expenditure .....	172
4.8 Health expenditure .....	174
4.9 Expenditure on long-term care .....	176
4.10 Minimum wage .....	178
4.11 Risk of poverty .....	180
4.12 Material deprivation .....	182
4.13 Health care resources.....	184
4.14 Capacities of the education system .....	186
4.15 Life satisfaction .....	188
<b>5 PRIORITY: Integration of measures to achieve sustainable development .....</b>	<b>191</b>
5.1 Greenhouse gas emissions.....	192
5.2 Emission-intensive industries.....	194
5.3 Energy intensity .....	196
5.4 Renewable energy sources .....	198
5.5 Share of road transport in total freight transport .....	200

5.6 Environmental taxes.....	202
5.7 Agricultural intensity.....	204
5.8 Tree-felling intensity .....	206
5.9 Age-dependency ratio .....	208
5.10 Life expectancy and healthy life years.....	210
5.11 Fertility rate.....	212
5.12 Net migration .....	214
5.13 Regional variation in GDP per capita.....	216
5.14 Regional variation in the registered unemployment rate .....	218
Bibliography .....	220
<b>III. Appendix .....</b>	<b>227</b>
Calculation of a synthetic estimate of development according to SDS priorities .....	229



## Introductory remarks

**The Development Report monitors the realisation of Slovenia's Development Strategy (SDS 2005–2013) and other structural changes in Slovenia's economy.** The Slovenian government adopted Slovenia's Development Strategy in June 2005 for the period until 2013. The report monitors the implementation of the main development priorities of SDS, but in interpreting the findings we also take into account that the economic crisis has shifted Slovenia (as well as the entire EU) away from a number of SDS objectives, which can therefore no longer be achieved in the short term. The analysis and findings thus primarily focus on developments since the outbreak of the crisis, including in comparison with other countries and the most recent EU-level guidelines. In that context, the analysis also includes a review of implementation of the strategic objectives of the EU, which are also binding for Slovenia (the EU 2020 strategy targets, the indicators of the Macroeconomic Imbalance Procedure Scoreboard). This year's report presents a review and assessment of trends up to 2013, or 2012, if the latest data are only available for that year.

**The structure of the Development Report follows the development priorities of SDS and analyses their fulfilment by means of the selected set of development indicators.** SDS set three key goals in the area of economic, social and sustainable development:

- (i) The economic development goal – to exceed the average level of economic development in the EU and increase employment in line with the Lisbon strategy's targets;
- (ii) The social development goal – to improve the quality of life and welfare;
- (iii) The intergenerational and sustainable development goal – to apply the principle of sustainability across all areas of development.

SDS defines five development priorities for the achievement of these goals: a competitive economy and faster economic growth; efficient use of knowledge for economic development; efficient and cheaper government; a modern welfare state and higher employment; and integration of measures to achieve sustainable development. The Development Report is divided into two parts: a review of the implementation of SDS across the development priorities, followed by a detailed report on progress by individual indicator of Slovenia's development. The findings in the report are mostly based on results obtained by means of these indicators. In areas where no relevant indicators were available due to data shortage, other sources have also been relied on (national and international research, reports on the implementation of sectoral strategies and programmes). The appendix to the report contains a quantitative aggregate assessment of development, which supplements the expert approach of the report, although it cannot substitute for a comprehensive assessment of progress in individual areas due to the time and geographical limitations in the availability of the data necessary for calculation.

**In view of the economic crisis, development indicators expressed as a percentage of GDP should be interpreted with caution, as they have been significantly impacted by the contraction in GDP during the analysed period.**

In a period of sharp short-term fluctuations in economic activity, these indicators are profoundly affected by changes in GDP, which must be taken into account when analysing changes in their value over time and in comparison with other countries that did not experience such fluctuations in the analysed period. For this reason changes in absolute values are also highlighted for these indicators.

**The Development Report is based on the official statistical data of domestic and foreign institutions available at the beginning of April 2014.** In the analysis Slovenia was compared with all 28 EU Member States. Where data for the last new Member State, Croatia, were not yet available, the EU-27 average was used. The terms 'European average' or 'EU average' thus refer to the group of the EU-28 countries; the term 'old Member States' means the EU-15 group, whereas the EU-13 countries (or the EU-12 without Croatia) that joined the European Union in enlargements after 2004 are referred to as the 'new Member States'.



## Main findings

**The year 2013 was marked by the implementation of some long-deferred structural reforms, as well as positive changes in the area of competitiveness and the first signs of economic recovery.** New pension legislation took effect in 2013 and labour market reform was passed with a view to reducing the rigidity of labour legislation and labour market segmentation, and at the end of the year Slovenia also undertook banking system stabilisation. The beginning of bank stabilisation, together with the first shifts towards privatisation, significantly improved the perception of Slovenia on international financial markets. Alongside privatisation and improved governance, this represents the first steps towards the urgently needed restructuring of the banking and corporate sectors, which could break the negative feedback loop between the adverse economic situation and poor conditions in banks and public finances. This could also facilitate the inflow of direct foreign investment, which would speed up the restructuring of the economy through financial resources and knowledge transfer. In 2013 additional measures were also taken in the fiscal area, but as a result of bank recapitalisations the general government deficit nevertheless increased significantly. Its sustainable reduction thus remains one of the priorities for ensuring macroeconomic stability, particularly in light of the rapidly growing general government debt. After the strong loss in competitiveness at the beginning of the crisis, which was a result of structural weaknesses of the economy, as well as measures taken to mitigate the effects of the crisis on the welfare of the population, in the recent period positive shifts have also been seen in the area of competitiveness. With a more pronounced adjustment of the labour market (wages and employment) to adverse economic conditions, the cost pressures on competitiveness have been easing in the last few years. Moreover, in 2013 the share of Slovenia's exports on the global market increased for the first time since the outbreak of the crisis and the first signs of economic recovery have become visible.

**Despite changes seen over the last year, Slovenia's setback in economic development since the beginning of the crisis is among the largest in the EU; the welfare of the population has also decreased substantially, and the reduction of environmental pressures continues to stem primarily from lower economic activity.** Slovenia is among the countries with the largest deterioration in economic activity, labour market conditions and public finances since the beginning of the crisis. A crucial factor in reducing the gap in economic development is increasing productivity (value added per employee), which has been hampered by insufficient innovative capacity of the economy. Several years of rapidly deteriorating economic conditions have led to a decline in the material welfare of the population in recent years, with most quality-of-life indicators showing no improvement since 2012. In view of demographic pressures, the welfare of the population is also at risk from the financial unsustainability of social protection systems, which have yet to be adjusted to the changing situation in society. Major structural changes are also needed to reduce pressures on the environment, which have otherwise been easing amid the contraction in economic activity during the crisis, but their sustainable reduction remains a challenge, especially in transport.

**In order to revive economic growth and halt the decline in household welfare in the medium term, more radical structural changes will be necessary.** Efforts will have to be focused on:

- **Completing the stabilisation, privatising and improving corporate governance of the banking system** to establish stable conditions for corporate financing with the smallest possible increase in public debt.
- **Deleveraging and privatising of companies, and increasing the role of equity capital in corporate financing.**
- **Continuing fiscal consolidation**, primarily through measures for a more sustainable reduction in expenditure.
- **Adjusting the health and long-term care systems** to demographic changes and changes in society, and permanently adjusting the **pension system** to increases in life expectancy.
- **Increasing the value added** of goods and services by boosting the innovative capacity of the economy and integrating enterprises into global supply chains, particularly through foreign direct investment.
- **Creating a stable business environment** that fosters entrepreneurship.
- **Continuing to improve labour market efficiency** by strengthening other flexicurity components alongside flexibility (active employment policy, lifelong learning) and tailoring the education system to meet current and future labour market needs.
- **Reducing environmental pressures** by improving the legislative framework and the system of incentives aimed at reducing pollution and increasing efficiency in the use of resources, while encouraging the development of environmentally friendly products, services and technologies.
- **Improving the performance of the government and its institutions** in making and implementing development decisions, and providing a proper environment for the functioning of the economy and effective functioning of the legal and political system.



## Summary

**The year 2013 was marked by the implementation of some long-deferred structural reforms, as well as positive changes in the area of competitiveness and the first signs of economic recovery.** New pension legislation took effect in 2013 and labour market reform was passed with a view to reducing the rigidity of labour legislation and labour market segmentation, and at the end of the year Slovenia also undertook banking system stabilisation. The beginning of bank stabilisation, together with the first shifts towards privatisation, significantly improved the perception of Slovenia on international financial markets. Alongside privatisation and improved governance, this represents the first steps towards the urgently needed restructuring of the banking and corporate sectors, which could break the negative feedback loop between the adverse economic situation and poor conditions in banks and public finances. This could also facilitate the inflow of direct foreign investment, which would speed up the restructuring of the economy through financial resources and knowledge transfer. In 2013 additional measures were also taken in the fiscal area, but as a result of bank recapitalisations the general government deficit nevertheless increased significantly. Its sustainable reduction thus remains one of the priorities for ensuring macroeconomic stability, particularly in light of the rapidly growing general government debt. After the strong loss in competitiveness at the beginning of the crisis, which was a result of structural weaknesses of the economy, as well as measures taken to mitigate the effects of the crisis on the welfare of the population, in the recent period positive shifts have also been seen in the area of competitiveness. With a more pronounced adjustment of the labour market (wages and employment) to adverse economic conditions, the cost pressures on competitiveness have been easing in the last few years. Moreover, in 2013 the share of Slovenia's exports on the global market increased for the first time since the outbreak of the crisis and the first signs of economic recovery have become visible.

**Despite last year's shifts, Slovenia still lags significantly behind the pre-crisis levels in terms of development.** Slovenia is among those countries with the largest deterioration in economic activity, labour market conditions and public finances since the beginning of the crisis. The material welfare of the population has deteriorated as well, particularly in the last few years, while the reduction of environmental pressures continues to stem primarily from lower economic activity. In order to revive economic growth and halt the decline in household welfare in the medium term, more far-reaching structural changes will be necessary.

**After a significant decline at the outbreak of the crisis, since 2010 Slovenia's economic development relative to the EU has been stagnating at the level recorded ten years ago.** The level of GDP per capita at purchasing power parity had declined by 7 percentage points by 2010 from its peak in 2008. Since then it has remained at 84% of the EU average, which matches the relative development of Slovenia in 2003. In addition to an excessively slow and insufficient response to the crisis, the strong widening of the gap with the EU during the crisis is related to the nature of Slovenia's development in the run-up to the crisis, which was insufficiently focused on strengthening competitiveness and making the economy more resilient to shocks. Slovenia was therefore more affected by the crisis than most other EU Member States, which was reflected in its crippled financial system, disrupted public finance balances and a sharp drop in competitiveness. The first shifts in these areas have been seen only in the recent period, but in view of further structural adjustments, a more sustainable economic recovery can be expected again and hence a narrowing of the development gap with the EU.

**In 2013 Slovenia undertook the banking system stabilisation, which, together with the announced move towards privatisation, contributed to an improvement in the perception of Slovenia on international financial markets.** After several years of deteriorating conditions in the banking system, which translated into a significant contraction of lending activity, an asset quality review and stress tests were carried out in 2013. Based on their results, the government recapitalised the banks and transferred the first portion of bad claims to the Bank Asset Management Company, which is a pre-requisite for the restructuring of the banking and corporate sectors. Its successful implementation will also necessitate activities related to the withdrawal of the state from companies and to improving governance in banks and companies. This would have a favourable impact on the inflow of direct foreign investment, which could play a significant role in the process of financial restructuring of companies and improvement in overall competitiveness. Slovenia's progress in banking sector stabilisation and signs that the government is serious about withdrawing from the commercial sector were also positively assessed by the international financial markets, which contributed to a decline in the yields of Slovenian government bonds at the end of 2013.

**Fiscal consolidation remains the main priority of economic policies for setting up a stable macroeconomic framework.** In 2012 significant shifts towards the consolidation of public finances were made, and the general government deficit thus declined for the first time since the beginning of the crisis. However, in 2013 the deficit rose to the highest level thus far, as a result of high expenditure related to the stabilisation of the banking system and some other one-off events, while the deficit excluding these events was somewhat lower than in the previous year. While in 2012 the consolidation effort had mainly been focused on the expenditure side, in 2013 additional measures were passed to both increase revenue (in particular the increase in value added tax and measures to reduce the grey economy) and limit expenditure. As the adopted measures to reduce expenditure have mostly been of an emergency nature, deficit reduction through structural measures with a more permanent effect on the expenditure side remains the main challenge. These measures should include further streamlining in the public sector and increasing its efficiency, a change in the sources of funding for public services and completion of social protection system reform.

**The trends in Slovenia's competitiveness have turned positive in the recent period, but the cumulative loss in competitiveness since the beginning of the crisis remains significant.** Alongside indebtedness and funding problems, in the first years of the crisis the Slovenian economy was also faced with a significant deterioration in cost competitiveness arising from an increase in unit labour costs and other input costs, which impeded its profitability. As a result of a number of structural weaknesses, the Slovenian global market share declined by around a fifth in 2008–2012. Since 2010 cost competitiveness has been improving, and in 2013 Slovenia's global market share rose for the first time since the beginning of the crisis. The gain in cost competitiveness, which was largely underpinned by industries in the tradable sector, was mainly a result of the labour market (employment and wages) adjusting to diminished economic activity and the contraction in low-technology and labour-intensive production.

**A sustainable improvement in competitiveness by increasing value added through higher innovation capacity of the economy, improvement in the business environment and a larger inflow of direct foreign investment remains a challenge.** Slovenia's R&D investment has increased significantly in recent years, as did the number of researchers and the share of population with a tertiary education, but the application of this knowledge has not yet produced sufficient results. The level of knowledge transfer from the research sector to the business sector is still insufficient to enable faster growth in the innovation capacity and competitiveness of the economy, and there is also a mismatch between the supply of and demand for a workforce with tertiary education. Slovenia also has a low efficiency of tertiary education, despite relatively high public expenditure. The prolongation of the crisis and a consequent decline in demand for a workforce with tertiary education also increases the risk of brain drain. All this impedes the faster growth in value added and productivity of the economy. A number of administrative barriers to doing business have remained in place, despite improvement in recent years, and further increases in labour market flexibility are necessary. An improved business environment would also have a positive impact on foreign direct investment, which could significantly contribute to the increase in the competitiveness of the economy through fresh capital and knowledge.

**The relatively long duration of the crisis is increasingly weakening the welfare of the population.** The material standard of the population continues to decline under the impact of the crisis, and the quality-of-life indicators have mainly started to show stagnation after a longer period of improvement. The main reason for the further deterioration in material welfare is a decline in employment, which in 2013 fell for the fifth year in a row, recording the largest decline in the entire period since the beginning of the crisis. At the same time unemployment continued to rise, almost reaching the high level encountered by Slovenia in the period after gaining independence. Wages, pensions and social transfers also declined in real terms. In 2013 total household disposable income otherwise fell less than a year earlier, but still notably, and was already more than 9% lower than in 2008 in real terms. Amid deteriorating purchasing power, private consumption has also been falling in the last two years. With income declining across all income brackets, income inequality is not rising and remains the lowest in the EU. This can be attributed to both a well targeted allocation of social transfers and a decline in wage inequality, particularly owing to the substantial increase in the minimum wage. Slovenia still belongs among the EU countries with low at-risk-of-poverty rates, but the share of people below the poverty threshold has risen by 22% since the beginning of the crisis, which is more than in the EU overall. The development of public services and improved access to public services have made a positive impact on the quality of life in recent years. Access to public services measured by the extent of inclusion of people in individual services had continued to improve after the beginning of the crisis, being relatively high compared with EU countries, but in 2012 there was practically no further improvement in most public services for the first time in this period. Stagnation can be explained by fiscal consolidation measures

and the consequent deterioration in the social position of the population, given that certain public services have to be paid or co-paid from private sources.

***The pressures on the environment are decreasing under the influence of the unfavourable economic situation, and there have also been some shifts towards their sustainable reduction.*** The decline in greenhouse gas emissions in 2012 (the most recent data) was again mainly due to lower economic activity, while the already high transport emissions continued to grow. Amid low demand for energy, renewable energy sources have been replacing fossil fuels ever since the beginning of the crisis. However, given the anticipated recovery in economic activity and hence higher demand for energy products, the continuation of these trends and the lowering of construction costs for new capacities will depend greatly on more efficient energy use. Energy savings during the crisis were, in fact, largely a result of lower economic activity, which is indicated by unfavourable developments in the area of energy intensity of the economy (energy consumption per unit of GDP). This is high in international terms, primarily due to extensive fuel consumption in transport. It is encouraging, however, that in the manufacturing sector, where the costs of energy impact export competitiveness, energy intensity has been decreasing even faster than in the EU overall. Another important aspect of synergies between environmental and economic development is exploitation of the market for environmental technologies, but in this area Slovenia still lags significantly behind the EU. The impact of environmental taxes on the competitiveness of the economy remains relatively small, as most environmental taxes burden households. However, ensuring competitive conditions in transport through excise duty policy is reflected in the lower energy and environmental efficiency of these tax instruments. In the area of municipal waste management, significant progress towards reducing the amount of deposited waste has been made in the last few years. The quantities of generated waste also continue to fall, which is partly linked to the decline in the level of economic development. Material productivity of the economy improved further, but this was mainly a result of the above-average decline in construction, which is a natural-resource-intensive sector.

***In the recent period Slovenia has made some moves to exit from the crisis, but for sustainable development it will also have to improve the efficiency of the government and its institutions.*** As a result of accumulated weaknesses in the operation of the legislative, executive and judicial branches of government, coupled with a slow response to the changing situation, Slovenia has been falling on international scales of institutional competitiveness since the beginning of the crisis, and the trust of people and companies in the government and its institutions is among the lowest in the EU. The weaknesses are reflected both in the efficiency of the institutional framework for making and implementing developmental decisions and in the efficiency of institutions that should provide a proper environment for the functioning of the economy. The efficiency of the judiciary in solving disputes is also low, and the duration of court proceedings remains too long. A move towards improving the efficiency of the government was made by constitutional changes in 2013, which, together with measures to fight the grey economy, are contributing to a better functioning of the government, allowing it to make important decisions with fiscal consequences, and ensure long-term sustainability of public finances.



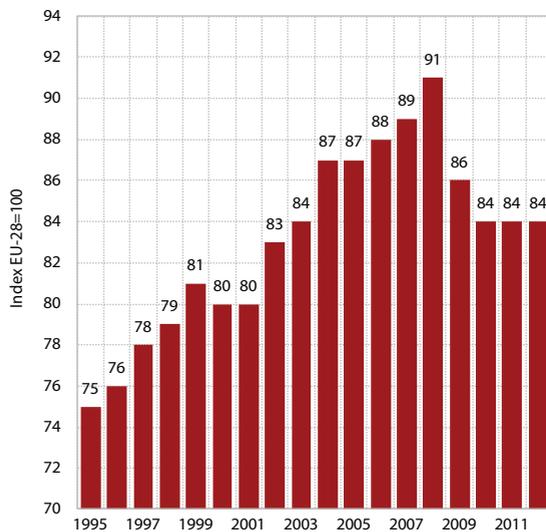
# **I. Development according to the priorities of Slovenia's Development Strategy**



## 1 The macroeconomic framework and the competitiveness of the economy

**The relative level of Slovenia's economic development has been stagnating at the 2003 level since 2010.** The gross domestic product per capita in purchasing power standards (PPS) reached its peak in 2008 (91% of the EU average). It declined by seven percentage points over the next two years, and has stood at 84% since, which corresponds to the relative level of Slovenia's economic development in 2003. Regression during the crisis was due to GDP trends in Slovenia, which were considerably less favourable (a sharper fall and slower recovery) than those in the EU. Similar trends were also recorded after 2010, although in this period the general price level started to decline compared to the EU average, stopping Slovenia's GDP per capita in PPS from moving further away from the EU average. The halt in downward trends in the recent period is therefore due to the adjustment of prices to reduced economic activity, while the key to catching-up is a sustainable economic recovery. Given GDP trends in 2013, which were again less favourable in Slovenia than in the EU, we assess that in 2013 Slovenia continued to lag behind in economic development.

Figure 1: Gross domestic product per capita in purchasing power standards, Slovenia



Source: Eurostat Portal Page – Economy and Finance, 2014.

**Regaining access to financial resources, on which important progress was made in the past year, is a precondition for economic recovery.** In the second half of 2013, banks underwent stress testing and asset quality review. Based on this, the state recapitalised the two largest state-owned banks and began transferring non-performing assets to the Bank Assets Management Company (the BAMC). This provided the basis for the restructuring and privatisation of the banking and corporate sector and their effective completion is

crucial to the successful kick-starting of the economy. The divestment of state ownership and the reduction of debt will be of significant importance for the effective restructuring of the economy, providing fresh capital for companies and having a positive impact on their management. The institutional framework for better management of state-owned assets and the withdrawal of the state from company ownership was adopted at the beginning of 2014 by way of the new Slovenian Sovereign Holding Act. This, and the decision to introduce a list of the first fifteen companies to be privatised, have improved the environment for the inflow of foreign direct investment, which could play an important part in the process of the financial restructuring of companies and increase competitiveness in general. The end of 2013 saw the adoption of the new insolvency law, which is targeted towards the effective restructuring of insolvent companies or preserving their healthy cores. The progress made in the stabilisation of the banking system and in providing the basis for the withdrawal of the state from the economy has been assessed by international financial markets as favourable, which at the end of 2013 lowered the yield on Slovenian government bonds.

**In addition to the improvement of the situation in the financial sector, effective fiscal consolidation is of paramount importance for the establishment of a stable macroeconomic framework.** Following a severe deterioration of public finances in 2013, largely due to the one-off effects linked to the stabilisation of the banking system, fiscal consolidation remains at the forefront of economic policies for the establishment of a stable macroeconomic framework. The main challenge is how to reduce the deficit by means of structural measures that will have a more permanent effect on expenditures. Such measures must be aimed at further streamlining of the public sector and should include structural measures aimed at increasing its efficiency, changing financing sources for public services, and reforming social protection systems to improve the long-term sustainability of public finance. In the future, fiscal stability will also depend on the effective restructuring and privatisation of the banking sector, which had a considerable negative impact on public finance in the past on account of its recapitalisation requirements.

**After the effective stabilisation of the banking system and financial restructuring of companies, the permanent improvement of the economic situation will depend primarily on the competitiveness of the corporate sector.** In the first years of the crisis, the Slovenian economy faced indebtedness and financing problems and saw a considerable deterioration in cost competitiveness, resulting from increased unit labour costs and other input costs. This reduced its profitability and, together with a number of structural weaknesses, significantly reduced Slovenia's market share on foreign markets. Cost competitiveness has improved recently, and Slovenia's global market share increased in 2013 for the first time since the onset of the crisis.

To date, improving cost competitiveness has mostly been based on the adjustment of the labour market to reduced economic activity and the contraction of low-tech and labour-intensive industries. If Slovenia is to achieve stable improvement in competitiveness, it must continue to keep labour costs within sustainable limits and direct future efforts towards (i) increasing value added by boosting the economy's innovation capacity and integrating Slovenian companies into global value chains, particularly through foreign direct investment, and (ii) improving the business environment, mainly by reducing administrative barriers and ensuring labour market flexibility and appropriate tax policy complemented by other measures to enhance competitiveness.

***The effective functioning of the state and its institutions, on which Slovenia has made no progress since the onset of the crisis, is also of paramount importance for ensuring a stimulating business environment and the competitiveness of the economy.***

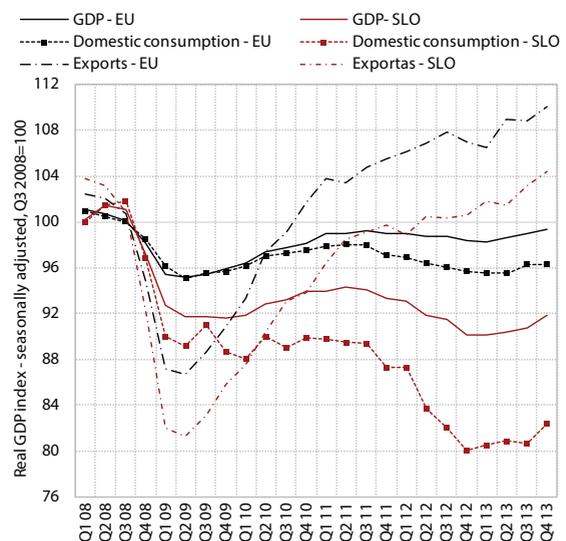
Internationally comparable indicators of the institutional competitiveness and efficiency of the state show that, due to accumulated deficiencies in the operation of the legislative, executive, and judicial branches of power and a slow response to the changed circumstances since the onset of the crisis, institutional competitiveness in Slovenia has declined considerably in recent years compared to other countries. The level of trust that companies and the population have in the state and its institutions has also decreased and is among the lowest in the EU. There are weaknesses in both the efficiency of the institutional framework for adopting development decisions and the efficiency of institutions that are to create an appropriate environment for the functioning of the economy. A lack of good business practices and customs (e.g. the poor efficiency of supervisory boards and the credibility of management) and the significant role of the state in the economy also have a negative impact on the operation of companies. The efficiency of the judiciary in settling disputes is also poor, resulting in excessively long judicial proceedings and relatively high expenditure arising from the operation of the judicial system. In 2013 there was some progress on this front as constitutional amendments were adopted ensuring the smooth running of the state in adopting important decisions with fiscal consequences and long-term fiscal sustainability. Progress has also been made on eliminating administrative barriers, revising the insolvency law, and curbing the shadow economy.

## 1.1 Macroeconomic framework

***Last year, gross domestic product again declined (-1.1%), lagging behind the pre-crisis level by one-tenth.*** Following a two-year period of modest recovery, economic activity decreased in 2012 and 2013, facing a smaller drop in 2013 than in 2012 (-2.5%). Last year the

decrease was again largely due to a drop in household consumption on account of a further real decline in disposable income, which was 9.2% lower than in 2008. Last year the average gross wage decreased again in real terms, and a further deterioration in the labour market led to a significant increase in the number of unemployed people. Social transfers were again reduced due to limits on general government expenditure. The strained fiscal situation dictated that other expenditure also be reduced, resulting in a decrease in government spending (see Chapter 3.1). Spending further decreased in 2013 due to a considerable reduction in the compensation of employees, as measures to reduce wages adopted in 2012 applied throughout 2013 and new measures were also adopted. In addition, after its growth slowed in 2012, the number of employees in the general government sector decreased for the first time in 2013. Despite a further drop in construction investments, investment activity slightly increased last year due to an increase in investments in machinery and equipment upon the commencement of the construction of a large energy facility. Out of all GDP components, gross fixed capital formation still lags behind the pre-crisis level most notably, standing at less than half the 2008 level<sup>1</sup>. Exports, the only GDP component that is above the 2008 level, were the only factor last year that made a significant positive contribution to economic activity, although, given the unfavourable production and

Figure 2: Gross domestic product, exports and domestic consumption in Slovenia and the EU



Source: Eurostat Portal Page – National Accounts, 2014.

<sup>1</sup> The strong investment cycle in the period from the date Slovenia joined the EU until the beginning of the economic crisis was followed by a drop in investment during the crisis, which is associated with the completion of large infrastructure projects, the financial crisis and, consequently, limited private and public financial resources. Accordingly, in the 2004–2008 period, the share of gross fixed capital formation in GDP increased by 3.6 percentage points to 28.6%, and declined to 17.3% by 2013, which is the second largest decline among EU Member States, taking into account Ireland and Cyprus.

geographical structure and considerable deterioration in cost competitiveness in the first years of the crisis, their recovery was slower than it was in most new EU member States. Last year, economic activity slightly increased (0.1%) at the EU level, with Slovenia remaining in the group of countries with the highest drop in the crisis period. Accordingly, the average GDP in the EU was 1.9% lower last year compared to the 2008 level, while GDP in Slovenia was 9.2% lower, the gaps with the pre-crisis levels being larger only in Croatia and Greece.

***The capacity for economic growth in the medium term is very modest without substantial structural changes.*** Before the crisis, the estimated potential GDP growth stood at around 4%. With the onset of the crisis, however, the potential for growth declined significantly, largely due to the structure of economic growth in the past and insufficient changes aimed at increasing the resilience of the Slovenian economy to shocks in the years before the crisis. The latest estimates show negative potential growth in 2013 and 2014 and a gradual increase in growth by up to 1% towards the end of the decade<sup>2</sup>. All three main components of potential economic growth declined during the crisis, particularly the contribution of labour, mainly due to an increase in the natural unemployment rate<sup>3</sup>. The contributions of the employment rate and the share of the active working age population were also negative. Considering the significant fall in investment activity as a result of limited financial resources and the high indebtedness of the corporate sector, the contribution of capital was also negative. The contribution of total factor productivity also diminished considerably, compared to the pre-crisis level. The decline in potential GDP shows the need for structural changes and reform, which would help Slovenia avoid a longer period of weak economic growth or stagnation.

***After standing at around 2% since the onset of the crisis, inflation fell significantly last year despite the rise in VAT rates.*** Consumer prices increased by 0.7%, which is significantly less than in the previous year (2.7%) despite the relatively large contribution of tax measures<sup>4</sup>. Price growth was affected by similar factors as in the previous year, although to a considerably lesser extent. This is mainly related to a further contraction in economic activity and a fall in oil prices on international markets. As in the past four years, inflation was due to higher

energy and food prices, although their contribution halved compared to the previous year. Growth in service prices, which in previous years had mainly been affected by one-off factors<sup>5</sup>, was also down. Prices of other goods, particularly semi-durable and durable, also dropped last year. The absence of inflationary pressures related to economic activity was reflected in fairly moderate core inflation. An international comparison based on the harmonised index of consumer prices shows that inflation fell in all EU Member States last year, while four recorded deflation. Inflation also fell at the euro-area level, where it was similar to that in Slovenia.

***Following a slowdown in growth in the 2009–2012 period, the nominal gross wage declined in 2013 (-0.2%).*** Average gross wage growth in the private sector was similarly low as in the previous year (0.6%). It declined in most private sector activities, most notably in construction and service activities. A rise in average wage growth was recorded only in the manufacturing sector and the sector of electricity, gas and steam supply. In both it was slightly larger compared to 2012. In the public sector, the decline in the average gross wage per employee even deepened in 2013 (-1.3%) as a result of an additional reduction in wages in the general government sector (-2.5%), which accounts for most of the public sector. Wage growth in public corporations (1.7%) was high and above average, as in the previous year. Wages in the general government sector were further reduced last year following austerity measures adopted in 2012, which were in force during the whole year<sup>6</sup>, and new measures agreed in mid-2013<sup>7</sup>, enabling the planned reduction in the compensation of employees in the general government sector. In view of the general economic and fiscal situation, austerity measures regarding the wages of public employees have been adopted since 2009. In 2010 and 2011 they helped to moderate wage growth, which was relatively high at the beginning of the crisis due to the implementation of public sector wage reform, which had been planned for several years. In the next two years, wages were also reduced in nominal terms. Last year, the average gross wage in the general government sector was 1.9% higher than in 2008. In the public sector, however, it was 5.0% higher in the same period due to growth in

<sup>2</sup> Potential GDP growth is calculated using a production function method (PF), which uses a bivariate Kalman filter (KF) to extract the cyclical component of total factor productivity, on the basis of the Spring Forecast of Economic Trends 2014 for the period from 2013 onwards.

<sup>3</sup> The natural unemployment rate (NAWRU – the non-accelerating wage rate of unemployment) was calculated using the New Keynesian Phillips curve. In 2013, NAWRU increased by 0.6 percentage points to 8.2%.

<sup>4</sup> The increases in VAT rates, excise duties and other taxes contributed 0.8 percentage points to inflation last year, according to our estimate.

<sup>5</sup> After the effects of the abolition of subsidies on school meals were no longer felt in September last year, year-on-year growth declined by 0.4 percentage points in 2013, while the introduction of lower supplementary health insurance premiums in December last year reduced it by a further 0.3 percentage points.

<sup>6</sup> With the introduction of the ZUJF, the wages of all public employees were reduced by 8%, while at the same time public employees were paid the last two quarters of funds intended to eliminate wage disparities.

<sup>7</sup> Measures included the reduction of the basic wage (partly in a linear and partly in a progressive manner, by around 1.3%, on average), the abolition of the increased seniority bonus paid to women for years of service over 25 years, the reduction of the allowance for specialised and master's and doctoral studies (by half).

public corporations (11.4%). In the 2008–2013 period, significant average gross wage growth was recorded in the private sector (11.4%), with more than half of growth being a result of changes in the employment structure<sup>8</sup> and the increase in the minimum wage<sup>9</sup>.

**Employment<sup>10</sup> fell considerably last year, for the first time also in public service activities.** Last year, the number of employed in Slovenia decreased more significantly (-2.0%) than in the EU on average; throughout the crisis period, Slovenia recorded a larger drop (-8.1%) than the EU (-2.9%). Last year, employment fell most notably in the construction sector, while the manufacturing sector recorded a more significant drop than in the previous two years. In these two sectors, employment has been falling since the beginning of the crisis. Accordingly, last year the number of persons employed in manufacturing was almost a fifth lower compared with 2008, mainly owing to a decline in labour-intensive and low-tech industries, while in construction it fell by a third (as a result of (half) lower activity). The most significant drop in employment throughout the crisis period was recorded last year in market services. The exceptions are information and communication activities and professional, scientific and technical activities – the only activities of the private sector in which the number of employees increased during the crisis. Although employment in public service activities began to decline in the second half of 2012 as a result of fiscal consolidation measures, it was still 5.6% higher than in 2008 last year. The number of people employed in public administration, defence, and compulsory social security decreased for the third year in a row, these being the only public service activities in which last year the number of people in active employment<sup>11</sup> was lower than in 2008. In education, the rise in the number of people in active employment came to a halt, while easing in human health and social work. In both sectors, the number of people in active employment was 8.9% higher last year than in 2008.

**After being in balance for several years in the initial stages of the crisis, the current account of the balance of payments has run a surplus since 2012 as a result of a significant cyclical fall in domestic consumption and several other structural factors.** In the period before the

crisis, Slovenia recorded a relatively high current account deficit. In the initial stages of the crisis, the current account was more or less in balance. In 2012 the current account balance turned into a surplus, which widened significantly last year. The increase was mainly accounted for by a positive balance of trade in goods, which turned from a deficit in 2012 to a surplus in 2013. This was also partly due to imports of investment equipment for an unfinished energy facility not yet being included in the balance of payments statistics<sup>12</sup>. In addition, the surplus in services trade further widened, while the deficit of the balance of factor income slightly narrowed and the surplus in the balance of current transfers remained similar to that of the previous year. The current account surplus in recent years has been influenced by several cyclical and structural factors. Limited access to foreign sources of financing and private sector deleveraging resulted in a significant drop in domestic consumption and imports, which is mainly associated with cyclical factors. Estimates regarding the contribution of the decline in imports and growth in exports with respect to creating a surplus in trade in goods and services show that the nominal increase in exports had a relatively larger impact, which, according to our estimates, was due to both cyclical (growth in foreign demand) and structural factors (increased competitiveness). The studies of international institutions<sup>13</sup> that assess the impact of structural and cyclical factors on the current account balance use different approaches. They are mostly based on the assessment of the cyclical component of current account balances on the basis of the assessment of the output gap and additional adjustment of the real effective exchange rate, while the structural change in the current account balance is often associated with unit labour cost trends. Although the former are more of an indicative nature due to the high volatility of output gaps and should be interpreted with care, calculations by the European Commission for Slovenia show that the structural component of the surplus strengthened significantly in the past two years. The cost competitiveness of the tradable sector also improved in this period, while the market share on the global market increased last year for the first time since the onset of the crisis (see Chapter 1.3).

**The total gross external debt had fluctuated between EUR 40 and 41 bn since 2009 until last year, when it fell below this level despite a further increase in the general government sector debt due to private sector**

<sup>8</sup> This was the result of redundancies of employees with mostly low wages, which in statistical terms increased the average wage level. According to our estimate, 0.9 percentage points of average wage growth in private sector activities (of 1.8%) in 2009 was a result of this effect (2010: 0.5 percentage points of 5.1%; 2011: 0.2 percentage points of 2.6%; 2012: 0.2 percentage points of 0.8%; 2013: 0.2 percentage points of 0.6%).

<sup>9</sup> A new Minimum Wage Act, which entered into force in 2010, increased its amount considerably. A gradual rise in the minimum wage in the next two years created pressure on wage growth, although the effect in both years was only around 0.5 pp.

<sup>10</sup> According to the national accounts statistics.

<sup>11</sup> Detailed data on public service activities are available in the Statistical Register of Employment.

<sup>12</sup> As the data on the exact amount of imports are not available, it can only be inferred from the difference between the merchandise trade balance according to the balance of payments statistics, and the merchandise trade balance according to the national-accounts methodology (ESA95), which was EUR 316 m or 0.9% of GDP in 2013.

<sup>13</sup> Monthly Bulletin ECB, November 2013; Quarterly Selection of Articles, No. 27, Autumn 2012, Banque de France, 2012, European Economic Forecast Winter 2014, Philip R. Lane and Gian Maria Milesi – Ferretti: External Adjustment and the Global Crisis. IMF Working Paper (WP/11/197).

Table 1: Slovenia's international investment position as a % of GDP

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
1 Debt claims	40.1	68.1	66.6	80.1	74.5	77.2	75.1	74.6	75.1	76.9
2 Equity claims	1.0	9.7	14.3	19.4	14.6	17.3	17.0	15.8	16.9	18.4
<b>3 Total claims (1+2)</b>	<b>41.1</b>	<b>77.9</b>	<b>80.9</b>	<b>99.5</b>	<b>89.1</b>	<b>94.5</b>	<b>92.1</b>	<b>90.5</b>	<b>92.0</b>	<b>95.3</b>
4 Gross external debt	43.7	71.4	77.5	100.5	105.3	113.8	114.8	110.9	115.7	112.2
5 Equity liabilities	9.1	17.5	20.5	20.8	19.7	20.5	20.5	20.3	21.3	21.1
<b>6 Total liabilities (4+5)</b>	<b>52.9</b>	<b>88.9</b>	<b>98.0</b>	<b>121.4</b>	<b>125.0</b>	<b>134.4</b>	<b>135.3</b>	<b>131.2</b>	<b>136.9</b>	<b>133.2</b>
7 Net external debt/claims (1-4)	-3.6	-3.2	-10.9	-20.4	-30.8	-36.6	-39.7	-36.3	-40.5	-35.3
8 Net equity debt/claims (2-5)	-8.1	-7.8	-6.2	-1.4	-5.1	-3.2	-3.5	-4.5	-4.4	-2.6
<b>9 Net international investment position (7+8)*</b>	<b>-11.7</b>	<b>-11.0</b>	<b>-17.1</b>	<b>-21.8</b>	<b>-35.9</b>	<b>-39.8</b>	<b>-43.2</b>	<b>-40.8</b>	<b>-44.9</b>	<b>-37.9</b>

Source: BS, IMAD calculations.

Note:\*a negative (positive) sign in the balance concerned indicates a net debt (credit) financial position.

**deleveraging.** Last year, the total gross external debt amounted to EUR 39.6 bn or 112.2% of GDP, which is EUR 1.3 bn (3.5 percentage points) less than in 2012 and EUR 0.3 bn more than in 2008<sup>14</sup>. Last year's decrease was largely due to a further deleveraging of commercial banks, which have been reducing their gross external debt since the beginning of the crisis (by a total of EUR 11.0 bn since September 2008), while their share in the total gross external debt decreased from 45.6% in 2008 to less than a fifth in 2013. This resulted in a significant decrease in the non-guaranteed gross external debt (by EUR 2.2. bn last year, and by a total of EUR 11.2 bn since 2008). On the other hand, the share of the gross external debt of the general government sector in the total gross external debt increased from less than 10% to 39% in the 2008–2013 period (by a total of EUR 11.7 bn since September 2008). Accordingly, the share of the public and publicly guaranteed debt increased from less than a fourth to more than a half in this period. After increasing significantly in 2012, the publicly guaranteed debt decreased last year, mostly due to a reduction in the Bank of Slovenia's short-term debt to the Eurosystem, while the volume of guarantees to domestic commercial banks and other sectors for long-term loans from foreign credit institutions increased.

**Last year's deleveraging of commercial banks and a significant flow of deposits out of the country also contributed to improving the negative net international investment position.** A lower gross external debt contributed to the improvement of the negative net international investment position (37.9% of GDP, 7 percentage points less than in 2012), which was also due to the higher gross external claims in debt instruments. Despite the issuance of government bonds totalling EUR 4.2 bn, the deleveraging of commercial banks, the reduced volume of currency and non-resident deposits in Slovenian banks, the reduced volume of trade credits, the Bank of Slovenia's reduced liabilities to the Eurosystem, and a slightly reduced volume of

foreign equity liabilities last year resulted in a decrease in foreign liabilities by a total of EUR 1.4 bn or 3.7% of GDP. Foreign claims also increased last year (EUR 1.1. bn or 3.3% of GDP), mainly due to the flow of household deposits out of the country; there was also an increase in financial derivatives used as a hedge against currency risks upon the issuance of a dollar bond. The structure of the improvement in the negative net international investment position shows that the improvement was mostly a result of private sector deleveraging and the flow of resident and non-resident deposits out of the country. Last year, the share of currency and deposits in the net international investment position structure decreased, while the share of bonds and notes increased. The net liabilities of the private sector and liabilities within the Eurosystem decreased by sector, while the net liabilities of the general government sector further increased. Despite the improvement, in 2013 the negative net international investment position still exceeded the threshold value of this indicator within the system of macroeconomic imbalance indicators monitored by the European Commission (35% of GDP).

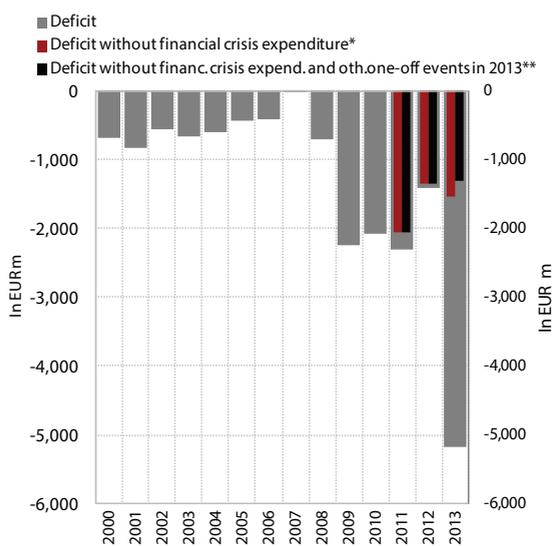
**Taking into account one-off expenditure due to bank recapitalisations in 2013, the general government deficit reached its highest level, whereas without taking into account one-off expenditure, the deficit was the lowest since the crisis began.** After significantly decreasing to 4% of GDP (EUR 1.414 m) in 2012 for the first time since the onset of the crisis, the general government deficit increased to 14.7% of GDP (EUR 5.178 m) in 2013. A substantial part of the deficit (EUR 3.633 m) was attributed to expenditure to strengthen the capital adequacy of the banking system (see Chapter 1.2), while the one-off expenditure items also included net expenditure for the payment of the third quarter of wage disparities in the public sector (EUR 104 m) and the payment of compensation to persons erased from the Permanent Population Register (EUR 126 m)<sup>15</sup>. Without taking into account one-off transactions in

<sup>14</sup> In 2008 the debt amounted to 105.3% of GDP, while a higher share of debt in 2013 was a result of a nominal decrease in GDP in this period.

<sup>15</sup> This wage settlement and the payment of compensation are liabilities that arose in 2013 following court decisions and government regulations adopted in 2013.

2013 and 2012, the deficit slightly decreased (from -3.8% of GDP to -3.7% of GDP), while the primary deficit also decreased (from -1.5% of GDP to -1.1% of GDP). The slight decrease in the deficit without taking into account one-off expenditure is a result of an increase in revenue, which outpaced the increase in expenditure. State budget revenue was lower than that planned in the revised budget; expenditure was adjusted accordingly. Although EU funds last year were higher than in 2012, and were the highest thus far, most of the decline in the revenue planned in the revised budget was due to the absorption of EU funds. On the expenditure side, interest, investment and pension expenditure increased. The deficit would be larger if no additional measures had been adopted within the revised state budget. Revenue was most significantly affected by measures that raised VAT rates, measures to curb the shadow economy, and the agreement on the further reduction of wages and other labour costs in the public sector.

Figure 3: General government deficit



Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of the general government, March 2014.

Note: \*Bank recapitalisations. \*\*Bank recapitalisations and other one-off events in 2013: wage settlement and compensation to persons erased from the Permanent Population Register.

**Last year, the adjusted structural general government deficit was reduced in accordance with the European Commission's recommendation received in the context of the excessive deficit procedure.** Estimates by the European Commission (November 2013) for 2013 showed that the structural deficit<sup>16</sup> remained at the same level as in the previous year, but the European Commission assessed that Slovenia made sufficient fiscal effort<sup>17</sup>

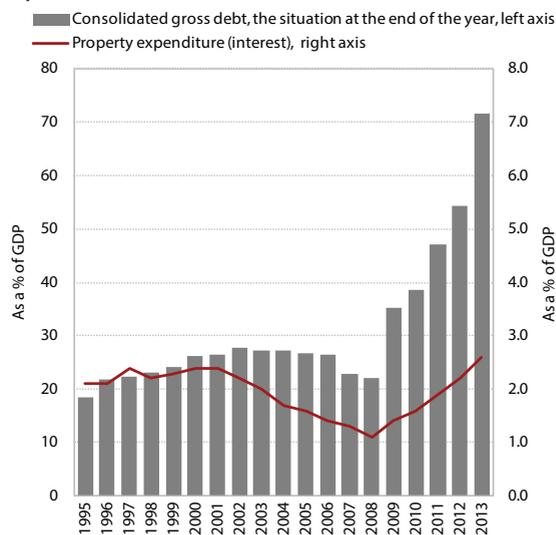
<sup>16</sup> According to estimates by IMAD, which take into account the first statistical publication of Main Aggregates of the General Government (March 2014), the structural deficit narrowed by 0.4 percentage points.

<sup>17</sup> Recommendation in the context of the excessive deficit procedure of June 2013.

in 2013, taking into account the adjusted structural deficit<sup>18</sup>, which takes into consideration changes in certain economic trends since the recommendation was made<sup>19</sup>. This opinion was also supported by the analysis of the effect of all discretionary measures that were adopted with respect to general government revenue and expenditure (temporary and permanent), which was 1.1% of GDP according to the European Commission<sup>20</sup>.

**Last year's increase in the general government debt was the largest thus far, which was to a large extent attributable to bank recapitalisation.** General government debt rose by EUR 6.1 bn last year, reaching EUR 25.3 bn or 71.7% of GDP. The increase in debt as a share of GDP in comparison to the previous year, when the debt amounted to 54.4% of GDP, was entirely due to the nominal increase in debt, since nominal GDP remained unchanged (-0.1%) compared to 2012. The debt increased due to deficit financing, while most of the increase was a result of bank recapitalisations and the issuance of the bond for the Bank Asset Management Company (BAMC). Borrowing was to a large extent based on the issuance of long-term instruments (5-year and 15-year dollar bonds, 3-year euro bonds, and 18-month treasury bills) and only to a lesser extent on short-term domestic borrowing on the basis of treasury bills and loans.

Figure 4: Gross general government debt and interest expenditure, Slovenia



Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of the general government, March 2014.

<sup>18</sup> The structural deficit adjusted according to: a) changes in potential economic growth in relation to the initial estimates made at the time when the recommendation was made, b) the impact of reviews of the structure of economic growth or the loss of general government revenue, and c) other one-off events that affected the general government sector's position.

<sup>19</sup> The adjusted structural deficit decreased by 0.6% of GDP.

<sup>20</sup> This was also in accordance with the European Commission's recommendation that Slovenia should take additional consolidation measures amounting to 1% of GDP.

**Box 1: Assessment of Slovenia in the European Commission's excessive imbalance procedure**

**To reveal imbalances at an early stage and promptly correct them, in 2012 the European Commission launched an excessive macroeconomic imbalance procedure.** The assessment procedure is based on ten internal and external imbalance indicators (see table) and an in-depth review to establish the impact of imbalances identified by indicators on macroeconomic stability. If the European Commission considers that macroeconomic imbalances exist, it will issue policy recommendations for the Member State(s) concerned. If it considers that there are severe or excessive imbalances that may jeopardise the proper functioning of the Economic and Monetary Union, a procedure will be initiated regarding the identified excessive imbalances in which recommendations and requests for enhanced supervision and monitoring may be issued to the Member State(s) concerned. The Member State against which the procedure has been initiated is obliged to present a corrective action plan (CAP). If an euro area Member State fails several times in a row to take appropriate corrective action, a fine of up to 0.1% of GDP can be imposed on it.

**On the basis of indicators and an in-depth review presented by the European Commission in the spring of 2013, Slovenia was put on the list of countries with excessive imbalances and was issued recommendations by the Council of the European Union in July 2013 to stabilise the situation as soon as possible.** Since the onset of the crisis, the set of macroeconomic imbalance indicators have pointed to two problematic areas in Slovenia, namely the competitiveness of the economy and the international investment position. Despite positive changes in the area of cost competitiveness after 2010 and a slight improvement in the country's negative net international investment position and market share in 2013 (see Chapters 1.1. and 1.3), indicators still point to imbalances, which was also confirmed by an in-depth analysis by the European Commission in the spring of 2013. The analysis revealed that Slovenia was experiencing excessive macroeconomic imbalances, in particular as regards corporate sector deleveraging against the background of weak economic activity, banking stability and the increase in general government debt. In addition, the European Commission considers that, in the past years, Slovenia did not implement structural reforms to enhance its adjustment capacity to shocks, which additionally hinders economic recovery. Therefore, in July 2013 the Council of the European Union issued nine recommendations for the 2013–2014 period to Slovenia in the areas of sustainable fiscal consolidation, the long-term sustainability of the pension system, labour market reform to increase competitiveness and employment, measures to stabilise the banking system, corporate deleveraging and restructuring, better management of state owned assets or divestment of non-core assets, improving the business environment, and reducing the length of judicial proceedings.

**According to the European Commission's assessment, Slovenia made significant progress in stabilising the banking sector by the beginning of 2014, while the implementation of privatisation and other structural reforms to increase competitiveness and keep public debt at a sustainable level still remain a challenge.** The European Commission monitors Slovenia's progress in implementing recommendations on a quarterly basis. The second report was made in January 2014, while an in-depth analysis was presented in March 2014. The European Commission assessed that stress tests, asset quality reviews, bank recapitalisation, and the transfer of non-performing assets to the Bank Assets Management Company (BAMC) constituted important progress in the process of restructuring and privatisation of the financial and corporate sectors. In its view, it is now crucial to establish an institutional framework for improving the management of state-owned assets and carrying out privatisation. In addition to having a positive impact on competitiveness, the divestment of state ownership is important in terms of maintaining public debt at a sustainable

**Table: Results of macroeconomic imbalance indicators for Slovenia**

	Indicator/Threshold	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
External imbalances	Current account, as a % of GDP (3-year average)	+6/-4 %	0.1	-0.8	-1.7	-2.0	-2.6	-3.8	-3.4	-2.0	-0.1	1.2
	Net international investment position, as a % of GDP	-35 %	-6	-8	-11	-17	-22	-36	-40	-43	-41	-45
	Real effective exchange rate (CPI deflator), 3-year growth	+/-11 %	4.7	4.8	1.0	-2.8	-1.2	2.2	5.2	1.2	-1.1	-4.5
	Export market share (goods and services), 5 year growth	- 6 %	3.4	16.4	27.0	19.0	19.8	12.1	6.8	-3.7	-6.7	-19.9
	Nominal unit labour cost, 3-year growth	+9 %	20.6	14.6	9.7	6.2	5.2	10.3	18.5	16.0	8.3	0.4
Internal imbalances	House price index, year-on-year % change	+6 %		6.5	11.9	14.1	18.8	1.5	-10.0	-1.4	1.0	-8.4
	Private sector credit flow, as a % of GDP	15 %	8.5	8.6	12.6	13.8	21.8	15.8	2.9	1.9	0.4	-3.0
	Private sector debt, as a % of GDP	160 %	64	68	78	84	98	108	116	118	115	114
	General government sector debt, as a % of GDP	60 %	27	27	27	26	23	22	35	39	47	54
	Unemployment rate, 3- year average	10 %	6.4	6.5	6.5	6.3	5.8	5.1	5.0	5.9	7.1	8.1
	Total financial sector liabilities, unconsolidated, year-on-year % change	16.5 %	12.6	11.5	17.7	13.8	28.5	6.6	7.4	-3.4	-1.3	-0.7

Source: Eurostat Portal Page – Macroeconomic Imbalance Procedure Statistics, 2014.

Note: Indicators found to exceed the threshold value in the EU excessive imbalance procedure are marked in grey.

level. Regarding fiscal stability, the European Commission considers that it is vital to deliver on commitments arising from the inclusion of the fiscal rule in the Constitution, while in light of the ageing population, it is necessary to continue the reform of the pension system and to reform the long-term care system. With regard to increasing competitiveness, the EC highlighted the necessity of further containment of unit labour costs and further reform of the labour market with a view to increasing its flexibility and stepping up the deregulation of services.

**The stabilisation of public debt is one of the key priorities in the coming years.** Last year, debt was EUR 17 bn higher compared to 2008, and 49.6 percentage points higher in relation to GDP. A rise in interest (by EUR 156.8 m last year, and by EUR 500.1 m compared to 2008), associated with increased debt, results in increased interest expenditure in relation to other expenditure and, in turn, less leeway for a response to possible shocks in the future and for the financing of development priorities, and affects the quality of public finance. That is why further sustainable fiscal consolidation, together with more decisive progress on the privatisation and restructuring of companies, including the sale of assets by the BAMC (see Chapter 3.2) with a view to reducing the burden of debt and improving the economic situation (GDP growth), is one of the key priorities of economic policy.

**Last year, state borrowing occurred under adverse conditions, which improved only at the end of the year.** With the yield at around 5% in the first quarter of 2013, borrowing conditions tightened considerably in April as a result of developments in the most exposed euro area countries. In addition, the required yield on Slovenia's bonds rose to 6.63%, which was the highest level in 2013, also due to a lack of trust on the part of international markets that Slovenia would be able to provide funding to resolve the problems in the banking system on its own. From June to October, the yield level was stable although still relatively high (6.1% on average), as uncertainty regarding the resolution of these problems continued due to a delay in the transfer of non-performing assets and questions being raised as to how much funds would be needed to recapitalise the banking system. The required yield fell considerably only after bank recapitalisations, which followed the publication of the results of the bank asset quality review and stress tests. Accordingly, the yield stood at 4.39% at the end of 2013 and fell to around 3.5% by the end of March 2014, which is the lowest since Slovenia has been issuing bonds in the Eurobond market. During 2013, three large credit rating agencies further downgraded Slovenia's credit rating (Moody's downgraded it from investment grade to speculative grade), but this did not affect the required yield significantly. All three agencies drew attention to the high increase in public debt in 2013 with respect to the bank balance sheet cleaning up process. At the beginning of 2014, Moody's changed the outlook on Slovenia's Ba1 government bond rating to stable.

## 1.2 Financial markets and corporate sector indebtedness

### 1.2.1 Financial markets

**The situation in Slovenia's banking system worsened in 2013.** Banks have significantly reduced loans to the Slovenian economy since the onset of the crisis as a result of limited sources of financing and low capitalisation, while the demand for loans remained low due to the unfavourable economic situation and the excessive indebtedness of the corporate sector. Accordingly, the volume of loans to domestic non-banking sectors has thus been decreasing since 2011 (down EUR 4 bn by November 2013). For the second year in a row, banks faced a decline in deposits by domestic non-banking sectors. The decline was approximately twice as large last year (EUR 1.6 bn) than the year before, as a significant part of government deposits was used for bank recapitalisation, while the decline in joint deposits was also due to the unfavourable economic situation and the lack of trust among bank customers. Adverse economic conditions further increased the burden of debt of over-indebted companies, thereby lowering the quality of bank assets. At the end of November 2013, the volume of claims in arrears totalled EUR 9.9 bn, which was 7.5% more than at the beginning of 2013 and 3.6-times as much as in 2007. Almost 80% of all claims were more than 90 days in arrears (non-performing claims).

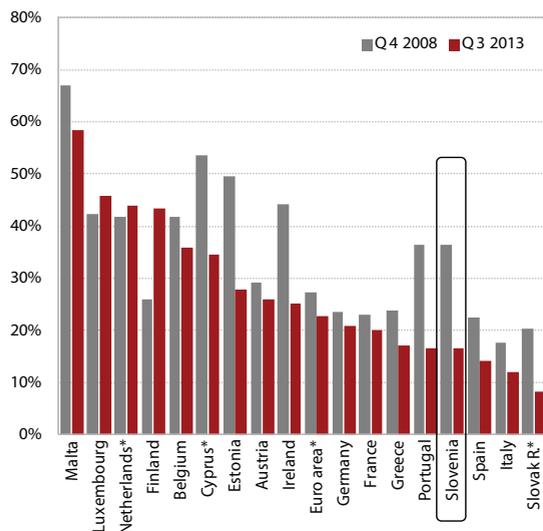
**The deteriorating situation in the banking system and adverse developments in international financial markets considerably limited the access of banks to foreign financing. Banks, however, continue to rely heavily on ECB funding.** The repayment of the foreign liabilities of banks slightly slowed down in 2013, remaining at a relatively high level of EUR 2 bn. Since the worsening of the international financial crisis in September 2008, net deleveraging at banks totalled EUR 11.2 bn. At the end of 2013, debt to foreign banks amounted to only EUR 5.7 bn, with liabilities towards foreign banks accounting for only 12.4% of the total assets of the banking system (around 35% at the end of 2008). Slovenia saw a significant reduction in the volume of foreign liabilities compared to the rest of the euro area, which indicates that, in recent years, banks have been exposed to above-average liquidity pressures, which further worsened the situation in the banking system<sup>21</sup>. The Slovenian banking system

<sup>21</sup> Italian banks were considerably less exposed due to a smaller share of foreign debt financing despite relatively poor bank stability indicators (capital adequacy, the share of non-

is already below average in terms of reliance on foreign financing. This and the successful stabilisation of the banking system could gradually improve access to foreign financing. Since the onset of the crisis, the banking sector significantly increased its liabilities to the ECB within non-standard long-term refinancing operations (by EUR 3.4 bn since September 2008).

**The deposit base, which was considered a relatively stable source of financing, decreased considerably in recent years.** In 2012 and 2013, when Slovenia was ranked among the countries with higher risk by international institutions, also due to the precarious situation in the banking system, banks saw an outflow of household deposits, which were at that time considered the most stable source of bank funding. In 2013, the inflow of household deposits declined by almost half a billion euros, which was the largest decline thus far. The decline in household deposits was most significant at the time of the worsening situation in Cyprus, although household deposits continued to decline in the following months as well. The largest part of last year's decline (a good 70%) was due to a reduction in short-term deposits, while long-term and overnight deposits also declined. Government deposits, which were an important source of funding for Slovenian banks<sup>22</sup>, also declined last year (by EUR 1.3 bn). The decline was due to the recapitalisation of the Slovenian banking system. In terms of financial stability, it is sensible for banks to rely more heavily on domestic financing sources instead of foreign financing sources. This, however, requires the trust of depositors in the banking system and appropriate economic conditions that will enable the accumulation of financial surpluses.

Figure 5: Foreign liabilities as a % of total assets, EMU Member States

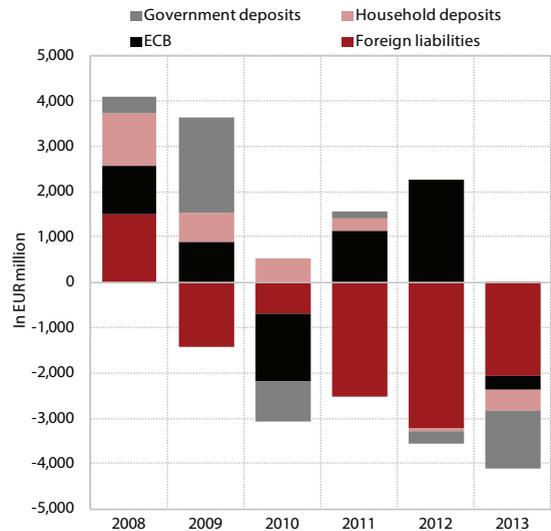


Source: Bank of Slovenia, World Bank, calculations by IMAD.  
Note: \* Data refer to the second quarter of 2013.

performing claims).

<sup>22</sup> Government deposits were between EUR 2.5 and 4 bn in recent years, amounting to EUR 1.3 bn at the end of 2013.

Figure 6: Change in the volume of some important sources of financing in the Slovenian banking sector



Source: Bank of Slovenia, calculations by IMAD.

**In view of the rapid worsening of banks' situation and the slow response to it, in 2013 Slovenia began the stabilisation of the banking system in accordance with the recommendations of the Council of the European Union within the macroeconomic imbalance procedure.** The rapid worsening of banks' situation, particularly in light of negative economic trends, corporate indebtedness, and the fiscal situation, was also highlighted in an in-depth review presented by the European Commission in the spring of 2013. On the basis of the review, Slovenia was put on the list of countries with excessive macroeconomic imbalances and was issued recommendations by the Council of the European Union to stabilise the situation as soon as possible (see Box 1). In accordance with the recommendations, in the second half of 2013, banks underwent stress testing and asset quality review, and the largest banks were recapitalised. Stress tests covered eight Slovenian banks<sup>23</sup> which constitute a representative sample of the Slovenian banking system. The results showed that the capital shortfall at the banks covered by the review would amount to EUR 4.778 bn (13.5% of GDP) under the adverse macroeconomic scenario<sup>24</sup>. On the basis of these results, EUR 2.8 bn<sup>25</sup> (7.8% of GDP) was injected into the largest three Slovenian banks at end of 2013, and some

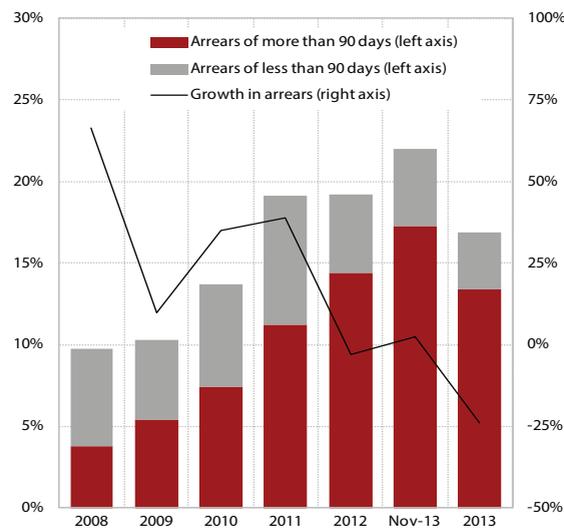
<sup>23</sup> Initially, 10 banks were included in the process of stress testing, but two of them were subsequently excluded due to an orderly wind-down process.

<sup>24</sup> The adverse scenario involves a decline in real GDP of 9.5% in the period 2013–2015, an 18% drop in private consumption, a 25% drop in gross capital formation and the value of shares and a 27% drop in average real estate prices. In this period, public debt would increase to 84.4% and the unemployment rate to 14%.

<sup>25</sup> The capital shortfall at these banks totalled EUR 3.7 bn, but the capital requirement declined to EUR 3 bn due to the transfer of assets to the BAMC and the bail in of subordinated debt holders. In addition, one of the banks was not fully recapitalised, as it is yet to receive final approval from the European Commission.

assets were transferred to the Bank Assets Management Company (BAMC). In addition, last year, the government recapitalised two banks undergoing an orderly wind-down process in the amount of EUR 445 m. Since 2008, about EUR 4 bn of public funds (11.3% of GDP) have been used for the recapitalisation of the Slovenian banking system. The remaining banks that were covered by the review will have to provide around EUR 1 bn of equity by the end of the first half of 2014, otherwise the state will have to recapitalise them as well.

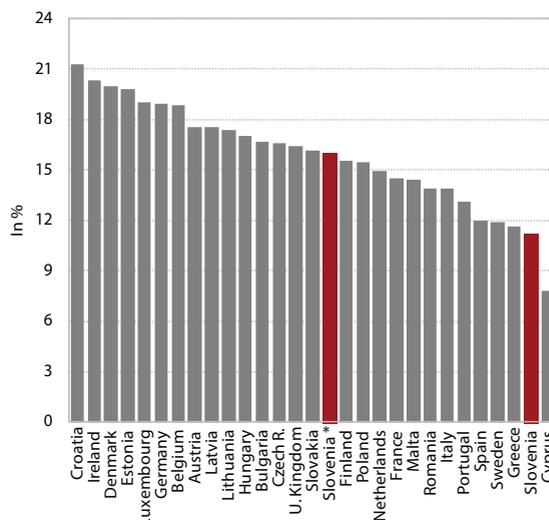
Figure 7: Share of and growth in claims in arrears in the Slovenian banking system



Source: Bank of Slovenia, calculations by IMAD.

**The Bank of Slovenia estimates that after the recapitalisation of the banks that were subject to the stress tests, the capital adequacy ratio of the Slovenian banking system will rise to 16%.** According to the Bank of Slovenia, the capital adequacy, measured as a ratio of core capital to risk weighted assets, should increase from 11% to around 16% after recapitalisations. This should enable the banks to meet the Core Tier 1 capital ratio requirement (6%) by the end of 2015, also under the adverse macroeconomic scenario. International comparisons show that after the recapitalisation of the largest banks, Slovenia's banking system will rank among the medium-capitalised banking systems in the EU. The first effects of a more serious approach to the stabilisation of the Slovenian banking system were also reflected in the improved position of Slovenia in international financial markets, which is also evident from the lower required yield-to-maturity on euro bonds (see Chapter 1.1, indicator 1.8). As non-performing assets were transferred to the BAMC, the volume of claims in arrears declined at the end of the year. It declined by almost 30% to EUR 7.0 bn compared to November. Most of the decline (more than three-quarters) was due to the lower volume of claims that are more than 90 days in arrears.

Figure 8: Capital adequacy of the banking systems



Source: BS, IMF.

Notes: Latest available data; Q2 2012 (UK), Q4 2012 (BG, FR, CY), Q1 2013 (AT, PL), Q2 2013 (IE, LU, DE, BE, LV, LT, HU, CZ, SK, FI, MT, IT, PT, ES, SE, GR SI), Q3 2013 (EE, NL, RO); \*The assessment of the capital adequacy of the Slovenian banking system after recapitalisations

**In addition to problems in the banking system, access to financing sources is hindered by the relatively modest development of other segments of the financial system.** With the contraction in the banking system's total assets, which have been in decline since 2010 as a result of the contraction in lending activity and, according to the latest data (2012), stand at around only 40% of the average value of total assets relative to GDP in the EU, the capital market is stagnating at an extremely low level. The value of the market capitalisation indicator relative to GDP in Slovenia is only 20% of the EU average. This is attributable to poor transparency and inadequate liquidity on the Slovenian capital market, which have been keeping potential investors in the Slovenian economy away and, given the lack of other sources of financing, resulted in the high indebtedness of Slovenian companies. If the economy is to achieve long-term growth and development, in addition to the stabilisation and better management of the banking system, Slovenia will have to develop this segment of financial intermediation as well, thereby increasing the role of equity capital in the financing of companies. In terms of development, the insurance sector is lagging behind the EU average the least. This is also due to the structure of insurance premiums<sup>26</sup>, with non-life insurance premiums, which are relatively less impacted by changes in income, accounting for around 70% of all premiums. However, with the further worsening of the economic situation, the volume of these premiums could also begin to decline considerably<sup>27</sup>. The life insurance

<sup>26</sup> Since the insurance sector has a relatively low debt level, it is not burdened with the repayment of overdue liabilities and can therefore focus more on its core activity.

<sup>27</sup> This is also indicated by the provisional data for the last quarter of 2013.

segment, however, is still relatively poorly developed, the main challenge remaining the development of pension insurance.

### 1.2.2 Corporate sector indebtedness

***In addition to the poor state of banks, unfavourable conditions on the demand side, resulting mainly from high corporate indebtedness, contributed to a reduction in lending to the economy during the crisis.***

After corporate indebtedness significantly increased in the years before the crisis, in the past three years (2011–2013) companies (and NFIs) made net repayments of EUR 7.4 bn of loans to domestic banks. Corporate indebtedness, measured as a debt-to-equity ratio, was still considerably higher in this period (128% in the third quarter of 2013) than before the outbreak of the crisis, when the ratio was more or less balanced. After declining at the beginning of the crisis, the level of equity did not increase significantly, with any possible increases being due to changes in value rather than actual transactions related to recapitalisations and the transfer of profits to capital<sup>28</sup>. The European Commission also drew attention to the over-indebtedness of the corporate sector in the context of the excessive macroeconomic imbalance procedure, highlighting the excessive burden of debt on companies in the face of their poor revenues, combined with elevated costs of labour and capital. This is reflected in the high indebtedness of companies, measured as the ratio of debt to free cash flow (EBITDA<sup>29</sup>), which only decreased minimally (to 8.5) in 2012, according to the latest data.

***With the high level of financial liabilities of the corporate sector to banks, which are concentrated in a relatively small number of companies, operating liabilities have recently gained in importance.*** Despite

the fact that companies' financial liabilities to banks remain the most important source of debt financing for companies, in 2012 the volume of financial liabilities to banks was only EUR 430 m larger than the volume of operating liabilities. The concentration of liabilities to banks is still very high. In 2012, as the year before, the most heavily indebted quintile<sup>30</sup> included only 16 companies<sup>31</sup>. While the amount of their financial liabilities to banks declined in 2012, the amount of total debt increased. The rise in debt was driven by the larger amount of financial liabilities to companies in the group, other financial liabilities, and operating liabilities. This shows that companies most heavily in debt to banks turned to affiliated (in terms of the business relationship or ownership) companies to service their debt, thereby creating increased pressure on the healthy cores of the economy, according to our estimates. An increase in these liabilities is also evident in certain other quintiles but is considerably less significant. In the second quintile, liabilities to companies in the group increased significantly, according to our estimates, mainly due to the fact that subsidiaries have been taking advantage of parent companies' access to sources of financing in international financial markets, where borrowing conditions are considerably better than in Slovenia<sup>32</sup>.

***Reducing corporate sector indebtedness and restoring business operations are crucial to the successful stabilisation of the banking system.*** The stabilisation of the banking sector will lead to the creation of conditions for the financial restructuring of heavily indebted companies, which is of paramount importance for their growth and development, together with favourable conditions for the operation of companies and increased competitiveness (see Chapter 1.3). The unfavourable situation in the credit markets also significantly affects companies that are not over-indebted but cannot fully exploit all business opportunities due to limited sources of

Table 2: Corporate indebtedness by quintiles with regard to financial liabilities to banks, Slovenia, 2012

Quintile	Financial liabilities to banks	Financial liabilities to companies in the group	Other financial liabilities	Operating liabilities	Value added	Average number of employees	Number of companies	Share of financial liabilities to banks in total liabilities (in %)	Debt-to-EBITDA	Net financial debt-to-EBITDA
	In EUR million									
1	3,611	3,122	4,250	10,783	9,642	5.0	58,217	8.9	7.7	2.9
2	3,610	368	550	1,959	1,782	73.1	683	32.8	11.2	7.1
3	3,605	242	301	1,726	1,915	200.8	185	31.6	7.3	4.5
4	3,553	145	577	1,359	1,799	683.7	49	31.5	7.2	4.7
5	3,685	621	890	1,807	974	1,302.6	16	34.1	14.6	10.3
Total	18,065	4,498	6,568	17,635	16,112	7.3	59,150	21.2	8.5	4.4

Source: AJPES, calculations by IMAD.

<sup>28</sup> In the period from 2008 to the end of 2012, the level of equity of companies and NFIs increased by a mere 0.7% in Slovenia, and by around 30% in the euro area.

<sup>29</sup> Earnings before interests, taxes, depreciation and amortization.

<sup>30</sup> Quintiles are formed on the basis of the financial liabilities of companies to banks (see Table 2)

<sup>31</sup> Thirteen of these companies were the same as in 2011.

<sup>32</sup> Interest rates for companies in Slovenia and in the euro area differ by 200 to 300 bps.

Table 3: Corporate indebtedness in terms of the net financial debt-to-EBITDA ratio, Slovenia, 2012

Net financial debt/EBITDA	EBITDA	Financial liabilities to banks	Financial liabilities to companies in the group	Other financial liabilities	Operating liabilities	Value added	Number of employees	Number of companies	Share of financial liabilities to banks in total liabilities (in %)	Net financial debt-to-EBITDA
<0	positive	81	14	70	3,533	3,909	103,504	17,918	0.7	-0.9
<0	negative	2,597	1,483	1,339	1,900	331	32,949	10,249	28.6	-15.6
from 0 to 5	positive	4,856	923	1,561	6,156	8,057	179,001	12,395	15.5	1.9
from 0 to 5	negative	1	1	6	400	76	8,627	5,674	0.1	0.4
above 5	positive	10,405	2,061	3,531	5,338	3,700	105,564	8,126	34.0	11.1
above 5	negative	1	2	4	156	40	1,892	2,027	0.2	22.9
EBITDA=0		124	14	57	153	0	16	2,761	32.5	0.0
Total		18,065	4,498	6,568	17,635	16,112	431,553	59,150	21.2	4.4

Source: AJPES, calculations by IMAD.

financing. The net financial debt to EBITDA ratio<sup>33</sup> stands at less than 5<sup>34</sup> for about 50% of companies, indicating their relatively good creditworthiness<sup>35</sup>. According to our estimates, provided that their EBITDA remains at the same level as in 2012, these companies have a borrowing potential of around EUR 19.5 bn, which is a relatively high amount given overall excessive indebtedness. The successful stabilisation of the Slovenian banking system is also necessary in terms of providing sources of financing to these companies, which represent the core of high-quality bank clients and currently draw on other (less expensive) sources of financing<sup>36</sup>.

### 1.3 Competitiveness of the corporate sector

*In the five-year period from 2008 to 2012, Slovenia recorded one of the largest declines in export competitiveness among the EU Member States, while initial data for 2013 indicate a reversal in this trend.* Slovenia's export share on the global merchandise market had declined continuously since 2008. In 2012, it was 22% lower than before the beginning of the crisis in 2007. On the markets of fourteen of Slovenia's main trading partners (see indicator 1.13), the cumulative

<sup>33</sup> Financial debt minus cash and cash equivalents.

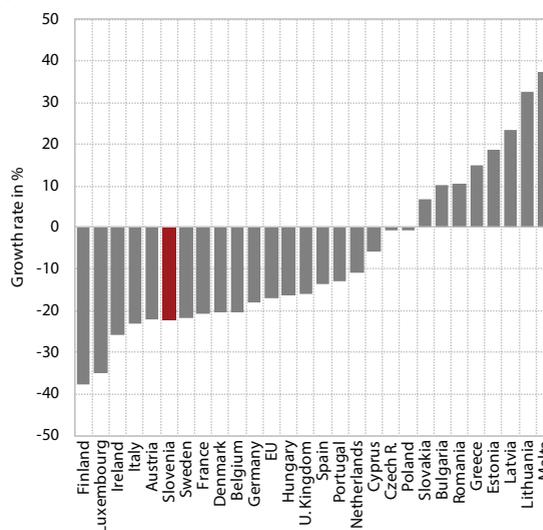
<sup>34</sup> We have taken into account the categories in which the net financial debt to EBITDA ratio is less than 5 (or negative), while companies' EBITDA is positive.

<sup>35</sup> This threshold is also set in the terms and conditions of the SID Bank for drawing down loans from the SID Bank's loan fund for small and medium-sized enterprises.

<sup>36</sup> Data show that there is practically no deleveraging of Slovenian companies abroad and that loans from abroad have increased in recent years. The large increase in 2013 was largely due to two one-off events, but we estimate that, without taking into account these two events, loans from abroad would have decreased by approximately 1.5%, which is less than the decrease in the loans of companies and NFIs in the euro area member states.

loss of market share totalled 12% in 2012, with market share exceeding the pre-crisis level only in Germany and Croatia, Slovenia's first and fourth most important trading partners. The majority of the loss was incurred in non-EU markets, while in the EU-27 the cumulative loss was smaller (6%). In the 2008–2012 period, the market share in the global market declined in most EU countries; of those declining, Slovenia ranked sixth, which is relatively poor. For a second year in a row, Slovenia was also one of the countries with excessive macroeconomic imbalances according to the methodology of the European Commission (see Box 1). Trends in the first three quarters of 2013 show a reversal of negative trends and a rise in market share on the global market. It is encouraging that Slovenia's market share increased in most of its main trading partners and product markets.

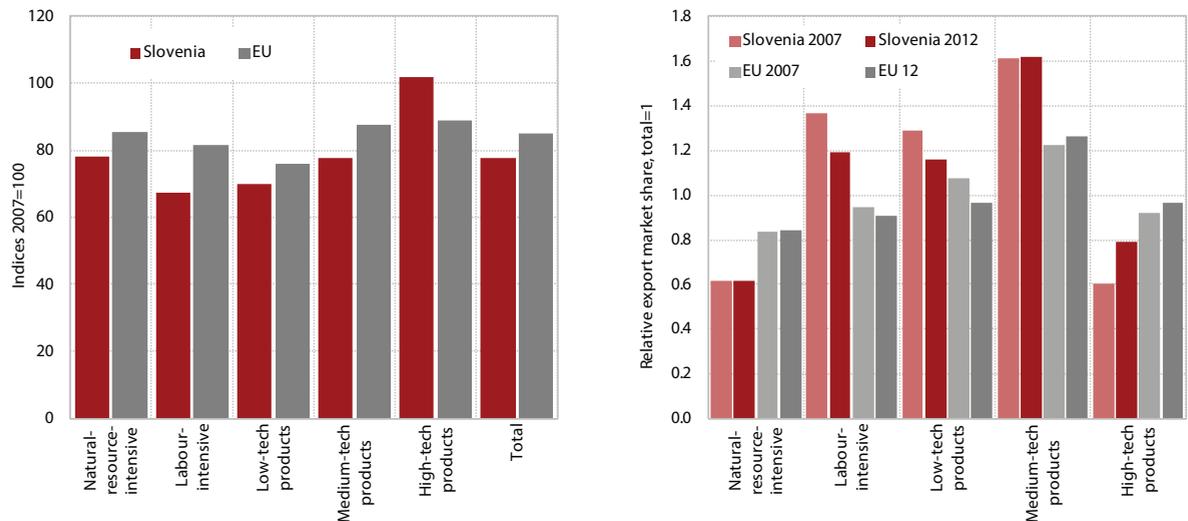
Figure 9: Change in market shares of EU Member States on the global merchandise market in the 2008–2012 period



Source: United Nations Commodity Trade Statistics Database, 2014; calculations by IMAD.

Note: The market share is calculated as the share of exports of a particular EU Member State in global merchandise exports.

Figure 10: Market shares on the global market by factor intensity in Slovenia and the EU, 2012



Source: UN Unctad, calculations by IMAD.

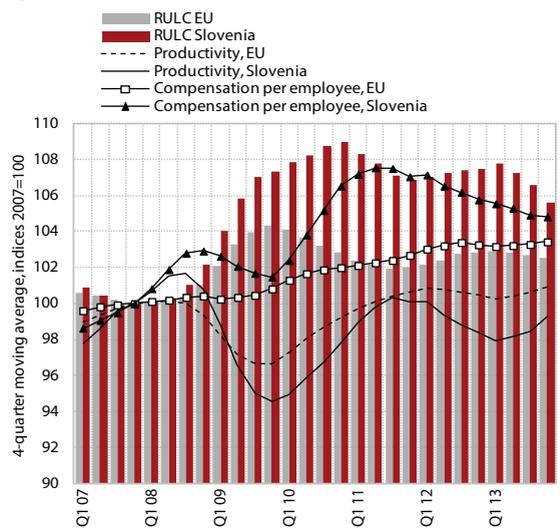
Note: \*The relative share of exports is the share of a country's exports of a certain group of products compared to the total share of the country's exports in the world market, e.g. the share of Slovenia's exports of medium-tech products is 1.6 times larger than the total share of Slovenia's exports in the world market.

**Important factors in the relatively large drop in Slovenia's market share are the regional and product structure of Slovenian exports and a deterioration in cost competitiveness.**

In terms of regional structure, Slovenia's exports are focused, to a relatively larger extent than in the case of other countries, on markets where recovery after the crisis has been slow, instead of on fast-growing, non-EU markets. In comparison to other countries, Slovenia's share of trade with the countries of the former Yugoslavia is considerably higher, as is its focus on the EU market. The negative impact of the product structure is accounted for by the fact that, during the crisis, the world market saw a rapid increase in demand for food and raw materials, which account for a relatively small share of Slovenia's exports, while demand for manufactured products, which account for the majority of Slovenia's exports of goods, was smaller. Slovenia has a relatively high share of medium-tech products, the demand for which fell significantly during the crisis (e.g. road vehicles, which account for the largest share of Slovenian exports of goods). In addition, low-tech and labour-intensive products also account for a considerable part of Slovenia's exports (see indicator 1.15). Their share, which had already been gradually declining in the years before the crisis, suffered an even steeper decline during the crisis when unit labour costs increased significantly and the volume of these industries shrank considerably (see Figure 14). In the 2008–2012 period, Slovenia recorded the largest cumulative decline in the market shares of low-tech and labour-intensive products (by around a third). The shares of medium-tech products and natural-resource intensive products declined by a good fifth, while the share of high-tech products was the only one to exceed the 2007 level. These trends indicate an urgent need for a more rapid shift towards high-tech products with high added value. In this regard, raising the innovation capacity of companies is of crucial importance.

**After a sharp decline in the first years of the crisis, the cost competitiveness of the Slovenian economy improved over the last three years (2011–2013), although the cumulative loss was still above the EU average.** The sharp decline in cost competitiveness in the 2008–2010 period was due to a relatively large increase in labour costs in 2008 and 2010<sup>37</sup> and a drop in productivity in 2009, which was above the EU average. In three years, real unit labour costs increased by 9% in Slovenia, and only by approximately 3% in the EU. The improvement after 2010 was mostly due to the

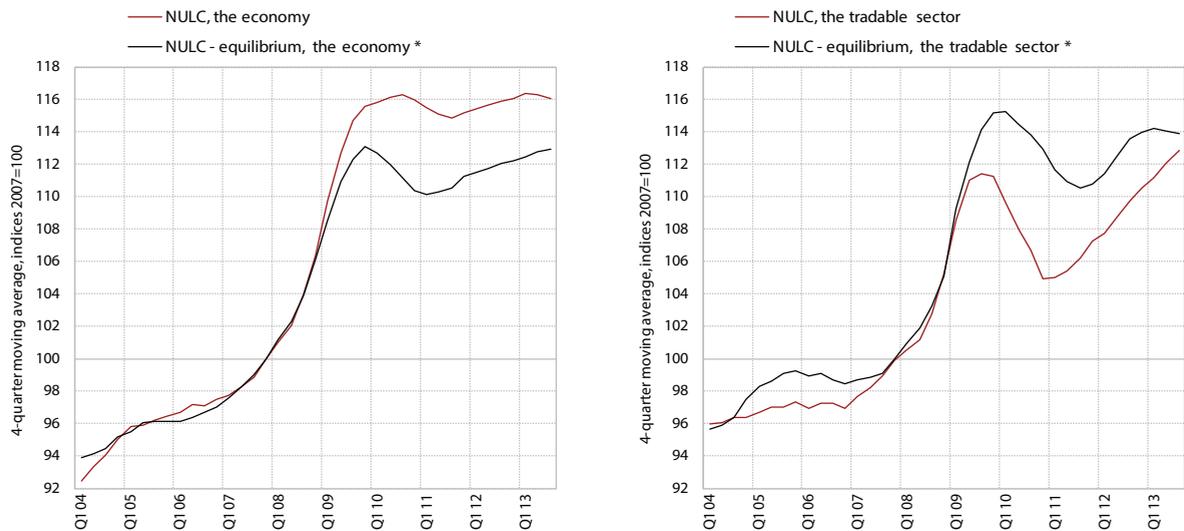
Figure 11: Real unit labour costs in Slovenia and the EU



Source: Eurostat, calculations by IMAD.

<sup>37</sup> In 2008 this was a result of the partial payment of wage disparities in the public sector and the indexation of wages to relatively high inflation the year before, and in 2010 to the large increase in the minimum wage mandated by the new law.

Figure 12: Nominal unit labour costs and equilibrium\* unit labour costs for the entire economy and the tradable sector, Slovenia



Source: Eurostat, calculations by IMAD.

Notes: \* Equilibrium unit labour costs are defined as nominal unit labour costs in the euro area adjusted for the difference between domestic and foreign prices (for more information, see The Equilibrium Competitiveness Indicator for Slovenia, Bank of Slovenia, 2013). The unit labour cost indicator is based on the gross domestic product for the entire economy and on value added for the tradable sector.

adjustment of the labour market to reduced economic activity, while economic growth still lagged behind trends in the EU. The adjustment of the labour market first involved a reduction in employment, and after 2011 a reduction in labour costs. After 2012, wages in the public sector decreased as a result of fiscal consolidation measures, with private sector wage growth easing as well. In 2013, real unit labour costs exceeded the 2007 level by a mere 5.6% in Slovenia, and by 2.5% in the EU. Taking into account the effects of the exchange rate depreciation in the 2010–2012 period, the cumulative loss of competitiveness in Slovenia since the beginning of the crisis was smaller<sup>38</sup>, while the effects of the depreciation were even more favourable in the euro area due to a larger share of external trade with non-euro area countries.

**The majority of the adjustment of unit labour costs in recent years was accounted for by the tradable sector<sup>39</sup>.** The cumulative increase in unit labour costs since the beginning of the crisis has been smaller in the tradable sector than in the entire economy. After a significant increase in unit labour costs at the beginning of the crisis, trends began to improve earlier (in 2010) in the tradable sector, where the adjustment was more intense, than in the non-tradable sector. A comparison with equilibrium<sup>40</sup> unit labour costs shows that this, and

a considerable increase in costs in the euro area after 2011, drove nominal unit labour costs to levels very close to the equilibrium unit labour costs in the second half of 2013. In the manufacturing industry, which represents the tradable sector in the narrow sense, the cumulative increase in unit labour costs during the crisis was approximately the same as for equilibrium unit labour costs. In 2010 and 2011, in particular, the improvement was largely due to a structural change, i.e. a significant reduction in the share of industries with relatively higher unit labour costs<sup>41</sup>. A more favourable position of the tradable sector is also reflected in the comparison of the level of unit labour costs with the EU average, which shows that, in mid-2013, unit labour costs in most of the tradable sector industries reached or came very close to the average level of unit labour costs in the EU prior to the onset of the crisis. On the other hand, the difference further increased in the non-tradable sector, in which the share of labour costs in value added was higher than the EU average even before the crisis. This is the case in most non-tradable sector industries, with the exception of construction and real estate activities.

labour costs in the euro area adjusted for the difference between domestic and foreign prices (for more information, see The Equilibrium Competitiveness Indicator for Slovenia, Bank of Slovenia, 2013). They show a change in unit labour costs that does not result in a deterioration in cost competitiveness.

<sup>41</sup> IMAD estimates, calculated by excluding the changes in the structure of manufacturing activities at the level of two-digit codes of activities (according to the Standard Classification of Activities) and at the level of individual data from companies, show that the change in the structure of manufacturing activities (a reduction in the share of activities with a higher share of labour costs in value added) had a considerable impact on the reduction of unit labour costs in 2010 and 2011.

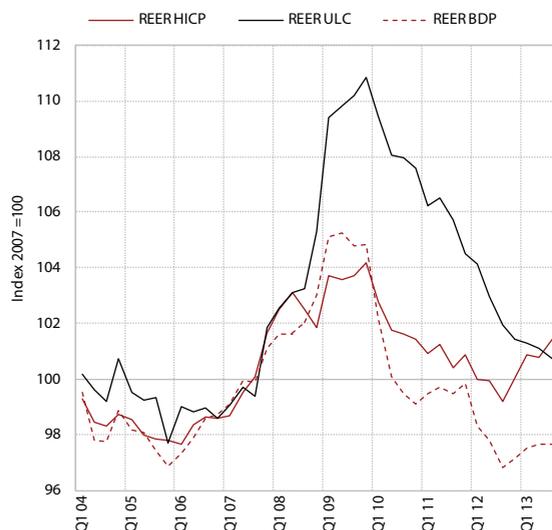
<sup>38</sup> In the first nine months of 2013, the real exchange rate deflated by relative unit labour costs in Slovenia exceeded the 2007 level by 1.6%, while in most euro area countries it was already below that level.

<sup>39</sup> The tradable sector consists of manufacturing (C), wholesale and retail trade, transportation, accommodation and food service activities (G-I), information and communication activities (J), and agriculture (A).

<sup>40</sup> Equilibrium unit labour costs are defined as nominal unit

**Despite unfavourable trends in costs, price competitiveness did not significantly deteriorate during the crisis, while the profitability of the corporate sector declined considerably.** In 2012<sup>42</sup>, after a three-year depreciation, the real effective exchange rate deflated by relative consumer prices reached the pre-crisis level, while the real effective exchange rate deflated by the GDP deflator reached it in 2010. More stable trends in prices compared to trends in costs show that, in the face of weak demand during the economic crisis, companies could not entirely offset cost pressures with prices, which in turn reduced their profitability. Their profitability declined significantly in 2009, and remained around that level until 2012<sup>43</sup>. Apart from pressures from unit labour costs, which were the most intense until 2010, in the period 2010–2012 profitability was also adversely affected by a deterioration in the terms of trade due to a rise in the prices of raw materials and the depreciation of the euro. The initial data for 2013<sup>44</sup> show a slight improvement in profitability as a result of the improved terms of trade and the further reduction of unit labour costs. Narrowing the gap between costs and prices is urgent, considering that, given the relatively high indebtedness of companies and poor access to other sources of financing, companies' own resources represent an important source of financing for investments, which are of crucial importance for stable improvement of competitiveness and an increase in value added.

Figure 13: The real effective exchange rate deflated by consumer prices, the GDP deflator, and unit labour costs



Source: ECB; calculations by IMAD.

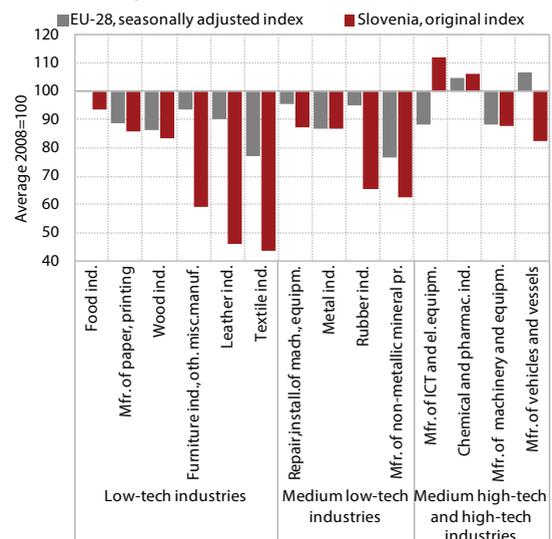
<sup>42</sup> In 2013 it was again slightly above the pre-crisis level. The appreciation of the real exchange rate in 2013 was driven by the appreciation of the nominal exchange rate and an increase in relative prices. The latter was associated with an increase in the prices of school meals (as a result of the abolition of subsidies) and an increase in the annual fee for the use of motor vehicles in the last months of 2012.

<sup>43</sup> The profitability of companies, computed as the ratio of operating profit to turnover (2008: 4.3%, 2012: 2.8%).

<sup>44</sup> Quarterly data on the operation of companies provided by SURS.

**Slovenia's volume of production in manufacturing lags behind the pre-crisis level more than the EU average, with the biggest gap being recorded in low-tech industries.** Despite the fact that the economic crisis affected the European Union as a whole, manufacturing in Slovenia is recovering at a much slower pace than in the EU on average. The difference is accounted for by a sharper drop at the beginning of the crisis, considering that since 2009 Slovenia has seen a similar trend in the volume of production as the EU. However, there are considerable differences between individual industries. The recovery of low-tech, labour intensive industries lags behind recovery in the EU the most. Following a significant initial drop, the volume of production in these industries further shrank in the 2009–2013 period, in contrast to the EU. Contraction in these industries was relatively slow in the period before the crisis, given the relatively low tax burden on lower wages and the relatively strong orientation of industrial policy towards the provision of subsidies to companies in difficulty. Weak demand for such products since the beginning of the crisis and a considerable increase in unit labour costs, particularly as a result of a rise in the minimum wage, sped up this process significantly. The recovery of low-tech industries in Slovenia also lags behind the average of new EU Member States. Trends in technologically more intensive industries are comparable to the EU average and the average of new EU Member States, while trends in high-tech industries (the chemical and pharmaceutical industry, the production of ICT equipment and electrical equipment) are even more favourable.

Figure 14: Change in the volume of production in manufacturing industries in the 2008–2013 period



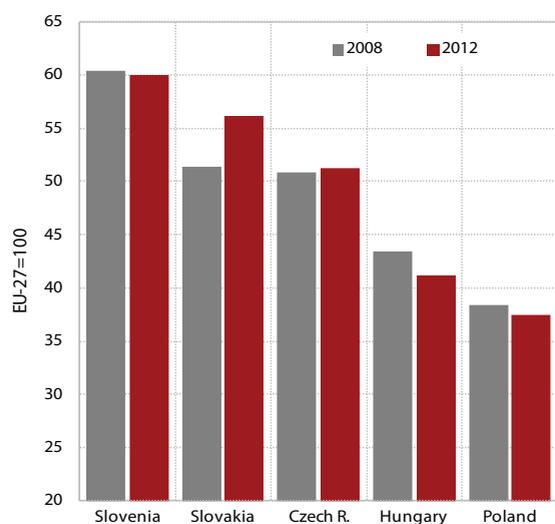
Source: Eurostat – short-term business statistics, SURS, calculations by IMAD.

**Relative to the EU average, in 2012 manufacturing productivity<sup>45</sup> came close to the level Slovenia recorded at the beginning of the crisis.** After falling to the lowest level since the beginning of the crisis in 2010 (55% of

<sup>45</sup> Measured by value added per employee.

the EU average), productivity began to rise again in the next two years at a faster pace than the EU average, to stand at 60% of the EU average in 2012, which is very close to the level Slovenia reached in 2008. Given the slower recovery of production and value added than in the EU, catching up in manufacturing productivity was mainly based on a reduction in employment. Compared to the new EU Member States of the Višegrad group, which are Slovenia's main competitors in foreign markets, Slovakia was the only one to narrow its gap in manufacturing productivity with the EU average in the 2008–2012 period. In the Czech Republic, as in Slovenia, the gap was approximately the same as at the beginning of the crisis, while it slightly increased in Hungary and Poland. The manufacturing productivity<sup>46</sup> gap of individual groups of manufacturing industries, compared to the EU average, did not change significantly during the crisis. It is most significant in technologically intensive industries, with the exception of the high-tech production of pharmaceutical and medicinal products, whose productivity level is the closest to the EU average. Moreover, the level of material productivity of high-tech manufacturing industries is also relatively low (see Chapter 5). Given the low cost competitiveness of low-tech, mainly labour-intensive industries, high-tech industries are of crucial importance for the development of the manufacturing industries sector. To achieve the competitiveness of the manufacturing industries sector and the entire economy, it is necessary to increase their value added as soon as possible, in particular by (i) increasing the innovation activity of companies and including service industries in the production processes of manufacturing industries to a greater extent, and ii) including companies in global value chains, particularly through foreign direct investment.

Figure 15: The productivity of the manufacturing industries sector in Slovenia and some of the new EU Member States

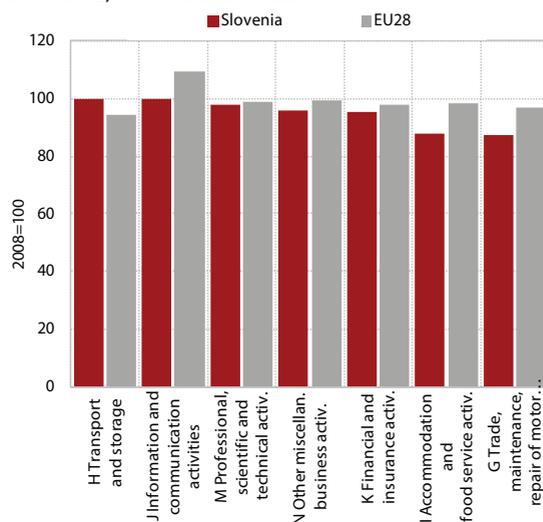


Source: Eurostat Portal Page – National Accounts, calculations by IMAD.

<sup>46</sup> Data that enable comparison at the level of manufacturing industries are available up to 2011.

**The recovery of market services is slower than in the EU; however, more favourable trends are characteristic of individual knowledge-based services.** The activity of market services, which had followed the overall EU trends from the onset of the crisis until 2010, decreased upon the intensification of the crisis in 2012, after the recovery of market services had considerably slowed down in 2011. The growth of market services in the EU continued in this period. Because the drop in domestic demand was greater than in the EU, the lag of value added behind the pre-crisis level and behind the EU trends is biggest in some traditional market services (trade and accommodation and food service activities)<sup>47</sup>. In view of the worsening of the banks' situation (see Chapter 1.2), the divergence of value added in financial and insurance services from the pre-crisis level has been faster than in the EU. More favourable trends, however, are characteristic of knowledge-based, non-financial services (information and communication services and professional, scientific and technical services), which were closer to the pre-crisis level in terms of value added in 2012, but still lagged behind the EU trends. There are, however, considerable differences among them. The growth of computer and information services and legal, accounting and consulting services, which increased the value added during the crisis especially on account of the fast growth of export earnings, was faster than in the EU. Particularly negative in comparison to the EU are architectural and engineering services, which showed a considerable decline in domestic sales due to the construction sector crisis, while the diversion to foreign markets began only in 2012. The recovery in the telecommunication service sector was slower than the

Figure 16: Change in value added (real) in market services, in 2008–2012, Slovenia and the EU



Source: Eurostat Portal Page – Economy and Finance – National Accounts, 2014.  
Note: The services displayed are market services with more than a 2% share in gross value added of the Slovenian economy. Although Real Estate Activity (L) reached 7.5% of value added in 2012, the largest part (84%) of real estate activities is the estimated housing activity of households, so the activity is not displayed in the figure.

<sup>47</sup> In the field of traditional market services, only the trends in transport are more favourable than those in the EU.

EU average, as well. This was influenced especially by the price drop in the EU, which contributed to a faster growth of real value added in the EU compared to Slovenia.

**The competitiveness of Slovenian exporters of services in EU markets is still high especially in the category of services related to natural characteristics and geographical position, but lower in the category of services based on high content of knowledge, modern technologies and a higher level of innovation.** Although the competitiveness level of Slovenian services in EU markets in 2012 was lower than at the onset of the crisis (in 2008), a halt to the downward trends was recorded last year. The EU remains the principal buyer of Slovenian services (79% in 2012); its share only slightly increased in the 2008–2012 period. Five major partners from the EU (Italy, Austria, Germany, Croatia and Hungary) account for three-quarters of the total service exports. The market share of Slovenian exporters in the EU is small; it is highest in the export of travel services, having considerably grown since the onset of the crisis. While the overall competitiveness of the second most important group, i.e. transport services, dropped from 2008 to 2012, its market share in the EU grew in the two principal markets (Germany and Italy). The market share of Slovenian exporters to the EU is smallest in other services, which mostly consist of knowledge-based services. Their export competitiveness contracted in the 2008–2011 period but rebounded in 2012. Since the onset of the crisis (2008–2012), the market share has increased considerably only in construction and other business services. Although the export of IT services also grew considerably in the 2008–2012 period, this was not enough to increase its market share in the EU, which declined by as much as 30%; this decline, however, stopped in 2012.

**Table 4: The market share of Slovenian exports of services within EU service imports**

In %	2008	2011	2012	Change 2012/2008
Services	0.35	0.32	0.33	-6.8
Transport	0.46	0.42	0.42	-8.2
Travel	0.63	0.7	0.7	11.8
Other services*	0.19	0.16	0.17	-13.0

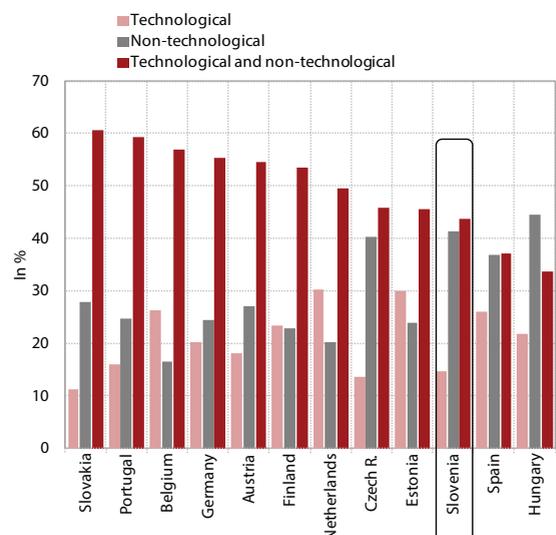
Source: IMAD calculation based on Eurostat data

Note: \* The 'Other services' group comprises communication, construction, financial, insurance, computer, IT, personal, cultural, recreation, state and other business services and licences, patents and copyrights.

**Due to the impact of knowledge-intensive services on the competitiveness of the entire economy, it is necessary to enhance their innovation activity and integration in the business processes of manufacturing industries.** Besides strengthening the share of technologically intensive manufacturing industries, knowledge-based services are of key importance to the enhanced competitiveness of the economy. Their role is not only reflected in a high level of innovation activity, which exceeds that in the manufacturing industries in most OECD countries, but especially in

their impact on enhanced innovation, efficiency and export performance of manufacturing and service companies that use these services (Ciriaci et al., 2013, Foster et al., 2012). With the aim to enhance quality, product differentiation and flexibility with regard to the needs of users, manufacturing industries have been increasing the share of service inputs, which now, on the EU average, contributes to as much as a third of the price of products (EU Competitiveness Report 2013, 2013). It is important for Slovenia to step up its investments in research and development in service industries, because it lags behind most OECD countries, although the share of service industries in terms of expenditure for research and development increased from 5.7% to 26.2% from 2003 to 2011 (OECD STI Scoreboard 2013, 2013). A further increase in investments in research and development in services is also important for enhancing the innovation capacity of service companies, which in Slovenia lags behind the innovation capacity of manufacturing industries more than in most EU member states. Of special importance in this respect is the enhanced innovation of services on the basis of the faster introduction of new technologies in the private and public sectors. Although most innovative service companies, both in Slovenia and in other EU member states, simultaneously introduce technological and non-technological innovations, the share of those service companies that innovate only by the application of new technologies is lower than in most EU member states. The progress in this field critically hinges on the availability of highly competent technical personnel and personnel with know-how from the field of marketing modern services in the global market. Insufficient awareness of the growing needs for such personnel and of intertwined service and manufacturing industries will have a negative impact on the competitiveness of the whole Slovenian economy.

**Figure 17: The share of service companies by type of innovation in selected EU Member States**



Source: Eurostat Portal Page, Science and Technology, Community Innovation Survey 2008–2010.

**While competition in services is on the increase, the principal obstacles remain a high degree of state ownership in network industries and the high degree of regulation of professional services.** The possibilities of raising productivity by enhancing competition are usually highest in services such as retail trade, professional services and network industries (the 2013 update of the OECD Indicators of Product Market Regulation, 2013). In *network industries* and retail trade, Slovenia does not have in place any particular legislative barriers to entry. In electronic communications, the concentration level is declining, the share of the dominant provider of broadband internet is comparable to that of the EU, while it is higher in fixed and mobile telephony markets. In recent years, the enhanced competition in the electricity and gas supply has resulted in increasing electricity supplier switching and in the major gas price drop in 2012 (see indicator 1.17). In retail trade, the concentration level in the highly concentrated sector of non-specialised, predominantly grocery stores has been on the decline since 2006, most notably in 2012<sup>48</sup>, which is probably a consequence of the impact of the crisis on the behaviour of consumers, who are increasingly economical in their shopping. The OECD estimates that regulation is still rather high in the field of *professional services* (such as accounting, legal, technical and architectural services), although it has declined since 2008<sup>49</sup>. Progress has been made in the field of the treatment of aliens with regard to entry into the market of regulated services<sup>50</sup>. Slovenia continues to stand out in terms of the large number of regulated professions, which has, however, slightly declined in the recent period. The rating continues to be low also due to the highly regulated prices of professional services. Major progress in the area of the deregulation of professional services can be expected in the next few years with the implementation of the Directive on Services and the Directive on the Recognition of Professional Qualifications<sup>51</sup>.

<sup>48</sup> Concentration measured in terms of the Hirschman-Herfindahl Index dropped from the maximum value of 3,387 in 2006 to 2,144 in 2012 (the high concentration limit being the value of 1,800), while the share of the main provider dropped from 53% to 38%.

<sup>49</sup> As regards the OECD European countries, the regulation of professional services is higher only in Poland, Germany, Luxembourg and Hungary. The regulation level is very similar in Austria, where progress in comparison to 2008 was also similar to that in Slovenia (The 2013 update of the OECD Indicators of Product Market Regulation, 2013).

<sup>50</sup> In 2011, the Employment and Work of Aliens Act abolished the quotas for individual services provided by aliens.

<sup>51</sup> Since 2010, the number of regulated professions has dropped by 36 to 287 (the EU average being 157); the procedure for obtaining existing permits was simplified. The modernisation and simplification of rules on qualifications that legally govern access to professions or professional titles is also the purpose of the revised directive on professional qualifications, according to which EU Member States should complete a review of regulated professions by the beginning of 2016 with the intention to facilitate the mobility of professionals in the EU market, create new jobs, and enhance the competitiveness of regulated services.

**The trade integration rate of the Slovenian economy is rising after the drop in 2009.** In 2013 the average share of international trade in GDP reached the highest level so far. The share of exports in GDP has risen ever since the drop in 2009, while the share of imports in GDP dropped in 2012 and 2013 due to the decrease in domestic consumption and also due to lower import prices in 2013. Until 2012 the increase in exports integration was just a consequence of the fact that exports were the only factor of economic growth in view of the decrease in domestic consumption, while the increase in 2013 was accompanied by enhanced export competitiveness in terms of market shares. The intensity of Slovenia's foreign trade relations in the past four years (2010–2013) thus outpaced the EU average and the rates in the majority of small EU economies.

**The situation in the area of the integration of companies through foreign direct investment (FDI) remains unsatisfactory.** In 2013, inward FDI decreased for the second consecutive year, while the shift in outward FDI was merely symbolic after the disinvestment in 2010 and 2012. Slovenia has thus remained among the EU member states with the lowest inward and outward FDI stock in relation to GDP, which means that Slovenian companies are not only missing opportunities to access fresh capital, but also opportunities to make a fast breakthrough in economic development and competitiveness by integration into global value chains (see Box 2). Nevertheless, an increase in the equity capital of foreign investors in Slovenian subsidiaries occurred in 2013, which is a positive sign supported by the results of surveys conducted in foreign subsidiaries in Slovenia. Although the number of foreign subsidiaries forecasting an increase in sales and employment in the 2013 survey was smaller than in the previous three years, the share of those forecasting expansion for the following year was as high as 43% (approximately 35% in 2011 and 2012).

**In 2013 the rate of early-stage entrepreneurial activity returned to the pre-crisis level, but the share of early-stage entrepreneurs driven by identified business opportunities was lower than before the crisis.** The share of the population entering entrepreneurial activity<sup>52</sup> declined rapidly in the first years of the crisis and rose significantly in 2012 and 2013, reaching the highest pre-crisis level (2008). At the same time, it exceeded the EU average<sup>53</sup>, but this was also due to the decline in early-stage entrepreneurial activity in the EU in the past two years. The sharp increase in entrepreneurial activity in the recent period can be associated, at least to a certain degree, with enhanced active employment policy measures aimed at promoting self-employment during the crisis. According to our estimate, the relatively high number of self-employed people in the period after 2009 is a result of not only the identified business

<sup>52</sup> The data are taken from a research by the Global Entrepreneurship Monitor (GEM). For more details, see indicator 1.19.

<sup>53</sup> As compared to the other 23 EU Member States included in the GEM survey.

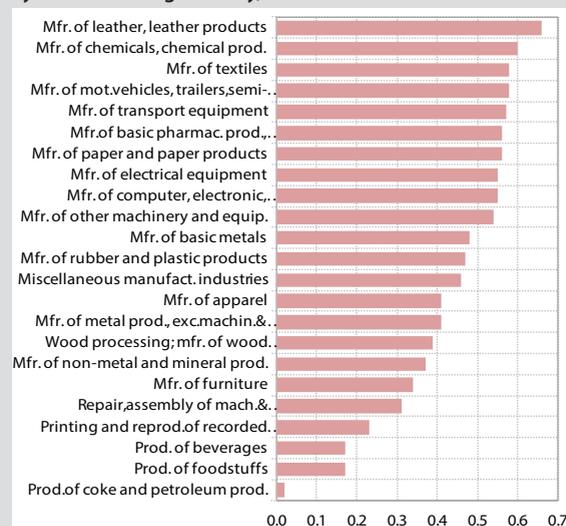
**Box 2: Slovenian companies in global value chains**

**The integration of companies into global value chains (GVCs) is becoming an increasingly important determinant of the export performance and competitiveness of companies.** Companies enter GVCs by vertical integration, i.e. through inward and outward foreign direct investment (FDI), or on a contractual basis.

By establishing subsidiaries or concluding contracts, a company builds its own GVC or enters the GVC of other companies as a subsidiary of a foreign company or as a contractual supplier. Entering GVC enables companies that build their own GVC to make efficient use of international differences in manufacturing costs, while companies and states entering GVCs may expect the almost immediate establishment of new manufacturing and the resulting advantages, such as new jobs, technology transfer, etc. Entering a GVC is thus one of the possibilities for fast breakthroughs in the field of economic growth and development. This also applies to Slovenian companies.

**The index of integration of Slovenian companies into GVCs<sup>1</sup> shows considerable differences between individual manufacturing industries.** As a rule, the indexes are highest in high-tech industries. The integration into GVCs is lowest in companies from low-tech industries, with the exception of mostly foreign market-oriented leather and textile industries.

**Figure: Index of integration of Slovenian companies into GVCs by manufacturing industry, 2012**



Source: A. Burger in M. Rojec. (2013). Inclusion and integration of Slovenian companies in global supply chains. Ljubljana: Faculty of Social Sciences.

<sup>1</sup> GSC Index = (export/sales + import of intermediate goods/total material costs)/2. The index ranges between 0 and 1.

**Table: Characteristics of companies by the mode of integration into GVCs through the import and export of intermediate products in 2012** (the values of indicators are expressed in relative terms, as a ratio to the average of the three-digit industry in which the company operates)

	Non-exporters of intermediate products	Exporters of intermediate products			
		Through outFDI	Through inFDI	Through outFDI+inFDI	On a contractual basis
Number of companies	6971	197	153	37	1857
No. of employed persons	0.52	10.55	4.47	8.11	1.88
Sales	0.39	11.28	6.29	9.22	1.93
Value added per employee	0.81	1.86	1.55	1.04	1.47
Fixed assets per employee	1.03	1.38	0.95	0.93	1.14
Share of exports in sales	0.62	2.48	3.36	3.03	1.90
Average salary	0.90	1.66	1.55	1.46	1.42
Level of indebtedness	1.11	0.61	0.67	0.74	0.64
	Non-importers of intermediate products	Importers of intermediate products			
		Through outFDI	Through inFDI	Through outFDI+inFDI	On a contractual basis
Number of companies	6561	155	202	36	2261
No of employed persons	0.45	11.85	3.92	8.08	1.90
Sales	0.32	12.68	5.48	9.40	1.91
Value added per employee	0.78	1.71	1.59	1.07	1.47
Fixed assets per employee	0.96	1.37	1.10	0.93	1.30
Share of export in sales	0.71	2.59	2.89	2.89	1.45
Average salary	0.86	1.60	1.67	1.53	1.44
Level of indebtedness	1.16	0.63	0.58	0.75	0.60

Source: A. Burger and M. Rojec. (2013). Inclusion and integration of Slovenian companies in global value chains. Ljubljana: Faculty of Social Sciences.

**The performance indicator analysis indicates a better performance of companies integrated into GVCs through FDI.**

In terms of their mode of integration into GVCs, exporters of intermediate products are divided into the following groups of companies: (i) with subsidiaries abroad (outFDI), (ii) foreign-owned (inFDI), (iii) foreign-owned and with subsidiaries abroad (outFDI+inFDI), (iv) exporters of intermediate products on a contractual basis, and (v) non-exporters of intermediate products. Slovenian companies are mostly integrated into GVCs on a contractual basis. Companies with intra-firm export/import flows of intermediate goods (types outFDI, inFDI, outFDI+inFDI) are bigger and more successful on average, as they have more employees and larger sales volumes, higher value added per employee, higher capital intensity, considerably stronger export orientation, higher salaries and lower indebtedness. The business performance of companies is generally positively related to their integration into GVCs, as the GVC index has a positive correlation with the level of productivity, the growth of value added and the exports of companies. At the same time, the analysis of the factors of integration of companies into GVCs shows that productivity positively influences the probability of a company's integration into GVCs. The average salary, which is an approximation of the education level of employees, and capital intensity positively influence the probability of a company's decision in favour of vertical integration into GVCs.

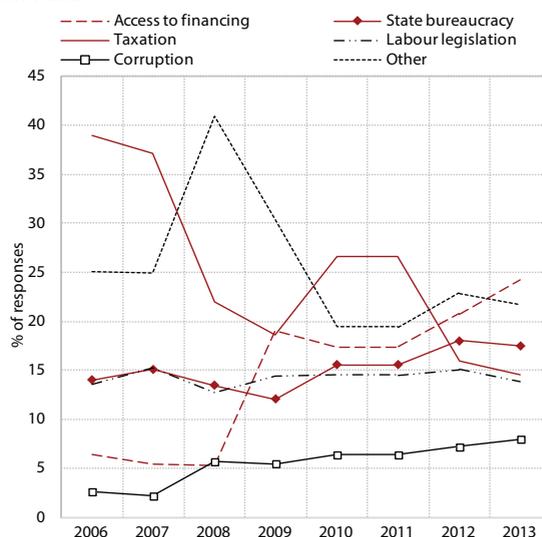
opportunities but also of the search for more flexible forms employment in uncertain conditions during the economic crisis (see Development Report 2013). It is in this context that one can also understand the results of the early-stage entrepreneurial activity analysis that show that the share of early-stage entrepreneurs driven by identified business opportunities is even lower than before the crisis, and that the share of necessity-driven entrepreneurs has increased significantly in the last year. This could mean that the recent increase in entrepreneurial activity is probably based more on the need to secure employment than on innovative solutions that could represent a potential for business expansion and new job creation. To a certain extent, this is also corroborated by the share of newly created companies in value added and employment of the entire corporate sector, which has shrunk since the onset of the crisis.

**As compared to the other EU Member States, there are still many obstacles to doing business in Slovenia.**

Significant progress had been made in the past few years regarding efforts to simplify the business operations of companies, particularly their incorporation. Many administrative burdens have been eliminated by introducing electronic transactions in a number of areas, and the payment of taxes and other compulsory contributions has been simplified<sup>54</sup>. A further reduction in the corporate income tax rate to 17% has also had a favourable impact on corporate operations. The results of various international surveys continue to point to entrepreneurs' great dissatisfaction with operating conditions in Slovenia (WEF, IMD). According to these survey results, the main obstacle to doing business in the past year was the deterioration in companies' access to financing. Compared to the other EU Member States, companies in Slovenia find it harder to access financing (bank loans and debt capital) and also have a high debt level. Despite the progress made in recent years, companies continue to be restricted in their operations by the state bureaucracy and face lengthy procedures required to obtain various documents, permits and

authorisations, and lengthy judicial contract enforcement procedures. In entrepreneurs' opinion, corporate operations are also subject to the negative influence of the lack of good practices and customs in the business environment, as Slovenia continues to rank at the very bottom of the list of states included in the study in terms of the effectiveness of supervisory boards, management credibility, the enforcement of accounting standards and the openness of the national culture to foreign ideas; moreover, the perception of corruption in society has been increasing for a number of years. As in past years, the WEF survey sees taxation and labour legislation that does not allow for sufficient labour market flexibility as the major obstacles to business operations.

Figure 18: The major obstacles to business operations in Slovenia



Source: WEF, 2005–2013.

Note: A particular value represents the percentage of answers to the question of which factor is perceived to be the most problematic for the operation of a company in the state. Respondents in the survey identified the five most problematic factors for doing business and ranked them by importance. The greatest share in the group "Other" includes poor work ethic of employees, the volatility of policies, workforce qualifications and inflation. Inflation was the most problematic factor for business operations in 2008.

<sup>54</sup> Report on the implementation of activities for improving legislation and eliminating administrative obstacles for the period October 2012–May 2013.

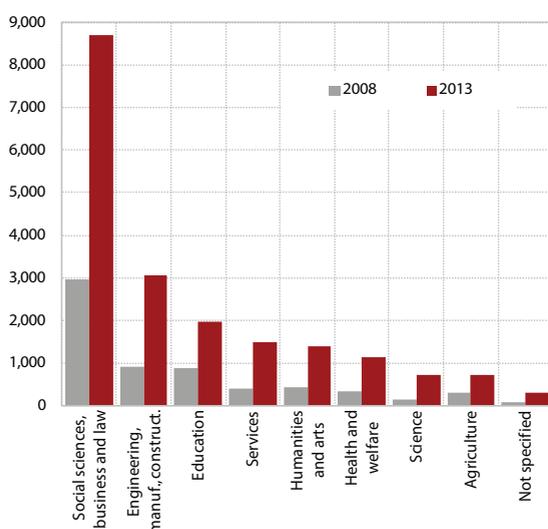
## 2 Use of knowledge for economic development

### 2.1 Education and Training

**Human capital measured in terms of the share of adults with tertiary education is on the increase.** The share of the adult population with tertiary education in Slovenia was 27.8% in the second quarter of 2013 and was below the EU average. The gap with the EU average narrowed significantly during the implementation of Slovenia's Development Strategy (SDS). The increase in the share of the population with tertiary education is principally due to the high participation of young people (aged 20–24) in tertiary education and the sharp increase in the number of graduates in recent years. The share of tertiary educated people in the age group 30–34 is increasing rapidly and was 41.5% in 2013, exceeding the EU 2020 Strategy target (40%) and achieving the EU average (36.6%) for the fourth consecutive year. The increase in the average number of years of schooling of the economically active population, which was characteristic of recent years, has not continued.

**Efficient use of human capital remains a problem.** The problem associated with the increase in human capital remains primarily its use, particularly in the increasing number of unemployed young people with higher education. The discrepancy between the supply and the demand at the tertiary education level has increased during the crisis, as the demand for workers with higher education declined and the supply increased. The number of registered unemployed, particularly social science, business and law graduates increased sharply in the period 2008–2013.

Figure 19: The number of registered unemployed persons with tertiary education by field of education\*, Slovenia



Source: ESS.

Note: \* according to year-end data.

**In recent years, the participation of young people in upper secondary and tertiary education has remained high, and increasing the interest of young people in vocational education remains a challenge.** The participation of young people aged 15–19 in upper secondary education in Slovenia is high and well above the EU average<sup>55</sup>. The same applies to the participation of young people (aged 20–24) in tertiary education, which is considerably above the EU average<sup>56</sup>. For young people at enrolment age<sup>57</sup> it was 57.1% in 2011 and exceeded the SDS target (55%) for the fourth consecutive year. During SDS implementation, the number of students enrolled in tertiary education declined in all areas of education except science, mathematics and computing due to the decline in the size of younger generations. The share of enrolment in the social sciences, business and law declined sharply during SDS implementation and no longer differed from the EU average. Despite the favourable conditions for the enrolment of young people in tertiary education (tuition-free first and second level study for full-time students, a high share of transfers for students and households) and a high proportion of young people enrolled in upper secondary education programmes for continuing education at the tertiary level, interest in vocational education remains modest even though employers' demand generally exceeds the supply. The share of young people enrolled in short-term vocational programmes and vocational programmes in the 2012/2013 school year remained lower than in 2005/2006 despite an increase in the past two years. Their number also declined, which is associated with demographic trends (a reduction in the size of generations at enrolment age) and the bad reputation of vocational training in Slovenia. According to the Eurobarometer survey on citizens' attitudes towards vocational education and training, the share of respondents attributing a negative image to education in Slovenia is the highest in the EU.

**The problem of the transition of young people from education to employment worsened considerably during the crisis, particularly in the tertiary educated population in 2012.** The share of young people not in employment and not in any education and training (NEET rates<sup>58</sup>) increased in all age groups, the most in the 20–24 and 25–29 age groups, during the crisis. The sharp increase in these two age groups is due to the increase in the number of tertiary education graduates aged up to 29, the shortage of jobs during the time of crisis, and the related increase in youth unemployment. Due to the very high level of participation of young people in upper secondary and tertiary education, NEET rates in Slovenia are below the EU average; however an increase that outpaced that in the EU was recorded in 2008–2012, particularly in the

<sup>55</sup> In 2011 this participation rate was 78.5% (the EU average was 60%).

<sup>56</sup> In the 2012/2013 school year it was 46.8% in Slovenia and the EU average was 30.6%.

<sup>57</sup> The participation rate is calculated for the enrolment age of 20.

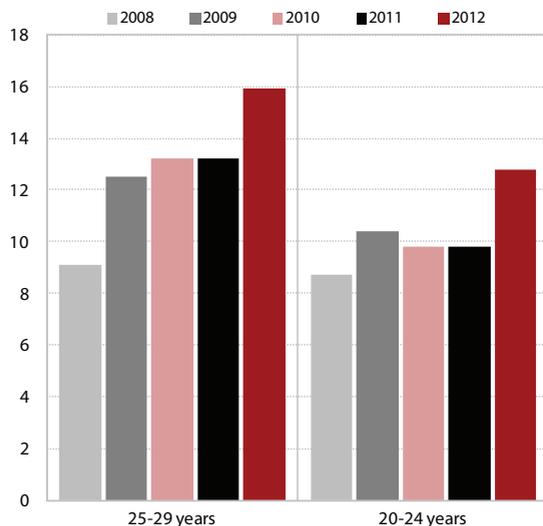
<sup>58</sup> NEET – Not in education, not in employment or training.

Table 5: Young people enrolled in upper secondary and tertiary education by field of education in Slovenia

	Number	Increase (%)	Difference	Enrolment structure (%)	
	2012/13	2005–2012	2005–2012	2005	2012
<b>Young people enrolled in upper secondary schools by type of educational programme</b>					
Total	78,208	-21.7	-21.652	100.0	100.0
Short-term vocational programmes and vocational programmes	12,484	-36.2	-7.082	19.6	16.0
4 and 5-year technical programmes	30,366	-6.8	-2.232	32.6	38.8
Gymnasium	30,324	-21.1	-8.089	38.5	38.8
Vocational technical programmes	3,955	-46.8	-3.473	7.4	5.1
Vocational course	366	18.4	57	0.3	0.5
Matura course	713	-53.9	-833	1.5	0.9
<b>Enrolment in tertiary education by field of education</b>					
Total	97,706	-14.9	-17.088	100.0	100.0
Education	7,887	-22.0	-2.231	8.8	8.1
Humanities and arts	9,227	7.3	631	7.5	9.4
Social sciences, business and law	32,968	-33.9	-16.935	43.5	33.7
Science, mathematics and computing	8,945	43.3	2.704	5.4	9.2
Engineering, manufacturing and construction	17,248	-4.0	-715	15.6	17.7
Agriculture and veterinary	3,140	-10.4	-366	3.1	3.2
Health and welfare	9,115	7.7	653	7.4	9.3
Services	9,177	-8.3	-829	8.7	9.4

Source: SURS; calculations by IMAD.

Figure 20: The share of young people not in employment and not in any education and training (NEET levels) in Slovenia



Source: Eurostat Labour Force Survey.

25–29 age group. NEET rates are the highest in this age group and (due to the high participation of young people in upper secondary education and the low dropout rate) the lowest in the 15–19 age group.

**Along with the increase in mismatch between supply and demand, there was a sharp increase in**

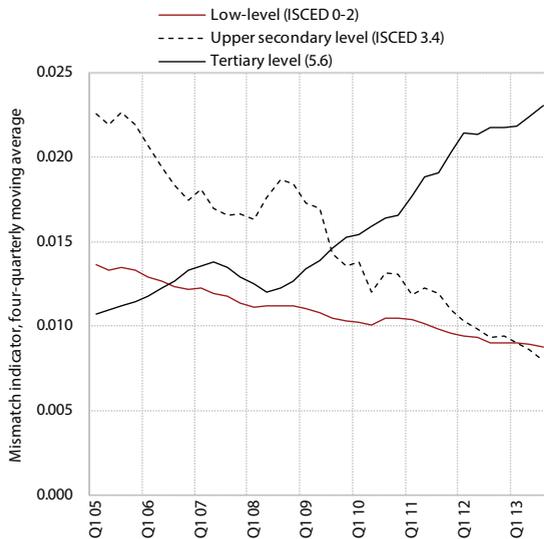
**unemployment among the tertiary educated during the crisis.** Although the unemployment rate generally declines with higher education levels, its increase was also recorded among the tertiary educated during the crisis. In the 2008–2013 period, the number of registered unemployed people with tertiary education rose by 184% and their share in the total number of unemployed rose from 10.2% in 2008 to 15.4% in 2013. The previously relatively low level of unemployment among the tertiary educated more than doubled in the period 2008–2013 and drew very close to the EU average level, behind which it had considerably lagged before the crisis<sup>59</sup>. In addition to modest demand, the increase in unemployment among the tertiary educated was compounded by a strong increase in the number of tertiary education graduates in recent years. The growing significance of the problem of employment of the tertiary educated is also reflected in the indicator of mismatch between the supply and demand for labour with regard to education level<sup>60</sup>, which points to a growing degree of mismatch for the tertiary educated

<sup>59</sup> In the second quarter of 2013, the rate of unemployment among the tertiary educated was 6.2% or 3.5 percentage points more than in the same period of 2008.

<sup>60</sup> The indicator of mismatch between supply and demand at a certain level of education has been calculated as  $Q_i - N_i$ , where  $Q$  represents the share of the working age population with  $i$  level of education in the total working age population, and  $N$  the share of the working population with  $i$  level of education in the total working population.

and a falling degree of mismatch with regard to low and upper secondary education levels.

Figure 21: Indicator of mismatch between the supply and demand for labour with regard to education level



Source: Eurostat; calculations by IMAD.

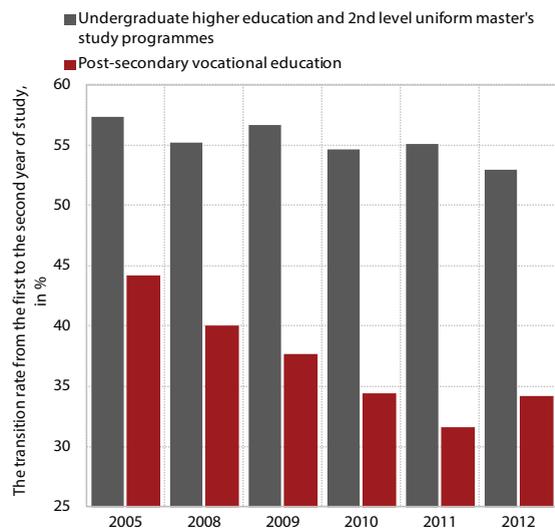
### Partial criteria of the quality of tertiary education show no significant improvement in recent years

The ratio of the number of students to the number of teaching staff at the tertiary level, which often serves as a rough international criterion of quality, remained at the previous year's level in 2012, disrupting the improvement trend from the previous two years. The number of students enrolled and, for the first time during SDS implementation, the number of teaching staff declined in the past year as a result of the adoption of the Fiscal Balance Act in 2012, which imposed restrictions on employment and accelerated retirements in the public sector. Slovenia lagged behind the average in 21 EU and OECD member states in terms of the ratio of number of students to the number of teaching staff in 2011. In our opinion, the unfavourable (higher) ratio significantly impacts enrolment in tertiary education solely on account of the benefits of student status (fictitious enrolments)<sup>61</sup>. In 2011, Slovenia lagged behind the EU average also in terms of the share of foreign students, which is also an indicator of tertiary education quality. This indicator has been increasing, but relatively slowly<sup>62</sup>.

**The efficiency of higher post-secondary vocational education and undergraduate higher education has remained low.** The transition rate<sup>63</sup> from the first to the second year of full-time post-secondary vocational

education and undergraduate higher education is low. In higher vocational education, this rate was 34.2% in the 2012/2013 school year and showed an increase on the previous year, but was lower than in 2005. In undergraduate higher education and 2<sup>nd</sup> level uniform master's study programmes it was 53.0%, i.e. lower than at the beginning of SDS implementation. The low transition rate is largely due to fictitious enrolments and the lack of interest in studies. This problem was addressed by the Act Amending the Post-Secondary Vocational Education Act in 2013, which restricted students' entitlement to benefits arising from their status if such benefits had already been claimed in the course of a higher education programme. The duration of higher education programmes, which also indicates the efficiency of tertiary education, decreased in 2005–2011, particularly as a result of shorter Bologna-system programmes. According to SURS data, the average duration of higher education was 5.8 years in 2011, which is still a relatively long period of time compared to the other states.

Figure 22: The transition rate from the first to the second year of full-time post-secondary vocational and undergraduate higher and 2nd level uniform master's study programmes



Source: SURS; calculations by IMAD.

Note: <sup>63</sup>The number of first-time enrolments in higher grades during the year/total enrolments in lower grades during year t-1)\*100

### Adult participation in lifelong learning has declined since the onset of the crisis, but still remains above the EU level.

Adult participation<sup>64</sup> in lifelong learning, which includes formal and non-formal education, declined for the third consecutive year in 2013<sup>65</sup> to 13.7%, which is the lowest rate since the onset of the crisis but still higher than in the rest of the EU, where it recorded an increase. In our opinion, this decline is due to the decline in the disposable income of the population and the reduced ability of businesses to fund employee training

<sup>61</sup> See indicator 4.15.

<sup>62</sup> The share of foreign students in the academic year 2012/2013 was 3.3.% or 2.0 percentage points more than in 2005/2006.

<sup>63</sup> The transition rate has been calculated as the share of first-time enrolments in higher grades during the year t compared with the total enrolments in lower grades in year t-1.

<sup>64</sup> Ages 25–64.

<sup>65</sup> According to the Labour Force Survey for the second quarter.

in adverse economic conditions. Adult participation in formal education was hardest hit by the crisis. The level of formal education achieved by the younger population being relatively high, the problem of education remains particularly in older age groups. It would therefore be reasonable to encourage adult participation in formal and non-formal education in order to boost the employment prospects of out of work older people who find it difficult to find new employment. Adult participation in higher education should also be encouraged by providing tuition-free learning at any time in life under certain conditions, as determined by the new Higher Education Act, which is under preparation.

**As a proportion of GDP, the share of public expenditure on education at the international level still remains high due to the high expenditure on tertiary education, while private expenditure continues to be lower than the EU average.** The share of public expenditure on education was 5.68% of GDP in 2011 and has not changed significantly in the last three years. During SDS implementation, they were above the EU average (5.44% of GDP in 2010), which was particularly due to higher participation in education (at all levels) in Slovenia, and increased in real terms at all education levels as a result of the increase in employment and wages (public sector wage reform). The highest increase in this expenditure was recorded at the pre-school level as well as the tertiary level, where it exceeded the EU average (according to the latest internationally comparable data for 2010: Slovenia 1.37% of GDP, EU 1.26% of GDP). Nevertheless, Slovenia's expenditure on educational institutions per student at tertiary level of education was below the EU average due to a very high participation level, raising the question as to the reasonableness of such a high participation rate and the problem of ensuring adequate education quality. The share of transfers to households and students participating in education<sup>66</sup> in the structure of total public expenditure exceeded the EU average (Slovenia: 8.3%, EU: 7.1%), along with an equally prominent share of public expenditure on transfers at the tertiary education level (Slovenia: 23.4%, EU: 18.2%), which could, among other things, increase interest in studying in Slovenia. The proportion of private expenditure on education in Slovenia is below the EU average at all levels, in particular at the tertiary level (Slovenia: 15.3%, EU: 20.7%). A possible solution to increasing expenditure per tertiary level participant is to introduce tuition fees, which could also contribute to improving the efficiency of studies. The eventual introduction of tuition fees should be accompanied by a system of study assistance (scholarships and long-term student loans), such as is already in place in many other countries.

**Given the relatively high unemployment among those with tertiary education and the high level of**

**dissatisfaction of employers with graduates' skills, the quality and efficiency of investments and responding to the needs of employers represent the major educational policy challenges.** The share of people with tertiary education is increasing in Slovenia, amid the relatively high public expenditure on education. Empirical studies show that a high share of people with tertiary education generally has a positive influence on economic growth. However, given the modest demand for people with tertiary education, particularly during the crisis, the problem of their employability in Slovenia has become aggravated to a great extent. In addition to the inadequate structure of those with tertiary education, which is reflected in a sharp increase in the number of unemployed with a degree in social sciences, surveys also show a very high (also relative to other EU countries<sup>67</sup>) proportion of employers who are dissatisfied with graduates' skills. This raises the question of the efficiency of investment in tertiary education and the extremely high participation in this level of education. The expansion of the network of institutions at the tertiary level indeed increases their accessibility but raises the issue of education quality. From this perspective, it is urgent to find a new balance between the accessibility and the quality of education. Given the increase in the unemployment of those with a tertiary education, the legislative framework should be re-engineered to ensure greater consistency between enrolment and future labour market requirements. To this end, a system for monitoring employers' needs for skills and knowledge should be put in place, which could also be used in the modernisation of educational programmes and the development of appropriate active employment policy programmes.

## 2.2 Research, development, innovation and use of information-communication technologies

**The increase in investments in research and development activities (R&D) in 2012 and recent years is primarily the result of business sector activities.** In 2012 Slovenia recorded the highest share of R&D expenditure relative to GDP, which, at 2.06%, significantly exceeded the EU average (2.06%). As throughout the period of crisis, this was the result of the increase in R&D expenditure that was, partly, also due to the higher number of reporting units and the fall in GDP (see Indicator 2.4). Although the real growth of R&D expenditure in the business sector slowed down in 2012, it remained the most dynamic and important source of R&D financing, as it accounted for 62% of total R&D expenditures. This points to stronger corporate activity in terms of modernising the production structure by adding new products, services and technological

<sup>66</sup> Expenditure on transfers to students participating in education and households includes: scholarships, meals subsidies, transportation, accommodation, textbooks, etc.

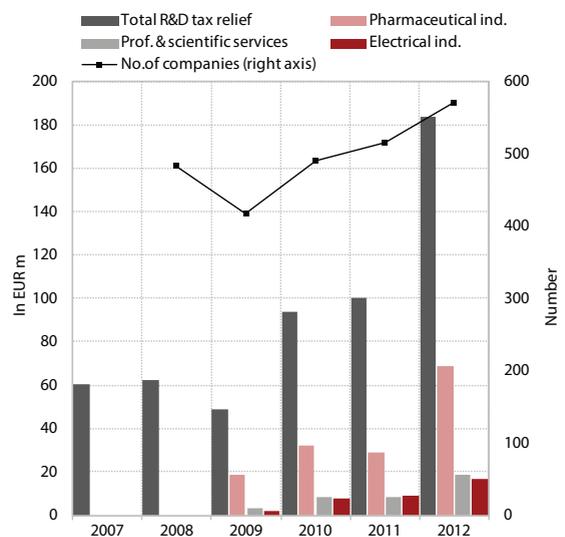
<sup>67</sup> According to the Eurobarometer survey "Employers' perception of graduate employability" (2010), this proportion is the highest among EU countries.

processes with a view to strengthening long-term international competitiveness. The most intensive R&D investments are made by the chemical industry and the electrical equipment industry, which accounted for more than 40% of business sector R&D expenditure in 2011. The share of all information activities (manufacturing of ITC equipment, telecommunications and information services), which play a key role in strengthening the innovation activities of the economy as a whole, was only 12.5% and was well below that of most EU Member States<sup>68</sup>. Increased R&D expenditure in Slovenia was also the result of foreign funding, which increased by one-fifth in real terms during the past year and accounted for 8.5% of total R&D expenditure<sup>69</sup>. The bulk of foreign funding (62%) was used by the business sector. The government sector<sup>70</sup> increased R&D investments in real terms throughout the crisis until 2011 and, with some instruments co-financed by the EU, encouraged companies to make additional investments in development<sup>71</sup>. In 2012, austerity measures led to the nominal and real decline in the general government sector's R&D expenditure.

**Higher tax relief rates in 2012 further encouraged R&D investments by the business sector.** The tax relief rate for R&D investments was much lower at the onset of the crisis.<sup>72</sup> The volume of tax relief utilisation started to grow more rapidly along with the gradual increase in the tax relief rate, with the highest rise occurring in 2012 when the general tax allowance was raised to 100%. The extent of R&D tax relief claimed by enterprises therefore increased from EUR 100 m in 2011 to EUR 184 m in 2012; however, tax relief remains concentrated on a few activities, much as in previous years. Manufacturers of pharmaceutical raw materials and preparations (C.21) claimed more than one-third of the total tax relief, and together with companies engaged in professional, scientific and technical activities (M) and manufactures of electrical equipment (C.27), claimed 56% of the total

tax relief in 2012. While the volume of tax relief claimed in 2011 and 2012 increased by 84%, the number of enterprises that made use of such relief rose by only 11%, which points to the fact that the number of enterprises claiming tax relief grew rather slowly. Compared to direct incentives, the importance of tax incentives in R&D investments also showed an increase in other states, as they were claimed by 27 out of the 34 OECD countries in 2011. Slovenia is ranked among the countries with the highest volume of incentives for R&D investments: 0.32% of GDP in 2011, whereas they did not exceed 0.2% of GDP in most OECD countries (OECD STI Scoreboard, 2013).

Figure 23: Tax relief claimed for R&D investments in Slovenia



Source: Ministry of Finance, 2008–2013.

Note: The tax relief for R&D investments was introduced at the rate of 20% in 2006. It rose to 40% in 2010 and 100% in 2012. Note: Manufacture of pharmaceutical raw materials and preparations - C.21, professional, scientific and technical services - SKD M, Manufacture of electrical equipment - SKD C.27.

**The number of researchers continued to grow in 2012; the positive trends in the number of researchers reflect an increase in R&D investments throughout the period following the onset of the crisis.** The total number of researchers, expressed as full-time equivalents, increased by 1,850 between 2008 in 2012, most notably in the business sector (1,560) and the higher education sector (600), while in the government sector it decreased by about 300. This trend is also indicative of the influence of some innovation policy measures aimed at strengthening the R&D staff of the business sector (such as competence centres, centres of excellence and development centres) and thus creating the potential to raise the innovation capacity of companies. The business sector employed 52% of all researchers in 2012, which was above the EU average (46.4% in 2012). There was a simultaneous structural shift in the employment of researchers in the business sector towards increasing the share of service activities, which employed approximately 42% of the business sector researchers in 2011. This points to an increasing response of service companies to the need to

<sup>68</sup> In the period between 2008 and 2011, the share of information activities in total business sector R&D expenditure in Slovenia averaged approximately 13% and exceeded 20% in many EU Member States (65% in Finland, 44% in Cyprus, 31% in Estonia and 26% in Croatia).

<sup>69</sup> These are the funds of the European Commission, international organisations, companies, universities, private non-profit organisations from abroad, and foreign governments funds.

<sup>70</sup> The government sector includes non-financial companies under public control, other central government units and direct budgetary users. These are institutes, central hospitals, museums, major libraries and others that beside their main non-R&D activity also perform R&D activities (SURS, [http://www.stat.si/doc/metod\\_pojasnila/23-086-MP.pdf](http://www.stat.si/doc/metod_pojasnila/23-086-MP.pdf)).

<sup>71</sup> In 2009–2013, the government sector provided EUR 300 m in incentives co-financed by Structural Funds for investment in priority technology fields within centres of excellence, competence centres and development centres, which linked enterprises and scientific research institutions (Smart Specialisation Strategy 2004–2020, 2013).

<sup>72</sup> When it was introduced in 2006, the tax relief rate was 20% and was raised to 40% in 2010.

employ development and research staff in order to raise innovation capacity and competitiveness.

***Human capital in the area of science and technology that significantly contributes to increasing the innovation capacity of the economy improved in 2012, but a slowdown can be observed in this trend.***

The number of doctorates awarded in science and technology increased by 18.2% in 2012, but their share in the total number of doctorates (45%) was below that at the onset of the crisis in 2008. Favourable trends were observed in most years of SDS implementation and show an increase in enrolment in doctoral programmes that followed the introduction of third-level Bologna-system programmes. The positive trends were discontinued in the 2012/2013 academic year as a result of cuts in public funds for young researchers in 2012, which also continued in 2013<sup>73</sup>. The number of students enrolled in doctoral programmes in science and technology declined more than the average for all disciplines. The number of science and technology graduates at the undergraduate level continued to grow (by 13.3% in 2012), as did their share in the total number of graduates (24.8%). Due to the decline in generations for enrolment in tertiary education, the number of enrolments in science and technology has also been decreasing since the 2010/2011 academic year. The demand for these qualifications remains high, which is also evidenced by the fact that science and technology graduates can quickly find employment (Komljenovič et al., 2013).

***The progress made in the area of the protection of intellectual property rights in 2012 was considerable, but the lag in patent protection behind the EU average has increased further during the crisis.***

The number of patent applications per million population submitted to the European Patent Office (EPO) by Slovenia in 2013 was 66 or one-quarter more than in the previous year, but it was still half the EU average. Community trademarks and designs also recorded significant growth in 2013, as applications for the registration of 129 trademarks and 75 industrial designs per million population were submitted to the OHIM<sup>74</sup> by Slovenian applicants. The gap between Slovenia and the EU average decreased regarding both indicators and the 2008 levels were exceeded by designs and trademarks in 2010 and 2013, respectively. In Slovenia, activities in which intellectual property rights are intensively enforced contributed 39% of GDP in 2010, which equalled the EU average (see Indicator 2.5). Although patents remain the most significant single indicator of research, development, and innovation, they do not provide an overall view of innovation capacity since patents in many areas never reach the market. The speed of market penetration with new products has become more important and cheaper for businesses than legal protection by patents.

<sup>73</sup> In 2013 the funds for the Young Researchers Programme were 85% of the total funds available in 2012.

<sup>74</sup> EU Office for Harmonization in the Internal Market.

***Internet use by the older population contributed significantly to a further increase in the share of Internet users in 2013.***

In 2013, the Internet was used by 73% of the population (aged 16–74), which was very close to the EU average (76%). The 5 percentage points increase in Internet use on 2012 was principally the result of a considerable increase (25%) in the use of the Internet by the older population (aged 55–74), although the rate for this age group still lagged behind the EU average (by 10 percentage points). The progress made in this area was principally due to the Slovenian project of intergenerational cooperation called *Simbioza*. In three years of implementation, the project contributed to greater competence in the use of the Internet and related services of nearly 16,000 older people<sup>75</sup>. The impact of the crisis on Internet usage expansion is seen particularly in Internet access by the less educated population, where in 2013 the gap with the EU average was wider than in any other Internet usage indicators (Slovenia 40%, EU 52%).

***The Internet is still not sufficiently used for more advanced services.***

The main characteristics of the use of the Internet and e-services in 2013 did not differ significantly from those in the previous periods. In Slovenia, the Internet is used to the same or greater extent than in the EU for simple services and less than in the EU for online banking and online shopping services, e-mail, travel booking and software purchases. Doubts about security and a lack of knowledge are the two main reasons for the low level of use of these services and some e-government services (such as sending completed forms and applications). In the future, broadband, particularly wireless or mobile Internet access, will be essential for increased use of advanced e-services, where Slovenia lags behind the developed countries (OECD STI Scoreboard, 2013). Among the reasons for this situation are the high prices of broadband Internet access, while the prices of mobile telephony services remain close to the EU average<sup>76</sup>. Slovenia maintained a steady position in the Network Readiness Index 2013 and was ranked 18<sup>th</sup> among the EU Member States. Its major weaknesses were the use of ICT in enterprises and the related employee qualifications and training, public procurement of advanced technology, and ICT use to improve public administration efficiency (Global Information Technology Report, 2013). It is the use of modern ICT and related services that impacts long-term economic growth more than their production<sup>77</sup>.

<sup>75</sup> In 2011–2103, the *Simbioza* project involved the participation of 9,269 volunteers from all over Slovenia. In 2013 computer training courses included mobile telephone services, which will play an increasingly important role in the future related to health-care applications.

<sup>76</sup> Among the EU Member States, Slovenia and Hungary had the highest fixed broadband Internet access prices. In terms of mobile telephony services, Slovenia was ranked in the middle of EU Member States (ITU 2013).

<sup>77</sup> Empirical studies show that the impact of ICT use on Slovenia's GDP growth is 0.28 percentage points a year. If ICT use increased

It is encouraging that the number of small enterprises developing ICT applications to be used in various areas (health care, energy efficiency and mobile online advertising) is on the rise and that some enterprises have successfully taken advantage of international crowdfunding platforms such as Kickstarter to help them kick start their business. Such companies introducing innovative products or services could expand their operations faster with additional support from public funds for promoting innovation.

**Slovenia ranks among the medium performing EU Member States in terms of innovation activity results; it lags behind most significantly with regard to the dynamics of employment in fast-growing companies and in the share of export of knowledge-based services.**

In 2008–2010, the innovation activity of Slovenian companies was weak<sup>78</sup>; in terms of the results of the new EC indicator of innovation output<sup>79</sup>, Slovenia ranks among the medium performing states as it ranked 13<sup>th</sup> in the EU-27 (Developing an Indicator of Innovation Output, 2013). The synthetic indicator has five components: a) patents, b) employment in knowledge-intensive sectors, c) the contribution of medium- and high-tech products to the trade balance, d) the share of knowledge-intensive services in the total exports of services, and e) the share of fast-growing companies in innovative sectors<sup>80</sup>. In comparison to the EU average, Slovenia achieved better results in the trade of medium- and high-technology products, and scored worst in exports of knowledge-based services and the share of fast-growing companies in innovative sectors (21<sup>st</sup> in the EU). The latter points to a gap in support mechanisms, as research shows that economic growth depends to a crucial extent on fast-growing innovative companies. These create a relatively larger share of jobs in periods of economic downturn and contribute to increasing innovation expenditure (Archibugi et al., 2013). The Development Report 2013 determined the low efficiency of Slovenia's innovation system to be critical since it achieved relatively poorer outputs compared to the high investment in innovation activities. The innovation system efficiency is also subject to the level of innovation activity in the public sector, where innovation measurement is still at an early stage. The European Public Sector Innovation Scoreboard 2013, which is based on 22 indicators, estimated that Slovenia's results for most indicators were close to the EU average, exceeded this average in five indicators, and scored below the average in five indicators (the quality of the legal framework, a slow increase in public sector

to the level of Sweden, its impact on GDP growth would be 0.62 percentage points a year (Outlon, 2012).

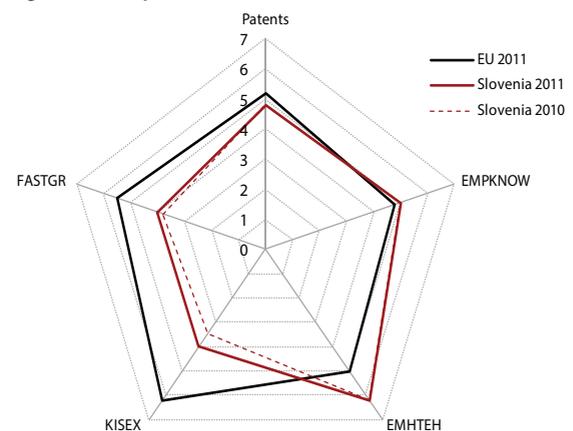
<sup>78</sup> The first data for the period 2010–2012 will be available in April 2014.

<sup>79</sup> This is an indicator of innovation results and complements the R&D investment indicator in the context of measuring the implementation of the EU 2020 Strategy.

<sup>80</sup> The criterion for identifying such companies is at least 10% annual increase in employment (Developing an Indicator of Innovation Output, European Commission, 2013).

efficiency through the use of e-services, internal barriers to innovation in the public sector, slow improvement of public sector services, a weak role of the public sector as a driver for innovation in the business sector through public procurement (EPISIS, 2013). These weaknesses point to the need to strengthen innovation in companies and in the public sector, as the latter can contribute to the improvement in the competitiveness of companies and the efficiency of the innovation system as a whole.

Figure 24: Composite indicator of innovation results\*



Source: Developing an Indicator of innovation Output (European Commission), 2013. Legend: Patents – the number of PCT patents as a ratio of GDP expressed in EUR billion; EMPKNOW – the share of employment in knowledge-intensive sectors, in the total number of employees; EMHTEH – the contribution of exports of medium- and high-tech products to the trade balance; KISEX – the share of knowledge intensive services in the total exports of services; FASTGR – the share of employment in fast-growing companies in innovative sectors in the employment of all fast-growing companies.

Note: \*This is a new composite indicator of innovation results developed by the European Commission in 2013. A detailed methodology of calculating the composite indicator of innovation results is shown in the source (Developing an Indicator of Innovation Output, 2013).

**Progress made in increased investment in intangible capital and knowledge is not adequately translated into outputs of using this knowledge.** Slovenia ranked 6<sup>th</sup> among the EU Member States in terms of R&D investments as a share of GDP in 2012, particularly due to higher R&D investments of the business sector. Alongside higher tax relief for R&D investments, the utilisation of tax relief is concentrated on a few activities and companies with existing R&D capacities. Since newly established businesses find it difficult to take advantage of such incentives, it is also important to provide direct R&D incentives (such as subsidies, subsidised interest rate loans and collaboration with R&D institutions). For the time being, the level of knowledge transfer from the research sector to the business sector inhibits a faster increase in economic innovation and competitiveness of the economy, which makes the strengthening of partnerships with research institutions and the mobility of researchers between both sectors a key priority in this area. The implementation of some instruments that could positively influence this area was completed at the end of 2013 and the results are not yet available. In comparison with more developed countries, Slovenia

lags behind in the formation of spin-off companies at universities<sup>81</sup>, which also contribute to a faster and more efficient transfer of scientific results to the business sector. With the prolongation of the crisis and lower demand for workforce with a tertiary education, the risk of brain drain increases. In 2012 alone the number of tertiary educated people who left the country rose by 72.8%, totalling 1,588 (Bevc and Ogorevc, 2013). Inadequate cooperation and coordination of various players<sup>82</sup> in the area of innovation policy prevents companies from accessing all calls for support for innovation by using a uniform platform. Frequent changes in the organisation of supporting institutions and inadequate cooperation between them reduce the efficiency of their actions. This was also reflected in the process of preparing the Smart Specialisation Strategy<sup>83</sup> that was not in conformity with the priorities of other development documents and had no clearly defined specific specialisation areas. It is therefore essential to draw up and supplement an operational programme for implementing the Smart Specialisation Strategy as a basis for the utilisation of EU Structural Funds in 2014–2020 (Bučar, Udovič, 2014). On the other hand, the increase in the volume of R&D financing within Horizon 2020<sup>84</sup> provides an opportunity to obtain additional funds not only for the research sector, but also for the participation of Slovenian companies in these programmes, which paves their way to international markets and the sale of know-how in global value chains.

<sup>81</sup> The preparation procedure regarding the new Higher Education Act, which aims to facilitate their formation, has been delayed.

<sup>82</sup> The Ministry of Economic Development and Technology, the Ministry of Education, Science and Sport, the Slovenian Enterprise Fund, SPIRIT, SID.

<sup>83</sup> The European Commission laid down the conditions to be met by Member States before starting to implement their projects under the Cohesion Policy. One of the conditions is the preparation of the Smart Specialisation Strategy, which is a research and innovation strategy adopted by Member States in order to stimulate economic growth and which must include clear priorities regarding investment in R&D and innovation in the period 2014–2020. A supplemented draft Smart Specialisation Strategy was published in November 2013.

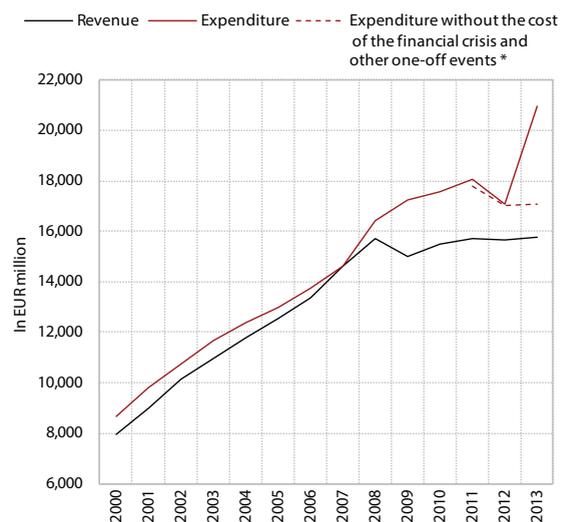
<sup>84</sup> The EU Framework Programme for Research and Innovation 2014–2020, through which more than EUR 80 bn is earmarked for these activities.

## 3 The efficiency of the state

### 3.1 The quality of public finances

**The period since the onset of the economic crisis in the area of public finances is marked by the challenge of how to stop the decline in revenue, reduce expenditure and simultaneously maintain the quality of public finances.** Despite the decline in economic activity, the total general government sector revenue for 2013 slightly exceeded that for the previous year as a result of the measures for increasing tax revenue and the most efficient EU funds absorption so far: they exceeded the 2008 level for the first time since the onset of the crisis. Tax revenue remained considerably below the 2008 level. On the other hand, the decline in primary expenditure (expenditure without interest payments, which increased sharply in 2013) without one-off events, which started only in 2012, slowed down considerably in 2013 due to an increase in expenditure on pensions and investments. Expenditure remained above the 2008 level and considerably exceeded revenue. The gap between general government revenue and expenditure, which increased considerably in 2009, has only gradually been closing, including due to one-off factors and particularly in 2013 as a result of the expenditure on the banking system stabilisation and to a lesser extent also due to some other one-off events. After a sharp decline (by 2.3 percentage points) in 2012, the structural deficit declined by another 0.4 percentage points last year<sup>85</sup>.

Figure 25: General government revenue and expenditure in Slovenia



Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of the general government, March 2014.

Note: \*In addition to funds for bank recapitalisations in all previous years, in 2013 one-off events comprised the third quarter of funds to eliminate wage disparities in the public sector and compensation to the persons erased from the Permanent Population Register.

<sup>85</sup> IMAD calculations based on the statistical publication of Main Aggregates of the General Government, March 2014.

**Measures on the revenue side have become an increasingly important consolidation component.** The decline in revenue, particularly in 2011 and 2012 when the corporate income tax was slashed, was mitigated by higher excise duties and the increase or introduction of some other charges and the rise in VAT rates in 2013. These changes shifted the tax burden from labour and capital to consumption, where an international comparison of implicit tax rates on labour and consumption showed that there was little space to manoeuvre to raise these tax rates. However, there are further possibilities to increase revenue through better tax collection and tax base expansion<sup>86</sup> and changes in real property taxation.

**Consolidation will have to be continued particularly on the expenditure side.** Expenditure growth had stabilised after 2008 and declined for the first time in 2012 and rose again in 2013, particularly on account of the increase in expenditure on investments, interest payments and pensions due to the increased number of retirees as a result of the implementation of the pension reform. In the initial stage, the general government expenditure was stabilised by cutting investments and adopting measures that limited the increase in social transfers (reduced valuation) and labour costs in the public sector (particularly wages and other labour costs). This expenditure declined for the first time in 2012 with the adoption of additional measures. On the other hand, the high general government debt increase had an impact on expenditure on interest payments, which accounted for one of the highest increases in general government

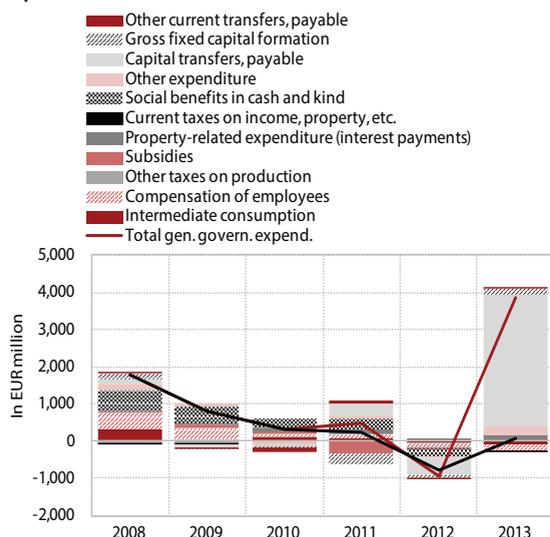
expenditure in the period 2008–2013. Increased crowding out of other government spending presents a significant challenge with regard to the quality of public finances. The period after 2007 also saw a sharp increase in pension expenditure, and the last pension reform was insufficient to stem the increase in the long period. Expenditure on health care also increased to a lesser extent after 2007. This points to the urgent need to establish more sustainable social protection systems. Otherwise, in the following years the burden of consolidation will affect the expenditure categories that have been the most restricted thus far.

### 3.1.1 Expenditure

**Following decline and restructuring in 2012, expenditure rose again in 2013.** In 2012 general government expenditure declined for the first time during the crisis, by 5.3% on the previous year. The decline was recorded for all expenditure types except interest payments. Excluding interest payments and one-off events, expenditure in 2012 was 4.8% lower. In 2013 expenditure rose by 22.6% and declined by 0.6% excluding interest payments and one-off expenditure. After consolidation had been focused on the expenditure side in 2012 and the measures adopted in that period continued to remain in force in 2013, additional measures to limit expenditure were adopted last year.

**Due to the expenditure on interest payments, the crowding out of other expenditure was particularly intense in 2013.** In 2013 the largest decline was recorded for compensation of public sector employees, which decreased even more than in the previous year, as, in addition to the effect of legislative amendments that came into force in 2012, an additional agreement was reached to reduce wages and other labour costs (see Chapter 1.1). The employment level in the general government sector declined for the first time since the onset of the crisis (-1.5%). Intermediate consumption expenditure, which in 2012 decreased for the first time since the beginning of the crisis, also saw a further decline. On the other hand, the increase in expenditure on interest payments on public debt almost equalled the decrease in compensation in employees. There was also an increase in most other expenditure categories for which a decrease was recorded in the previous year. Following the recapitalisation of a number of banks and some public companies in 2011, the level of capital transfers declined in 2012 and increased sharply again in 2013 due to bank recapitalisation (see Chapter 1.2.1). An increase was also recorded in gross capital formation, which had been decreasing since the onset of the economic crisis, especially in 2011 and 2012. Social benefits in cash and in kind, which showed the first decrease during the crisis in 2012, remained on a similar level in 2013 to that reported for the previous year. Their decrease in 2012 was mainly a result of changes in the eligibility criteria, which tightened the conditions for exercising social rights. Some social benefits (parental

Figure 26: Interim changes in the general government sector's expenditure in Slovenia



Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of national accounts, March 2014.

Note: \*One-off events: The costs of the financial crisis in 2011, 2012 and 2013 (bank recapitalisation) and wage settlement (the third quarter of salary disparity elimination) and the payment of compensation to the persons erased from the Permanent Population Register in 2013.

<sup>86</sup> An increase in the level of contributions and expanding the health insurance contribution basis for certain categories of insured persons will come into force in 2014.

Table 6: General government expenditure, Slovenia

In EUR million	2007	2008	2009	2010	2011	2012	2013
Intermediate consumption	1,939	2,245	2,301	2,418	2,511	2,451	2,363
Compensation of employees	3,641	4,112	4,399	4,500	4,616	4,492	4,324
Other taxes on production	114	71	9	9	9	11	9
Subsidies	541	582	682	704	390	352	352
Interest, payable	438	416	479	583	697	760	917
Current taxes on income, wealth, etc.	15	14	4	4	8	3	3
Social benefits in cash and in kind	5,624	6,189	6,629	6,877	7,158	6,992	7,006
Other current transfers, payable	549	725	780	711	790	720	940
Capital transfers, payable	282	368	283	233	562	137	3,705
Gross fixed capital formation	1,461	1,640	1,632	1,581	1,267	1,164	1,312
Other expenditure	22	46	37	-66	26	5	15
<b>Total general government expenditure</b>	<b>14,625</b>	<b>16,410</b>	<b>17,235</b>	<b>17,553</b>	<b>18,034</b>	<b>17,086</b>	<b>20,945</b>

Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of national accounts, March 2014.

benefits and certain other family benefits) declined further in 2013, mainly due to the changes that came into force in 2012<sup>87</sup>. On the other hand, pension expenditure, which accounts for more than one-half of the expenditure on social benefits in cash and kind and was stagnant in 2012, increased significantly last year. This was due to a sharp increase in the number of old-age pensioners before the enactment of the new pension legislation (see Chapter 4). Expenditure on subsidies stabilised at the 2012 level after two years of decline. The inclusion of the wage settlement (the elimination of the third quarter of wage disparity in the public sector) and compensation to the persons erased from the Permanent Population Register in the expenditure for 2013 in accordance with the decisions and legal regulations adopted during the past year entailed a sharp increase in other current transfers<sup>88</sup>.

**Compared to the period before the crisis, a decline was recorded only for expenditure on gross capital formation and subsidies, as the most flexible part of expenditure, particularly in 2011 and 2012.**

After a strong increase in the period before the crisis, investments declined sharply after 2008. A decline from the previously high levels (4.5% of GDP in 2008) was expected given the fact that some infrastructural projects had been completed and justified by the need for austerity measures during the crisis. Since it represented the most flexible part of public expenditure, its decline was also a result of the lack of

systemic and permanent measures for reducing other expenditure categories. The problem is also that the decline coincided with the availability of considerable EU funds for this purpose, which remained unabsorbed particularly in the area of investments in environmental and transport infrastructure. The latter fact is the result of difficulties in securing co-financing, the absence of investment priorities or strategies, and the general problems associated with the drawing down of EU funds. Positive developments in this area occurred no sooner than in 2013 (see Box 1: General government revenue from EU funds). The government supported investment activity in this period indirectly through other instruments (guarantees). After the period of high subsidies in 2009 and 2010, this expenditure also declined to the EU average level in 2011–2012, principally as a result of certain anti-crisis measures and institutional changes in Slovenian Railways<sup>89</sup>. In both years, the government continued to carry out anti-crisis measures, but funded them through other instruments (such as taxes and loans) which were not classified as subsidies and other general government expenditure but as having the characteristic of being state aid.

**In 2012, state aid<sup>90</sup>, which represents measures of the government in terms of its expenditure, revenues and other fiscal instruments, reached its highest level following EU accession as a result of a very high level of aid to the financial sector and an increase in aid to horizontal objectives.** In order to remedy the

<sup>87</sup> The Fiscal Balance Act reduced parental benefits and child benefits, introduced a means-tested childbirth grant and large family allowance and raised the level of parental compensation. The Emergency Measures in the Field of Labour Market and Parental Care Act, which came into force on 1 August 2013, reduced the upper parental benefit limit.

<sup>88</sup> In accordance with the methodology, all this expenditure was included in the data for 2013, although only payments for the elimination of the third quarter of salary disparity in the public sector were made at the end of 2013 and at the beginning of 2014.

<sup>89</sup> Following the restructuring of Slovenian Railways and the incorporation of two of the company's units into the general government sector in 2011, which resulted in a lower subsidy level and in an increase in the compensation of employees and intermediate consumption in the general government sector.

<sup>90</sup> State aid represents all measures of a state in terms of its expenditure (subsidies, capital transfers) and revenues (reduced state revenues), allocated by various instruments (grants, tax exemptions and reliefs, favourable loans, guarantees, etc.) to economic entities that have an impact on the single internal market of the EU.

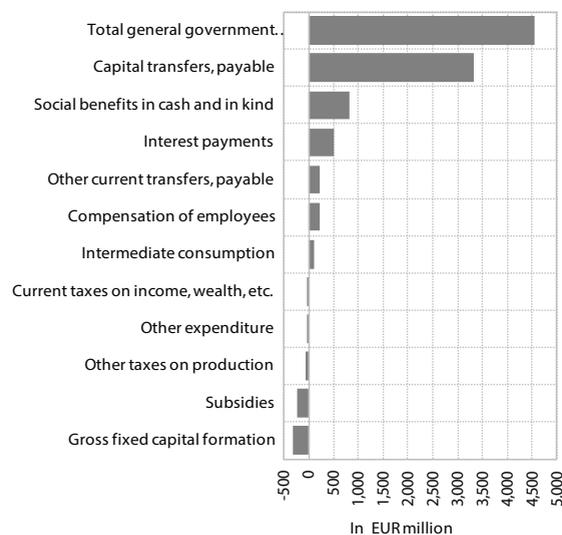
consequences of the crisis, the Slovenian government introduced a special state-aid scheme intended to remedy the serious disturbance in the economy in 2009. A total of EUR 482.9 m was distributed in aid under this scheme in 2012, which is half more than in the previous year<sup>91</sup>. Financial institutions received EUR 946.2 m in state aid in 2009–2012, and with the new state aid to banks towards the end of 2013, Slovenia probably exceeded the average state aid granted by the EU for financial institutions in 2008–2012<sup>92</sup>. With the onset of the crisis, other forms of state aid with horizontal objectives, intended to remedy the consequences of the crisis, increased strongly in Slovenia and in the other EU Member States. While most states abolished anti-crisis measures in 2010, Slovenia increased the volume of aid to horizontal objectives and allocated it through instruments that were not classified as general government expenditure. In 2012 this aid totalled EUR 71.8 m. The highest increase was recorded in aid to employment<sup>93</sup> and environmental protection<sup>94</sup>, whereas aid for other purposes declined sharply. In the context of increasing the competitiveness of the economy and creating new jobs, aid granted in 2012 related to less effective objectives than in the year before. The increase in aid for research and development and training had a favourable result, as this type of aid is deemed to be the

most effective. However, the less positive aspect was the reduction in aid to small and medium-sized enterprises, potentially the most dynamic parts of the economy, and for regional goals, in particular the reduction in aid for the promotion of entrepreneurship, competitiveness and foreign direct investments. Due to the austerity measures on the general government expenditure side, the volume of aid granted in the form of deferred tax payments or exemptions and allowances for the payment of taxes and contributions and favourable loans increased.

***In addition to capital transfers, the most significant expenditure item which showed an increase in 2008 and 2013 was expenditure on social benefits in kind, which was only partly associated with the economic crisis.***

In the period after 2008, this expenditure increased by EUR 816 m, representing an increase of EUR 1,381 m on the 2007 figures, largely as a result of the extraordinary increase in social transfers in 2008<sup>95</sup> and demographic trends (the retirement of large post-war generations) and to a lesser extent of the economic crisis (the increase in expenditure on unemployed people and some family benefits resulting from the operation of automatic stabilisers). In 2010–2012 the increase in pension expenditure was restricted by an intervention law and was mainly due to a growing number of beneficiaries that further increased relatively strongly before the adoption of the new pension legislation at the end of 2012. This recent reform is expected to stem the increase in pension expenditure but only for a short period of time. In the circumstances of the deteriorating labour-market conditions that resulted in reduced payments of social contributions, the remaining challenge is to curb the growth of budget transfers to the Pension and Disability Insurance Institute of the Republic of Slovenia (which decreased by EUR 169 m to EUR 1,585 m in the previous year), as it crowds out other expenditure. In 2008–2013, interest payments increased by EUR 500 m, of which one-third was recorded on the sharp increase in public debt in the previous year. In 2012–2013, the reduction in labour costs and intermediate consumption was an important factor of consolidation, but this expenditure still exceeds the pre-crisis levels<sup>96</sup>. Many restrictive measures adopted after 2010 have not yet neutralised the increase in expenditure following the payment of the first two quarters of the funds intended to eliminate salary disparities in 2008 and 2009; moreover, unemployment was rising until 2013. Despite a shift towards more sustainable changes in recent years, a large part of the measures in force in this area are still interventionist in nature, which means that more permanent measures to curb this expenditure will have to be agreed upon in the following years.

Figure 27: Changes in categories of general government expenditure in 2008–2013, Slovenia



Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of the general government, March 2014.

<sup>91</sup> A total of EUR 243.4 m in aid was distributed under this scheme in 2011, which is almost equivalent to the total amount of aid distributed in 2009 and 2010 (EUR 249.4 m).

<sup>92</sup> 14.6% of GDP in 2012 (State Aid Scoreboard, European Commission, 2013).

<sup>93</sup> Increased aid was intended for the employment of persons with disabilities under the Vocational Rehabilitation and Employment of Disabled Persons Act (Uradni list RS, No. 96/2012).

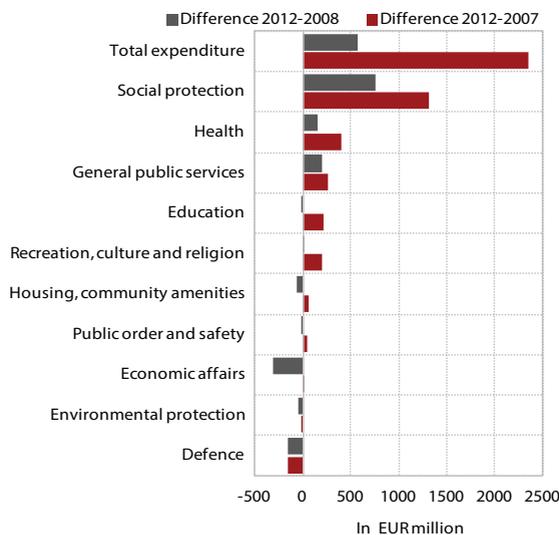
<sup>94</sup> Environmental protection aid was intended for qualified electricity producers and granted under the EU directive on the promotion of the use of energy from renewable sources.

<sup>95</sup> In connection with indexation in relation to wage growth, which was high this year due to the elimination of the first quarter of salary disparities in the public sector.

<sup>96</sup> In 2013 the excess of expenditure on the 2008 level was also due to one-off factors, i.e. the incorporation of two units of Slovenian Railways into the general government sector in 2011.

**Changes in the structure of expenditure by function also point to the need to restructure general government expenditure.** In the period 2008–2012, rapid growth was recorded in the following three types of expenditure; (i) expenditure on social protection (due to the increase in pension expenditure) (ii) expenditure on general public services (due to the increase in interest payments), and (iii) health care expenditure, where two-thirds of the increase was a result of the increase in compensation of employees. Expenditure on economic affairs and defence dropped the most due to the reduction in investments. Changes in the structure of expenditure point to a reduction in the flexible part of budget expenditure and consequently in expenditure (such as investments) that could be used to contribute to economic recovery. Moreover, there is mounting pressure on other expenditure and the quality of public services in spite of the fact that there is the potential to increase expenditure efficiency. In this regard, a detailed analysis of expenditure and planning in accordance with the programme classification is required in order to improve the quality of the consolidation. Considering the high deficit, attention should also be paid to the changes in financing public services as an alternative to reducing the volume of services due to the scarcity of public funds.

Figure 28: Changes in general government expenditure by function, Slovenia



Source: SI-STAT – Data Portal – National Accounts – General government accounts – General government expenditure by type and function, December 2013.

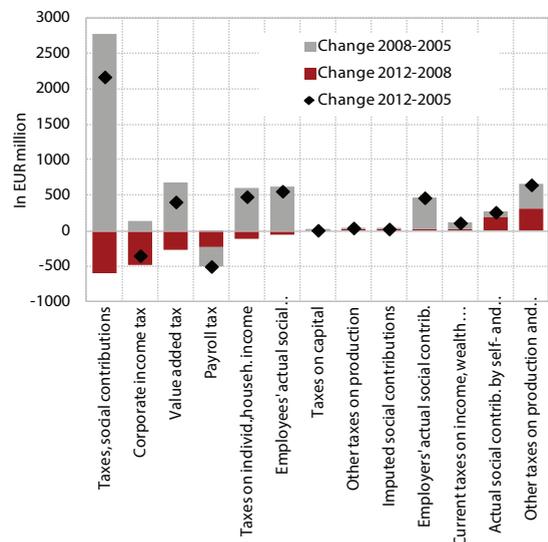
### 3.1.2 Revenues

**General government revenues increased in 2013 as a result of the measures adopted to increase tax revenues and the highest absorption of EU funds so far.** In 2013, higher VAT rates and more effective tax recovery (as a result of the implementation of the measures of the shadow economy control programme) yielded

an increase in revenue from this source. This increase translated into a considerable rise in taxes on production and imports<sup>97</sup>, which had still been stagnant in 2012. A slight increase was also recorded in taxes on capital and was due to higher revenues from taxes introduced in 2012, but these taxes only accounted for a minor share in the overall structure. Adverse labour market conditions and accelerated retirements preceding the adoption of the pension reform at the end of 2012 resulted in a further reduction in employment and consequently also in the number of the insured, which entailed a significant decrease in personal income tax revenue<sup>98</sup> and, for the second consecutive year, social security contributions. There was also a decrease in wages (see Chapter 1). Higher drawdown from the Cohesion Fund resulted in considerably higher revenues from the EU budget (see Box 1: General government revenue from EU funds). After a substantial increase in 2012, non-tax revenues decreased in 2013.

**Since the beginning of the crisis, the structure of the general government revenue has changed in favour of revenue not derived from taxes.** Revenues slightly exceeded the 2008 level for the first time in 2013 as a result of higher non-tax revenue and the EU funds received and to a lesser extent also social contributions;

Figure 29: Changes in revenue from taxes and social contributions, Slovenia



Source: SI-STAT Data Portal – National Accounts – General government accounts – Fiscal burden type, September 2013.

<sup>97</sup> There was also a strong increase in revenue from the environmental tax on air pollution by CO<sub>2</sub>, which was introduced in 2012 and remained in force throughout 2013.

<sup>98</sup> The reduction in personal income tax revenue was also due to the change in tax brackets in 2013 (Fiscal Balance Act). A fourth, 50% tax bracket was introduced for income exceeding five average wages (tax base over EUR 70,000) and the threshold between the second and third tax bracket was raised from EUR 15,000 to EUR 18,000. Its impact on personal income tax revenue reduction prior to the entry into force of these changes was estimated at EUR 37 m.

Table 7: General government revenues, Slovenia

In EUR million	2007	2008	2009	2010	2011	2012	2013
Market output, output for own final use and other non-market output	901	996	999	1,046	1,157	1,172	1,125
Taxes on production and imports	5,016	5,225	4,862	4,979	5,043	5,067	5,312
Property income	247	331	194	309	263	395	447
Current taxes on income, wealth, etc.	3,168	3,320	2,931	2,908	2,884	2,717	2,591
Social security contributions	4,814	5,326	5,388	5,495	5,523	5,480	5,377
Other current transfers, receivable	344	485	563	715	841	797	788
Capital transfers, receivable	120	25	52	18	16	43	127
<b>Total general government revenues</b>	<b>14,609</b>	<b>15,707</b>	<b>14,988</b>	<b>15,471</b>	<b>15,727</b>	<b>15,672</b>	<b>15,767</b>

Source: SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of the general government, March 2014.

however, the latter have been declining in recent years. Despite the increase in VAT rates, tax revenues were below the 2008 level by EUR 626 m (1.8% of GDP) as a result of lower tax bases due to the crisis, but also due to the reduced corporate income tax rate (and increased tax reliefs). The decline in revenue due to the aforementioned factors was only partially offset by the increase in some other taxes (particularly excise duties and VAT) and new taxes. Renewed economic growth and consequently also the tax base increase remain crucially important for further growth in general government revenue and fiscal consolidation. In the context of positive incentives for the business environment, the stabilisation of the tax system after a decade of innumerable changes is equally important.

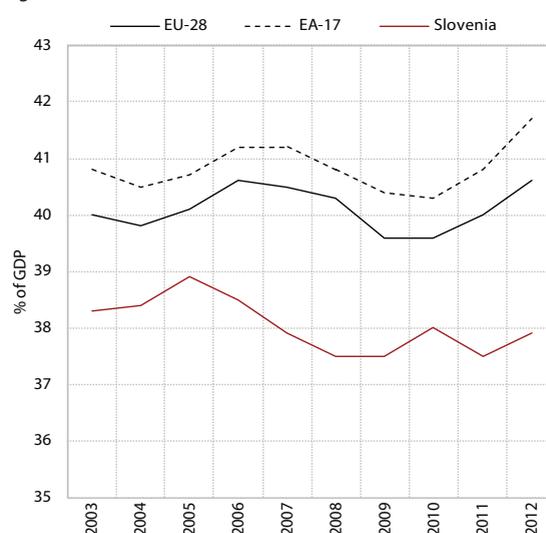
**Changes in taxation in recent years have shifted taxation from labour and capital to consumption.** At the peak of economic growth (2005–2008), the share of tax revenue in Slovenia did not increase as it did in the other EU Member States. Tax reforms in this period were not performed in a fiscally neutral manner, i.e. through a simultaneous introduction of alternative tax sources or permanent reduction in expenditure. Due to a significant decline in revenue, the majority of taxation changes since the beginning of the crisis were focused on increasing tax revenue, with the exception of the corporate income tax. Changes in the tax system in 2005–2013 shifted the tax burden from labour and capital to consumption. In 2012, the implicit tax rates on labour were lower than in 2005, which ranked Slovenia in the middle of the EU Member States (twelve Member States had a higher rate). The decrease in the corporate income tax rate in this period triggered a further reduction in the implicit tax rate on capital, which had already been below the EU average in 2008; however, the decrease in implicit tax rates on capital also peaked in the EU during the crisis. According to the most recent data, the implicit tax rate on consumption remained at the 2005 level in 2012; however, it is estimated to have increased after the increase in VAT in 2013 and was among the highest in the EU-27 (seven Member States had a higher rate).

**An international comparison of implicit tax rates on**

**labour and consumption showed that there was little space to manoeuvre in order to raise these tax rates.** However, there are still possibilities for changes to real property taxation (switching from a charge for the use of building land to a property tax). Moreover, the urgent need to continue fiscal consolidation leaves little space for tax reduction. Any such reduction would have to be supported by prior or simultaneous permanent expenditure reduction and should also take into account expected future trends in expenditure due to the ageing of the population.

**In the EU and euro area, on average, taxes and social contributions exceeded the 2008 levels in 2012, while in Slovenia they remained EUR 600 m below the 2008 level (EUR 575 m in 2013).** To a certain extent, this is a result of faster economic recovery in other EU Member States that decided to use an increase in some taxes as a fiscal consolidation measure sooner and to a greater extent than Slovenia. In 2012 Slovenia was one of the thirteen states in which revenue from taxes and contributions remained below the 2008 level in nominal

Figure 30: Share of taxes and contributions in GDP



Source: Eurostat Portal Page – Economy and Finance, Government Statistics, January 2014.

**Box 3: General government revenue from EU funds**

***In the 2007–2013 programme period, particularly investments and subsidies in Slovenia were financed with EU grants which, with the exception of those from the Cohesion Fund, were drawn down effectively.*** In this programme period, Slovenia was eligible to use EUR 4.2 billion of cohesion funds, of which EUR 4.1 billion for three operational programmes (OP). All funds available were allocated by the end of 2013 (according to data provided by the Ministry of Economic Development and Technology), including additional commitment appropriations<sup>1</sup>. In this entire period, contracts were signed for EUR 3.8 billion (92.5% of commitment appropriations), beneficiaries received EUR 2.5 billion in payments from the budget (62.4% of available commitment appropriations), and EUR 2.4 billion (59.4% of commitment appropriations, 95.1% of amounts disbursed) were repaid into the budget. By the end of 2013, total drawdowns were much less behind the plan (EUR 124.9 million) than in the previous years<sup>2</sup> as a result of simplified procedures for drawing up and filing claims for refunds and better cooperation between ministries. In the 2007–2013 period, the funds of the OP for strengthening regional development potentials were absorbed most efficiently, and the least efficient, given the amount of the available commitment appropriations, was the absorption of cohesion funds intended for environmental and transport infrastructure development. The absorption of cohesion funds improved in 2013: absorption was 80.6% higher than in 2012 and three times higher than in 2011. The absorption of structural funds (ERDF and ESF) was at the same level as in 2012 and 14.9% less than in 2011.

***Although Slovenia still experiences difficulties in the institutional area in terms of drawing on EU funds and co-financing resources are limited due to the economic crisis, it could successfully draw down all funds available for this programme period provided that the current pace of absorption is maintained (the n+2/3 rule<sup>2</sup>).*** The fact that Slovenia did not lose its grants was also due to the measure which granted additional appropriations to all OPs for reserve projects with low implementation risk. Most additional appropriations were granted to environmental and transport infrastructure development projects (EUR 307.3 million). In order to avoid the potential loss of these funds, the funds were reallocated between OPs (this option expires at the end of 2015), major projects without appropriate implementation timelines were divided into stages and the possibility was allowed for the transfer of individual stages into the 2014–2020 programme period. Slovenia, like other EU Member States in this crisis, is faced with absorption problems due to the limited co-financing resources on the side of the beneficiaries and the state, and there are also problems with providing environmental permits, drawing up project and investment documents, frequent complaints, and long review procedures. Slovenia continues to have institutional problems in this area. At the beginning of 2014, the Government Office for Development and Development Policies was established with a view to improving absorption. In terms of the absorption rate, Slovenia ranked 10<sup>th</sup> among the EU Member States (50.58% as compared to the EU average of 48.04%) and fifth among the new Member States (excluding Croatia), according to the European Commission's data; DG Budget, Absorption Rate of Structural and Cohesion Funds, 2007–2013, as at 1 November 2013).

**Table 1: Absorption of EU funds in 2007–2013 by operational programme, in EUR million, as at 31 December 2013**

Operational programme	Commitment Appropriations 2007–2013	Allocated funds	Contracts signed	Disbursements	Reimbursement to the budget	Behind the plan	Outturn in %
OP R&D	1,783.3	2,232.9	1,719.7	1,397.9	1,335.9	62.0	74.9
OP HRD	755.7	803.6	726.9	545.9	502.7	43.2	66.5
OP ETID	1,562.0	1,831.3	1,348.1	617.8	598.2	19.6	38.3
<b>Total Cohesion Policy</b>	<b>4,101.0</b>	<b>4,867.8</b>	<b>3,794.7</b>	<b>2,561.6</b>	<b>2,436.8</b>	<b>124.8</b>	<b>59.4</b>

Source: Ministry of Economic Development and Technology.

Note: OP R&D – Operational Programme for Strengthening Regional Development Potential, OP HRD – Operational Programme for Human Resources Development, OP ETID – Operational Programme for Environmental and Transport Infrastructure Development.

**Table 2: Annual EU funds absorption by fund in 2007–2013, in EUR million, as at 31 December 2013**

Funds/policies	2007	2008	2009	2010	2011	2012	2013
European Regional Development Fund	0.0	0.0	78.8	308.2	382.3	326.0	277.5
European Social Fund	0.0	0.0	6.4	104.7	134.3	107.4	155.5
Cohesion Fund	0.0	0.0	104.9	99.4	60.2	107.0	193.3
Agricultural and fisheries policy	0.1	208.3	220.3	217.9	220.2	267.5	271.7
Other	0.0	15.8	35.9	20.3	15.1	33.7	35.7
<b>Total</b>	<b>0.0</b>	<b>224.1</b>	<b>446.3</b>	<b>750.5</b>	<b>812.1</b>	<b>841.6</b>	<b>933.7</b>

Source: The Ministry of Finance.

<sup>1</sup> By the end of 2012, total drawdowns were EUR 249.7 million behind the plan.

<sup>2</sup> The funds allocated in a particular year must be absorbed in the following two to three years.

terms. The share of taxes and contributions in Slovenia's GDP in 2012 showed an increase on the previous year (by 0.4 percentage points) due to a relatively larger decline in GDP, reaching the 2008 level, i.e. 37.9% of GDP. Its share in the EU average for 2012 was 40.6% of GDP or 0.6 percentage points more than in the previous year or 0.3 percentage points more than in 2008 (higher, above-average levels were recorded in the euro area).

### 3.2 Institutional competitiveness

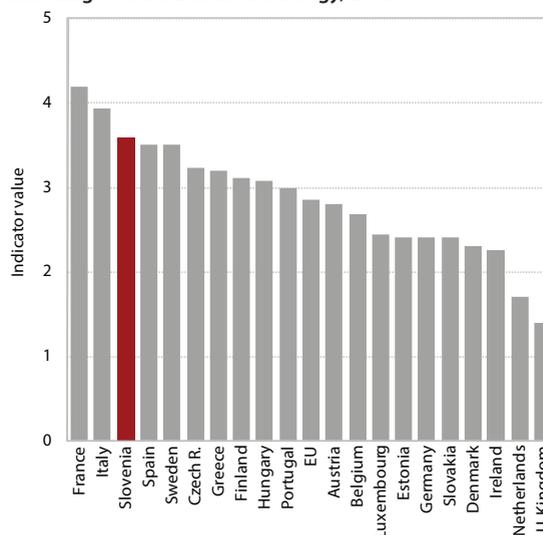
**The establishment of an institutional framework and effective functioning of the state and its institutions is of crucial importance for a stimulating business environment, for the competitiveness of the economy, and for meeting the needs of the population.** SDS gave priority to reducing state property and its effective management, upgrading the institutional framework, and improving the standards of the professionalism and transparency of the functioning of the state and its institutions. In 2013, progress was made in terms of eliminating administrative barriers, insolvency legislation and curbing the shadow economy; moreover, amendments to the Constitution were adopted in the area of fiscal policy and referendum legislation. International comparisons show that institutional competitiveness in Slovenia has deteriorated significantly in recent years due to a slow response to the changed circumstances since the onset of the crisis and the accumulated deficiencies in the operation of the legislative, executive, and judicial branches of power. The confidence of businesses and individuals in the state and its institutions is consequently also low.

**In recent years, the state has not significantly reduced its direct and indirect ownership share in businesses and financial institutions; on the contrary, it has increased it further with the latest bank recapitalisation.** The main reason for the slow reduction of the state ownership share in businesses and financial institutions continues to be the lack of political consensus on the withdrawal of the state from ownership of companies. An important reason is also the non-transparent and inadequate system of holding and managing the state's ownership share in businesses and financial institutions, while the absence of an appropriate legal framework<sup>99</sup> in the first half of 2013 brought the sale of the state's ownership share in businesses to a complete halt. The sale of the state's shares of company ownership was also affected by the financial and economic crisis, which had an impact on the lower interest of potential portfolio and strategic investors in acquiring ownership shares in companies.

<sup>99</sup> In the absence of the Strategy of Corporate Governance of Capital Investments of the Republic of Slovenia in the first half of 2013, the legal framework for the sale of the state's shares of company ownership included only the Ordinance and the Ordinance Amending the Ordinance on the Programme for the Disposal of Financial and Physical Assets of the State in 2010 and 2011 (Uradni list RS, Nos. 97/2009 and. 85/2011).

Compulsory settlements and bankruptcies of companies forced banks to exchange loans for ownership shares in these companies and the state to recapitalise state-owned banks. This resulted in a direct and indirect increase in the state's share of company ownership and established a close link between the privatisation and bank stabilisation processes. The share of the equity capital of companies in which the state holds a majority stake in the total capital of Slovenia's corporate sector increased further during the crisis: from 16.4% in 2008 to 23.2% in 2012, and to 30%<sup>100</sup> in companies in which the state has more than a 25% ownership share. This ranked Slovenia among the OECD countries with the highest share of state-owned enterprises (OECD, 2013)<sup>101</sup>. In the second half of 2013, the state resumed gradual privatisation and put 15 companies<sup>102</sup> on the list of state

Figure 31: Indicator of the scope of state-owned enterprises according to the OECD methodology, 2013



Source: OECD, Product Market Regulation Database, 2013.  
Note: The graph presents data for the EU Member States that are also OECD members; there is no data available for Poland. The EU average is the unweighted average of the EU Member States that are also OECD members. The indicator of the scope of state-owned enterprises in 30 business sectors was measured as the share of sectors in which the state has a controlling interest in at least one company, where the indicator value ranged between 0 and 6 (the higher the value, the higher the state control).

<sup>100</sup> According to data from SOD's "List of Direct and Indirect Investments of the Republic of Slovenia under the Slovenian Sovereign Holding Act as at 31 August 2013", the state had direct and indirect ownership shares in 492 enterprises. In 2008, the state had a more than 50% ownership share in 133 companies from the aforementioned list, whose equity capital totalled EUR 5,944.8 m. By 2012, the number of these companies increased to 153 and their equity capital to EUR 8,724.3 m. Together with companies in which the state had an ownership share exceeding 25%, their number was 203 and their total capital was EUR 11,277.4 m.

<sup>101</sup> Among the countries included in this analysis, Slovenia (3.60) was preceded only by China (6.00), Russia (5.40), India (5.17), Turkey (4.45), France (4.20), Norway (4.15), and Italy (3.93).

<sup>102</sup> Two Decisions of the National Assembly approving the sale of shares of 15 companies held by the Republic of Slovenia (Uradni list RS, Nos. 36/2013 and 52/2013. The list included 15 companies scheduled for sale: Adria Airways, Aero, Elan, Fotona, Helios, Aerodrom Ljubljana, Adria Airways Tehnika, Nova KBM, Telekom Slovenije, Gospodarsko Razstavišče, Paloma, Terme Olimia Bazeni, Unior, and Žito.

capital investments for sale, however, only two such sales were carried out successfully by the end of January 2014. Research also shows that state-owned manufacturing enterprises performed worse than (domestic and foreign owned) private enterprises, as the former lagged behind both in terms value added per employee and return on equity (Rojec, 2013).

**The new Slovenian Sovereign Holding Act created the legal grounds for the establishment of an institutional framework for the state's withdrawal from company ownership in March 2014.** Slovenian Sovereign Holding (SSH) was established in 2012 as an institutional solution to increase the transparency and efficiency of the management of all state-owned investments. The Slovenian Sovereign Holding Act (ZSDH, Uradni list RS/ Official Gazette of the Republic of Slovenia, No. 105/2012) was drafted, but not implemented in practice. Since the classification of investments being the precondition for the ZSDH to enter into force was not adopted, the Capital Assets Management Agency of the Republic of Slovenia (AUKN) ceased to exist and the authorisations for the management of the investments of the Republic of Slovenia were transferred to SOD. Amendments to this Act (ZSDH-A, Uradni list RS, No. 39/2013) did not essentially improve the system transparency. The new Slovenian Sovereign Holding Act provides for the following: (i) the management of all indirect and direct equity holdings of the state will be brought under the control of the SSH; (ii) the SSH will not become the owner of state investments; (iii) the transformation of SOD into SSH; (iv) KAD will remain an independent legal entity with its own management, but with the obligation to act in concert with the SSH in the sale of investments and voting at general meetings; (v) the Ministry of Finance will be required to draw up a strategy of corporate governance of state capital investments under which investments would be defined as strategic, important and portfolio investments; the Strategy will be subject to approval by the National Assembly. ZSDH-1 represents the necessary institutional basis for setting up the system and policy for managing state equity holdings in Slovenian companies. The actual establishment and operationalisation of this system and policy remain one of the main tasks in 2014.

**The future withdrawal of the state from company ownership will depend on the efficient establishment and operation of the SSH and the bad bank, the actual sale of state ownership shares in companies, and the willingness of foreign investors to invest in the Slovenian economy.** The key task following the adoption of the ZSDH-1 will be the earliest possible establishment and beginning of the operation of the SSH and the drawing up of the Management Strategy for Capital Investments. An important role in the further privatisation of Slovenian companies will also be played by the Bank Assets Management Company (BAMC) and by the Bank Stability Fund (BSF)<sup>103</sup>. After the publication

of stress test results, banks started transferring their non-performing loans to the BAMC in the form of equity holdings and as outstanding corporate loans by the redemption or acquisition of assets. This initially entails an increase in state equity holdings in Slovenian companies, which will be gradually sold by BAMC. No decision has yet been taken regarding the integration and joint management of holdings in companies by the SSH and BAMC; however, it will be of vital importance as the two institutions have been established for the purpose of effective management and sale of equity holdings in companies. The merging of holdings in these companies will be essential for their effective management and sale. The process of the withdrawal of the state from company ownership with a simultaneous bank stabilisation process provides an excellent opportunity to carry out the corporate deleveraging process. The Act envisages that BAMC will have completed its activities by the end of 2017. However, it depends on the political will regarding the state's withdrawal from company ownership and the interest of foreign investors as to what extent this necessity and willingness of the state to withdraw from company ownership will actually be implemented. This is also associated with foreign investors' previous bad experience with the management of the procedures for the sale of state-owned holdings.

**The efficiency of the state in Slovenia that should ensure proper conditions for the functioning of the economy is low and deteriorating in comparison with other countries.** Lower rankings and values in the period after the onset of the crisis were recorded on most indicators of international competitiveness, and Slovenia remains in the group of countries whose competitiveness declined most during the crisis. Institutional competitiveness is hampered by a number of factors, among the most important being the inefficiency of the state. The results of surveys conducted among business persons reveal a great dissatisfaction with the work of institutions and decision-makers (the government, the National Assembly, and the Central Bank), low adaptability of government policy to changes in the economy, bureaucracy and an increased perception of corruption in society (IMD 2013, WEF 2013/14). A low rating continues to apply to the area of business legislation, which is marked by a lack of responsibility and efficiency of supervisory boards, and poor protection of minority shareholders. Despite changes in labour legislation in terms of an increase in flexibility (the reduction of dismissal costs for certain categories of workers and the simplification of dismissal procedures) in 2013, a low rating continues to apply to the provisions concerning the recruitment and dismissal of employees, and Slovenia's low ranking in the labour market in comparison to the other EU Member States is also due to the tax burden on labour. The deterioration of the efficiency of the state during the crisis is also demonstrated by the World Bank Governance Indicators 2013, but nonetheless progress was made in

<sup>103</sup> Bank Stability (ZUKSB), Uradni list RS, No. 105/2012. The Act came into force on 28 December 2012.

<sup>103</sup> Act on the Measures of the Republic of Slovenia to Strengthen

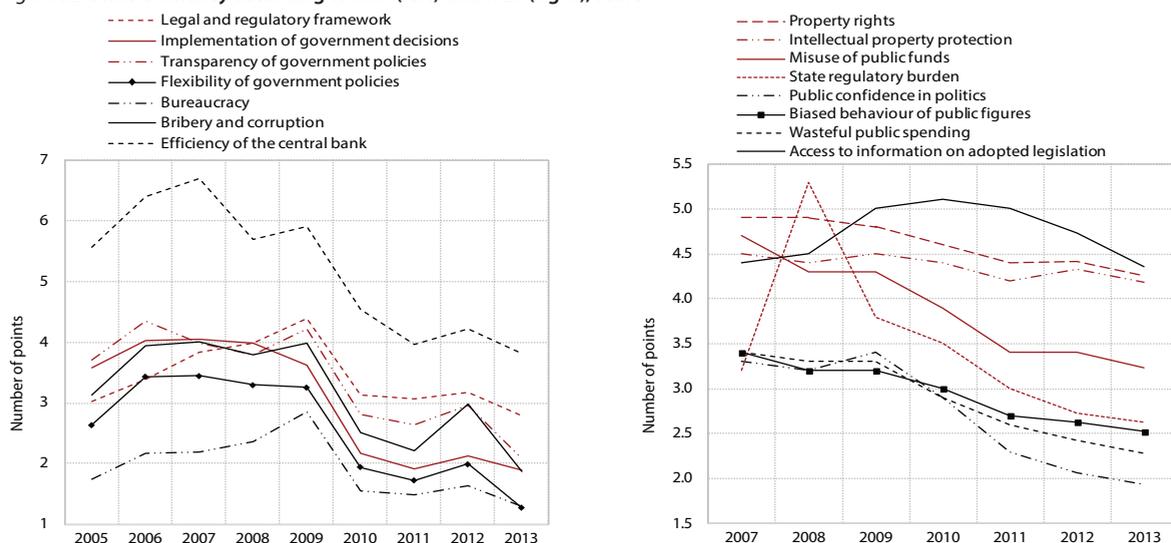
Table 8: Slovenia's ranking with regard to institutional competitiveness according to IMD, WEF and World Bank indicators

	Headline competitiveness indicator			Institutional competitiveness		
	IMD	WEF	Doing Business*	IMD	WEF	WGI**
2005	42 (51)			39		77.6
2006	43 (53)	40(122)		37	44	80
2007	43 (55)	39 (131)	55 (178)	35	40	80.1
2008	43 (55)	42 (134)	54 (181)	33	48	85.0
2009	38 (57)	37 (133)	53 (183)	30	43	83.3
2010	53 (58)	45 (139)	37 (183)	46	48	81.3
2011	53 (59)	57 (142)	35 (183)	53	54	80.6
2012	53 (59)	56 (144)	31 (185)	52	58	80.9
2013	53 (60)	62 (148)	33 (189)	54	68	

Source: IMD, WEF, Doing Business, World Bank Governance Indicators

Notes: The ranking of Slovenia and the number of states included in the survey shown in brackets. \* Comparable to the previous years since 2012 due to a change in methodology. A major change in methodology occurred particularly in 2010, when the area of labour and employment was eliminated from the calculation. \*\* WGI – World Bank Governance Indicators – Efficiency of the State: the countries included in the research are not ranked by places but centiles (0-100).

Figure 32: State efficiency according to IMD (left) and WEF (right), score



Source: IMD World Competitiveness Yearbook, various issues, and The Global Competitiveness report, WEF, various issues.  
 Note: Higher scores are better, and a maximum score in IMD (left) is 10, and in WEF (right) 7.

several areas in the past year. According to the survey “Doing Business”, Slovenia’s competitiveness improved compared to other Member States, which can be attributed to the methodology, while the subjective perceptions of the business persons surveyed and the current economic conditions do not influence the results. In this context, it should be noted that the survey points to the lengthy procedures that are principally associated with public institutions.

**The implementation of the programme of measures aimed at eliminating administrative barriers and drafting better regulations continued in 2013.** The implementation of the programme slowed down considerably and was suspended due to early elections in 2011. For this reason, the original programme of measures was renewed and extended until the end of

2013. A total of 261 measures were carried out between 2009 and 2013, most of them in the area of finance, statistics, justice and agriculture<sup>104</sup>. The main focus of other measures was on the process of reducing the burden in the area of the environment and spatial planning, broader labour law legislation, cohesion policy (drawing down of EU funds), finance (taxes, excise duties and other charges) and the economy (matters concerning legal status and financial reports). Only after the completion of the final stage of the programme will it be possible to establish to what extent the overall “Programme Minus 25” has actually been implemented. With the purpose of increasing synergies between measures, particularly uniform coordination, and reducing the reporting burden, Slovenia adopted the Unified Document for an Improved Legislative and

<sup>104</sup> Website: <http://www.stopbirokraciji.si>

Business Environment and to Raise Competitiveness<sup>105</sup>. The document covers 262 measures<sup>106</sup> and provides a basis for the preparation of policies, strategies and programmes for the next financial period until 2020 (the Unified Document for an Improved Legislative and Business Environment and to Raise Competitiveness – 2013). We assess that joint coordination is welcome, however a greater focus on the implementation of some priority measures is of particular importance.

**A major problem in the business environment is insolvency.** The number of defaulted obligors and the amount of all outstanding liabilities have increased significantly and default periods have become protracted since the onset of the crisis. In comparison with 2008, the number of legal entities that are behind with payments more than doubled and the total outstanding amounts increased significantly in the period until 2013<sup>107</sup>. For this reason, insolvency legislation was amended in 2013 in order to improve the efficiency of the restructuring of insolvent businesses or preserve their healthy cores. The amended Financial Operations, Insolvency Proceedings and Compulsory Dissolution Act<sup>108</sup> restricted the protraction of bankruptcy proceedings and the depletion of insolvent debtors' assets. One of the novelties introduced by this Act is a faster and easier entry into business ownership by creditors as economic owners and consequently gaining control of businesses. This enables creditors to convert their claims into equity stakes in a number of permanently insolvent companies in compulsory settlement proceedings without the consent of the owners and thus preserve the company's ability to continue its operations. In our opinion, the doubling in the number of initiated bankruptcy proceedings instituted against legal entities was a consequence of the adoption of the new legislation in the second half of the year.

**In Slovenia, the phenomenon of the shadow economy and other forms of liability concealment and avoidance is above average.** The high extent of the shadow economy undermines trust in the efficiency of

the state and also causes a tax gap resulting in the need to impose higher burdens on all taxable persons. The major part of the shadow economy can be attributed to unregistered and incorrectly registered production and service activities, undeclared work and other income earned within the framework of regular and legal activities. The estimates on the shadow economy in Slovenia vary widely, they, however, all indicate that the level of the shadow economy in Slovenia in recent years has remained extremely high in comparison to other countries.<sup>109</sup> Within the national accounts' statistics, the OECD and Eurostat have developed a methodology of measuring the so-called underground economy in national accounts as corrections of the GDP.<sup>110</sup> According to this method, the Statistical Office of the Republic of Slovenia (SURS) has estimated<sup>111</sup> that the shadow or underground economy in 2010 (the latest available data) amounted to 8.3% of GDP. As regards the scope of the underground economy measured by this method, Slovenia ranks among the upper third of EU Member States with problems in this area. In this context, it is worth mentioning that Slovenia has achieved comparably good results in collecting VAT, which is one of the most important indicators of the shadow economy; according to the estimates of SURS for 2010, the state collects almost 88.6% of the theoretical VAT.<sup>112</sup> Since 2009, the Tax Administration has been carrying out activities to fight the shadow economy and each year it defines the sectors it plans to inspect in detail (construction, taxi services, accommodation and food service activities, etc.). In the period 2009–2013, over 12,000 in-depth inspections were carried out and a total of EUR 7.8 m of additional outstanding tax liabilities were discovered, which is, however, very little in comparison to the annual estimates of the shadow and underground economy. In 2013, the government adopted a programme for

<sup>105</sup> The Unified Document covered the following: The Action Plan for the Implementation of the Small Business Act, Foreign Direct Investments, The Action Programme to Eliminate Administrative Barriers and Reduce Legislative Burdens by 25%, The Programme of Measures to Boost the Economy – 2012, Managing the Shadow Economy in the Republic of Slovenia (relevant ministries), Agenda 46+ (The Chamber of Commerce and Industry of Slovenia), and The Requirements of Slovenian Crafts and Trades (Chamber of Craft and Small Business of Slovenia).

<sup>106</sup> As many as 46 measures were implemented by April 2014, the implementation of 89 measures is in progress and the deletion of 8 measures has been proposed (The First Report on the Implementation of the Measures from the Unified Document for an Improved Legislative and Business Environment and to Raise Competitiveness 2014).

<sup>107</sup> An average of 2902 legal entities owed EUR 104 m a day in 2008, which rose to as many as 7032 legal entities and as much as EUR 748 m in 2013. More than 67% of this amount was accounted for by long-term debt.

<sup>108</sup> Uradni list RS, No. 47/2013 of 31 May 2013.

<sup>109</sup> For example, *The Shadow Economy in Europe in 2013* (ATKearney, VISA and Johannes Kepler Institute Linz) has established that the size of the shadow economy in Slovenia in 2013 amounted to 23.1% of GDP. Due to methodological problems, the indications in this research are not necessarily comparable between individual states or correct. According to Bojan Nastav's calculations, the size of the shadow economy in Slovenia in 2007 amounted to 15.6% of GDP (*Siva ekonomija v Sloveniji. Merjenje, vzroki in posledice. (The Shadow Economy in Slovenia. Measurement, Reasons and Consequences)*, doctoral thesis, 2009).

<sup>110</sup> The above-mentioned corrections comprise: (i) corrections for units partly or entirely avoiding registration; (ii) corrections for illegal activities; (iii) corrections for household activities not subject to registration; (iv) corrections for legal entities not included in the sources (who failed to submit accounting statements); (v) corrections for self-employed persons not included in the sources; (vi) corrections for intentional misreporting; (vii) other statistical deficiencies and corrections.

<sup>111</sup> The total scope of coverage corrections in the GDP estimate under the production method (increase in value added). SURS, *Popravki zajetja v BDP in siva ekonomija, 2013 (Coverage Corrections in the GDP and Shadow Economy)*.

<sup>112</sup> SURS, *Teoretični davek na dodano vrednost in podatki o davčni vrzeli za leti 2009 in 2010, 2013 (SURS, Theoretical value added tax and data on the tax gap for 2009 and 2010, 2013)*.

managing the shadow economy in Slovenia and the stated measures are to a large extent connected with the increase in the operational efficiency of institutions dealing with in-depth inspections in the area of taxes and customs and with the reduction of undeclared work.

***One reason for the deterioration in the efficiency of the state is also corruption; in recent years in particular, the perception of corruption in society has worsened significantly.***

The corruption level assessment in individual countries is to a great extent the result of the functioning (or non-functioning) of institutions of the rule of law, the integrity of the public sector, quality management and the competitiveness of the business environment (Evaluation of the Corruption Situation 2013, Commission for the Prevention of Corruption). While Slovenia is a country with a relatively low level of administrative corruption, the crisis has revealed the long-term development of systemic corruption which allows benefits to be gained to the detriment of public funds and the public interest. The European Commission has also established<sup>113</sup> that bribery cases rarely occur in Slovenia, however, corruption in the broader sense seems to be a serious problem. In this regard, the Commission for the Prevention of Corruption points out different fields where the risks of systemic corruption are high: public procurement, the management of the capital investments of the state and local communities, the operation of the banking system, the financing of political parties and election campaigns, the inefficient operation of inspection services, influencing the adoption of legislation, etc. The number of reported instances of suspicion of corruption and other irregularities has dramatically increased since the beginning of the crisis, which may be the result of a higher level of corruption perception in society, the adoption of relevant legislation (The Integrity and Prevention of Corruption Act, 2010) and more effective functioning of supervisory authorities (the Commission for the Prevention of Corruption, the establishment of the National Bureau of Investigation). The problem of corruption perception is also confirmed by the Corruption Perception Index (Transparency International, 2013), according to which Slovenia's ranking has been on the decline for a number of years compared to the other EU Member States. The deterioration of corruption perception in society is typical of the majority of EU Member States: according to the Eurobarometer survey, as much as one-fourth of EU citizens are of the opinion that corruption is widespread in general, and more than one-half are convinced that the level of corruption in their countries has increased in recent years.

***Low institutional competitiveness is also reflected in the growing lack of confidence of businesses and individuals in politics, the state and its institutions.***

According to the Eurobarometer survey data (Eurobarometer 80, 2013), trust in institutions remains among the lowest in the EU in 2013, while the data

also point to an extreme loss of trust in institutions in Slovenia in recent years. Since the onset of the crisis, public trust in the government, the National Assembly, political parties and local authorities has deteriorated considerably. Along with political instability in the past two years, mistrust has increased further and also remained high in 2013. The trust in EU institutions is higher, but has deteriorated slightly over the past two years. The survey results show that the popular discontent can be attributed to a great extent to the growing unemployment, the poor economic situation and to tax increases. Trust in institutions in the country is similarly low as in the other EU Member States that were most severely affected by the crisis.

***In 2013, constitutional amendments were adopted<sup>114</sup> to ensure the smooth operation of the state in adopting important decisions with fiscal consequences and provide for the long-term sustainability of public finances.*** The latter will be strongly influenced by the incorporation of the fiscal rule into the Constitution<sup>115</sup>, which states that over the medium term revenues and expenditures of the government budget must be balanced without borrowing; the rule should enter into force along with the 2015 budget. The amendments to the Constitution also include referendum legislation amendments, which means that a referendum will no longer provide for the possibility of deciding on laws<sup>116</sup> whose rejection could have major fiscal consequences (such as laws dealing with taxes, customs and other obligatory charges and on the law adopted for the implementation of the central government budget). A referendum may now only be requested by 40,000 citizens<sup>117</sup>; in addition, a law subject to a referendum is rejected if the majority numbering at least one-fifth of all qualified voters have cast votes against the law.

### 3.3 The efficiency of the judiciary

***Slovenia's competitiveness is also hindered by a lower level of trust in the rule of law.*** The rule of law depends on the perception of legitimacy of its key players – the parliament, the government, and the judiciary. According to public opinion polls, trust in all three branches of power is declining. Trust in the rule of law and its

<sup>114</sup> Constitutional Act Amending Articles 90, 97 and 99 of the Constitution of the Republic of Slovenia. *Uradni list RS*, No. 47/2013 of 31 May 2013.

<sup>115</sup> Constitutional Act Amending Article 148 of the Constitution of the Republic of Slovenia (UZ148). *Uradni list RS*, no. 47/2013 of 31 May 2013.

<sup>116</sup> Apart from laws whose rejection could have major fiscal consequences, referendums are no longer allowed to be called regarding laws on emergency measures to ensure the defence of the state, the ratification of international treaties, or on laws eliminating unconstitutionality in the area of human rights and fundamental freedoms.

<sup>117</sup> Until these amendments were adopted, also 30 National Assembly members and the National Council could request a referendum.

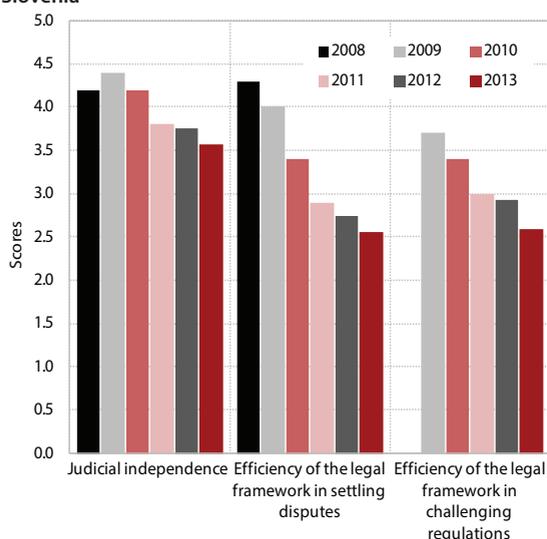
<sup>113</sup> European Commission, EU Anti-Corruption Report, 2014.

institutions in Slovenia has decreased since the onset of the crisis, which is also indicated by various international surveys (the 2013 World Bank Governance Indicators, the 2013 Heritage Foundation Index of Economic Freedom). In this context, it is worth mentioning that such trust has decreased in most EU Member States and is similar to the trend in the countries that have been most severely affected by the crisis. The Commission for the Prevention of Corruption (KPK)<sup>118</sup> has established that the creation of an environment characterised by the efficiency of the institutions of the state is an important factor and a result of the establishment of the rule of law; apart from raising trust in institutions, it also creates the conditions for sustainable medium-term and long-term economic growth. The trust of citizens and businesses in the judicial system has thus remained at a low level. The World Economic Forum estimates also reveal a continued deterioration in judicial independence from the influence of politics and the private sector in Slovenia and point to the inefficiency of the legal framework in settling disputes and challenging regulations. In comparison to other countries, the major problem regarding the efficiency of the judiciary is still the lengthy court proceedings (Doing Business 2014) which also has an impact on the costs of the operation of the courts. An OECD survey (Judicial Performance and its Determinants: A Cross-Country Perspective, 2013) determined that court proceedings in Slovenia were lengthy, resulting primarily from the low productivity of judges, the inadequate identification of lengthy and problematic matters, and the poor distribution of

responsibility within courts. Lengthy court proceedings also increase expenditure; according to the OECD data<sup>119</sup> the share of budget funds Slovenia earmarks for the judiciary as a percentage of GDP is above average compared to other analysed countries.

**The reduction in the number of unresolved cases and court backlogs also continued in 2013, but the proceedings are still lengthy.** Court statistics show that in almost all courts, with the exception of the labour and social courts, the number of unresolved cases and court backlogs dropped in the first nine months of 2013 compared to the same period last year. The reason was also the decrease in the number of incoming cases and a slight increase in the efficiency of judges and the judicial staff, because their number decreased more than the number of incoming cases. An exception were the labour and social courts, where the number of incoming cases increased significantly. According to our estimates, this increase was to a great extent mostly the result of a high number of work-related disputes regarding the payment of the third quarter of wage disparities in the public sector. The number of backlogs as defined by Article 50 of the Court Rules also dropped, in particular at the Supreme Court. The average time for the adjudication of cases, which according to the court statistics amounted to 4.2 months, slightly decreased. According to the court statistics, commercial law cases are particularly long, since at courts of lower instance bankruptcy proceedings against a legal person last 23.8 months on average, while personal bankruptcy proceedings last 33.3 months on average. Individual and collective labour disputes at the labour and social courts are also very long and exceeded the figure for the previous year; on average, they last 17.5 months.

Figure 33: WEF indicators of the efficiency of the judiciary in Slovenia



Source: The Global Competitiveness Report, WEF, different figures.

Note: The score is the value of the indicator. A higher score is better; the maximum score is 7.

The legend of the indicators represents a ranking between two extremes: (i) To what extent is the judiciary independent from politics, citizens or enterprises? (ii) How efficient is the legal framework for private companies in settling disputes? (iii) How efficient is the legal framework for private companies in challenging the legality of work of the government and/or regulations?

<sup>118</sup> Evaluation of the Corruption Situation, Commission for the Prevention of Corruption, 2013.

<sup>119</sup> Judicial Performance and its Determinants: A Cross Country Perspective (OECD), 2013.

## 4 The labour market and welfare state

### 4.1 The labour market

**In 2013, employment continued to adapt to the reduced economic activity.** Alongside the new decline in economic activity, the employment rate dropped in most of the private sector and for the first time also in the general government sector. According to the register, the number of persons in employment dropped by 2.3% in 2013, also as a result of large scale retirements at the end of 2012 (prior to the entry into force of the pension reform) and the non-renewal of a high number of temporary employment contracts at the beginning of 2013. In comparison to 2008, the average number of persons in employment dropped by 10.1%. Although the biggest drop in the number of persons in employment in 2013 – as in the past years – was observed in construction (on average 38.3% fewer persons in employment than in 2008), the most evident (although modest) growth among the activities in the private sector in the period from April to November was recorded in construction, which means that Slovenia deviated even further from the strategic objective regarding employment. The employment rate of the population aged 20 to 64, which should reach 75% by 2020 in accordance with the national objective within the EU 2020 Strategy, was still 1.1 percentage points lower in 2013 than the year before and amounted to 67.2%. Therefore, this objective will become increasingly difficult to achieve by 2020. The objective of Slovenia's Development Strategy, namely that the employment rate would reach 70% in 2013, was also not achieved, because it amounted to 63.3% and for the first time in the Strategy implementation period it was below the EU average.

**In parallel, unemployment continued to increase and earnings continued to decline in 2013.** The number of registered unemployed persons increased by 8.8% on an annual average level (in comparison to 2008, it was 89.9% higher). Unemployment increased significantly at the beginning of 2013, while during the year no major changes occurred. In the second quarter of 2013, the survey-based unemployment rate amounted to 10.4% (2.2 percentage points more than the previous year) and drew close to the EU average, while it was relatively low at

the onset of the crisis compared to international figures. In 2013 the lowering of real wages continued, which was the result of an adjustment to the lower activity level and public finance consolidation (regarding the decline in wages in the public sector, see also Chapter 1.1).

**The crisis strongly affected young people and those with a low level of education.** The decline in economic activity caused a decrease in the employment rate in most age groups and affected young people in particular. Young people are mainly temporarily employed and therefore they were often among those employees whose fixed-term employment contracts were not renewed by companies due to the unfavourable economic situation. Reduced demand also strongly reduces their employment opportunities when they enter the labour market after they have completed their education. In 2013, approximately 82% of the generation which had completed education registered as unemployed. The employment rate of the population aged 15–34, which amounted to 38.4% in 2008 and was above the EU average in that year, dropped below the EU average in 2011 and by the second quarter of 2013 it dropped to as low as 25.8%. This dramatic drop in recent years was to a great extent the result of the reduced volume of student work. With respect to education, the employment rate of people with low education declined most severely since the onset of the crisis, which is related to a severe drop in construction activities and technologically less demanding and labour-intensive processing industries, which during the crisis additionally accelerated due to the deterioration in cost competitiveness owing to the rise in the minimum wage. For the past two years also the employment rate of highly educated people has been rapidly decreasing, which is connected to the significant increase in the number of highly educated persons, on the one hand, and low demand, on the other hand (also due to the restrictive employment policy in the public sector).

**Alongside the growth in the number of job seekers and modest demand for labour force, structural imbalances in the labour market currently do not seem to be a serious problem, but they nevertheless exist.** The presence of structural imbalances in the labour market is in particular evident from the increase in long-term unemployment and the movement of the Beveridge curve. In the second quarter of 2013, the long-

Table 9: Changes in the number of employed persons

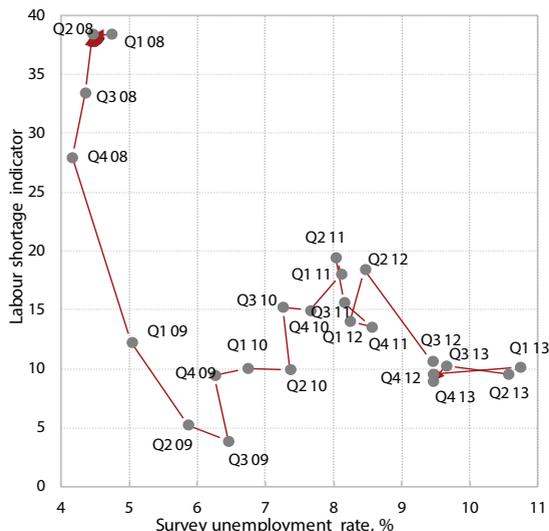
In %	2006	2007	2008	2009	2010	2011	2012	2013
Total (1+2)	1.5	3.3	2.6	-1.8	-2.2	-1.6	-1.3	-2.0
1. Public services (O–Q)	1.4	0.8	1.8	2.2	2.2	0.9	1.1	-0.9
2. Other activities (A–N and R–T)	1.6	3.9	2.7	-2.6	-3.1	-2.2	-1.3	-2.2
S13. Government sector	1.4	0.3	2.7	1.5	1.5	2.8*	0.5	-1.5

Source: SURS, national accounts statistics, calculations by IMAD.

Note: \*Based on the reorganisation of Slovenian Railways (hereinafter: SR), which resulted in four new companies, two SR parts (3,756 employees) fell under the government sector. Without this change, the growth in the number of employed in S13 would be 0.5%.

term unemployment rate amounted to 5.1%, which was by 2.1 percentage points more than in the previous year. According to the labour force survey, in the second quarter of the year the share of long-term unemployed persons amounted to 49.5% and was higher than the EU average (47.1%). In recent years, the Beveridge curve, which presents the relationship between the survey unemployment rate and the labour shortage indicator<sup>120</sup>, has been gradually shifting to the right despite temporary short-term changes in its direction, which indicates an increasing inconsistency between the volumes of supply and demand in the labour market. In conditions of reduced economic activity and consequently low demand in 2013, the curve does not indicate inconsistencies between the needs of employers and the qualifications of the unemployed (the curve is not shifting towards the upper right), however, with regard to its movement in the past, when it started to shift upwards even in conditions of modest economic activity, it can be reasonably concluded that such inconsistencies exist. This is also confirmed by the fact that despite rising unemployment, employers cannot satisfy all their needs.

Figure 34: Beveridge curve, Slovenia, seasonally adjusted

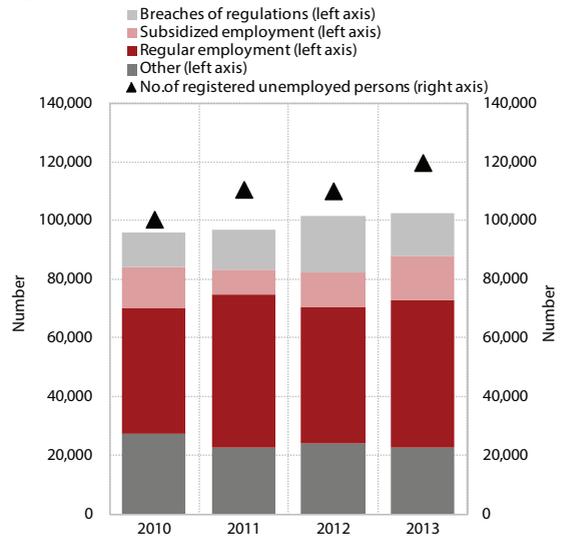


Source: Eurostat, SURS; calculations by IMAD.

**In 2013, the state reinforced active labour market policy (ALMP) programmes.** Following a two-year period of decline, the number of persons included in ALMP programmes increased again in 2013. The number of unemployed persons who have obtained direct employment by way of these programmes (for example employment subsidies, subsidies to unemployed persons for self-employment and public work) increased by 30.8% in comparison to 2012. In this way, the state

<sup>120</sup> The labour shortage indicator is based on the business climate indicator and shows the percentage of manufacturing companies reporting labour force shortages as a production restriction factor. The aforementioned indicator is often used instead of the job vacancy rate.

Figure 35: The number of persons de-registered from the register of unemployed persons by reason, Slovenia



Source: Employment Service of Slovenia (ESS).

Note: Subsidized employment includes employment through public works, subsidies for self-employment and other subsidies.

tried to intervene more actively in the reduction of the considerably increased unemployment rate.

**In 2013, legislative changes were made in order to reduce the rigid labour legislation.** In April 2013 the new Employment Relationships Act (ZDR-1) and the amendments to the Labour Market Regulation Act (ZUTD-A) entered into force, which constitute a package of legislative changes that restrict employment protection in Slovenia. The main objectives of these changes were: i) to reduce labour market segmentation, (ii) to establish a concept of flexicurity, and (iii) to enhance the efficiency of labour protection laws and prevent abuses. ZDR-1 simplifies the procedure for dismissal in the event of the individual dismissal of a permanently employed person, reduces expenses for dismissals of regular workers (notice periods and severance pay) and introduces some new limitations in concluding fixed-term contracts). The OECD estimates that through these changes Slovenia has reduced rigidity in legislation in the field of employment protection for regular workers against individual dismissal, where, following the changes in Slovenia, the employment protection indicator (EPR) was brought below the OECD average<sup>121</sup>, and in the field of temporary forms of work, where the indicator regarding the regulation of temporary contracts (EPT) was brought closer to the OECD average<sup>122</sup>. The main amendments to ZUTD include the introduction of the possibility of

<sup>121</sup> On the basis of the changes made in 2013, the employment protection indicator in Slovenia was reduced from 2.39 to 1.99, which is below the unweighted OECD average (2.04).

<sup>122</sup> On the basis of the change made in 2013, the indicator regarding the regulation of temporary contracts in Slovenia was reduced from 2.50 to 2.13, which indicates major flexibility with regard to temporary employment, and is slightly above the unweighted OECD average (2.08).

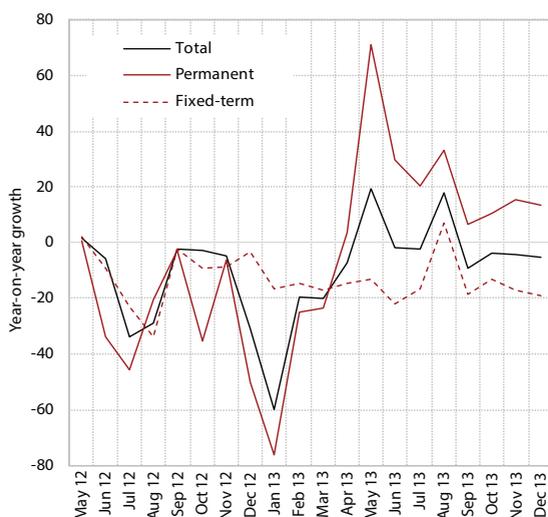
temporary or occasional work for pensioners and better access to unemployment benefits by people under 30 years of age.

***A number of legislative amendments were adopted to reduce segmentation, which has been a burning issue in the labour market in Slovenia for many years.***

In order to reduce the differences between employees with permanent contracts and those with fixed-term contracts, the new ZDR-1: (i) introduces severance pay in the event of the termination of a fixed-term employment contract which was concluded for a period of one year or less; it shall amount to one-fifth of the average monthly wage, (ii) introduces additional restrictions in the event of the serial chaining of employment contracts for the same work by legally determining what qualifies as the same work, (iii) introduces restrictions with regard to fixed-term employment contracts in the event of workers hired through employment agencies<sup>123</sup>, (iv) reduces the maximum notice period in the event of regular employment, and (v) reduces severance pay for workers with 5–10 and 15–20 years of service.

***After the entry into force of the amendments, the number of permanently employed persons has been growing faster than the number of those employed for a fixed-term, however, the share of other forms of work has also increased.*** Data from the Statistical Register (SRDAP) on new employments, first-time employments, and changes in employment with regard to the type of contract (fixed-term/permanent) show that since the entry into force of the aforementioned amendments the number of permanent employment contracts has been growing faster than the number of fixed-term

Figure 36: Year-on-year growth in the number of new employments by type of employment contract, Slovenia



Source: SURS (Statistical Register of Employment – SRDAP); calculations by IMAD.

<sup>123</sup> The ZDR introduces a restriction in the number of referred workers, which must not exceed 25% of the number of workers employed by the user (Article 59).

employment contracts; this could indicate that employers eased their reservations about permanent employment, which might also bring positive effects with regard to a slight reduction in labour market segmentation. At the same time, the labour force survey data show that in 2013 employers took advantage of other forms of work more frequently, while the share of persons engaged in an employment relationship was lower. This was especially typical for the second and third quarters of 2013, which could indicate that employers have replaced fixed-term employment contracts with other forms of work. Among other forms of work, the share of student work in particular increased significantly, therefore, such trends could also have a mainly seasonal character. The impact of last year's changes in regulations on segmentation is therefore rather unclear and it is difficult to assess it because of the short period that has passed since the entry into force of the Act and the further reduction in the demand for labour.

## 4.2 Social Protection Systems

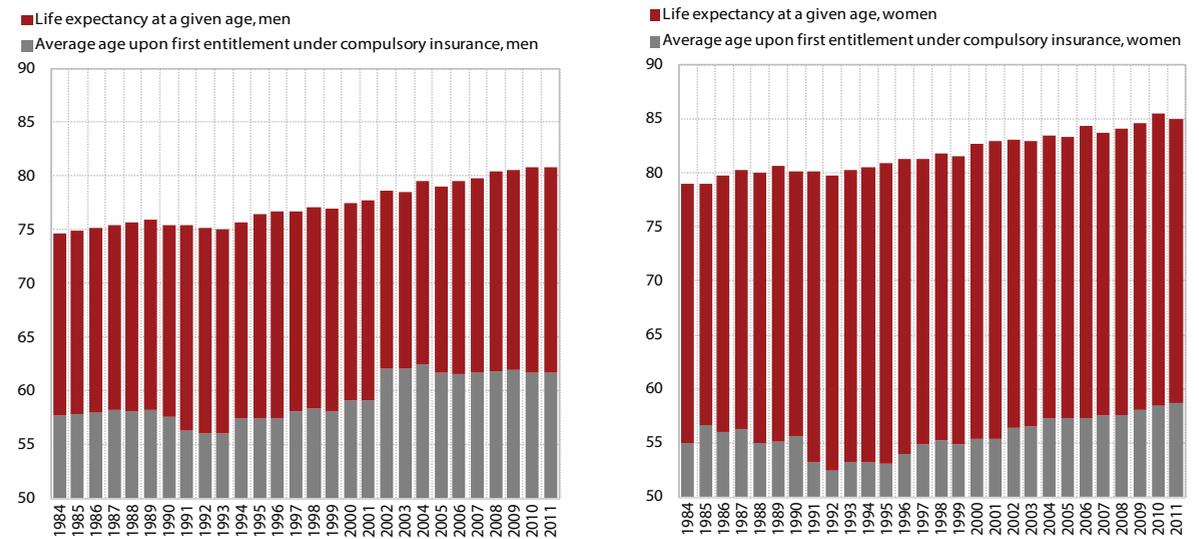
***After the period of a relatively high growth regarding such since the onset of the crisis, systemic as well as increasingly strong intervention measures in 2011 and 2012 curbed social protection spending.***

In 2011 the total expenditure on social protection<sup>124</sup> increased by only 0.4% in real terms, which is considerably less compared to the previous years (see indicator 4.6). Its growth was mainly the result of an increase in the number of pensioners and beneficiaries of unemployment benefits and family benefits, because the indexation of transfers was limited by an intervention law to only one-quarter of the usual adjustment; apart from that, also austerity measures in the area of health care continued to be implemented. In comparison to the GDP, the share of total expenditure on social protection did not increase in 2011 (25% of GDP); the highest share of this expenditure, i.e. expenditure on social benefits, increased by only 0.3 percentage points of GDP. As in previous years, such expenditure was significantly below the EU average (29.1% of GDP). The trends regarding expenditure on social benefits in cash and kind<sup>125</sup> within the general government expenditure were also similar. In 2011 the latter increased by 0.4 percentage points of GDP, while in 2012, the share remained unchanged despite a significant fall in GDP (19.8% of GDP). In real terms, it dropped by 4.8% in 2012, which was the result of the reform of the system of social transfers and further intervention measures, introduced by the Fiscal Balance Act (freezing indexation, suspension or cancellation of certain benefits). In the EU average, in 2011, general government expenditure on social benefits and reliefs for the first time decreased in real terms (by 0.1%), while in 2012 it increased again by 0.7%. As a share of GDP, it amounted to 21.5% in 2012, which was 1.7 percentage

<sup>124</sup> According to the ESPROSS Methodology.

<sup>125</sup> According to the ESA 95 Methodology.

Figure 37: Average age upon retirement, life expectancy upon retirement, and share of lifetime spent in retirement, Slovenia



Source: Eurostat, Pension and Disability Insurance Institute, calculations by IMAD.

Notes: Average retirement age – average age upon first entitlement under compulsory insurance; Life expectancy upon retirement – life expectancy at a given retirement age in a certain year.

points more than in Slovenia. The lower share of expenditure in Slovenia was, *inter alia*, also the result of the system of social transfers: as a rule, higher shares are characteristic of countries with prevailing universal rights; however, Slovenia ranks among the countries where many rights are related to a family's material situation – in 2012 the targeting of social transfers improved further.

**In 2013, the new pension legislation started to be implemented; the last reform of the system of social transfers was subject to some minor changes, while the health care system and the long-term care system have remained mainly unchanged despite the increasing problems that occurred.** The new Pension Act raised the retirement age, levelled off the retirement conditions for men and women and changed the essential parameters for the calculation of pensions by introducing transitional periods of different length for their entry into force. With regard to the fact that the reform cannot ensure the sustainability of the system in the long term, preparations need to be undertaken for a more radical reform which should be effectively implemented before 2020. In mid-2013 amendments to social legislation were adopted with the purpose of improving the situation of some socially most disadvantaged population groups (in particular, single parent families and large families, beneficiaries of social benefits in cash; furthermore, scholarships for upper secondary school students are being re-introduced). The health care system reform and long-term care reform are still in preparation. At the end of 2013 the intervention law provided additional sources for financing health insurance, which will somewhat mitigate the problems of financing. In order to maintain the level of quality and accessibility, urgent systemic changes need to

be adopted: new legislation should consider further optimising the provision of health services, broadening the bases for contributions, amending the rights arising from compulsory health insurance, and upgrading the payment models with respect to health care providers.

**Following the slowdown in the growth of pension expenditure<sup>126</sup> in the period 2009–2011 and the drop in real terms due to austerity measures in 2012, expenditure in 2013 increased owing to the increase in the number of pensioners.** It amounted to EUR 4.254 bn, i.e. EUR 106 m (0.7% in real terms) more than one year ago. Due to the new Pension Act and the consequent higher retirement rate towards the end of 2012 and at the beginning of 2013<sup>127</sup>, among the three main types of pensions only the expenditure on old-age pensions increased (4.0% nominal growth). Owing to the adjustment with the wage growth, at the beginning of 2013 pensions increased by 0.1%, which increased expenditure at the annual level by less than EUR 5 m, while in the following two years no adjustment is foreseen.<sup>128</sup> Due to the further decline in the wage

<sup>126</sup> According to the balance data of the Pension and Disability Insurance Institute, Ministry of Finance, covering the following types of pensions: old-age, disability, survivor's, farmer's and military pensions, pensions received from former states of Yugoslavia, pensions remitted to former states of Yugoslavia, pensions remitted abroad, recreation grants to pensioners, other pensions.

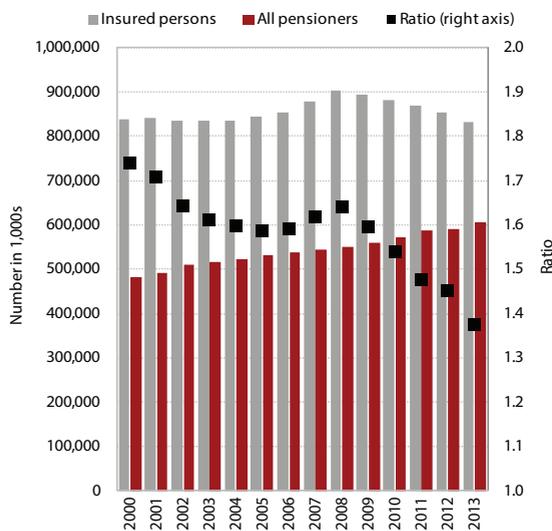
<sup>127</sup> Pensioners who submitted their applications for retirement at the end of the year (prior to the entry into force of the Act) were counted among pensioners after their applications had been resolved favourably and after they had received their first pensions, i.e. in the first months of 2013.

<sup>128</sup> Implementation of the Republic of Slovenia Budget for 2014 and 2015 Act (ZIPRS1415), Uradni list RS. No. 101/2013, Article 56.

bill, social security contributions paid into the budget of the Pension and Disability Insurance Institute fell by 2.4% in nominal terms, while the amount of the budget transfer was significantly higher, which means that its share in pension insurance revenue reached the highest value so far (from 29.2% in 2012 to 32.0%).<sup>129</sup> Due to reduced GDP, the share of pensions in GDP rose for the sixth consecutive year, i.e. by 0.36 percentage points, and reached 12.06% (see indicator 4.7). The new pension regulation will stabilise this share in the medium term and subsequently it will start to grow faster again. A key political response to these challenges in many EU countries seems to be a closer combination of pension parameters with longer life expectancy.<sup>130</sup> Given the expected further growth in the share of the older population in Slovenia (at the beginning of 2013, the share of the population over 65 years of age was 17.1% and was 1 percentage points below the EU average; however, according to the projections<sup>131</sup> to 2060, this share is expected to grow to 33%, without considering systemic changes) and given the lowest employment rate of elderly workers among EU Member States, such combination will be quite a challenge for Slovenia.

**In 2013, the number of pensioners exceeded 600,000 for the first time.** Due to increased retirements prior to

Figure 38: The number of insured persons and pensioners, and the relevant ratio, Slovenia



Source: Institute for Pension and Disability Insurance, 2013.

<sup>129</sup> The Republic of Slovenia provides funds from the state budget and other sources to cover the differences between the revenues of the Institute from contributions and from other sources and the expenditure of the Institute. (Pension and Disability Insurance Act (ZPIZ-2), Uradni list RS, No. 96/2012, Article 162).

<sup>130</sup> Some EU Member States have already introduced adjustment mechanisms which will tie pensions to rising life expectancy (Italy, Greece, the Netherlands, Slovakia and Cyprus), Schwan A. and Sail E., 2013.

<sup>131</sup> Kraigher T., Ferk B. (Delovna projekcija prebivalstva Slovenije (Working Projection of the Population of Slovenia), 2013).

the adoption of the new Act, the increase in the number of pension recipients recorded in 2013 was also high, however, during the year the increase moderated. In 2013, old-age, disability, widow(er)'s and survivor's pensions were paid to 2.9% more persons on average than in the previous year (average number: 602,311 persons). Such increase is largely attributable to old-age pension holders (4.1% more than in the previous year), because at the end of 2013 their number increased by 17.1% in comparison to 2009. In the past years, such increase, in addition to the retirement of larger generations, was also due to the lengthy process of adopting the new pension legislation (the rejection of the Act at a referendum in June 2011 and the adoption of the Act at the beginning of December 2012). In 2013, the number of pensioners per 100 insured persons already amounted to 72.6 pensioners, which is 9 more than in 2005 (i.e. 1.38 insured persons per pensioner, while in 2005 this number was 1.67).

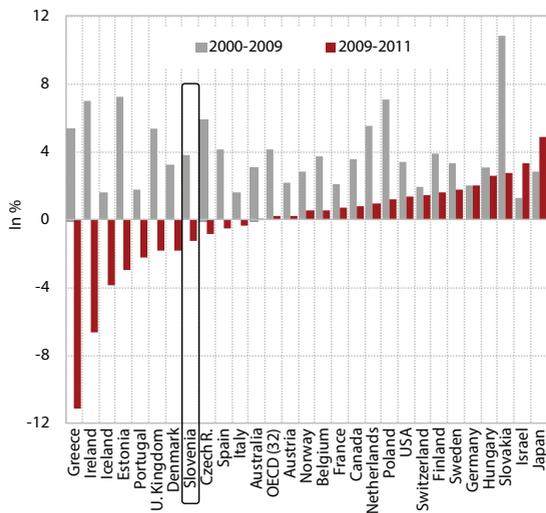
**In 2013, the number of people included in supplementary pension insurance, dropped for the third year in a row.** According to the data of the Ministry of Labour, Family, Social Affairs and Equal Opportunities (MDDSZ), by the end of September, 2.9% fewer persons were involved in this insurance than the year before,

while the share of compulsory insurance holders included in supplementary insurance dropped further, i.e. to 59.7%. The reduction in the number of persons included can be attributed to the drop in employment and therewith to the decline in the number of potential insured persons with supplementary insurance (since the number of insured persons with compulsory insurance also dropped by 2.9%). The decline in the number of persons included in supplementary insurance was lower than the year before, when their decline was higher due to the first payments of pensions from supplementary insurance.<sup>132</sup> In general, a low share of insured persons are saving for a supplementary pension, and the average premium amounts saved are relatively low. At the end of September 2013, only 3.8% of those included in voluntary supplementary insurance were included in individual voluntary supplementary pension insurance, whereas the rest were included in collective insurance. According to the data of the Slovenian Insurance Association (SZZ), the average monthly premium per insured person in the second pillar amounted to approximately EUR 44, while in the third pillar, which includes 38 thousand persons, it amounted to EUR 23.

<sup>132</sup> The criteria for regular termination of supplementary pension insurance are: an age of 58, the right to a pension under compulsory insurance regulations and the expiry of at least 120 months following the conclusion of a supplementary insurance contract. Insured persons with the right to a supplementary pension, instead of opting for a pension annuity, largely decided on a one-off withdrawal of funds despite the lowered tax base (by 50%) on the pension annuity, which makes it more attractive in terms of taxation. This is due to the unfavourable financial situation of the population and the general uncertainty with regard to the economic situation.

**In 2013, total health care expenditure continued to drop and during the crisis in Slovenia it fell much more than in OECD countries on average.** In 2012, it amounted to 9.0% of GDP<sup>133</sup>, while in 2013, according to the first preliminary estimates of the Health Insurance Institute of Slovenia (HIIS), it amounted to 8.8% of GDP. In its structure, the share of public expenditure is falling, while the share of private expenditure is rising, which is the result of a series of measures aimed at balancing the operations of the Health Insurance Institute (the transfer of a portion of expenditure to complementary health insurance, a reduction in expenditure on medicinal products and medical devices, etc.). In the period 2010–2011, the growth of health expenditure stabilised or dropped in almost all OECD countries (see indicator 4.8). The European Commission emphasises that the measures which reduced expenditure growth were mainly focused in most countries on the improvement of the sustainability of public financing of health care and insufficiently focused on the increase in the efficiency of the health care system. This means that, for example, the measures did not produce changes with regard to the structure of public funds spent (the promotion of prevention, primary health care; secondary level ambulatory care, day surgery); therefore, despite the implementation of austerity measures in the past years in most countries, there should still be sufficient room for further reforms and a slowdown in the growth of public health expenditure<sup>134</sup>.

Figure 39: Average annual real-term growth rate of total health expenditure



Source: OECD.

**For the third year in a row, HIIS did not settle its outstanding liabilities in the current year.** In 2013 for the second year in a row, the revenues of HIIS dropped

<sup>133</sup> In the calculation of the share of GDP, the revision of the GDP of September 2012 was considered (SURS, National Accounts).

<sup>134</sup> Report on Public Finances in the EMU 2013 (European Commission), 2013.

by 1.3% also in nominal terms and by 3.1% in real terms. Despite a series of measures which were adopted over the past years to maintain stable financing of the public health care system, in 2013 HIIS could not settle its outstanding liabilities in the current year for the third year in a row. It transferred the payment of its outstanding liabilities amounting to as much as EUR 74.6 m to 2014. Therefore, the difficulties in the operation of health establishments are being aggravated.<sup>135</sup> In 2014 the intervention law will slightly increase revenues, however, the conditions for the operation of HIIS will be even more demanding, because the revenues are expected to increase only by 1%, which means that they will be 0.9% lower in real terms. The conditions for its operation may also be aggravated by the fact that in October 2013 the Directive on Patients' Rights in Cross-Border Health Care entered into force, according to which in cases of long waiting periods, patients will be entitled to health treatment abroad at the expense of the compulsory health care scheme; in addition, patients will be free to seek other diagnostic health services and secondary level ambulatory care services abroad<sup>136</sup>.

**In 2011, expenditure on long-term care services continued to grow<sup>137</sup>; the fastest growth was recorded in private expenditure.**

Total expenditure on long-term care slightly increased in 2011 and reached 1.32% of GDP, which, according to the latest comparable international data, is lower than the OECD 24 average (1.56% of GDP). Slovenia's public expenditure on long-term care as a share of GDP is also lower than in other countries (Slovenia: 0.98% of GDP, OECD: 1.39% of GDP); moreover, it is increasing at a slower pace than relevant private expenditure (see indicator 4.9). In the future, pressure on the growth of private expenditure is expected to be even higher, since a large part of the needs still remains to be covered. In order to guarantee stable sources of long-term care financing, systemic changes are urgent to bring together the disconnected sources of public financing, provide for more coordination in providing services and more equal access to them, and via an altered system of financing, promote the development and performance of services at home and facilitate the involvement of informal providers and other forms of care for the elderly. However, in the revision of financing it needs to be taken into consideration that in Slovenia as much as 50% of the total public expenditure on long-term care is being financed from compulsory health insurance

<sup>135</sup> According to the first operational assessment for 2013 (Ministry of Health, March 2014), 17 hospitals (out of 27 public hospitals) generated losses, and in particular individual regional hospitals and the Maribor University Medical Centre had a relatively high deficit; more than 50% of primary health care centres also had difficulties regarding their operation.

<sup>136</sup> The costs of treatment shall be reimbursed up to the amount covered by compulsory health insurance for the same health service on the patient's own territory.

<sup>137</sup> Measured by the SHA methodology (System of Health Accounts).

Table 10: Work-incentive indicators, Slovenia and the EU

	Tax wedge on labour costs		The unemployment trap – movement from unemployment benefits to 67% of the average wage		The low-wage trap – movement from 33% to 67% of the average wage		The low-wage trap – movement from 33% to 67% of the average wage	
	Single person (67% of the average wage)						One-earner couple with two children with 33% of the average wage	
	Slovenia	EU	Slovenia	EU	Slovenia	EU	Slovenia	EU
2001	44	41	83	75	39	46	99	55
2002	44	41	84	74	43	45	96	54
2003	44	41	86	74	46	45	95	58
2004	44	40	88	74	49	44	92	57
2005	42	40	83	75	51	45	76	59
2006	41	40	82	76	52	47	73	61
2007	41	40	81	75	51	47	67	60
2008	40	39	83	75	53	47	68	58
2009	40	39	83	75	53	48	68	60
2010	39	39	83	75	48	47	64	58
2011	39	40	90	75	46	47	61	59
2012	39	40	90	75	49	47	62	59

Source: Eurostat Portal Page – Population and Social Conditions, 2013

Notes: Due to methodological ambiguities between Eurostat, OECD and SURS (for example the consideration of 2/3 instead of 67% and 1/3 instead of 33%), the data from previous years have been slightly changed for Slovenia and the above stated data also differ from the data provided by SURS, however, mostly at the decimal level, therefore we are submitting data in the form of whole numbers, where there are no deviations.

**Tax wedge on labour costs:** Tax burden on labour (in %) = (income tax + social contributions by the employee + social contributions by the employer + payroll tax / gross wage + social contributions by the employer + payroll tax) x 100. It reflects the combined effect of taxes, social security contributions and social transfers on labour costs.

The conversion is made for a single person without children receiving 67% of the average gross wage. In 2012, in the case of an employee receiving 67% of the average wage, 39% was for the payment of tax and 61% for the net wage.

**The unemployment trap:** The unemployment trap (%) = (1 - (net income from employment - net income during unemployment/gross wage) x 100. It shows the net to gross earnings ratio for a single person without children upon transition from unemployment to employment, taking into account the unemployment benefit in the amount of 80% of the gross earnings of an employed person receiving 67% of the average employee's gross earnings. In 2012, the transition from unemployment to employment for such an unemployed single person increased his/her net earnings by 10% of the gross wage or increased his/her net earnings by EUR 0.10 for every additional euro paid in gross wage.

**The low-wage trap:** Low wage trap (in %) = (1 - difference in net income (the transition from 33% to 67%) / the difference in gross wage (the transition from 33% to 67%)) x 100. For a single person, the low-wage trap shows the ratio of the net and gross earnings of an employed single person upon transition to a better paid job (from 33% to 67% of the gross wage of the average employee). The low-wage trap for a one-earner couple with two children shows the ratio of net to gross earnings of an employed single person in a four-member household upon transition to a better paid job (from 33% to 67% of the gross wage of the average employee). In 2012, such a single person upon transition to a better paid job increased his/her net earnings by 51%; for a couple with two children this share was 38%. This means that every additional euro paid for gross wage increased the single person's net earnings by EUR 0.51 and those of a couple with two children by EUR 0.38.

(HHS), therefore, changes in the financing cannot be enforced without the simultaneous implementation of health care reform.

**Expenditure for kindergartens has also increased.** In 2011, it amounted to 0.79% of GDP (of which 0.64% of GDP was public and 0.15% of GDP private expenditure). In comparison to the year before, the share increased (by 0.05 percentage points); in 2010 (the latest international data available) it was also higher than on average in the 21 EU Member States that are also OECD members (0.57% of GDP). Since 2008 it has increased by 0.16 percentage points, in particular on account of the higher share of public expenditure (by 0.15 percentage points) as a result of increased demand for kindergartens seats (the number of children enrolled in kindergartens, the introduction of free kindergarten in 2008 if more than one child in the family attends kindergarten) and due to the increasing number of kindergartens, their units and the employment of additional staff. In 2010, the share of private expenditure in GDP exceeded the average of the 21 EU Member States that are OECD member.

The ratio between the number of children attending kindergartens and the number of educational staff has remained favourable, which causes high expenditure per participant (2010: USD 7,744 PPS), despite its decline in comparison to the previous year. Owing to higher private expenditure, it was still higher than the EU-21 average (USD 7,085 PPS).

**Despite the reform of the system of social transfers, which represented a significant change to the social protection systems, work incentive indicators do not show notable changes.** Only the low-wage trap increased – for a single person by 3 percentage points and for a couple with two children by 1 percentage point. This indicates that in 2012 the higher wage effect upon movement into higher wage employment was lower than the year before, which could be attributed to improved targeting of social transfers to people with the lowest incomes. In 2012, the tax burden on labour costs for lower wages (39%) remained unchanged for the third year in a row and also the unemployment trap remained the same in comparison to the year

before. Compared to the EU, the unemployment trap in Slovenia was significantly higher (Slovenia 90%, EU 75%), which, according to our assessment, is due to a smaller gap between low wages (which grew as a result of a sharp rise in the minimum wage) and the relatively high assessment percentage for unemployment benefits for the first three months. In 2011, changes in these indicators in Slovenia were subject to the influence of the provisions on the increase in unemployment benefits and a more restrictive social transfer valuation. As a result, between 2010 and 2011 the unemployment trap increased by 7 percentage points due to the increase in the unemployment benefit rate from 70% to 80% of the base rate, which has made transition towards employment even less encouraging since 2011.

### 4.3 Living conditions, social exclusion and social risks

**Although they have deteriorated slightly, composite and aggregate well-being indicators for Slovenia still show a relatively favourable picture.** Given that they include different dimensions and use different sets of indicators, the results also differ slightly but nevertheless show that the different rankings of Slovenia in terms of development have remained similar to those in the past years. In the Human Development Index (HDI) for 2013<sup>138</sup>, Slovenia remains in the group of countries which enjoy very high levels<sup>139</sup> of human development. With regard to the HDI value (0.892) Slovenia ranked 21<sup>st</sup> out of 186 countries, together with Finland (the same ranking as the year before) while among EU Member States it ranked 10<sup>th</sup>. With regard to the *non-income human development index*,<sup>140</sup> Slovenia ranks 5<sup>th</sup> among EU Member States. As regards the *Better Life Index* (BLI)<sup>141</sup>, Slovenia ranked 19<sup>th</sup> out of 36 countries<sup>142</sup> in 2013 (in 2011 it ranked 21<sup>st</sup>). The greatest impact of the crisis is therefore reflected in the aggregate indicator *satisfaction with life*<sup>143</sup>, which strongly decreased in the second half of 2013. Slovenia remains among the upper half of EU Member States and according to the average annual results (two measurements), its ranking 12<sup>th</sup> does

not deviate from last year's ranking; however, following a significant drop in satisfaction during the autumn measurements, Slovenia now ranks slightly lower (14<sup>th</sup>). The summary of well-being indicators in Slovenia<sup>144</sup> prepared by national professional institutions shows that in recent years Slovenia has mainly stagnated or lagged behind in the area of material welfare, while in the area of social and environmental welfare, it has made progress.

#### 4.3.1 Material living conditions

**In 2013, the decrease in household disposable income was lower than in the previous year, but still considerable.** Household disposable income decreased in real terms for the first time in 2009; in 2013, according to our estimates, in real terms it was 9% lower than in 2008. In 2012, it decreased by 5.2% in real terms and in 2013 it decreased, according to our estimates, by a further 3.3%. The *adjusted disposable income*<sup>145</sup> also decreased in a similar way (by 5.2%) in 2012 after its constant increase in the previous years. Apart from the movement of individual categories of disposable income, as is evident in the following paragraph, this was influenced by the reduction in social transfers in kind<sup>146</sup>, which decreased for the first time in 2012, i.e. by 5.4%. In comparison with the EU, Slovenia's gap regarding disposable income per capita increased further. A somehow smaller gap with the EU average exists – as in previous years – at the level of adjusted disposable income per capita (expressed in purchasing power standards), which in 2012 amounted to 78.3% of per capita income in the EU; however, the difference with regard to the year before further increased by 3.1 percentage points.

**In 2012, the main contribution to the reduction of disposable income came from the largest category of disposable income, i.e. compensation of employees, which saw the largest decline thus far.** Gross operating surplus and mixed income covering entrepreneurial and other revenues (of farmers, sole traders and persons

<sup>138</sup> The HDI, as one of the main aggregate indicators of societal development and prosperity, incorporates three factors of human prosperity: health, education and income. The index for 2013 mainly considers data for 2012.

<sup>139</sup> The report ranks countries with index values exceeding 0.804 among countries with a high level of human development; values ranging from 0.804 to 0.712 indicate countries with a high level of development; while the index values for countries with a medium and low level of development range from 0.710 to 0.304.

<sup>140</sup> The non-income human development index is calculated only by considering the HDI components of health and education.

<sup>141</sup> The index is published by the OECD. It consists of 11 areas which are presented together with 24 prosperity indicators.

<sup>142</sup> In addition to 44 OECD Member States, this year's classification also includes Brazil and Russia.

<sup>143</sup> See indicator 4.16.

<sup>144</sup> The preparation of prosperity indicators is a joint project of UMAR, SURS, the National Institute of Public Health (NIJZ), and the Environmental Agency of the Republic of Slovenia (ARSO). The presentation covers three areas: material, social and environmental prosperity, including a total of 19 leading indicators. A summary of the indicators will be published on the websites of the participating institutions.

<sup>145</sup> The adjusted disposable income is derived from the disposable income by adding the value of social transfers in kind received and given.

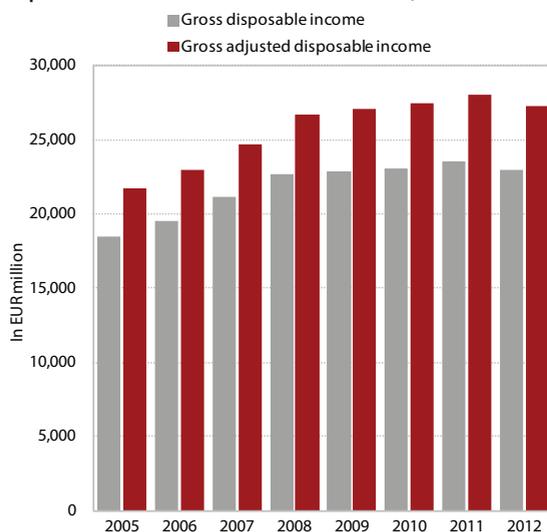
<sup>146</sup> These include goods and services that national units and the NPISH provide as transfers in kind to households, irrespective of whether they were acquired on the market or whether the national units or NPISH produce them as non-market output. They may be financed from taxes, other countries' revenues or social security contributions, and, in the case of the NPISH, from support and property-based income (The European System of National and Regional Accounts 1995, 2005, par. 4 104). In 2012, the majority (84.9%) was earmarked for health care and education, while the rest for recreation, culture, religion, and social security.

Table 11: Disposable income of the population, Slovenia

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Real growth</b>								
Compensation of employees	3.1	4.3	5.7	3.9	-1.3	-0.4	-1.8	-3.8
Social benefits other than social transfers in kind	2.4	2.4	2.3	4.0	5.3	2.9	4.5	-2.3
Gross operating surplus and mixed income	5.3	3.6	6.8	-1.1	-3.4	-4.6	-0.8	-6.0
Property income	-7.6	0.8	4.2	8.4	-31.2	-21.4	28.3	-5.4
Other current transfers	37.2	-23.4	-94.6	-	-	-	-	-
Social contributions	3.1	4.1	4.4	4.7	-0.2	0.2	-0.8	-2.5
Current taxes on income, wealth, etc.	-2.5	9.3	3.6	10.1	-5.4	-3.3	0.3	-0.3
Disposable income	4.1	2.8	4.7	1.5	-0.2	-0.9	0.5	-5.2
<b>Share of disposable income</b>								
A: Compensation of employees	79.7	80.9	81.6	83.6	82.7	83.1	81.2	82.4
B: Social benefits other than social transfers in kind	26.2	26.1	25.4	26.1	27.5	28.6	29.7	30.6
C: Gross operating surplus and mixed income	25.5	25.7	26.2	25.5	24.7	23.8	23.5	23.3
D: Property income	1.9	1.8	1.8	1.9	1.3	1.1	1.4	1.4
E: Other current transfers	1.2	0.9	0.0	-0.4	0.0	-0.2	0.2	-0.5
F: Social contributions	25.1	25.4	25.3	26.2	26.1	26.4	26.1	26.8
G: Current taxes on income, wealth, etc.	9.3	9.9	9.8	10.7	10.1	9.9	9.8	10.3
Net disposable income (A+B+C+D+E-F-G)	100	100	100	100	100	100	100	100

Source: SURS; Non-financial sector accounts.

Figure 40: The gross disposable income and gross adjusted disposable income of households and NPISG, Slovenia



Source: SURS, Non-financial accounts by sector.

engaged in cultural activities) dropped significantly in that year and have been decreasing since 2008. The declines in the compensation of employees and in mixed income brought about a lowering of taxes on income and wealth and social security contributions. For the first time, also social transfers declined, i.e. in particular due to intervention measures introduced by the ZUJF<sup>147</sup> and the

<sup>147</sup> Fiscal Balance Act. (Uradni list RS, No. 40/2012).

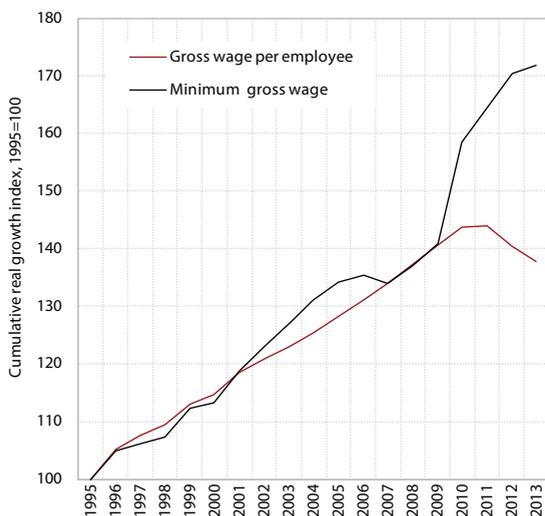
reform of the system of social transfers. However, social transfers<sup>148</sup> are turning into an increasingly important part of disposable income and their share in disposable income has reached the highest level since 1995. We estimate that also in 2013 the most important categories of disposable income decreased further, whereby the decrease in the compensation of employees mostly contributed to the approximately 3% decline.

**In 2013, the real decline in the wage bill was similar to the year before.** The net wage bill has been decreasing in real terms since 2009. In 2012, the net wage bill reduction was the highest (-3.4%) thus far, but in 2013 these trends were evident in a similar way. Alongside continued decline in economic activity and additional austerity measures in the government sector, the net wage per employee in 2013 fell by 1.2% in real terms; the number of wage recipients fell by 1.9%, resulting in a reduction in the net wage bill of 3.2% in real terms. In 2013, the gross wage per employee slightly dropped in nominal terms (-0.2%; -2.0% in real terms). As in the previous year, it rose only in the private sector (by 0.6%); in the public sector the decline even deepened compared with the previous year (by 1.3%), in particular as a result of an additional reduction in wages in the general government sector (-2.5%).

<sup>148</sup> Social transfers include pensions, transfers to the unemployed, family benefits and parental supplements, transfers ensuring social security, wage compensations, sickness benefits, scholarships, transfers to the war-disabled and veterans and victims of war, and other transfers to individuals, although excluding social transfers in kind.

**The share of minimum-wage earners increased with a further minimum wage rise.** In 2013, the minimum wage increased by 2.7% due to adjustment for inflation. As indicated by the average for the period following 2000, the minimum gross wage growth in 2013 was more favourable than the trends of the average gross wage per employee. Therefore the ratio between the two increased even further (to 51.4%), which ranks Slovenia on top of EU Member States. Compared with 2009, the number of minimum wage recipients and their share in the total number of employed persons more than doubled in 2013 (see indicator 4.11). The high minimum wage increase and resulting deterioration in competitiveness (see Chapter 1.2.) after 2009 also had an impact on the loss of jobs.

Figure 41: Cumulative rise in the average gross wage and minimum gross wage, Slovenia



Source SURS, MDDSZ, calculations by IMAD.

**After 2009, the wage gap decreased as a result of changes in the employment structure, the minimum wage rise, and wage stagnation/reduction in certain activities with the highest wages.** Following a slight increase in 2009, wage inequality in the period 2010–2012 gradually declined. The ratio between the gross wage of the ninth and the first deciles fell and reached its lowest value since 1999<sup>149</sup>. This includes considerable decreases in the Gini coefficient and the share of low-wage earners<sup>150</sup>, which was growing in the period 2005–

<sup>149</sup> Slovenia was ranked roughly in the middle of the scale of EU Member States with a decile coefficient value of 3.3 (data for 2012). According to the last All-European Structure of Earnings Survey (conversion for activities B-S; without O), in 2010 the decile coefficient was the lowest in the Scandinavian countries (Sweden and Norway, 2.3), and the highest in Portugal (5.0) and Romania (5.3).

<sup>150</sup> According to OECD methodology, these are employees earning an amount equal to or less than two-thirds of the median income (EUR 897 in 2012). According to the latest comparable data of Eurostat, the share of low-wage earners (17.3%) ranks Slovenia near the EU average (17%; 2010).

2009. Until the onset of the crisis, the highest/lowest average gross wage ratio among activities continued to grow every year, but then started to fall. The decrease in the aforementioned ratio in recent years has been attributed to the coincidence of two occurrences. The minimum wage rise caused an increase in the lowest wages, while with the onset of the crisis wage growth in certain activities with the highest wages slowed considerably. The period following the onset of the crisis has been characterised by a statistical increase in the level of the average gross wage by activity, due to the loss of low-wage jobs. In addition, the wage gap also narrowed as a result of government sector austerity measures, which in the period 2010–2011 completely halted the growth of wages and even reduced them in nominal terms in the period 2012–2013. The impact of the crisis and the minimum wage rise also reduced the wage gap with respect to education. In the period 2009–2012, the highest rise in wages was recorded for low education-level employees (14.2%), while wages for highly educated employees slightly dropped (-0.6%), which is problematic from the aspect of motivation. The gender pay gap slightly increased (to 5.1%). In the past two years, the lagging behind of average wages for women compared to men grew slightly only in the mining sector, whereas in the construction and water supply sectors the advantage in average wages for women over men decreased. In other activities, the lagging behind dropped. As a result of different gender representation with respect to activities and professions, the wage gap between women and men in favour of men in the period 2009–2012 slightly grew, but is still considerably lower than the average in the period 2000–2008 (8.4%). Slovenia differs significantly in comparison to other EU countries, because according to the latest All-European Structure of Earnings Survey, the average gap between women's and men's earnings in the EU Member States is 16.2% in favour of men (2010<sup>151</sup>).

**In 2013, average pensions further decreased in real terms.** The average net pension dropped by 1.8% in real terms in comparison to the year before, and by around 8% in comparison to 2009, when pensions started to fall.<sup>152</sup> The decrease in pensions was influenced by a restrictive pension indexation policy in the period 2010–

<sup>151</sup> EU-27 conversion for activities B-S (without O). According to the methodology from the All-European Structure of Earnings Survey, only data for individual countries are available for activities B-S. In 2012, Poland (6.8%) was closest to Slovenia (the comparable figure for Slovenia according to these statistics is 2.6%), while the biggest differences (exceeding 20%) were recorded in Germany, the Czech Republic, Croatia, Slovakia and Estonia (the latter recorded a difference of 28%).

<sup>152</sup> The average amount of all pensions (since 1 January 2012, no supplementary allowance included) with the exception of military pensions, pension advance payments, farmers' pensions under SZK (old-age insurance of farmers), and pension supplements. A detailed calculation of the drop in pensions for a longer period of time is not possible because data on the average pension without supplementary allowance are only available until 2011.

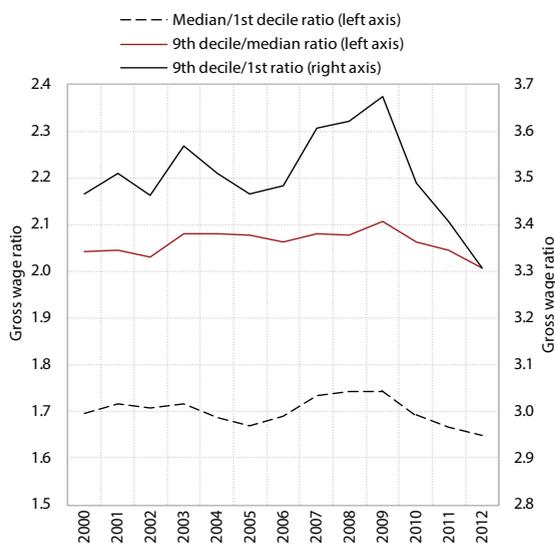
Table 12: Wage inequality indicators, gross wages, Slovenia

	2000	2005	2007	2008	2009	2010	2011	2012
9th decile/1st decile ratio <sup>1</sup>	3.46	3.47	3.61	3.62	3.67	3.49	3.41	3.31
Median/1st decile ratio <sup>1</sup>	1.70	1.67	1.73	1.74	1.74	1.69	1.67	1.65
9th decile/median ratio <sup>1</sup>	2.04	2.08	2.08	2.08	2.11	2.06	2.05	2.01
Gini coefficient <sup>1</sup>	0.294	0.290	0.292	0.279	0.283	0.273	0.268	0.262
Share of low-wage earners <sup>1</sup> , in %	17.4	17.0	18.5	19.0	19.3	18.3	17.9	17.3
Highest/lowest gross wage ratio by sector	1.85	2.32	2.46	2.38	2.32	2.25	2.19	2.23
Gap between women's and men's average gross wage <sup>2</sup> , in %	12.2	6.9	7.8	7.6	2.9	3.7	4.6	5.1

Source: SURS, calculations by IMAD.

Notes: <sup>1</sup> Calculations for the period 2008–2012 are based on data from administrative sources and refer to the entire year, whereas for the preceding period, they are based on the statistical survey for the month of September of the that year. <sup>2</sup> By structural statistics of wages.

Figure 42: Wage inequality (wage ratios), 2005–2012

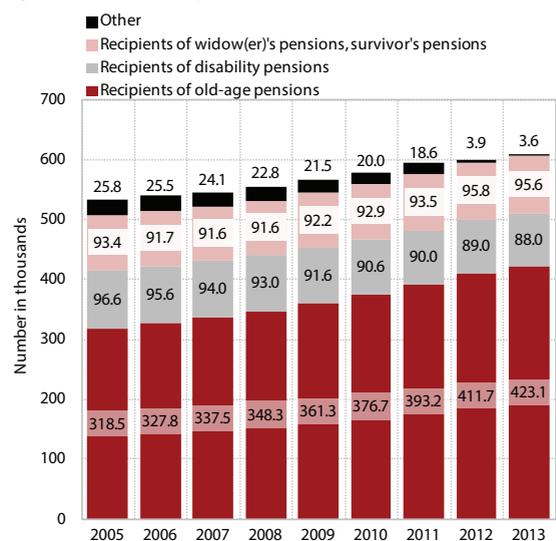


Source: SURS, calculations by IMAD.

2012, when indexation of pensions ceased to be carried out in its entire, statutorily determined extent with respect to the average wage, and ceased to be carried out completely in 2012. In February 2013, pensions were adjusted by the average wage growth in 2012 (with effect from 1 January 2013), which amounted to only 0.1%. In 2013, like the year before, only pensioners whose pensions did not exceed EUR 622 were paid the annual (recreation) grant; this was received by 407,529 pensioners (i.e. 61.9% of all pensioners, before this figure was 93.4%). As the average net wage and the average net pension slightly dropped in nominal terms in 2013, the pension-to-wage ratio deteriorated further. It amounted to 56.7% for the average pension and 61.8% for the average old-age pension (both -0.3 percentage points in comparison to the year before). The ratios between the wage and the disability pension (-0.5 percentage points to 48.0%), and widow(er)'s or survivor's pensions (-1.2 percentage points to 39.1%) further deteriorated in particular due to a higher drop in other pensions. Their ratio also deteriorated with regard to old-age pensions. The year 2013 again saw the largest increase in the number of old-age pension recipients (by 4.1%),

whose number over the past three years grew faster as a result, in particular, of the retirement of more post-war generations and longer life expectancy, but also as a reaction to uncertainty regarding the preparation of the new Pension Act and its final adoption. Falling trends in disability pensions have already been present throughout the decade and in recent years the number of disability pension beneficiaries has dropped by approximately 1% per year; the number of survivor's pension beneficiaries shows a downward trend, while the number of widow(er)'s pensions shows a constant upward trend as a result of the longer lifespan and lower pensions of women (however, the drop in the former and the increase in the latter slowed down last year). The share of old-age pension recipients shows an upward trend, while the shares of disability pensions and survivor's pensions together with widow(er)'s pensions show downward trends.

Figure 43: Number of pensioners, Slovenia, December



Source: Pension and Disability Insurance Institute of the Republic of Slovenia

Note: Other – recipients of military pensions, recipients of pension advance payments; recipients of farmer's pensions under SZK (old-age insurance of farmers).

**In 2012, systemic changes to and interventions in the system of social transfers reduced the number of benefits received by the population from public**

## Box 4: Household debts

**Slovenian households are less indebted than in the EU on average, however, after 2005 indebtedness started to grow much faster.** Household debt can be measured by various indicators and all of the indicators used show a rapid increase in Slovenia's household debt in the period 2005–2008 and restricted growth in the following years. After 2011 and 2012, indebtedness started to decrease. Liabilities started to decline already in 2011; lower indebtedness in that year is also shown by the following two indicators: "liabilities per capita" and "household liabilities with regard to disposable income"<sup>1</sup>, while in 2012 also by the indicator "household liabilities with regard to household financial assets"<sup>2</sup>. The debt continued to decrease also in 2013. In 2012, household liabilities amounted to approximately one-third of all household financial assets and a good half of the disposable income. Slovenia's household debt is considerably lower than the EU average if we compare the liabilities per capita and the total liabilities in comparison to the disposable income. The difference in indebtedness is significantly lower if household liabilities are compared to household financial assets. In Slovenia, household financial assets (2012: 108% of GDP) are far below the EU average (2012: 214% GDP); as regards the structure of funds, Slovenia stands out with a significantly lower share in life insurance and pension insurance. The EU-27 average also shows an increase in household debt in the period after 2005; however, in these countries the debt increased at a slower pace; in the past two years – like in Slovenia – it slightly decreased. With regard to financial liabilities, in 2012, the most heavily indebted households were those in Latvia (61.4%) and Cyprus (58.9%), while with regard to disposable income, the most heavily indebted were households in Denmark (299.1%) and the Netherlands (288.6%). On average, liabilities per capita were three times higher than in Slovenia.

Table: Indicators of household debt

	Household liabilities/ household financial assets		Household liabilities/ household disposable income		Liabilities per capita	
	In %				In EUR	
	Slovenia	EU-27	Slovenia	EU-27	Slovenia	EU-27
2005	24.3	32.8	37.2	105.9	3.445	15.505
2008	31.8	37.9	50.2	108.7	5.667	17.450
2009	31.5	36.6	52.2	115.1	5.864	18.044
2010	32.3	36	54.8	116.3	6.167	18.695
2011	33.2	36.5	53.4	115.7	6.140	18.979
2012	32.3	34.9	53.5	114.8	5.961	19.179
2013 q1	32		55.7			
2013 q2	32		53.1			
2013 q3	31.7		53.3			

Source: Bank of Slovenia, Financial accounts and Eurostat Portal Page – Annual Sector Accounts.

<sup>1</sup> They comprise long-term and short-term loans and other liabilities (with the exception of consumer credits and advance payments).

<sup>2</sup> This comprises all household financial assets: Cash and bank deposits, short-term and long-term securities, shares and other equity capital and various insurance technical reserves (from reserves from life and pension insurances).

**sources<sup>153</sup>, while the average benefit amount slightly increased.** In 2012, the volume of funds for cash benefits granted to the population from public sources, which significantly increased in the period after the onset of the crisis, dropped in real terms by 5.7% in 2012 in comparison to the year before. This was the result of a significant fall in the number of benefits. Since the onset of the crisis, the number of benefits has increased and in 2011 it exceeded the 2008 value by 2.4%, while in 2012

<sup>153</sup> Data source: IMAD's database on cash benefits. This includes all cash benefits irrespective of the budget they are financed from, including pensions. In this database each individual payment to the recipient is considered a benefit. For more details, see Denarni prejemki prebivalstva v 2012 (*Cash Benefits of the Population in 2012*), Ekonomsko ogledalo (*Economic Mirror*), December 2013.

it dropped by 14.6%. This is related to the enforcement of the new social legislation in 2012 and the adoption of an intervention law (Fiscal Balance Act). At the same time, the effects of the new social legislation showed an increase in the average value of means-tested benefits. This indicates that interventions in the system of social transfers in 2012 actually led to their improved targeting of the population with a lower standard of living.

**In 2012, the volume of loans to households started to decrease, which also resulted in lower household debt.** In the years before the crisis the total volume of loans to households in Slovenia increased by more than 25% annually, after that the growth slowed down. In 2012, the total volume of loans to households

## Okvir 5: EU 2020 goals in the area of poverty and social exclusion

**With 392,000 persons living at risk of poverty and social exclusion in 2012, Slovenia has moved away from the set target for the third year in a row.** In November 2010, the target of reducing risk of poverty and social exclusion in Slovenia to 320,000<sup>1</sup> persons was adopted. The target was set in line with the fifth target of the Europe 2020 Strategy, which sets out that at least 20 million fewer people should be living at risk of poverty and social exclusion by 2020. This target is being monitored by a common indicator of the population at risk of poverty and/or social exclusion. This common indicator is composed of three sub-indicators (whereby persons belonging to several groups are taken into account only once in the total number), i.e.: i) the at-risk-of-poverty rate; ii) the severe material deprivation rate (defined as deprivation in at least four out of a total of nine items of deprivation<sup>2</sup>); and iii) the share of persons living in households with very low labour intensity (less than 20% of total household labour potential). In 2012 the number of people affected by severe material deprivation increased from 123,000 to 133,000, the number of people living in households with very low labour intensity increased from 3,000 people to 118,000, and the number of people living below the at-risk-of-poverty threshold increased by 2,000<sup>3</sup> to 271,000. In 2012, the total number of persons in Slovenia exposed to the risk of poverty and social exclusion accounted for 19.6% of its population (0.3 pp more than in 2011), which means 392,000 persons. In the EU, the number of people exposed to the risk of poverty and social exclusion was considerably higher in 2011, as it accounted for 24.8% of the population (0.5 pp more than in 2011).

<sup>1</sup> In Slovenia, this target was adopted under the National Reform Programme in November 2010. For Slovenia, this means a reduction in the number of people exposed to the risk of poverty and social exclusion from 361,000 in 2008 to 320,000 in 2020.

<sup>2</sup> For the material deprivation factors, see indicator 4.13.

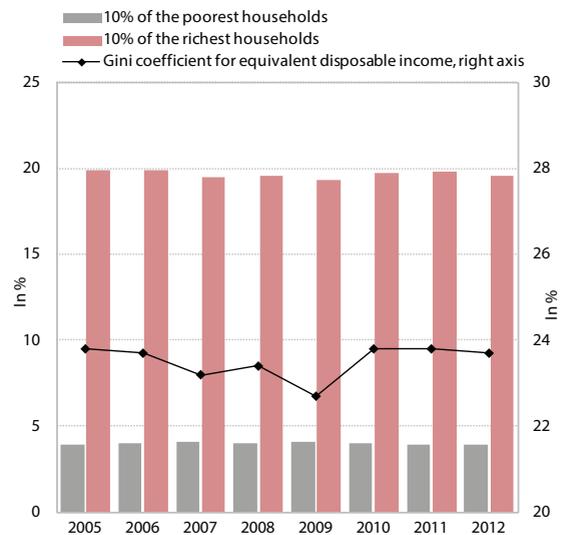
<sup>3</sup> See indicator 4.12. Particular attention should be drawn to the methodology of setting the at-risk-of-poverty-threshold.

dropped for the first time since the onset of the crisis. These trends also continued in 2013, when the total volume of loans significantly dropped again due to a further significant reduction in the volume of consumer loans and a slight increase in the volume of housing loans. Until 2010, high growth in the volume of housing loans was recorded, while in 2011, their growth started to slow down. The volume of consumer loans started to drop already in 2010, and in particular in the period 2012–2013 it dropped rapidly. The reduction in the volume of loans is connected with the decrease in household final consumption expenditure and the uncertainties faced by households. In 2011 the decrease in the volume of loans also resulted in lower household debt (see Box 4).

**In 2012, the at-risk-of-poverty rate remained at approximately the same level as in the preceding year, however, around 271,000 people lived below the at-risk-of-poverty threshold.** From 2009 to 2012, the at-risk-of poverty rate in Slovenia increased by 2.2 percentage points (the EU average increase was 0.5 percentage points<sup>154</sup>). Since the onset of the crisis, the number of people living below the at-risk-of-poverty threshold has increased by 22% (48,000 people), which exceeds the EU average. Despite the increased risk of poverty during the crisis, Slovenia still ranks among those European countries where the at-risk-of-poverty rate is low; in 2012, it was the sixth lowest among the EU Member States (see indicator 4.12). In 2012, the population living below the at-risk-of-poverty threshold also had to face increased material deprivation, while the material deprivation of the population living above the at-risk-of-poverty threshold dropped in comparison

<sup>154</sup> Eurostat estimate.

Figure 44: Income distribution: Share of equivalent disposable income and Gini coefficient, Slovenia



Source: Eurostat Portal Page - Economy and Finance, November 2013.

to the year before. Also other indicators (the Gini coefficient, the 80/20 quintile share ratio) for 2012 do not indicate an increase in income inequality, while the distribution of income among the population has not changed considerably in the long term. Income inequality still remains the lowest in the EU. However, it needs to be taken into account that the at-risk-of-poverty rate and other income inequality indicators for 2012 were calculated on the basis of income data for 2011, which was more favourable from the aspect of income than 2012.

**Table 13: Household expenditure, the difference between the fifth and first income quintiles by groups of allocated assets, Slovenia**

	2000	2005	2006	2007	2008	2009	2010	2012
Total allocated assets	3.9	4.2	4.4	4.2	4.4	4.2	4.1	3.8
Consumption expenditure, including:	3.6	3.9	4	3.8	3.9	3.8	3.7	3.4
Food and non-alcoholic beverages	2.4	2.3	2.4	2.2	2.2	2.2	2.3	2.1
Alcoholic beverages and tobacco	2.7	2.1	2.1	1.7	1.8	1.8	2.2	1.9
Clothing and footwear	6	7.3	7.9	8	7.7	7.2	6.8	6.3
Housing, water, electricity, gas and other fuels	1.9	1.9	1.8	1.7	1.8	1.7	1.8	1.7
Furnishings, household equipment and routine maintenance of the house	3.3	4.6	4.6	4.1	4.3	4.2	4	4.5
Health	2.4	3.9	3.4	2.5	2.4	2.5	3	3.1
Transport	9.4	7.8	9.2	9.1	10.8	10.4	9.3	7.2
Communications	3.1	3	3	2.9	3	2.8	2.6	2.6
Recreation and culture	4.5	5.5	5.4	6	6	5.8	5.2	5.2
Education	10.6	20.2	23.6	13.9	13.2	13.1	20.7	13.5
Hotels, cafes and restaurants	6.1	6.6	6.2	5.1	6.5	7.3	8	9.2
Miscellaneous goods and services	3.3	3.7	3.8	3.7	3.8	3.8	3.8	3.4
Other expenditure (for the purchase of dwellings, renovation, major works, various expenditures)	8.7	6.9	8.7	8.8	10.4	9.9	7.9	8.3

Source: SI-STAT Data Portal – Demography and Social Statistics – Level of living – Consumption expenditure of private households.

**Along with the decline in the disposable income of the population and the deterioration of its purchasing power, also private consumption dropped in 2012 and 2013.** In 2012, a significant decline in disposable income (-5.2%) and private consumption (-4.8%) was recorded; according to the first quarterly data, the decline also continued in 2013 (according to our estimates, the disposable income decline amounted to -3.6% and the private consumption decline to -2.7%). In 2012, for which the latest more detailed data are available, households mostly cut back expenditure on furniture, household appliances and maintenance costs; this was followed by expenditure on audio-visual, photographic and computer equipment. A strong decline was also recorded in the purchase of vehicles. In 2012, expenditure on durable goods, which had dropped in real terms by as much as 21.8% in the period 2008–2012, reached the lowest share of consumption (7.4%) since such data were first made available.<sup>155</sup> The share of semi-durable goods also went down, while the share of services remained at the same level as the year before.

**The restriction on household expenditure in richer households has further narrowed the inequality gap with respect to household consumption.** According to (the latest) data for 2012, funds spent by an average household, including the value of its own production, amounted to EUR 19,735 and were thus 9.4% lower than in 2010.<sup>156</sup> In 2012 the fifth of the households with the

highest income spent 3.8 times more (EUR 34,919) than the fifth of the households with the lowest income (EUR 9,145). In 2012, the ratio between the consumption of these two quintiles was at its lowest since 2000, when these data became available. The ratio relating to expenditure on transport, clothing and footwear, food and non-alcoholic beverages declined in particular, since these goods are essentially required in households. With regard to 2010, the lowest decline was recorded for the ratio for the fifth and first quintiles relating to education (by 7.1 percentage points), which, however, had been oscillating significantly in the previous years. The largest increase in the ratio was for expenditure on hotels, cafes and restaurants, furniture and household equipment. The decrease in the ratio regarding the total consumption expenditure results from the drop in expenditure in nominal terms in the fifth quintile (in particular due to the reduction in expenditure on food and non-alcoholic beverages and on clothing and footwear) and at the same time a slight increase in expenditure for such purposes in households in the first quintile. Households in the lowest three income brackets spent the highest share of consumption expenditure on food, non-alcoholic beverages and housing, while households in the highest two income brackets spent the highest share for transport, food and non-alcoholic drinks.

### 4.3.2 Quality of life

**The development of public services and improved access to public services in the previous years have had a positive impact on the quality of life.** Even in the period following the onset of the crisis, access to public services

<sup>155</sup> Since 1995.

<sup>156</sup> According to the latest data obtained from the Household Budget Survey for 2012. Due to the survey upgrading in 2012, data for 2011 are not available.

measured by involvement in the implementation of particular services was improving and was relatively high compared to other EU Member States. However, in 2012, for the first time in this period, the majority of public services showed no further improvement. This stagnation is associated with fiscal consolidation measures and a simultaneous deterioration of the population's social conditions, since certain public services have to be paid for or a supplemental amount has to be paid out of pocket.

***The number of children attending kindergartens continues to increase due to a larger number of births in recent years, whereas in the preceding year, the percentage of attendance was higher only in the older age group.*** The number of children in kindergartens increased by 0.7% in the 2013/2014 school year. 53.8% of children aged 1–2 attended kindergarten; the percentage for the 3–5 year age group was 88.6%. The share of children aged 1–2 attending nursery schools decreased, whereas the share of children aged 3–5 increased. Increased attendance in both age groups is indicated up to and including the 2011/2012 school year, whilst this growth ceased in the 2012/2013 school year, in our opinion mainly due to the legislative amendments (the Exercise of Rights to Public Funds Act of 2010<sup>157</sup>, the Fiscal Balance Act (ZUJF) of 2012<sup>158</sup>), and the decline in the disposable income of the population. In 2011, kindergarten attendance was higher than the EU average and also increased more between 2005 and 2011. The conditions for carrying out this activity also remain favourable (see indicator 4.15).

***The participation of young people in upper secondary education remains high.*** The participation of young people (aged 15–19) in upper secondary education in the 2011/2012 school year remained approximately at the level of the previous year, whereas in 2011 (the latest international data) it was well above the EU average<sup>159</sup>. In 2012, with the entry into force of the Exercise of Rights to Public Funds Act of 2010, which limited national scholarships to upper secondary school students and students aged 18 or more, the share of secondary school students receiving national scholarships dropped sharply<sup>160</sup>. As a consequence, the conditions of the socially most vulnerable groups of young people enrolled in upper secondary education deteriorated.

<sup>157</sup> The Exercise of Rights to Public Funds Act of 2010 modified income brackets for eligibility to reduced nursery fees and modified the family means-test methodology.

<sup>158</sup> The free-of-charge kindergarten for two or more children in a family simultaneously attending kindergarten was abolished (under the new rules, 30% of the fee, which is set as a reduced payment under the Act, is paid for the younger child, but parents are exempt from the payment for any subsequent younger child attending kindergarten).

<sup>159</sup> In 2011 participation of the young (aged 15–19) in upper secondary school education amounted to 78.5% (EU-27: 60.0%).

<sup>160</sup> In 2012 national scholarships were granted to 10.2% of upper secondary school students (in 2011: 39%).

These conditions improved again in 2013, when a new Scholarship Act<sup>161</sup> was adopted, which reintroduced the opportunity to receive national scholarships for upper secondary school students under 18 years of age. The upper secondary education completion rate is also high; in 2011 it rose further and exceeded the average of the 21 European countries that are members of the OECD<sup>162</sup>. In 2013, the share of early school leavers<sup>163</sup> in the population declined slightly (falling to 4.3%) and was considerably lower than the EU average. Given the favourable trends in the participation of young people in upper secondary and tertiary education (see also Chapter 2.1), the share of young people (aged 20–24) with at least secondary education<sup>164</sup> increased as well in 2013. In 2013, the share of the adult population (aged 25–64) with at least secondary education increased as well (rising to 85.6%) and was also higher than the EU average (74.9%). However, given the favourable trends in the participation of young people in education, the issue of the transition of young people from the education system to the labour market is becoming exacerbated (see also Chapter 2.1).

***In 2012, the scores of Slovenian fifteen-year olds on the PISA mathematical and scientific literacy test<sup>165</sup> were still higher than the OECD average, whereas in terms of reading literacy, the gap even increased.***

As in the preceding surveys, Slovenian 15-year olds reached their best results in scientific literacy and worst results in reading literacy<sup>166</sup>. They most exceeded the OECD average in scientific literacy, while in reading literacy, the negative gap with the OECD average was most pronounced. Between 2009 and 2012, the scores of Slovenian fifteen-year olds in all three literacy scales remained at an almost identical level, but compared to the OECD average, their negative gap in reading literacy

<sup>161</sup> Scholarship Act (ZŠtip-1), Uradni list RS, No. 56/2013.

<sup>162</sup> In 2011 the upper secondary school graduation rate amounted to 98.7% (EU-21: 82.9%).

<sup>163</sup> Percentage of the population aged 18–24 with at most lower secondary education and not in further education or training.

<sup>164</sup> According to the data from a survey on manpower, for the second quarter in 2013 the share of young people (aged 20 to 24) with at least upper secondary education increased to 89.9% (EU: 79.7%), which was an increase of 1.4 percentage points compared with the preceding year (EU: an increase of 0.6 percentage points).

<sup>165</sup> PISA (Programme for International Student Assessment) is an international research study on capabilities in reading literacy, mathematics literacy, and science literacy, carried out under the auspices of the OECD. The research includes 15-year old students regardless of the type of school they attend. The research is carried out in triennial cycles. The purpose of the PISA research is to gather data on the competences students will need for their professional and private lives, and which are essential for both the individuals and society as a whole. In 2009, the survey focused on reading literacy. For Slovenia, these data are available for 2006, 2009 and 2012.

<sup>166</sup> In the 2012 international PISA education study, 15-year olds achieved 501 points in mathematical literacy (OECD: 494 points), 514 points in scientific literacy (OECD: 501 points), and 481 points in reading literacy (OECD: 496 points).

Table 14: The share of the population aged 15 years or more who, during the past 12 months, participated at least once in a selected cultural activity, Slovenia

In %	Watched or listened to a cultural programme on TV or radio	Read a book	Been to the cinema	Visited a historical monument or site	Visited a museum or gallery	Been to the concert	Visited a public library	Been to the theatre	Seen a ballet, a dance performance or an opera
<b>2013</b>									
EU-27	72	68	52	52	37	35	31	28	18
Slovenia	77	67	43	52	36	50	48	33	15
<b>2007</b>									
EU-27	78	71	51	54	41	37	35	32	18
Slovenia	86	72	47	60	39	49	53	36	16

Source: Cultural Access and Participation, Special Eurobarometer 399, 2013; European cultural values, Special Eurobarometer 278, 2007.

increased. Furthermore, in 2012 the scores of Slovenian fifteen-year olds in all three PISA literacy scales dropped in comparison to 2006, declining the most in the reading literacy.

#### **Most population health indicators are still favourable.**

The burden of out-of-pocket health expenditure remains low because in Slovenia the majority of health services and medicines are covered by the system of compulsory and complementary health insurance. From the aggregate point of view and in terms of international comparisons, the financial accessibility of health care remains relatively good, but the numbers of patients waiting for health care services longer than the maximum waiting period are increasing. In 2013, according to NIPH data, the number of patients waiting for health care services did not increase, but the number of patients waiting longer than the maximum waiting period rose by almost a quarter, which is mostly due to a significant decrease in the funds made available by the Health Insurance Institute of Slovenia during the period of crisis, which in the preceding years had been systematically channelled towards reducing the waiting periods for certain surgeries. The lengthening of waiting periods has more severely affected poorer households that cannot afford to pay for private health care services. Data from the Household Budget Survey show that in recent years, poorer households have been reducing their out-of-pocket health care expenditure (for dentistry, prosthetics, prescription glasses, non-prescription medicines), while better-off households have been spending less for the purchase of other goods, whilst their share of spending on health care has increased (see indicator 4.8). Despite the aforementioned, most population health indicators are still favourable (see indicator 5.10).

**For the first time since 2005, involvement in the provision of social assistance services did not increase in 2012, even though needs continued to grow.** The development of long-term care in 2012 stagnated. The number of persons in residential homes for the elderly increased slightly, whereas the number of persons receiving home care decreased slightly, so that the latter

form of care remains considerably less developed than institutional care. Since age-related needs for long-term care due to population ageing continue to increase (the share of the population that is handicapped in the performance of normal daily activities<sup>167</sup> increases with age), it is assumed that the stagnation of formal social care increases the pressure on formal health care (especially the community nursing service) and informal care. The number of adults with special needs involved in occupational activity centres and specialised social institutions also declined. Given the fact that these services are partly payable and partly funded publicly, the stagnation in the network of social assistance services can be partly attributed to the real decline in income (wages and pensions) of service users in 2012, and partly to austerity measures aimed at fiscal consolidation, which narrowed the public financing of these services.

**The participation of the population in cultural activities remains above the EU average, but, like elsewhere, decreased slightly between 2007 and 2013.** According to the Eurobarometer data<sup>168</sup>, in 2013 the highest share of the population aged 15 years or more watched or listened to a cultural programme on TV or on the radio, which is associated with the availability of television and radio, whereas the lowest share of this population attended a ballet or dance performance or an opera. Slovenia most exceeded the EU-27 average regarding the number of visits paid by the population to public libraries, which is associated with a well-developed network of public libraries. Slovenia lagged most behind the EU-27 average with regard to visits to the cinema. The participation of the population in all cultural activities, except for visits

<sup>167</sup> Based on the data obtained by the EU-SILC survey, in 2012, 26% of older people aged 65 or more believed that their handicaps with regard to performing everyday activities are of a serious nature, whereas this share in the age group of 75 years or more amounted to 33.9%, and in the age group of 85 years or more, it was already 43.7%.

<sup>168</sup> The study 'Cultural Access and Participation, Special Eurobarometer 399 (2013)' was conducted in 27 EU countries and in Croatia between 26 April 2013 and 14 May 2013. The study included residents in the country concerned, aged 15 years or more. In Slovenia, the study included 1,017 respondents.

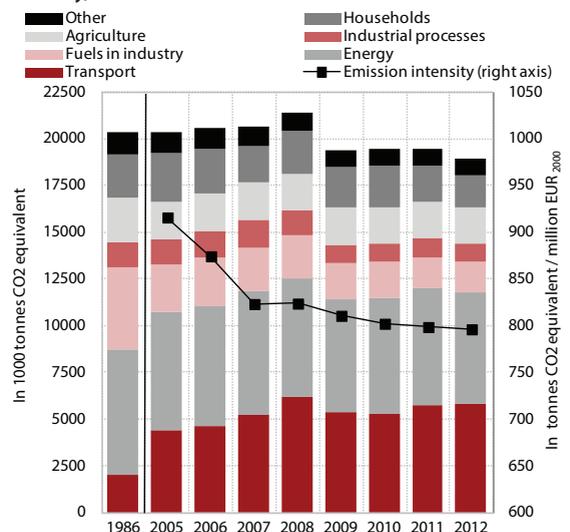
to concerts, decreased between 2007 and 2013. The most severe drop was recorded in watching or listening to cultural programmes on the television or on the radio and in visits paid to historical monuments or sites. Similar to the trend in Slovenia, the participation of the population in cultural activities decreased in the EU as well. The two most common reasons why residents failed to participate in cultural activities or why they failed to attend them more often were a lack of time and a lack of interest. Despite the crisis and the decline in disposable income, a high cost was a less common reason for not attending events.

## 5 The integration of measures to achieve sustainable development

### 5.1 Integrating environmental criteria with sectoral policies

***In 2012, the decrease in greenhouse gas emissions was to a large extent a result of the drop in economic activity; however, the growth of already high emissions from transport continued.*** In 2012, the 2.8-percent decrease in greenhouse gas emissions (GHG) was largely due to the reduction of emissions in the energy sector and households; however, the reduction of emissions from industry, a trend which has been present since 2006, continued. Following high growth in the preceding year, the emissions from transport, which were the only increasing source of emissions in 2012, increased further. In Slovenia, transport accounts for about half of all emissions that are not included in the EU Emission Trading System (EU ETS) and are crucial for the fulfilment of international obligations. This is particularly important for the 2020 emission targets, while the economic crisis has put Slovenia on the path of achieving Kyoto Protocol targets (see indicator 5.1). After reaching its peak in 2008, the level of GHG emissions in Slovenia decreased considerably under the influence of the crisis. In order to achieve the long-term targets by 2020 alongside economic recovery, it is essential to improve the emission intensity of the economy, i.e. to reduce GHG emissions in relation to GDP. In 2012, the emission intensity of the economy fell by 0.3%; similar modest progress has been present since 2008. In any event, Slovenia is among the the countries where a unit of added value is generated by relatively high emissions. In 2011, emission intensity in Slovenia was 26% higher than the EU average, while in 2005 it was 12% higher.

Figure 45: Greenhouse gas emissions by sector and emission intensity,

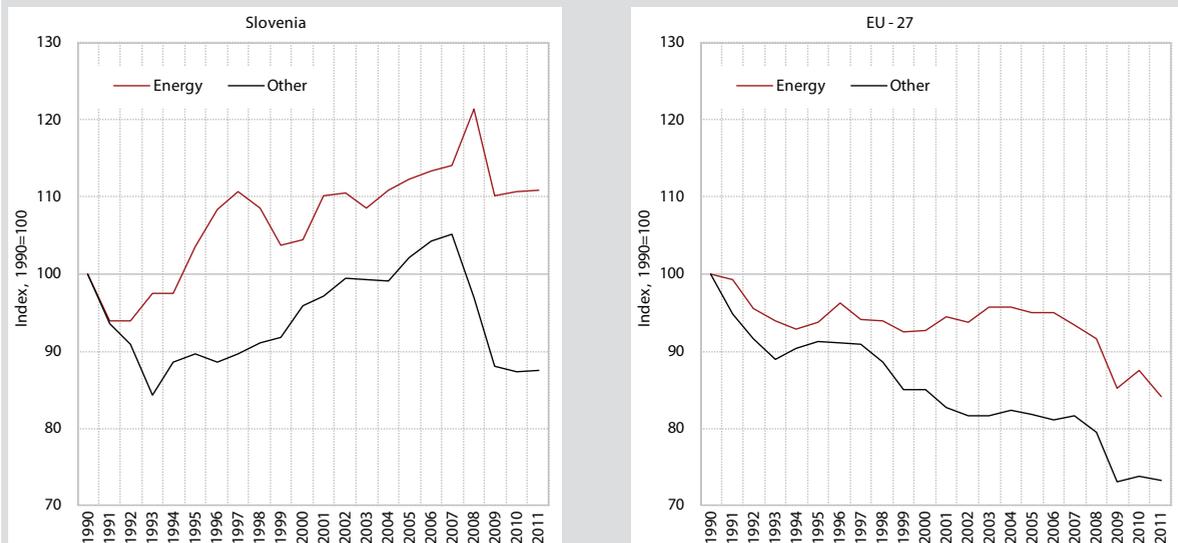


Source: ARSO, SURS, calculations by IMAD.

### Box 6: Decomposition analysis of energy-related greenhouse gas emissions

**The pressure exerted on the increase in greenhouse gas (GHG) emissions was produced primarily by energy-related emissions<sup>1</sup>.** In the period 1990–2011, greenhouse gas emissions increased by 5.8% in Slovenia. The economic crisis interrupted their growth; however, in 2011, energy-related emissions were approximately 11% above the level of 1990 and GHG emissions from other sources were one-tenth lower (-12.4%). Also, on average in the EU Member States, a higher level of GHG emission reductions was held back primarily by emissions generated in the process of burning fossil fuels. Their dominant share (in 2011, Slovenia: 81.9%, EU-27: 79.4%) and slower decline (or in the case of Slovenia, increase) are the reasons that in the climate and energy dialogue focus on the use of fossil fuels, while the quantification of factors in the generation of energy-related emissions may contribute to more targeted government measures. Since the factors in the generation of GHG emissions change over a longer time period and depend on the wider economic context, the time period from the beginning of the implementation of Slovenia's Development Strategy, where it is necessary to distinguish between two sub-periods, i.e. the years of rapid economic development (2005–2008) and the period of economic crisis (2008–2011), was analysed in greater detail<sup>2</sup>.

Figure 1: Greenhouse gas emission trends in the period 1990–2011 in Slovenia and in the EU



Source: UNFCCC.

**Energy-related emissions were divided into five components, while for the perfect additivity of their changes an LMDI method was used.** The analysis is based on the identity which was, among others, used by Lee and Oh (2006) and the World Bank (2007). In order to make possible the additivity of individual changes in the components in total emissions change, while in a specific time interval, the Logarithmic Mean Divisa Index (LMDI 1) method was used<sup>3</sup>. The change in energy related emissions in an individual country and between the years T and 0, is a sum of changes regarding five effects, namely the a) emission content of the fuels (b) the share of fossil fuels in primary energy use (c) energy intensity (d) gross domestic product per capita, and (e) population. The effect of changes in the emissions content of the fuels is calculated by applying the LMDI1 method in the manner below (see equation (ii)), by analogy, other effects are also carried out. Direct international comparison with the EU-27 Member States is provided by single data sources of Eurostat and UNFCCC<sup>4</sup>.

$$GHG_i = \frac{GHG_i}{FOSS_i} \times \frac{FOSS_i}{TPES_i} \times \frac{TPES_i}{GDP_i} \times \frac{GDP_i}{POP_i} \times POP_i \quad (i)$$

<sup>1</sup> These are all emissions in the combustion of fuel, in general including the emissions from the energy, transport, industry and household sectors.

<sup>2</sup> The year 2005 is also important as the reference year in the context of meeting the EU commitments to reduce GHG emissions, while the average of the years 2008–2012 for meeting Kyoto targets.

<sup>3</sup> In order to obtain additivity (complete or incomplete), various methods can be applied. In an extensive examination of studies using different approaches to decomposition analysis, Liu and Ang (2007) studied their advantages and disadvantages and established that the most commonly used solution has recently been the so-called LMDI 1, as specified in Ang (2005).

<sup>4</sup> GHG – emissions as a result of energy use (UNFCCC); FOSS – consumption of fossil fuels (coal, oil, gas); TPES – energy supply; GDP – gross domestic product in fixed prices; POP – the number of inhabitants as of 1 January (all Eurostat).

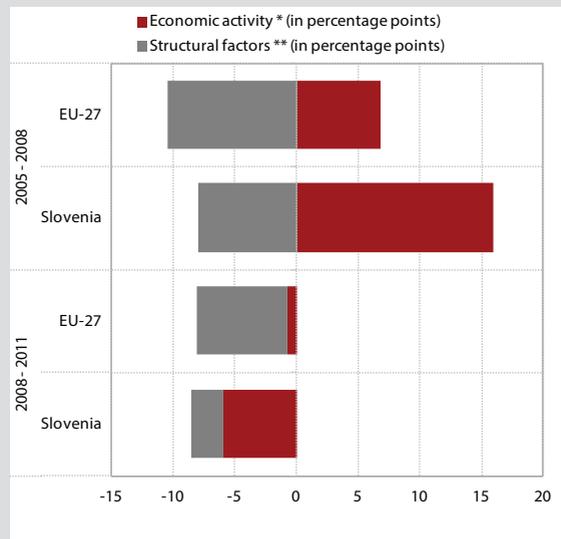
**Box 6: Decomposition analysis of energy related greenhouse gas emissions (continuation)**

$$\frac{GHG_i(T) - GHG_i(0)}{\ln GHG_i(T) - \ln GHG_i(0)} \left( \ln \frac{GHG_i(T)}{FOSS_i(T)} - \ln \frac{GHG_i(0)}{FOSS_i(0)} \right) \text{ (ii)}$$

**In the period 2005–2008, the structural changes towards lower energy intensity did not sufficiently mitigate the pressure of rapid economic growth, on the basis of which GHG emissions in Slovenia increased.** The rapid economic development of Slovenia in the period from the country's accession to the EU until the economic crisis was reflected in the increase in energy-related GHG emissions (+7.9%). Their increase was also due to the greater share of fossil fuels in the total energy supply, which could not be entirely replaced by non-fossil energy sources under the influence of strong demand for energy and an insufficient increase in renewable energy source capacities. Contrary to some other more rapidly growing EU Member States, Slovenia also has not managed to entirely mitigate the pressure on the increase in emissions with more efficient use of energy or towards the reduction in total energy consumption per unit of GDP. In the EU-27 average, during relatively slower economic growth, the effect of the decline in energy intensity largely reduced the volume of emissions, which fell by 3.7 % in that period.

Table and figure 2: Contributions of growth factors in energy-related GHG emissions, Slovenia and the EU-27

Contributing factors	2005-2008		2005-2011	
	Slovenia	EU-27	Slovenia	EU-27
Economic activity (in percentage points)	0.3	-1.0	3.0	0.7
Structural factors (in percentage points)	1.4	-1.4	-5.5	-3.2
Contribution of factors	-9.6	-8.1	-0.2	-4.8
Emission content of fuels (in percentage points)	15.3	5.6	-7.8	-1.8
Share of fossil fuels (in percentage points)	0.6	1.2	1.9	1.0
Energy intensity (in percentage points)	7.9	-3.7	-8.6	-8.2

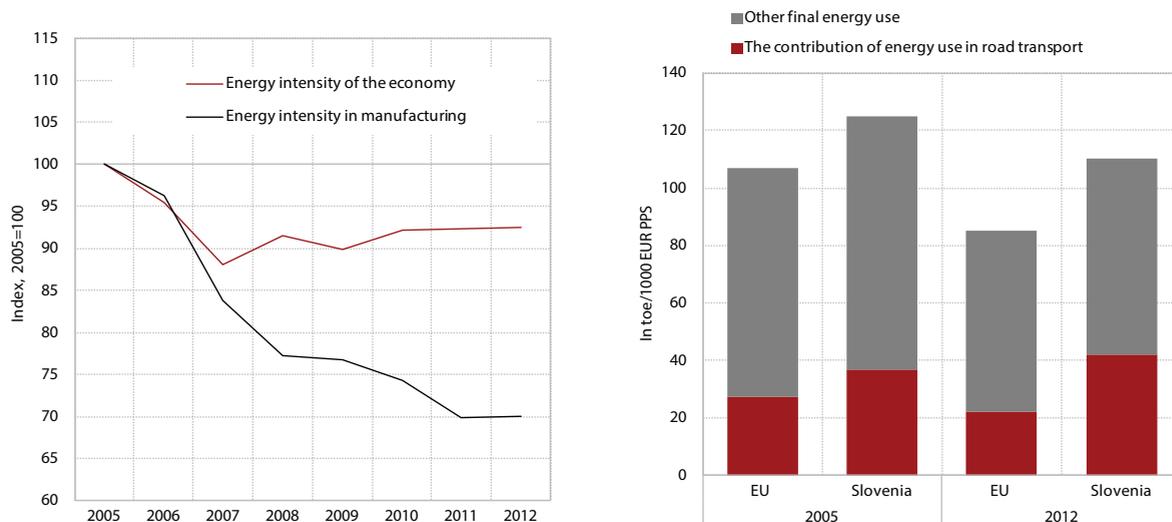


Source: UNFCCC, Eurostat; calculations by IMAD.

Note: \* Sum of changes in factors: GDP per capita and population, \*\* Sum of changes in factors: emission content of fuels, share of fossil fuels and energy intensity of the economy.

**A relatively large drop in energy related emissions in the period 2008–2011 (-8.6%) was comparable to the decrease at the EU level (-8.2%); however, a sharper decline in Slovenia's GDP contributed significantly to the decrease in Slovenia.** The decline in economic activity in Slovenia is amongst the greatest declines in the EU since the beginning of the economic crisis and thus this factor of economic activity has also contributed to the decrease in GHG emissions. In contrast to the previous period, the decline in GHG emissions in Slovenia also resulted from the lower share of fossil fuels in total consumption, while the use of renewable energy sources increased. The structure of fossil fuels changed towards a higher share of consumption of petroleum products and coal, whose emissions are higher than those from gas, thus increasing the effect of the content of emissions from fossil fuels. Greater reductions in emissions in the period 2008–2011 were restricted by unfavourable trends in the energy intensity of the economy, which remained practically unchanged. On average, the EU Member States much more effectively implemented efficient use of energy, which may be a relevant factor in reducing costs for the economy. The effects of decreased energy intensity and reduced use of fossil fuels, at the EU level, contributed much more to the decrease in emissions than the decline in economic activity. The total effect of factors which should be reduced in terms of emissions and which support the growth of economic activity, along with the concurrent reduction in greenhouse gas emissions (the content of emissions from fuels and energy intensity) was modest in Slovenia (-2.7 percentage point) and much lower than the average in the EU Member States (-7.4 percentage point).

Figure 46: Energy intensity, Slovenia, (left) and comparison between Slovenia and the EU (right)



Source: Eurostat Portal Page - Economy and Finance, November 2014; calculations by IMAD.

**In 2012, the share of renewable energy sources (RES) further increased as demand for energy products was low.**

While reducing the total use of final energy, the use of RES increased (by 2.8%) in 2012 and thus also their share in gross final energy consumption (SI: 20.2%, EU average: 14.1%). Given the favourable hydrological conditions and the increase in new capacities in the production of solar energy as well as the reduced demand for energy products, it is estimated that the share of RES further increased to approximately 21% in 2013. Compared to the EU, Slovenia meets a larger share of demand for energy. The use of RES depends, to a large extent, on natural conditions, which are rather favourable in Slovenia particularly in terms of the use of wood for heating and hydropower for electricity generation. Other RES play a much less important role; the gap in relation to the EU average is noticeable particularly in the use of wind energy. Although the supports for the production of energy from RES have increased since 2005 as a result of the change in the structure of supports in favour of more expensive solar energy, Slovenia lags behind the EU average in terms of the share in RES from less traditional sources (solar, wind, geothermal energy and biogas). Compared with the EU average, the use of all RES in Slovenia increased less, namely by 27.2% (by 51.2% in the EU) in the period 2005–2012. At the same time, in the mentioned period a move toward more efficient use of energy, which represents an important factor in the reduction of the costs of building additional capacities of renewable and non-renewable energy sources, was noticed in the EU. Under the objectives set out until 2020, Slovenia has committed itself to attaining a 25% share of RES in terms of gross final energy consumption (EU: 20%). Higher demand for energy products where RES have a small share could threaten the achievement of this objective in the event of enhanced economic activity and in the absence of measures for more efficient energy use.

**The low level of economic activity has significantly contributed to energy savings.**

In addition to the decline in GHG emissions and the increase in the share of RES, the aim of the climate and energy package of the EU Member States is to achieve 20% energy savings compared with the business-as-usual scenario by 2020. In two-thirds of the EU countries this means a reduction in *primary energy use* compared to the base year of 2005, while in Slovenia and some other new Member States where, in the catching-up process in terms of economic development, a higher demand for energy was expected, this entails a restriction on growth. Slovenia is permitted to increase its primary energy use by 4.2% compared to 2005 (in 2012, it was 1.9% lower compared to 2005), while on average in the EU-28 this entails a reduction in primary energy use of 13.4% (in 2012, -7.5%). In most countries, higher savings also resulted from a worse economic situation than expected. This applies also to Slovenia where economic activity decreased again (by 2.5%) in 2012, which had an impact on the further decrease in primary energy use (by 3.8%). The objective of 20% energy savings was also set for *final energy use* in the EU Member States, where Slovenia's position in attaining this goal is slightly worse compared to other Member States<sup>169</sup>, resulting from higher energy consumption in transport<sup>170</sup>.

**In 2012, the key factor in the high energy intensity of the Slovenian economy remains the use of energy in transport.**

In the period 2005–2012, final energy

<sup>169</sup> Final energy use is the use of primary energy reduced by energy use in transformations, own use of energy, and loss. Transport has a higher share in final energy use than in primary energy use; therefore, in increasing the energy use in the transport sector, its impact is greater in final energy use.

<sup>170</sup> Slovenia is allowed to increase this figure by 3.9% compared to 2005 (in 2012, it was 0.9% lower compared to 2005) while on average in the EU-28, this entails a reduction in final energy use of 8.7% (in 2012, -7.2%).

use, on average, decreased (by 7.2%) in the EU, while it remained almost unchanged in Slovenia (-0.9%). The sectoral breakdown shows that the decrease in energy use in industry was much higher than in the EU; the use of energy in households also decreased, while the more energy-efficient use in these sectors in Slovenia was cancelled out by the increased use of fuels in transport. This also represented key pressure on the use of energy during the crisis and therefore the energy intensity of the economy measured by final energy use per unit of GDP even slightly increased in Slovenia after 2008 and was already 33% higher than the EU average in 2012<sup>171</sup> (in 2005 it exceeded the EU level by 17%). With the continuation of the high energy intensity of the economy and assuming the recovery of economic activity, it will be hard to achieve the targeted energy savings; additional measures for efficient energy use will be required.

***In 2012, the energy intensity in manufacturing remained unchanged after six years of decline, while the share of emission-intensive industries has slightly increased since the beginning of the crisis.*** In 2012, the consumption of energy in manufacturing per unit of generated value added almost equalled to that in the year before. The reduction in energy intensity in manufacturing, which was particularly pronounced in the period 2006–2008, stopped. A detailed analysis<sup>172</sup> of energy consumption shows that this is due to the absence of the contribution of more efficient energy use or a decrease in energy intensity at the level of individual industries in 2012. This effect is particularly important in terms of export competitiveness, particularly in industries where energy use represents a significant part of expenses. In 2012, the main contribution to the decline in energy efficiency came from highly energy-intensive metal production<sup>173</sup>. In spite of less favourable trends in the last year analysed, energy intensity in manufacturing has decreased more than in the economy, on average, including industries where tax and other instruments of the state have a greater impact. The decrease in energy intensity in manufacturing has also been more pronounced after 2005 than in the EU average; however, energy intensity in Slovenia is still higher than in the EU overall. This can be partly attributed to the industry structure, which is, more than in other countries, based on industries where more energy is used in production

<sup>171</sup> In the inter-temporal comparison, the indicator of the comparison of primary energy per unit of GDP in fixed prices is used; however, the comparison between the countries in individual years is monitored in purchasing power standards for higher methodological relevance.

<sup>172</sup> A decomposition analysis breaks down the change in final energy consumption in manufacturing into three sets of factors: a change in the volume of production, the structure of manufacturing, and in energy intensity within individual industries (see indicator 5.2).

<sup>173</sup> Considering the 1.1% increase in production compared to the previous year, the consumption of energy in this industry increased by 6.1%. In the production of metals, energy costs as a share of operating revenues increased to 13.2%, while the average of all manufacturing industries amounted to 4.5%.

processes. To some extent, this is also confirmed by an above-average proportion of emission-intensive industries<sup>174</sup> in Slovenia, which has been at a similar level (at one-fourth) since 2010; however, it is higher than at the beginning of the implementation of the Slovenia's Development Strategy (2005) and the pre-crisis level (2008). With the exception of the paper industry, the share of all emission-intensive industries (the chemical industry, the production of metals and non-metals) in the total value added of economic activities is higher in Slovenia than in the EU average.

***The volume of all types of freight transport has considerably increased since 2005 due to the transit position of Slovenia; however, progress towards more sustainable forms of freight transport is also hindered by the out-dated railway infrastructure.*** The share of road freight transport reached its peak in 2009, since then and in considering the annual fluctuations, a downward trend can be noticed (82.1% in 2012 and 81.4% in the first three quarters in 2013). However, the share of road freight transport is considerably above the average in the EU Member States (75.1%), where the shift of transport to more sustainable modes (railway and water) continued in 2012. In the period 2005–2012, the road freight transport carried out by Slovenian road transport operators increased significantly (44%). This was also due to the increase in transport operations abroad (cross-trade), while in the territory of Slovenia, transport operations carried out especially by foreign road transport operators are on the increase. During the period analysed, the volume of railway transport increased much less (by 7%). Contrary to the trend in Slovenia, the EU average of the volume of transported freight by road (-7%) and by railway (-2.3%) decreased between 2005 and 2012. In terms of both types of transport of goods per capita, Slovenia has already significantly exceeded the EU average, it was more than twice the EU average. This is also due to Slovenia's transit location at the crossing of the European V and X corridors and the increase in foreign trade flows through Slovenia with the expansions of the EU. A faster increase in rail freight transport has been hindered by the out-dated infrastructure, particularly the railway connection to the Port of Koper, which largely contributed to the increase in the volume of goods transported by railway during the period analysed. With the modern road infrastructure, where the density of the motorway network per capita ranks at the very top of the EU Member States, the increased volume of transport and, consequently, the revenues from road tolling are not sufficient for the originally planned payments for construction and maintenance works in the light of the heavier traffic on Slovenian roads. This is also one of the reasons why the prices of vignettes and road tolling of freight vehicles with the lowest emission standards increased in 2014, while the Motorway Company of the Republic of Slovenia started to restructure its loans.

<sup>174</sup> Defined according to the World Bank methodology.

**In 2012, the revenues from environmental taxes increased; however, they remain well above the EU average owing to the extensive use of energy in road transport.** In 2012, the revenues from environmental taxes nominally increased by 8%, to 3.8% of GDP<sup>175</sup>,

and are high in relation to the EU average (2.4%). The difference compared to the EU Member States results from the increased inflows from *energy taxes* (Slovenia: 3.1% of GDP, EU: 1.8% of GDP). Despite the lower taxation of energy products in Slovenia than in the EU average, higher revenues result from their extensive use, particularly motor fuels in transport<sup>176</sup>. In 2012 the increase in excise duties and the CO<sub>2</sub> tax on motor fuels introduced in July had an impact on the further growth of revenues from energy taxes; however, contrary to the trends in previous years, the increase in the quantities of fuels sold made a smaller contribution. The impact of fuel taxation on the costs and thus competitiveness of the most exposed transport activities has remained small as compared to the planned EU framework. The scheme for commercial diesel fuel introduced in 2009 provides transport operators who buy fuel in Slovenia with the possibility of excise duty refunds<sup>177</sup> against a minimum amount determined at the EU level. On the other hand, such measures through price signals decrease the energy and environmental efficiency of energy taxation. The impact of *transport taxes* on the competitiveness of the economy is relatively small, as the majority (65%) of taxes is directly levied on households<sup>178</sup>. Despite a large share of ownership and use of means of transport, revenues from transport taxes were lower than in the EU (0.4% of GDP, EU: 0.5%) in 2012. In 2012 further reduced demand for<sup>179</sup> new vehicles, which decreased revenues from the tax on new motor vehicles, in spite of the additional taxation of vehicles with larger engines introduced in July, had an impact on the reduction of such revenue. However, under the influence of the November increase in annual fees when registering vehicles, the revenues from this source, whose impact in the light of

<sup>175</sup> The increase in relation to GDP was large, also because of the significant reduction in GDP in 2012.

<sup>176</sup> In addition to their above-average impact on energy consumption and thus energy intensity in Slovenia, motor fuels are normally more heavily taxed than other energy products, and their share in the structure of energy products additionally increases the revenues from energy taxes.

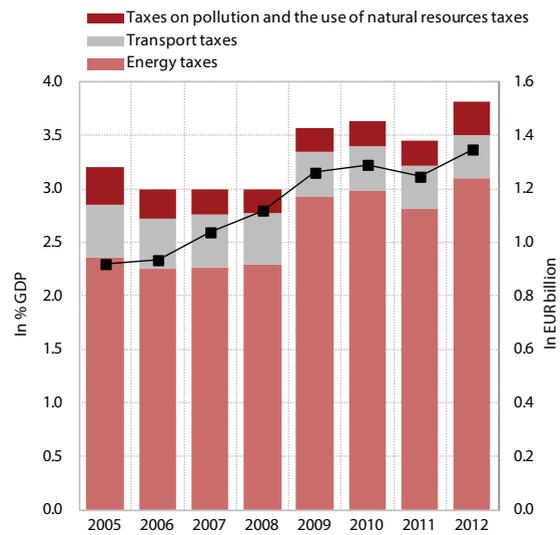
<sup>177</sup> In 2012, EU 49.3 m of excise duties was refunded under three excise duty refund schemes (for commercial diesel fuel used for agricultural and forestry machinery and for industrial and commercial purposes) classified as environmentally harmful subsidies.

<sup>178</sup> Consequently, it influences the purchasing power of households, while the analysis of the impact on competitiveness is particularly important in transport operations. In 2011, the transport sector was liable to directly pay a 6% transport tax, according to SURS data.

<sup>179</sup> Despite some measures taken towards increasing the taxation of means of transport, the revenues from transport taxes decreased by 1.5%; however, they were maintained at the level of the preceding year (0.4% of GDP) in relation to GDP. In past years, progress in terms of the greater involvement of environmental criteria was made in determining the level of taxation.

additional increase in July 2013 will be more noticeable in 2013 and 2014, increased slightly. *Taxes on pollution and the use of resources* in Slovenia and in the majority of EU Member States represent relatively modest general government revenues (0.3% of GDP; EU: 0.1% of GDP); however, they may represent an important instrument in reducing pollution, managing waste and promoting efficient use of sources.

Figure 47: Revenues from environmental taxes, Slovenia



Source: Eurostat Portal Page - Economy and Finance, November 2014.

*In 2012, the increase in government budget appropriations for research and development (R&D) activities for environmental and energy purposes stopped. Government budget appropriations for environmental research dropped by 25% in real terms at the annual level, while for energy research they dropped by 34.5%. These trends reflect the austerity measures and, consequently, a substantial decrease in the majority of government budget appropriations for R&D in 2012<sup>180</sup>; however, government funding for environmental and energy research is still at a higher level than before the crisis. No significant progress was made with regard to green patents, i.e. patents related to environmental technologies<sup>181</sup> in 2010, which is the latest year for*

<sup>180</sup> Investments by the business sector, i.e. the private sector, increased in real terms by 2.8%. In 2011 (the latest available data), energy and environmental activities (SKD D and SKD E) earmarked for research 150% more funds in real terms than the year before.

<sup>181</sup> The following environment-related technologies are included among the green patents: General environmental governance (reducing air pollution, water pollution, waste management, land restoration, environmental control), obtaining energy from renewable and non-fossil energy sources (wind energy, solar thermal energy, solar photovoltaic energy, geothermal energy, etc.), combustion technologies with the potential to restrict the harmful impacts of fossil fuels, technologies contributing indirectly to the restriction of emissions (storage of energy, fuel-cells), reducing emissions in transport and fuel efficiency in transport (electric and hybrid cars), energy efficiency in

**Table 15: Government budget appropriations for environment- and energy-related R&D, as a percentage of total government R&D budget\***

	Slovenia						EU					
	2007	2008	2009	2010	2011	2012	2007	2008	2009	2010	2011	2012
Environment	1.36	3.51	2.27	3.27	3.36	2.98	2.65	2.88	2.79	2.67	2.55	2.57
Energy	1.07	1.11	1.58	1.99	3.59	2.79	3.13	3.74	3.62	4.13	4.09	4.01

Source: Eurostat Portal Page – Science and Technology – Research and Development, 2013.

Note: \* In accordance with the Frascati international methodology, this involves all appropriations earmarked by the state for the implementation of R&D within the state and abroad, regardless of the implementing sector (OECD, 2000).

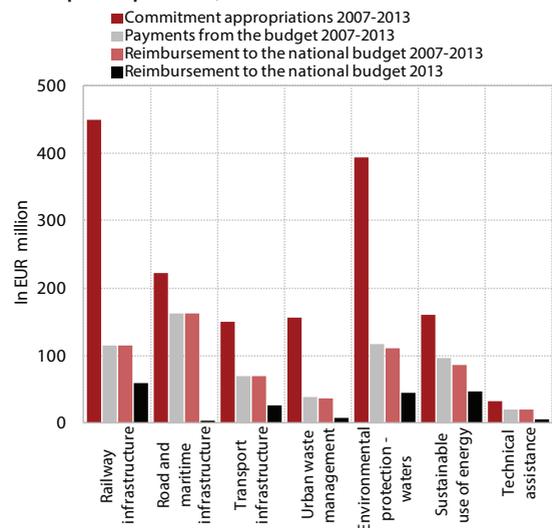
which data are available. Slovenian applicants filed only four first patent applications with the EPO, while in the period 2005–2010, they filed 21 in total. The majority of applications are still related to obtaining energy from renewable sources, more precisely from solar, thermal and photovoltaic energy. In Slovenia, the small share of green patents also reflects weak innovation activities in general, measured by the number of patent applications per million population<sup>182</sup>. In the period 2005–2010, Slovenian applicants filed 10.4 first patent applications with the EPO per million population, while the European average was much higher (51.1). The low volume of green patents and in general<sup>183</sup> modest exploitation of the potential of the rapidly growing global market of environmental technologies<sup>184</sup> entails that there are still unexploited opportunities for Slovenian R&D activity and sustainable economic growth.

***The absorption of EU funds within the cohesion policy for transport and environmental infrastructure increased in 2013, however, it is still very modest in this area.***

In 2013, EUR 193.3 m was earmarked and already reimbursed by the EU, which is more than in 2012 (EUR 108.6 m) for projects under the Operational Programme of Environmental and Transport Infrastructure Development (OP ETID). For the entire period of the second financial perspective (2007–2013), EUR 1,577 m of EU cohesion funds from the EU budget will be earmarked for the programmes under OP ETID; however, despite the accelerated drawing down of such funds in recent years, only EUR 598.2 m, or less than 40% of commitment appropriations, has been reimbursed to the budget of the Republic of Slovenia thus far<sup>185</sup>. Among the development priorities, there are three areas that stand out by poor absorption of funds, namely municipal waste management (24% of commitment

appropriations<sup>186</sup>), the water sector (28%), and the most extensive area of railway infrastructure (26%), whose greatest project i.e. the construction of the second track of the Divača-Koper railway, was transferred to the next financial period in 2012. The greatest absorption of funds for OP ETID in this financial perspective was in the area of road and maritime infrastructure (73%) and recently also in the area of sustainable energy use (53%). In order to reduce the loss of EU funds, measures allocating the so-called “additional commitment appropriations” for projects where no problems with their implementation area are envisaged also continued in 2013. Difficulties in providing funds for the co-participation of the state or municipality and the liquidity issues of contractors have had an impact on the absorption of funds, particularly since the beginning of the crisis; however, the problems with the preparation of investment documents and the acquisition of environmental permits continued.

**Figure 48: EU funds within the cohesion policy for the Operational Programme of Environmental and Transport Infrastructure Development (OP ETID) according to development priorities, Slovenia**



Source: Ministry of Economic Development and Technology, 2014.

***The quantity of generated waste continued to decline in 2012 and municipal waste management is improving.***

In 2012, approximately 4.4 m tonnes of waste were

<sup>186</sup> The share of funds reimbursed to the budget of the Republic of Slovenia in the funds earmarked for this area for the entire period 2007–2013.

buildings and lightning (OECD Towards Green Growth, 2011).

<sup>182</sup> See indicator 2.5.

<sup>183</sup> A key role will be played by eco-innovations that will have to think outside the box as these are changes in production processes and are reflected in products, services, marketing, consumption and organisational methods, etc. (taken from the EIO-Annual Report 2012, 2013).

<sup>184</sup> In the period 2007–2010, the global market for environmental technologies increased by 11.8% per year (GreenTech Made in Germany 3.0, 2012).

<sup>185</sup> In accordance with the n+2/n+3 rule, the funds available in year n can be used in the following two or three years, i.e. by 2015 at the latest.

generated in Slovenia, of which approximately 85% were generated from production and service activities, the rest being municipal waste. The quantity of generated waste has been decreasing since 2009<sup>187</sup>, which the slowing down of economic activity contributed to. Among *waste generated from production and service activities*, the lion's share (almost one-third) was in mineral waste, mostly from energy supply activities (mainly ash from coal combustion plants) and the construction sector. In the *municipal waste* segment, the quantities of waste further decreased in 2012, while waste treatment improved<sup>188</sup>. In Slovenia, less waste is generated than on average in the EU (Slovenia: 362 kg/inhabitant, EU: 492 kg/inhabitant), which also depends on the general development level. The share of disposed waste, which represents the loss of material resources and risk of air and water pollution, was reduced to 42.3% in 2012; however, it is still higher than the EU average (33.3%)<sup>189</sup>. The share of recycled or composted waste increased to 39.5%, which is the EU average<sup>190</sup>. Despite smaller quantities of generated waste, according to the latest internationally comparable data, Slovenia is ranked among the leading countries with regard to the number of employees in the sectors of waste collection, transport and management and the recovery of secondary raw materials (E38) per 1,000 population<sup>191</sup>, meaning that the very diversified network of operators providing the municipal services of waste collection and transport in Slovenia is less effective. According to data from AJPES, in the period 2008–2011, the number of employees in companies providing these services rose considerably (by almost one-fifth), with the strongest rise in the segment of secondary raw materials recovery. The latter may partly be attributed to limited natural resources, making waste an increasingly important source of secondary raw materials.

**Material productivity has increased as a result of changes in the economic structure and the more rational use of resources since the onset of the economic crisis; however, it was slightly below the EU average.** Material productivity is an indicator of

<sup>187</sup> In the period 2009–2011, the waste quantity decreased; however a direct comparison for 2012 is not possible because of the new Decree on waste which introduced the term of by-product which resulted in the considerable reduction of quantity of reported waste generated from production and service activities.

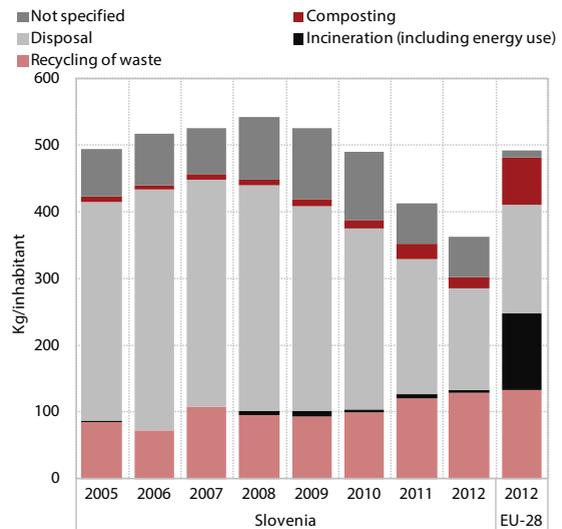
<sup>188</sup> Sustainable waste management is based on hierarchical principles: most efforts should go to the prevention of waste generation, followed by reuse, recycling, and energy processing, including incineration, and only at the end, land filling.

<sup>189</sup> The differences in waste management among EU Member States are substantial. In Germany, Belgium, the Netherlands and Sweden, less than 2% of municipal waste generated was land filled in 2012.

<sup>190</sup> The EU target is to prepare no less than 55% of the waste from households and other sources for reuse and recycling of waste materials (paper, metal and glass).

<sup>191</sup> According to Eurostat data, the number of people employed in this sector per 1,000 population in 2011 was only higher in the Czech Republic.

Figure 49: Municipal waste management, Slovenia and the EU



Source: Eurostat Portal Page – The Environment, 2014.

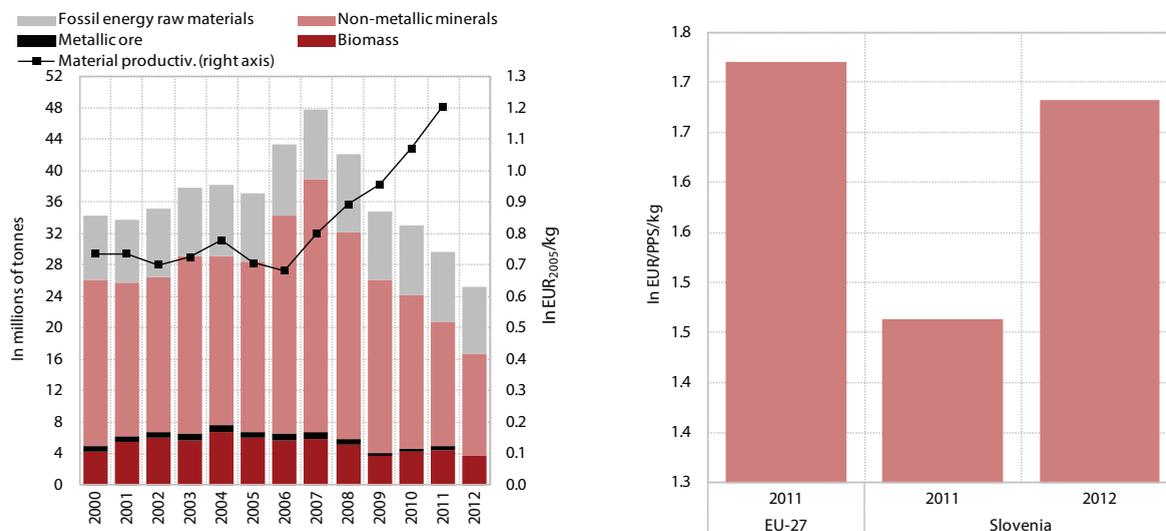
sustainable production and consumption and represents the relationship between GDP and the raw materials and materials consumed in a particular country. In Slovenia, material productivity in 2011<sup>192</sup> was at 85% of the EU-27 average, and in comparison with the year before, the gap with the EU average decreased by 12 percentage points. Slovenia's low material productivity was also confirmed by an analysis based on the supply and use tables, which indicates that Slovenia has an above-average share of raw material costs throughout the entire economy<sup>193</sup>. This is a consequence of its economic structure, which is based on activities involving extensive use of materials more than in other EU Member States; moreover, the share of costs was also above the average in the majority of comparable industries, which indicates less efficient use of raw materials. In addition to the greater pressure on the aforementioned natural resources, the efficiency of use of raw materials has a significant impact on competitiveness, particularly in export-oriented manufacturing; however, the greatest gap with the EU average was in certain technologically demanding industries<sup>194</sup>. The extensive use of raw materials was also recorded in those economic industries that are mainly oriented towards the domestic market (e.g. the construction industry stands out in comparison with the EU), whereas the common indicator

<sup>192</sup> The latest internationally comparable data where the GDP is expressed in purchasing power standards (Source: Eurostat).

<sup>193</sup> According to Eurostat's latest internationally comparable data, in 2009 the share of raw materials in relation to the value of production was estimated at 7.9% in Slovenia and at 4.8% in the EU. The share of use of more broadly defined materials, which also takes into account intermediate products and final products for the purposes of intermediate consumption, was also above average (Slovenia: 28.2%; EU: 19.7%).

<sup>194</sup> Particularly in the manufacture of electrical equipment, the production of other machines and equipment, and the production of motor vehicles; in all these industries, there are high costs of use of non-metal mineral products compared to the EU.

Figure 50: Domestic consumption of material and material productivity\*, Slovenia, (left) and material productivity in Slovenia and the EU (right)



Source: SI-STAT Data Portal – Environment, 2014; Eurostat Portal Page – Environment, 2014. Calculations by IMAD.

Note: Waste and other products are not shown due to the small size of the categories in the figure (left). PPS – purchasing power standard. \* Domestic consumption of materials is defined as the exploitation of domestic sources plus net imports of materials (material imports minus exports); material productivity is the relationship between GDP and the domestic use of materials.

of material productivity varies greatly, depending on the consumption of non-metal minerals<sup>195</sup>, which has a great impact mostly because of the weight of these products. Therefore, during the period observed, material productivity was lowest in 2006 and 2007, which was also a result of high construction sector activity, and was additionally stimulated by the completion of the motorway network.<sup>196</sup> In 2012 material productivity improved for the fifth year in a row (by 16.7%) and was by 62.2% higher than in 2005. As in the past four years, the reduced total material use in 2012 was mainly due to lower use of construction materials, although the quantities of most other raw materials also declined substantially.

**In 2012, total pollution from agriculture fell although the area of agricultural land in use increased.** Slovenian agriculture, which is not ranked among the more intensive according to international comparisons<sup>197</sup>, has mostly reduced its pressures on the environment in recent years. In 2012, the total consumption of plant nutrients in mineral fertilisers and pesticides declined again. Their consumption per surface area of agricultural land decreased considerably compared to the previous year (by approximately 8% and 14%, respectively) and compared to 2005 (by approximately 17% and 24%, respectively), while there are still possibilities for a further decrease. Some studies show that the

<sup>195</sup> This mainly applies to the use of sand and gravel.

<sup>196</sup> According to the tables of consumption, the use of non-metallic materials in the construction of civil engineering structures (e.g. the construction of roads) is above average in comparison with other construction activities.

<sup>197</sup> According to selected indicators of the Agriculture, Fishery and Forestry Statistics, Eurostat, 2013.

consumption of pesticides in technologically more appropriate food production, could decrease in the next ten years by a further 10-15%<sup>198</sup>. Special attention is paid to agriculture in water protection areas, as pesticide and fertiliser residues represent the most important source of agricultural pollution of groundwater and, consequently, drinking water. The monitoring of drinking water quality in Slovenia shows that, in general, the situation is good and is improving. However, some areas near the most intensive agriculture are still problematic. In 2012, in consuming drinking water, 5% of the Slovenian population were exposed to excessive pesticide concentrations and 0.2% of the population to excessive nitrate concentrations<sup>199</sup>. The intensity of agriculture, measured by the average yield of the two most important crops, increased in wheat production while it decreased in maize production under the influence of severe summer drought. Because of more frequent drought periods and at the same time because of the rising dependence of Slovenia on external food markets, it would be reasonable to increase the area of irrigated land along with the general concern for potential negative impacts on the environment<sup>200</sup>.

**In 2012, the surface area of organically cultivated lands increased considerably after a few years of moderate growth.** It was approximately 9% higher; however, in converting to organic farming, the surface area, also with the help of new supports for the conversion,

<sup>198</sup> Source: Urek, G., et al., Agricultural Institute of Slovenia, 2012.

<sup>199</sup> Data source: Environmental Indicators in Slovenia, 2013.

<sup>200</sup> In Slovenia, only approximately 1% of agricultural land is irrigated, which is less than the EU-27 average (approximately 9%). The share is much higher than in all neighbouring countries, regarding which Italy in particular stands out.

increased by one-third. Despite this growth, the long-term quantitative objectives for the development of organic farming, which were set high with regard to the initial favourable situation, will not be achieved<sup>201</sup>. In terms of environmental protection, it would be desirable to increase the area of organic farming, in particular in protected areas and river plains where groundwater resources and the impacts of intensive farming are most problematic; yet organic farming is present there at least<sup>202</sup>. At the same time, the growth in the supply of domestic organic products on the market is too slow considering the demand, so that the share of Slovenian organic food in total sales is only about 15%. Additionally, organic production is present mainly in animal husbandry, while there is a growing demand for organic fruit and vegetables.

***The economic utilisation of forests could be improved while taking care to maintain their role in environmental protection.*** Slovenia is one of the EU countries with the highest share of forests, also resulting from sustainable forest management. Extensive forest areas have a positive impact on the environment, as forests prevent soil erosion, provide protection against bad weather influences, improve the water supply, increase biodiversity, and are large sinks for carbon dioxide, which is the main cause of the greenhouse effect. At the same time, forests are also a source of ecologically acceptable raw materials which have been relatively little exploited in Slovenia. The felling of trees is increasing in the long term; however, it was much lower than the potential in the whole observation period. In 2012, 68% of the permitted felling was realised (in the previous year 71%), meaning 46.4% of the annual volume of wood increment (in the previous year, 47.1%). Certain estimates show larger felling volumes than recorded. Therefore, the amendment to the Forest Act<sup>203</sup> introduced the obligation to monitor the transport of forest wood assortments based on administrative documents. The extensive and rapidly increasing export of unprocessed timber of higher quality represents unexploited potential to achieve higher employment and higher added value in further stages of the forest-wood chain. In 2012, the net export of sawmill and veneer logs increased by more than 40%, while the total net export of timber accounted for more than one-fourth of the production of forest wood assortments. The main export directions are Austria, particularly for coniferous timber, and Italy, particularly for lower quality timber. Lower domestic consumption of timber resulted from a reduced volume of work in the construction industry, the bankruptcies of forest and wood companies, and an unfavourable size structure of sawmill plants, which have difficulty competing with modern large-scale plants in neighbouring countries. At the beginning of 2014, ice

damage in forests caused considerable damage which will provide an opportunity for higher employment in felling trees and wood harvesting as the rehabilitation of forests will take several years. Consequently, it would be reasonable to use a higher supply of wood in further stages of the forest-wood chain, thus reducing the economic damage caused.

## 5.2 Sustained population growth

***The growth in the population in Slovenia slowed down in the last two years (to 0.2% per year on average), particularly because of the absence of the previously high net migration.*** On 1 July 2013, Slovenia had 2,059,114 inhabitants, which is 2,852 more than the previous year. Both natural increase and net migration decreased. The latter was the main reason for the growth of the population and was related to the accelerating economic growth and Slovenia's accession to the EU and Schengen Area in the period 2005–2009<sup>204</sup>. In recent years, net migration dropped mainly because of deteriorating conditions in the labour market (between 2010 and 2012, the number of people who immigrated to Slovenia exceeded the number who emigrated from it by more than two thousand). The number of immigrants decreased while the number of emigrants has fluctuated less. In 2012, the number of Slovenian nationals who emigrated increased noticeably for the first time; 8,191 people emigrated, i.e. 3,512 more than in the preceding year (the average for the period 2005–2011 was 3,500 annually). In the first nine months of 2013, net migration was similar as in the preceding year, the number of emigrants was 12.1% lower than in the same period of the preceding year; however, it was still high (5,200).

***The population is increasing at a slower rate also because of a decline in the natural increase.*** In 2012, the natural increase amounted to 1.3 per 1,000 inhabitants and was the lowest in the last five years and still noticeably higher than prior to 2008. This was due to a higher number of deaths than in the previous year, while the number of births remained at the 2011, level when it declined (by 1.8%) for the first time since 2003. The number of women of childbearing age decreased (by approximately 5 thousand) but the total fertility rate increased slightly in 2012 (from 1.56 to 1.58 per woman of childbearing age). The fertility rate ensuring the renewal of generations amounts to 2.1 per woman of childbearing age; however, Slovenia achieved this level thirty years ago (1980:2.11). The average age of mothers at first childbirth also increased in 2012; their average age at the birth of the first child was 28.9, while their average age at the birth of all children was 30.5. In the last four years, the increase in the average age of mothers slowed down slightly. The data available for the first nine months of 2013 show that the decrease in the

<sup>201</sup> Objectives are set in the Action Plan for the Development of Organic Farming by 2015, 2005.

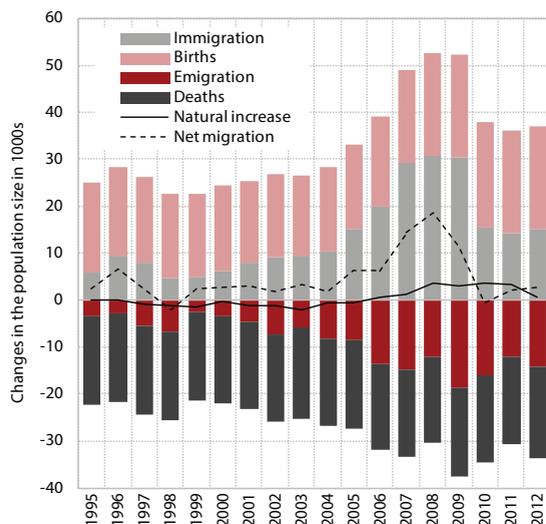
<sup>202</sup> Source: Podmernik, D., and Kerma, S., 2013. The Challenges of Organic Farming and Tourism on Organic Farms.

<sup>203</sup> Act Amending the Forest Act, Uradni list RS No. 63/2013.

<sup>204</sup> In the period 2005–2009, this meant almost 11,500 more immigrants than emigrants per year.

number of births and increase in the number of deaths which started in 2011 continue. The number of deaths is increasing, as Slovenia has a significant number of older people (at the beginning of 2013, more than 90,000 inhabitants were older than 80 years of age), the longer life expectancy for women is increasing at a slower pace, as it has already reached almost 83 years. In 2012, the infant mortality rate (infants under the age of one year) fell to 1.6 deaths per 1,000 live births, which is the lowest value ever achieved in the EU.

Figure 51: Components of population growth, Slovenia



Source: SI-STAT – Demography and Social Statistics, 2013.

**The material conditions for starting a family were relatively favourable at an international level; however, as the poor economic situation continued, such conditions deteriorated slightly in 2012 and 2013.** The set of measures regarding starting a family and increasing the quality of family life includes a parental compensation system, family benefits, and organised care of preschool children. Slovenia still has one of the most parent- and child-friendly parental protection systems in the EU as it provides 12-months of leave from work upon the birth of a child. In 2012, the Fiscal Balance Act (ZUJF)<sup>205</sup> reduced the amount of parental compensation<sup>206</sup> to 90% of the compensation basis (unless the basis does not exceed the minimum wage), while the upper limit of parental compensation is twice the average wage (previously it had been two and a half times the average wage). 2.7% fewer beneficiaries than in the preceding year took advantage of parental compensation and, for the first time, the benefits paid for this purpose decreased (-1.9%). The amount of the child benefit was reduced by 10% in the 5<sup>th</sup> and 6<sup>th</sup> income brackets and eliminated in the 7<sup>th</sup> and 8<sup>th</sup> income brackets (above EUR 631.39 per family

<sup>205</sup> Fiscal Balance Act – ZUJF (Uradni list RS, No. 40/12).

<sup>206</sup> For parental leave of 9 months following three months of maternity leave; maternity leave compensation is still 100% of the compensation basis.

member). In 2012, the amount of child benefits were reduced by 15.1% and the number of benefit recipients dropped considerably (-23%). In addition, an income level test was set for the birth grant and the large family allowance, and the nursery fee subsidy for a second child was reduced (30% of the fee is now paid). In the 2013/14 academic year, 88.6% of children aged 3–5 were enrolled in nursery schools, which – considering the latest internationally comparable data – is more than the EU average<sup>207</sup> and more than the preceding year. Because of the deterioration of the labour market, material conditions for starting a family are not expected to improve in 2013.

**In 2012, the life expectancy further increased for men, while for women who, on average, achieve a higher age, it remained the same.** In 2012, male life expectancy reached 77 years and female life expectancy remained at 82.9 years and the difference between the genders diminished to less than 6 years. On the other hand, disability-free life expectancy measured in healthy life years is longer for men. In 2012, it was 55.6 years for women and 56.5 years for men, meaning that women would spend 66.7% of their lives without limitations in daily activities and men 73.3%. In 2012, disability-free life expectancy increased, after two years of decline, but the perceived quality of life for women according to this indicator has nevertheless deteriorated considerably in recent years (see indicator 5.10).

**As a result of longer life expectancy, the old age dependency ratio increased rapidly; trends in this direction will continue to grow in the future.** At the beginning of 2013, there were 26.9 persons over 65 years of age per 100 people of working age in Slovenia (see indicator 5.9), which is 2.9 more than in 2005, and the share of elderly people was 17.1%, which is 1.8 percentage points more than in 2005. The old-age dependency ratio and the share of elderly people in the population are lower than in the EU average; however, according to the EUROPOP 2010 population projections, they should exceed the EU average by 2025. Since the assumptions of the projection with regard to the active population have not been realized – the size of net migration has been overestimated – this could happen even sooner. By 2020,<sup>208</sup> the share of the elderly in Slovenia is expected to rise to 20.6%, and the old-age dependency ratio to about 34.3%<sup>209</sup>. Considering that Slovenia has the lowest employment rate of older workers in the EU, such demographic development will considerably increase the burden on the income of the active working population and the state. The expected trends and the given conditions therefore demand systematic and harmonised measures in demographic,

<sup>207</sup> In the academic year 2010/11, 87.3% of preschool-aged children attended nursery schools, while the EU average was 82.8%. See also Chapter 4.3.2.

<sup>208</sup> Working Projection of the Population for Slovenia, IMAD, 2013.

<sup>209</sup> Population 65+/population 20–64.

Table 16: **The difference between the population projection and the actual situation, Slovenia**

		According to the data available from SURS	EUROPOP 2010 population projection			IMAD 2013 population projection	
		2013	2013	2020	2060	2020	2060
Share in %	Young people (0–19)	19.3	19.1	19.6	18.7	19.5	17.1
	Working age (20–64)	63.6	64.0	60.6	49.8	60.0	49.9
	Elderly (65+)	17.1	16.9	19.8	31.6	20.6	33.0
Old-age dependency ratio		26.9	26.4	32.6	63.4	34.3	66.1

Source: Eurostat, SURS, calculations by IMAD.

Note: Due to rounding up, the sum of shares exceeds 100 in some parts.

social, employment and fiscal policies in order to provide fiscal sustainability and the social sustainability<sup>210</sup> of social protection systems.

### 5.3 More balanced regional development

**The regional differences in Slovenia are small, in terms of an international comparison, and have not increased since the onset of the crisis; however, in 2012 the development gap among Slovenian regions continued to increase with respect to the EU average.** In 2012, a decline in economic growth in all regions was recorded again, the largest one in the Zasavska region, which had the lowest GDP per capita in the country for the second year in a row. Since economic activity declined everywhere, regional differences remained at a similar level as in the preceding years. The relative dispersion of regional GDP per capita remained at the 2011 level and is among the lowest in the EU. The ratio between the extreme values shows relatively small regional differences, the level of which has not changed significantly. In 2012 the Osrednjaslovenska region, with the highest GDP per capita, exceeded the GDP per capita of the economically weakest region, Zasavska, by 2.2 times, which was slightly more than in 2011 (i.e. 2.1). Since the onset of the crisis, the drop in economic activity has neutralised the effects of progress which the Slovenian regions had achieved<sup>211</sup> as regards catching up to the EU average until 2008. The regions returned to the level that they had reached in 2002 compared to the EU or even before that.

**In 2013 the registered unemployment rate increased again in all regions, less in the regions of Vzhodna Slovenija, which contributed to a further decline in**

**disparities between the regions which reached the lowest values since the onset of the crisis.** All regions with above-average registered unemployment rates are in the cohesion region of Vzhodna Slovenija, where only the Notranjsko-kraška region has a lower rate compared with the Slovenian average. In all four regions of Zahodna Slovenija the registered unemployment rates are lower than the country average. As in 2013 the unemployment rate increased more in regions with lower rates, regional differences measured by absolute dispersion decreased further<sup>212</sup>. They have been narrowing continuously since 2010, and in 2013 they were the lowest since 2000. In 2013 the registered unemployment rate was lowest in the Gorenjska region (9.8%) and highest in the Pomurska region (17.7%), but the latter recorded the smallest increase in comparison with the previous year. In 2013 the ratio between the extreme values decreased to 1:1.8 which is the lowest ratio since 2008.

**Regional differences in gross wages<sup>213</sup> are decreasing. In the crisis period, in addition to the impact of the minimum wage rise, this is due to wage reductions in certain activities with the highest wages.** In 2012 the Gini coefficient and interdecile coefficient<sup>214</sup> decreased at the national level and within the majority of regions; however, wage inequality varies among the regions. In 2012 the Gini coefficient dropped the most in the Notranjsko-kraška Region (0.235) and thus this region replaced the Koroška Region as the one with the lowest wage inequality as measured by this coefficient. The Osrednjeslovenska Region has the highest coefficient (0.274), which, however, declined above-average. With the exception of the Spodnjeopavska and Zasavska Regions, the Gini coefficient decreased compared to the previous year in all regions, yet still more in the regions of Zahodna Slovenija. The largest wage ratio between the 9<sup>th</sup> and the 1<sup>st</sup> decile was registered in the Osrednjeslovenska Region, where the gross wages of the 9<sup>th</sup> decile were 3.8 times higher than the gross wages of the 1<sup>st</sup> decile and the lowest wage ratio was registered in the Notranjsko-kraška Region (2.8 times). Gross wage

<sup>210</sup> In 2012 the risk-of-poverty and material deprivation rates decreased and were still higher than the EU average. In 2012 the at-risk-of-poverty rate of people over 65 was 19.6% (EU average: 14.5%). The quality of life of elderly people is revealed by the material-deprivation rate of people over 65, which in 2012 reached 17.4% (16% in the EU). With regard to both indicators, a great difference can be seen between the elderly (65+) and the total population average (13.5% and 16.9%, respectively); this gap is considerably smaller in the EU. The at-risk-of-poverty and material deprivation rates are also much higher for elderly women than men, while this gap is considerably smaller in the EU.

<sup>211</sup> And exceeding it in the case of the Osrednjeslovenska Region.

<sup>212</sup> See also Indicator 5.14.

<sup>213</sup> In total employment.

<sup>214</sup> The comparison between the 9<sup>th</sup> and 1<sup>st</sup> deciles shows that Slovenia ranks in the middle of the 27 EU Member States (the Gini coefficient is not available for differences in gross wages for individual countries).

Table 17: Selected groups of unemployed persons, Slovenia, by region

	Total unemployed persons			Young people aged up to 24 years			Unemployed persons with at least higher education			Due to the expiry of fixed-term employment		
	Number			Share in %			Share in %			Share in %		
	2008	2012	2013	2008	2012	2013	2008	2012	2013	2008	2012	2013
<b>Slovenia</b>	<b>63,216</b>	<b>110,183</b>	<b>119,827</b>	<b>11.7</b>	<b>8.5</b>	<b>9.0</b>	<b>10.2</b>	<b>13.8</b>	<b>15.4</b>	<b>32.2</b>	<b>38.0</b>	<b>42.0</b>
<b>Zahodna Slovenija</b>	<b>21,062</b>	<b>43,030</b>	<b>48,472</b>	<b>8.3</b>	<b>6.6</b>	<b>7.4</b>	<b>13.8</b>	<b>16.3</b>	<b>17.7</b>	<b>32.2</b>	<b>35.4</b>	<b>37.3</b>
Obalno-kraška	2,642	5,142	5,812	7.6	6.9	6.1	12.4	13.6	15.2	28.3	36.4	38.6
Goriška	2,322	5,323	5,962	9.2	6.9	7.4	13.9	15.9	17.1	32.3	34.7	37.6
Gorenjska	3,945	7,991	8,740	8.7	7.6	8.9	12.3	14.7	16.2	34.0	41.7	43.7
Osrednjeslovenska	12,153	24,575	27,958	8.1	6.2	7.2	14.5	17.4	18.9	32.4	33.2	35.0
<b>Vzhodna Slovenija</b>	<b>42,116</b>	<b>65,901</b>	<b>70,307</b>	<b>13.4</b>	<b>9.7</b>	<b>10.1</b>	<b>8.5</b>	<b>12.2</b>	<b>13.8</b>	<b>32.2</b>	<b>39.8</b>	<b>42.7</b>
Notranjsko-kraška	1,224	2,534	2,973	11.0	7.8	8.5	12.7	12.5	13.8	35.7	37.7	38.7
Jugovzhodna Slovenija	4,223	8,470	9,328	13.6	11.3	11.8	6.9	10.4	12.1	28.8	35.3	36.8
Spodnjeposavska	2,514	4,493	4,750	9.9	9.4	9.7	8.1	11.0	12.6	31.7	39.1	42.2
Zasavska	1,682	2,825	3,173	15.2	11.8	12.1	6.7	10.2	11.6	31.4	38.0	40.2
Savinjska	9,907	15,232	16,499	13.8	9.7	10.3	8.7	13.3	15.0	31.9	37.6	41.2
Koroška	2,421	3,889	4,368	13.3	9.2	10.1	11.1	13.8	15.1	36.3	43.0	46.5
Podravska	13,412	19,668	20,375	12.9	8.9	9.1	9.5	13.2	14.8	34.8	44.0	47.0
Pomurska	6,733	8,790	8,842	14.6	10.2	10.6	6.0	10.1	11.7	27.6	38.5	42.4

Source: ESS, calculations by IMAD.

Note: The sum totals of the regions do not always equal the figures for Slovenia, as the latter include the unemployed without known residence. The sum of shares of selected groups is not 100%.

inequalities have been decreasing in all regions since 2009; however, on average, more in the regions of Zahodna Slovenija. A considerable minimum wage rise in recent years which resulted in a rise in the level of the lowest wages had the greatest influence on the decrease in wage differences. In addition, this was due to the halt in the growth of wages or even their decrease in certain industries where wages are the highest (financial and insurance activities, public services). The increase in the minimum wage had a major impact on the reduction of inequality in economically weaker regions, as there are more employees with lower wages in these regions.

**In 2013, the number of jobs decreased in all regions; however, one-third of them are still in the Osrednjeslovenska Region.** In 2013 the population concentration index amounted to 20.7, but it is still among the lowest in the EU. The job concentration index is slightly higher (25.7), which remained at the 2012 level<sup>215</sup>. More than one-quarter of Slovenia's population lives in the Osrednjeslovenska Region, which is also where more than one-third of the jobs are located and the highest index of labour migration is recorded; therefore, this region is considered a labour force region<sup>216</sup>. All this affects migration movements between

<sup>215</sup> The population and job concentration indices are calculated by the following equation:  $[\sum_{i=1}^N |y_i - a_i| / 2] * 100$ , where  $y_i$  represents the share of jobs in region  $i$  in the country,  $a_i$  represents the share of the surface area of region  $i$  in the country, and  $N$  represents the number of regions.

<sup>216</sup> Labour force regions are those regions where the value of the index of labour migration is 96 or more. In 2012, the

regions. In 2012, the Osrednjeslovenska Region had the highest interregional net migration (4.7 per 1,000 inhabitants), while it was negative in most other regions. The interregional net migration was the lowest in the Zasavje Region (-8.1 per 1,000 inhabitants), where the unemployment rate was also high. The concentration of jobs as well as the widespread and affordable road network contribute to the process of building housing outside urban settlements, thus increasing daily labour migrations from suburbanised areas to bigger (employment) centres. Daily migrations, which depend to a great extent on individualised forms of transport by car, impair the air quality, increase greenhouse gas emissions and noise, and cause higher energy dependence. The lack of a comprehensive and more systematic approach to the process of suburbanisation also puts pressure on agricultural lands<sup>217</sup> and the existing public economic and social infrastructure in immigration areas, which are usually not adapted to the population increase.

**In 2013, temporary measures of developmental support were adopted for the area of Maribor and its wider surroundings and Zasavje.** The unfavourable economic conditions and increase in unemployment in 2013 led to the adoption of additional temporary developmental support measures<sup>218</sup> in the Zasavje

index value in the Osrednjeslovenska Region was 126. See the methodology interpretation of SURS: [http://www.stat.si/doc/metod\\_pojasnila/07-234-MP.htm](http://www.stat.si/doc/metod_pojasnila/07-234-MP.htm).

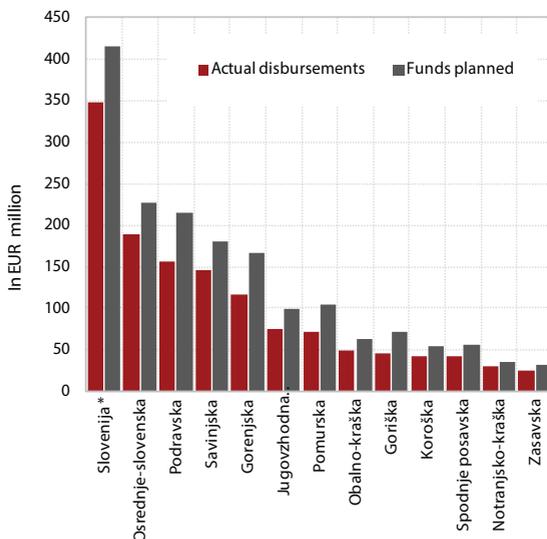
<sup>217</sup> See also Chapter 5.4.

<sup>218</sup> In accordance with the Promotion of Balanced Regional Development Act (Uradni list RS, No. 20/2011) and the Decree on

Region and Maribor and its wider surroundings. These two areas joined the Pomurje and Pokolplje Regions, where temporary measures within the framework of adopted programmes to foster competitiveness have already been implemented. The measures are aimed at creating new jobs and encouraging employment, providing conditions for long-term economic growth, starting up new innovative businesses, promoting investments, and developing economic and transport infrastructure, which should contribute to reducing the gap as regards development. Temporary developmental support measures are thus carried out in four of the twelve regions of Slovenia. In the event of positive effects on economic activity and declines in unemployment<sup>219</sup> in these regions, a further reduction in regional disparities can be expected.

**Drawing on European Funds within the Operational Programme for Strengthening Regional Development Potentials (OP DP) is being carried out as expected.** In severe economic conditions, cohesion policy funds have great significance for balanced regional development and the development of the country as a whole. In the programme period 2007–2013, Slovenia had EUR 1,768.2 m (the EU part) of commitment appropriations,

Figure 52: Planned and actually disbursed EU funds for the Operational Programme for Strengthening Regional Development Potentials (OP SRDP), by region, 2007–2013



Source: Ministry of Economic Development and Technology, 2014.

Note: \* Projects without a territorial code of region or municipality are considered to be implemented throughout Slovenia.

the Implementation of Endogenous Regional Policy Measures (Uradni list RS, Nos. 24/11 and 16/13), the Government may adopt additional temporary developmental support measures for areas in which, owing to the internal structural problems or external impacts, the economic conditions may deteriorate to such an extent that the level of registered unemployment rate reaches the critical limit of 17%, with such level being established for three consecutive months at the level of administrative units.

<sup>219</sup> These measures can only be evaluated after a longer period.

which have largely been confirmed, available for OP SRDP projects financed by the European Regional Development Fund (ERDF). In the period from 1 January 2007 to 31 December 2013, beneficiaries were paid EUR 1,397.9 m (79.0% of commitment appropriations), while EUR 1,335.5 m (75.5% of commitment appropriations) were reimbursed to the budget by the EU. The majority of the funds disbursed under the OP SRDP were projects at the national level (27.0% of all disbursements) followed by the projects in the biggest region, the Osrednjeslovenska Region (12.8% of all disbursements) and the least in the Zasavska Region (1.6%).

## 5.4 Spatial management

**The process of comprehensive reform of legislation that is to provide greater efficiency in the system of spatial planning began at the end of 2013.** In Slovenia the system of spatial planning and construction is complicated and ineffective; however, after 2004 it was marked by many changes aimed at procedural aspects which also had some impacts on the environment and development. The main reason for the inefficient system, which is reflected in lengthy procedures, is the so-called sectorisation, which makes the coordination of the interests of the individual bodies responsible for spatial planning more difficult. This inefficiency is also due to the insufficient implementation of spatial planning regulations. At the end of 2013, the government of the Republic of Slovenia confirmed the bases for regulatory changes in the area of spatial planning and construction aimed at reforming umbrella and sector legislation in this area by putting into place mechanisms (content-related, procedural and organisational) that will facilitate the actual coordination of the developmental needs and interests in the area in an effective manner<sup>220</sup>. An important segment of the reform of the system is also the improvement and integration of the information system of spatial planning and building (e-Space), which is to collect and unify the most important spatial information in one place.

**Given the insufficient strategic planning, the fragmentation and the same level of importance of individual bodies responsible for spatial planning are reflected in the difficulty coordinating them.** An important part of development planning documents is to identify the demand for space; however, development policies at the national level are often insufficiently specified in terms of space<sup>221</sup>, while in the implementation phases, they also compete with each other for the

<sup>220</sup> They are to be adopted by the end of 2014. (Bases for regulatory changes in the area of spatial planning and construction of buildings – Proposal for discussion – New material, No.2. MZIP. Government materials of 13 November 2013).

<sup>221</sup> At the strategic level, for example, development orientations which the country will develop and promote in individual areas have not been determined and coordinated

same space. Sector policies are equivalent in exercising their visions in space; therefore, mutual coordination is difficult or even impossible. For the most part, they do not comply with regional development programmes, and many of these programmes do not pursue national development goals. A lack of coordination is also evident among municipalities and their mutual cooperation in planning spatial arrangements of local importance which are of common inter-municipal interest. The increasing number of municipalities is also reflected in often unrealistic and irrational spatial planning which does not take into account demographic projections and the possibility of exploiting synergies with neighbouring or other municipalities, which results in increased pressure from urbanisation and, hence, a loss of high-quality agricultural land to urban uses.

***The drafting of national spatial plans and municipal spatial plans is being carried out at a slow pace.*** In 2010, the Act Regulating the Siting of Spatial Arrangements of National Significance (Uradni list RS, No 80/10), whose purpose is to optimise and accelerate the procedures for the siting of spatial arrangements of national significance was adopted; however, the procedures for national spatial plans and further implementation of projects are excessively long<sup>222</sup>. As from 2003, when the Spatial Management Plan entered into force, several national spatial plans were adopted (eight in 2013), of which 30% have not been realised, including certain that were adopted years ago. Among them, there are several important spatial arrangements with a view to contributing to national competitiveness (e.g. projects in the area of transport infrastructure) and the safety of the population (projects in the field of water arrangement, flood safety, protected areas, and landslides). By the end of 2013, new municipal spatial plans had been adopted by 82 of 212 municipalities, of which only three were urban municipalities. About one-third of the municipalities that have already adopted municipal spatial plans are carrying out procedures for amending their spatial planning documents. Spatial planning in municipalities<sup>223</sup> often takes place in the absence of prior

<sup>222</sup>The reasons for this are: long-term coordination with the bodies responsible for spatial planning and the lack of financial resources of investors; the inability to coordinate planned arrangements in relation to statutory protection regimes in place; the failure to respect the prescribed statutory deadlines for issuing guidelines and opinions; the lengthy public procurement procedures; the rejection of the proposed solutions of local communities, etc. (source: Report on the problems and dynamics of national social plan preparation, including proposed measures to accelerate preparation procedures, Ministry of Infrastructure and Spatial Planning, 2013).

<sup>223</sup>The problems encountered in the preparation of municipal spatial plans are in particular: inconsistencies in the long-term development guidelines of the strategic part of municipal spatial plans with more detailed land use, inconsistencies in the strategic parts of municipal spatial plans at the regional and inter-municipal levels; appropriate data support is not provided for the preparation of municipal spatial plans; the prevalence of individual interests over municipal development initiatives; the lengthy coordination processes with individual

strategic planning activities, which leads to a lack of coordination of the planned activities and to changes in already adopted spatial planning documents.

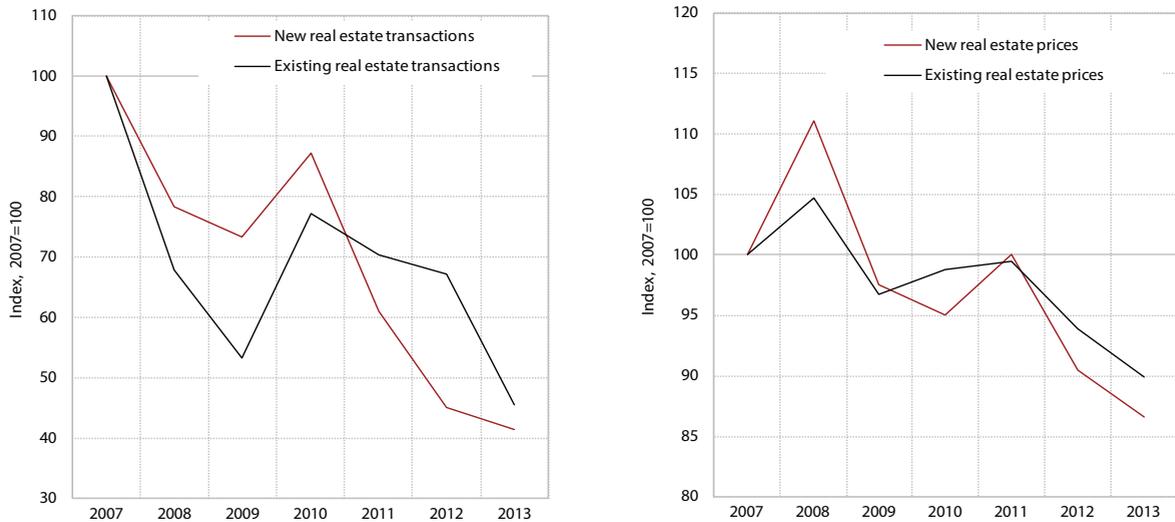
***According to the "Doing Business" research study, lengthy procedures for the registration of real estate and for obtaining building permits remain an important obstacle to the ease of doing business in Slovenia compared to other countries.*** The World Bank has established that in the past four years Slovenia undertook important changes which simplified procedures and reduced tariffs; however, lengthy procedures are still a problem, particularly in relation to official records. As regards the procedure for the registration of real estate, Slovenia's ranking, after it introduced certain changes in 2010 and 2011, has improved by 25 places, to 83<sup>rd</sup> place, according to the latest research. In recent years the real estate register was established and activities for the digitalisation of the land register were carried out, which, in addition to the simplification of registration, also increased the safety of individuals and businesses in real estate, while a mass property valuation was carried out in 2011. Despite the progress made, in the process of introducing the property tax it was established that numerous deficiencies still exist with regard to the completeness, updating, and utilisation of these records. This can also affect the length of procedures, since according to the World Bank data, a company needs 110 days to register real estate (or property) in Slovenia, which is considerably more than in other EU Member States. As regards the procedure for obtaining building permits, Slovenia's ranking improved by two places (to 59<sup>th</sup> place) last year, which is partly due to the changes in spatial legislation in 2012 and 2013. Through amendments to the Construction Act, time limits for issuing project conditions were reduced and simplified procedures related to required approvals were adopted. Among other things, project conditions are no longer required from water and sewage service providers. This should shorten the process of obtaining a building permit, for example for the construction of a typical<sup>224</sup> warehouse, by 15 days (to 182 days) which is still much more than in other EU Member States.

***The use of agricultural land is being reduced in the long run.*** Although spatial changes are of a long-term nature, the data on the spatial use (otherwise deficient) evidence a decrease in utilised agricultural land. In 2012, it namely increased after a relatively significant

sectors' prevalence of protection regimes; the parallel conduct of procedures in the field of spatial planning; the protection of the environment and the construction of buildings and related duplication in administrative procedures; raising the awareness of the public regarding the importance of coordination in the preparation of municipal spatial plans (Source: MzIP).

<sup>224</sup>A standard warehouse, according to the "Doing Business" 2014 research study, is a new construction with complete architectural and building plans to be connected to water, sewerage, and the telecommunication network (10 m long). The warehouse would be built in 30 weeks and used for storing general goods. The size of storage is not prescribed.

Figure 53: Transakcije ter cene novih in rabljenih stanovanjskih nepremičnin, Slovenija



Source: SURS, 2014. IMAD calculations.

decrease in the year before; however, it was about one-tenth less than in 1995<sup>225</sup>. The objectives in relation to agricultural land protection are not set out and there are no estimates as to how much and what agricultural land would be needed in order to provide food safety for the population<sup>226</sup>. The area of arable land per capita in Slovenia is much smaller than the EU average; According to Eurostat data, there were 0.08 ha of fields and gardens per capita in 2011 in Slovenia, while the EU-28 average was 0.21 ha. On the other hand, the overgrowing of agricultural lands and urbanisation, which represents the irretrievable loss of soil, are on the increase. In recent decades, the image of the rural landscape was marked by poorly coordinated activities affecting the physical environment, dispersed construction, and changes in the use of quality and economically significant agricultural lands<sup>227</sup>. Construction oriented to lower-quality land further decreased with the most recent amendment to legislation<sup>228</sup>, on the basis of which damage stemming from changes to the use of top-quality agricultural land was reduced, while damage to lower-quality land was eliminated. A partial approach to legislative amendments creates new conflicts in relation to the siting of activities, which could have been avoided with comprehensive and coordinated systemic changes concerning land policy, agricultural land, spatial planning and public finances, and effective mechanisms of implementation.

***In 2013, dwelling prices decreased further; however, in the uncertain conditions of the economic crisis, the***

<sup>225</sup> Source: SURS, regular annual statistical surveys.

<sup>226</sup> The success of agricultural land protection as a condition for self-sufficiency (Court of Audit of the Republic of Slovenia), 2013.

<sup>227</sup> Conclusions of the conference "The Rural Landscape as Development Potential" (Slovenian Association of Landscape Architects), 2013.

<sup>228</sup> Act Amending the Agricultural Land Act, Uradni list RS, No. 58/2012.

***real property market has not been revived.*** In 2013, dwelling prices<sup>229</sup> (new and existing flats and houses) dropped by 4.3% and were 17.1% below the peak of 2008<sup>230</sup>. Furthermore, the total number of dwellings sold decreased (by over a quarter) and was more than one-half below the peak of 2007. With lower sales of new and existing flats, worse economic conditions, and difficult access to funding, the construction of new flats also decreased during the crisis period. The number of dwelling constructions begun in 2012 was the lowest since Slovenia's independence and was a fifth lower than in the previous year and 70% lower compared to 2007. Building permits issued in 2013 show an increase in construction, but only the number of building permits issued to natural persons for mostly single-dwelling houses was higher than in the previous year, which is likely to be the result of the still relatively high prices of dwellings, lower purchasing power, poor access to loans, and a lack of dwellings in some cities<sup>231</sup>. The lack of dwellings could be partly solved by means of utilising empty dwellings, which are estimated to number approximately 80,000<sup>232</sup>; some

<sup>229</sup> Calculated on the basis of house price indices, SURS, 2014.

<sup>230</sup> With the decrease in the price of real estate in Slovenia, no excessive imbalances in this area were identified in 2012. House prices are also included in the set of indicators establishing excessive imbalances between EU Member States as one of the indicators of internal imbalances (for more details, see Box 1). This is an interim change in the relative prices of residential property measured by means of the Eurostat experimental harmonised index of residential property prices (new and existing flats and houses together) relative to the private consumption deflator. The threshold value of the interim relative change was set at 6%. In 2009, 2010 and 2012, Slovenia faced a drop in the relative prices of real estate, while the upper limit was exceeded during the period 2004–2007, mostly in 2007 (18.8%).

<sup>231</sup> The prices of existing dwellings in other parts of Slovenia (excluding Ljubljana) slightly increased, which is also due to the smaller supply of old and new dwellings.

<sup>232</sup> According to SURS data, on 1 January 2011, there were

of these could be made available to rent. The increase in rental real estate would also comply with the European Commission's report on macroeconomic imbalances. In the coming years, the supply in the real property market will likely increase as a consequence of the disposal of certain real property investments that will be transferred to the Bank Asset Management Company, while as the decrease in the construction of multi-dwelling buildings continues, excess demand for new dwellings could be observed in some places.

## 5.5 Culture

**Relatively favourable trends in the area of attendance of cultural events remained in the economic crisis period, while Maribor, as the European Capital of Culture, largely contributed to the increased attendance at cultural events in 2012.** Despite a smaller total number of published books and brochures in 2012, the production of Slovenian literary publications continued to increase; the number of Slovenian literature titles published increased and was higher than in the pre-crisis period (2008) and at the beginning of the implementation of Slovenia's Development Strategy. Furthermore, the number of Slovenian long films produced and the number of viewers thereof increased, while the number of foreign long film viewers decreased. 2012 saw a significant increase in the number of visits to cultural events<sup>233</sup>, which was largely due to the organisation of events within the Maribor – European Capital of Culture activities. In comparison to the previous year, the number of visits to cultural events rose by about 60%, to 16.1 m. Approximately 6.9 m or more than 40% of visitors to cultural events in Slovenia as a whole (in the previous year about 10%) were visitors to cultural events in the Municipality of Maribor<sup>234</sup>.

**In 2011 and 2012, the increase in the number of persons employed in culture ceased, while the share of self-employed persons in its structure increased.** In 2012, there were 24,481 people employed<sup>235</sup> in culture in Slovenia. This number decreased for the second year in a row (in 2014, by 1.4%); however, it was still more than a tenth above that in 2005. Compared to the beginning

approximately 175,000 empty dwellings, including holiday homes without basic infrastructure and/or dwellings built before 1945, as well as empty houses with basic infrastructure but without house numbers in Slovenia. Excluding the above housing unsuitable for living, there were about 80,000 empty dwellings.

<sup>233</sup> These include museums, galleries and exhibition grounds, theatrical performances, films in cinemas, orchestral/choral concerts and performances given by cultural institutions.

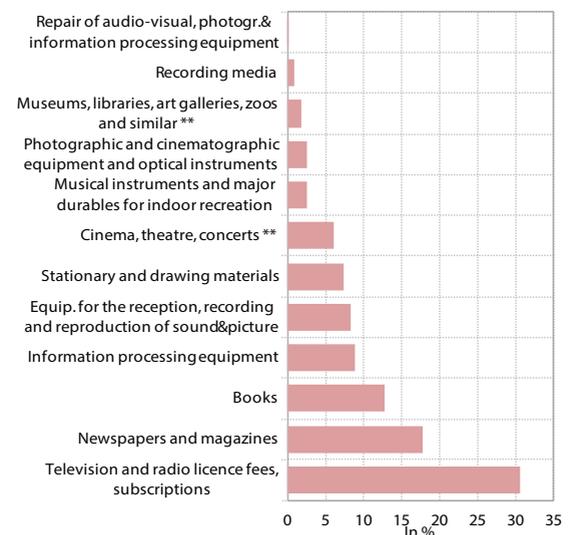
<sup>234</sup> These are events which were organised by Maribor Municipality although some of the events took place elsewhere.

<sup>235</sup> Statistical Register of Employment – SRE. Persons in an employment relationship and self-employed persons (except farmers) are included. Data on persons employed in culture are shown according to the definition of culture of the European Commission (ESS NET-CULTURE, 2012).

of the implementation of Slovenia's Development Strategy, the number of employees has increased while the number of self-employed increased even more; their share increased to almost one-fourth of all persons employed in culture. The share of self-employed persons in culture is also considerably above the average of all economic activities. Despite the unfavourable economic situation and consequent decrease in employment in all sectors, the share of persons employed in culture in relation to the total employed population in the economy in 2012 remained at a similar level as in recent years (2012, 3.1%)<sup>236</sup>, while compared to 2005 it was even slightly higher.

**The expenditure on culture per household member has not decreased significantly since the onset of the crisis.** Compared to the relatively considerable reduction in household disposable income, the decrease in expenditure on culture in the period 2008–2012 was smaller (in real terms, it was 2.4% lower). A major decrease in such expenditure was recorded between 2010<sup>237</sup> and 2012 (per household member, it was 11.2% lower in real terms). In some categories that, according to the UNESCO definition, are most directly associated with cultural content (cinema, theatre, concerts, museums and galleries), expenditure also rose significantly in 2012. This can be partly attributed to visits to the cultural events within the scope of the European Capital of

Figure 54: The structure of household expenditure on culture, 2012



Source: (SURS – Household Consumption Survey (HCS) 2012); calculations by IMAD. Note: \*\* Categories that according to the UNESCO definition are most directly associated with cultural contents.

<sup>236</sup> Internationally comparable data from the labour force survey show that the share of people employed in culture compared to all employed persons in 2012 was higher than the EU average (Slovenia: 2.0%; EU-28: 1.7%), as in previous years during the implementation of Slovenia's Development Strategy.

<sup>237</sup> Owing to the revamping of the statistical survey in 2012, data for 2011 are not available.

Table 18: Cultural production and attendance of cultural events, Slovenia

	2005	2008	2009	2010	2011	2012
<b>Museums, galleries and exhibition grounds</b>						
Number of exhibitions	1,809	2,119	2,169	2,039	2,382	2,504
Number of exhibition visitors	2,284,350	2,454,878	2,600,882	2,882,440	3,020,190	3,548,275
<b>Theatres</b>						
Number of performances at the theatre headquarters	5,226	4,160	3,776	4,650	5,848	5,610
Number of new works performed, total	246	205	236	307	316	450
– number of new productions by Slovenian authors	90	86	131	132	176	232
Number of visitors to theatrical performances, total	928,629	867,220	782,491	864,482	948,618	955,031
<b>Films</b>						
Number of long films produced	13	8	11	8	19	26
Number of viewers of (Slovenian and foreign) long films	2,443,776	2,417,994	2,772,073	2,888,391	2,867,224	2,637,830
– number of viewers of Slovenian long films	72,239	103,000	51,846	193,532	131,415	132,304
<b>Cultural institutions</b>						
Number of performances	8,925	9,370	8,855	11,121	11,453	17,473
Number of visitors	1,729,222	2,150,812	2,251,923	2,384,087	2,936,175	8,935,094
<b>Books and brochures published</b>						
Number of titles of published books and brochures	4,394	6,358	6,139	5,621	5,991	5,851
Number of literary titles	993	1,274	1,473	1,315	1,456	1,428
– number of Slovenian literary titles	501	709	773	657	681	712
<b>General libraries</b>						
The number of borrowed units of library material per capita	10.4	12.7	11.7	12.0	12.5	12.8

Source: SURS, Fiviva, d. o. o., National Film Fund, Institute of Information Science, National and University Library.

Notes: The number of borrowed units of library material per capita is calculated with regard to the number of population as of 1 July; N/A-not available.

Culture in Maribor; however, they still represent only a small share of total household expenditure on culture. Following the changed methodology of reporting<sup>238</sup>, care should be taken as regards direct comparison with preceding years. The share of expenditure on culture and recreation in total household expenditure was 8.6% in 2012, which is approximately at the level of the EU average (8.7%). In recent years, it has been decreasing similarly as the EU average.

***In 2012, government expenditure on culture decreased for the second year in a row; however, it was higher than at the onset of the crisis and among the highest in the EU<sup>239</sup>. It decreased by 8.6% in real terms compared***

<sup>238</sup> Up to 2010, data on household expenditure for culture were collected by using diaries in which household members recorded daily expenditures and the quantities of consumer goods purchased, and since 2012 by using the personal interview method based on a questionnaire with which household members were asked about purchases in the last six or twelve months.

<sup>239</sup> According to the COFOG methodology, this covers expenditure on cultural services, broadcasting and publishing. Expenditure on cultural services includes expenditure on cultural institutions (libraries, museums, galleries, theatres, monuments, zoos, botanical gardens, aquariums, etc.), the organisation and support of cultural events (concerts, films and other productions), scholarships, loans and subsidies granted to artists, writers, designers, composers and other employees in the area of culture.

to the year before. Expenditure on cultural services decreased more; however, the decrease in expenditure on broadcasting and publishing services was also high. In 2012, the share of expenditure on culture as a percentage of GDP amounted to 1.25% (2011: 1.30%), of which 0.81% of GDP on cultural services and 0.44% of GDP on broadcasting and publishing. Despite the decrease, the share of government expenditure on culture expressed as a % of GDP was higher than in the pre-crisis period (2008) and higher than at the beginning of the implementation of Slovenia's Development Strategy (2005), while in 2011 it was among the highest of the EU Member States. In 2012, among expenditure on culture, investments decreased for the third year in a row, with the highest drop recorded in 2012. In this respect, investments in cultural services are decreasing while investments in broadcasting and publishing services are increasing. In both areas, subsidies and the compensation of employees in accordance with the reduced number of employees continue to decrease.

# **Part II**

# **Indicators of Slovenia's development**



## **THE FIRST PRIORITY:**

### **Economic growth and the competitiveness of the economy**

- 1.1 Gross domestic product per capita in purchasing power standards
- 1.2 Real GDP growth
- 1.3 Inflation
- 1.4 General government balance
- 1.5 General government debt
- 1.6 Balance of payments
- 1.7 Gross external debt
- 1.8 Yield on ten-year government bonds
- 1.9 Development of the financial sector
- 1.10 Loan-to-deposit ratio
- 1.11 Non-performing claims
- 1.12 Labour productivity
- 1.13 Market share
- 1.14 Unit labour costs
- 1.15 Structure of merchandise exports by factor intensity
- 1.16 Knowledge-intensive market services
- 1.17 Network industries
- 1.18 Foreign direct investment
- 1.19 Entrepreneurial activity

## 1.1 Gross domestic product per capita in purchasing power standards

**The gap between Slovenia's level of development and the average in the EU remains at a high 16 percentage points for the third year.** Slovenia's per capita gross domestic product in purchasing power standards stood at 21,400 PPS<sup>1</sup> in 2012, according to Eurostat<sup>2</sup> figures. Slovenia was closing the gap with the EU average in terms of per capita GDP in PPS until 2008, when it reached 91% of the EU average, whereupon the gap widened sharply in the first two years of the crisis; since 2010 it has been at 84%, the same level of relative economic development as in 2003. The principal reason why Slovenia has stopped catching up is that gross domestic product contracted more sharply than in the rest of the EU; by 2012 only three Member States recorded a steeper or equal cumulative contraction of GDP since the start of the crisis (Greece, Croatia, Latvia). Economic trends less favourable than those in the EU continued in the years following the sharp contraction of economic activity (2009), which has been compounded since 2010 by a decline in the general level of prices in Slovenia, which has kept gross domestic product expressed in purchasing power standards unchanged and at a low level since 2010. In 2012 the general level of prices at the level of GDP was 5.4 percentage points lower than in 2009, having dropped by 2.8 percentage points year-on-year to 80.3% of the average price level in EU countries. Given that the contraction in 2013 was again sharper than on average in the EU, we estimate that Slovenia did not improve its position last year vis-à-vis the average level of development in the EU.

**The decomposition of per capita GDP in PPS (into productivity and the employment rate) shows that Slovenia is lagging behind the EU average due to**

**lower productivity, which has eroded further during the crisis.** Productivity (expressed in purchasing power standards) had been approaching the EU average until 2008 (84%), before the gap widened by 4 percentage points in 2009; in 2012 the gap narrowed by only 1 percentage point to 81% of the EU average, which is similar to the level recorded in 2004. Since the adjustment in productivity (relative to the EU) stemmed largely from declining employment, the employment rate relative to the EU's has also decreased substantially since the beginning of the crisis, to 103.4% from 108% of the EU average. Despite a moderate adjustment in productivity after 2010, the gap in per capita GDP in PPS has not narrowed.

**Since the start of the crisis, only four Member States have diverged from the average economic development of the EU at a faster pace than Slovenia.** While Slovenia's gap with the EU average widened by 7 percentage points in 2012, Spain, Cyprus and the United Kingdom slipped 8 percentage points and Greece 18 percentage points. In this period fifteen EU countries made headway, including nine new Member States; Poland (11 percentage points) and Lithuania (8 percentage points) narrowed the gap the most. In 2005 (when SDS was adopted), Slovenia was lagging 13 percentage points behind the EU average and was closest to Greece (91%) and Cyprus (93%). Since then the gap has widened by 3 percentage points, bringing Slovenia closest to Malta (86%) and the Czech Republic (81%). In the EU as a whole, the GDP to PPS ratio, which was at 1:9.3 at the start of the previous decade (Romania 5,000 PPS / Luxembourg 46,500 PPS) decreased to 1:5.6 by 2012 (Bulgaria 12,000 PPS / Luxembourg 67,100 PPS).

<sup>1</sup> GDP per capita in purchasing power standards enables a comparison between countries by eliminating the effect of the differences in price levels. The purchasing power standard (PPS) – the selection of a currency for the expression of results – is a convention. In Eurostat's comparison, the results are shown in a "currency" called PPS. PPS is an artificial, fictitious currency that, at the level of the EU, equals one euro. The PPS or "EU-28 euro" is a "currency" that reflects the average price level across the EU-28.

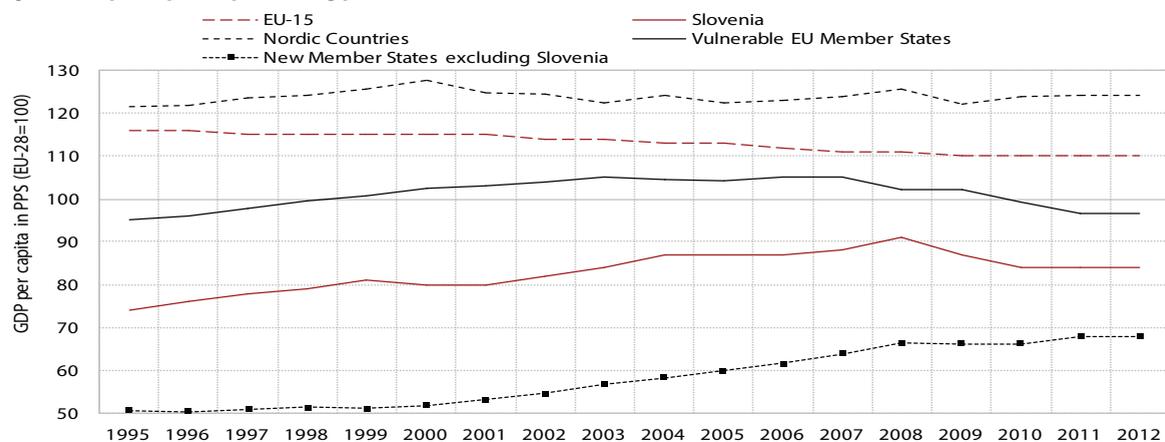
<sup>2</sup> In December 2013 Eurostat released data on GDP per capita in PPS for the period 2010–2012. The data are based on revised purchasing power parities for the cited years, the latest revised data on GDP in national currencies for individual countries, and the latest data on population size.

Table: GDP per capita in purchasing power standards, index, EU-28=100

	1995	2000	2005	2008	2009	2010	2011	2012
<b>EU-15</b>	116	116	113	111	111	110	<b>110</b>	<b>109</b>
Austria	135	132	125	125	126	127	129	130
Belgium	129	127	120	116	118	121	120	120
Bulgaria	32	28	37	44	44	44	47	47
Cyprus	88	88	93	100	100	97	94	92
Czech Republic	77	71	79	81	83	81	81	81
Denmark	132	132	124	125	124	128	126	126
Estonia	36	45	62	69	64	64	69	71
Finland	108	117	114	119	115	114	116	115
France	116	116	110	107	109	109	109	109
Greece	75	84	91	93	94	88	80	75
Croatia	46	50	57	63	62	59	61	62
Ireland	104	132	144	132	129	129	129	129
Italy	122	118	105	104	104	103	102	101
Latvia	31	37	50	59	54	55	60	64
Lithuania	36	40	55	64	58	62	68	72
Luxembourg	223	245	254	264	253	263	266	263
Malta	89	87	80	81	84	87	86	86
Hungary	52	54	63	64	65	66	67	67
Germany	129	118	116	116	115	120	123	123
Netherlands	124	135	131	134	132	130	129	128
Poland	43	48	51	56	61	63	65	67
Portugal	77	81	80	78	80	80	77	76
Romania	33	26	35	47	47	48	48	50
Slovakia	48	50	60	73	73	74	75	76
<b>Slovenia</b>	<b>75</b>	<b>80</b>	<b>87</b>	<b>91</b>	<b>86</b>	<b>84</b>	<b>84</b>	<b>84</b>
Spain	92	98	102	104	103	99	96	96
Sweden	126	128	122	124	120	124	125	126
United Kingdom	116	121	124	114	112	108	105	106

Source: Eurostat Portal Page – Purchasing Power Parities, 2013.

Figure: GDP per capita in purchasing power standards for selected countries (EU-28=100)



Source: Eurostat Portal Page – Purchasing power parities, 2013.

Note: \* Vulnerable EU Member States (Greece, Ireland, Italy, Portugal, Slovenia, Spain).

## 1.2 Real GDP growth

**Gross domestic product contracted yet again in 2013 (-1.1%), to about a tenth below its level of 2008.** Exports remained the only factor that made a substantial positive contribution to economic activity and its growth accelerated as Europe's economy started recovering last year. Nevertheless, the contribution of the external trade balance was more subdued than in the year before, as imports rose as well due to a slower decline in domestic demand. The decline in domestic demand was slowed in particular by an uptick in gross fixed capital formation; the contraction of household consumption decelerated, whereas the slump in government consumption deepened.

**Real growth in exports was more robust last year as the economic recovery in the EU got under way, while growth in exports to countries outside the EU slowed down.** Export growth stood at 2.9%, up 2.3 percentage points over the year before, driven by stronger merchandise exports. After having declined in 2012, merchandise exports to the EU<sup>1</sup> rose last year, whereas the growth of non-EU exports slowed down. Among the key trading partners, exports to Germany and France contracted marginally, the growth of exports to Austria continued, exports to Italy inched up after having slipped the year before, exports to Croatia also rose, while the growth in exports to Russia slowed down. Medical and pharmaceutical products accounted for the bulk of total export growth, along with oil and oil derivatives<sup>2</sup>. Real growth in services exports (2.6%), which was underpinned by exports of intermediation and construction services, slowed down. Following a substantial decline in 2012, real imports of merchandise and services recovered last year, which is to a large degree attributable to the import of equipment for the construction of an energy installation and higher car imports.

**Household and government consumption expenditure continued to decline last year due to the further weakening of the labour market and tight public finances.** The decline in household consumption expenditure slowed down (-2.7%). Compensation of employees contracted again as the average gross wage continued to decline along with employment. Social transfers decreased at a slower pace than in the preceding year as the number of

claimants, in particular pensioners, spiked at the start of the year. The strong compression of government consumption expenditure (-2.0%) was the result of a significant reduction in compensation of employees, as the wage-cutting measures adopted in 2012 had effect through the entire year and additional measures were adopted. The number of employees in the general government dropped for the first time, after employment growth had already slowed down in 2012.

**Last year's modest expansion of gross fixed capital formation was largely a result of the purchase of equipment for an energy installation.** Gross fixed capital formation edged higher (0.2%) after four years of contraction, but it was still barely half the level of 2008. The overall growth was a result of the expansion of investments in machinery and equipment largely associated with an investment in an energy installation, as investments in buildings and structures dropped, albeit at a slightly slower pace than in 2012. Change in inventories again had a negative impact on GDP (-0.5 percentage points), but its contribution was significantly smaller than in the year before.

**Gross domestic product at the EU-28 level increased slightly last year.** The EU's economy expanded by 0.1% as the contribution of net exports dropped compared with the year before, whereas domestic consumption expenditure, in particular by households, contracted at a slower pace than in 2012. GDP trends improved in 18 Member States, while Germany and Austria stand out among the key countries which recorded slower growth. After a two-year contraction, EU-28 GDP thus lagged behind the 2008 level by 1.9%; it exceeded the benchmark in ten Member States and only two countries (Greece and Croatia) had wider gaps than Slovenia (-9.2%).

<sup>1</sup> When Croatia joined the EU, its status regarding merchandise trade with Slovenia changed for statistical purposes. In order to ensure that the data are comparable, we have treated Croatia as an EU member since January 2012, as does SURS, although it joined later.

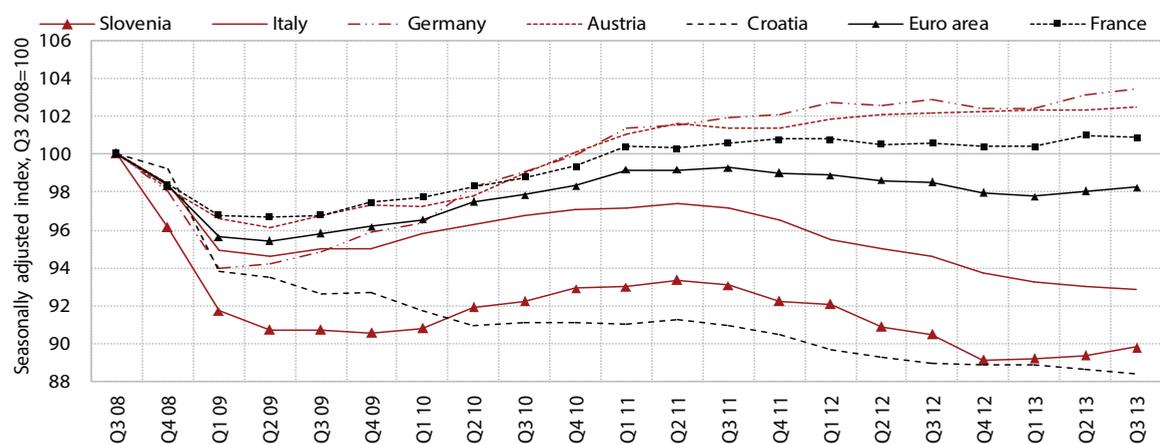
<sup>2</sup> Re-exports of imported merchandise.

Table: Contribution of individual expenditure components to GDP growth, Slovenia

	1996	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Real GDP growth, in %	3.6	4.3	4.0	5.8	7.0	3.4	-7.9	1.3	0.7	-2.5	-1.1
<b>Contribution to GDP growth, in percentage points</b>											
External trade balance (import–export of merchandise and services)	0.3	2.5	2.2	0.2	-2.0	0.1	2.6	1.8	1.0	3.8	1.3
- Exports of merchandise and services	1.4	6.2	6.1	7.8	9.1	2.8	-10.9	6.0	4.7	0.4	2.2
- Imports of merchandise and services	1.1	3.7	3.9	7.6	11.2	2.6	-13.5	4.3	3.6	-3.4	0.9
Total domestic demand	3.3	1.7	1.8	5.7	9.0	3.2	-10.5	-0.5	-0.3	-6.3	-2.4
- Household consumption expenditure	1.9	0.4	1.1	1.5	3.3	1.2	-0.1	0.8	0.4	-2.7	-1.5
- Government consumption expenditure	0.5	0.6	0.7	0.8	0.1	1.0	0.5	0.3	-0.3	-0.3	-0.4
- Gross fixed capital formation	1.9	0.7	0.7	2.6	3.5	2.0	-6.8	-3.5	-1.1	-1.5	0.0
- Change in inventories	-1.0	0.0	-0.7	0.7	2.0	-0.9	-4.1	1.9	0.6	-1.8	-0.5

Source: SI-STAT Data Portal – National accounts, 2014.

Figure: GDP in Slovenia and its main trading partners



Source: Eurostat Portal Page – Economy and finance – National accounts, 2014.

## 1.3 Inflation

**Against the backdrop of the ongoing contraction of economic activity and lower prices of raw materials on international markets, inflation slowed down substantially in 2013 (0.7%)<sup>1</sup> despite the hike in VAT rates in July.** The factors that affected price growth remained similar compared with 2012, but their impact was less pronounced due to the effects of weak economic activity and the absence of external price shocks. The contribution of the prices of food and energy products to inflation halved over the preceding year (0.7 percentage points) and the contribution of the prices of services was smaller as well (0.2 percentage points) due to one-off factors. Changes in other consumer prices were driven by the contraction of economic activity, which is evident from the ongoing subdued growth of core inflation. Tax measures affected inflation as well: we estimate that the VAT hike in July contributed about 0.7 percentage points to inflation while the increase in excise duties (on liquid fuels and tobacco) and other taxes contributed another 0.1 percentage points.

**The absence of external price pressure was reflected in slower growth of energy and food prices, while the prices of other goods were driven down by sluggish demand.** Energy products contributed 0.4 percentage points to overall consumer price growth last year, while price growth in this group was only half that of 2012 (2.7%). The growth in energy prices was driven by higher electricity prices, which contributed 0.5 percentage points to inflation on the back of higher environmental taxes. The prices of fuels for transportation and heating declined for the first time since 2008 (-1.9%) as oil prices expressed in euros dropped (-3.1%) and excise duties were cut. Against the backdrop of lower prices of raw materials on global markets, the increase in food prices (2.2%) slowed down last year and contributed 0.3 percentage points to the overall inflation rate. The prices of the majority of other goods dropped due to ongoing lacklustre demand. The prices of semi-durable goods<sup>2</sup> dropped (-2.4%) after having already fallen in 2011, as did the prices of durable goods (-2.3%).

**The subdued growth in the prices of services was a consequence of higher prices of utility services and the effects of certain one-off factors.** Having grown rapidly in 2012, the prices of services decelerated in 2012 (0.6%), contributing only 0.2 percentage points to last year's inflation. The growth was driven

particularly by higher utility prices<sup>3</sup> (0.2 percentage points) and prices of accommodation and food service activities (0.1 percentage points). The prices of some other services rose as well (the annual road user charges and financial services), which contributed a combined 0.2 percentage points to the overall inflation rate. The impact of the re-introduction of certain one-off measures<sup>4</sup> and the lower price of telecommunication services reduced last year's inflation by about 0.7 percentage points.

**Inflation in Slovenia was on a par with the euro area average.** At the end of the year, inflation measured by the HICP<sup>5</sup> stood at 0.9%, just slightly (0.1 percentage points) above that of the euro area. Domestically as well as across the entire euro area, the inflation trend was driven by food prices, whose contribution to the overall inflation rate dropped to 0.5 percentage points in Slovenia and 0.2 percentage points in the euro area owing to relatively modest growth in the prices of unprocessed food. The prices of energy products also had a notable impact on inflation, rising slightly in Slovenia while remaining level compared with the year before in the euro area. Price trends in Slovenia were also affected by the prices of services, which grew at a faster pace than in the euro area, albeit more moderately than in the preceding year.

<sup>1</sup> December 2013 compared with December 2012.

<sup>2</sup> The lower prices of clothing and footwear (-2.9%) had the biggest impact on the prices of semi-durable goods.

<sup>3</sup> After a prolonged period of unchanged prices, the Decree on the tariff system for public environmental services (Official Gazette RS, No. 87/2012, 109/2012) transferred the power to confirm price changes to the local communities.

<sup>4</sup> The restoration of subsidies for school meals reduced annual price growth by 0.4 percentage points in 2013 and the reduction of premiums for supplementary health insurance in December by another 0.3 percentage points.

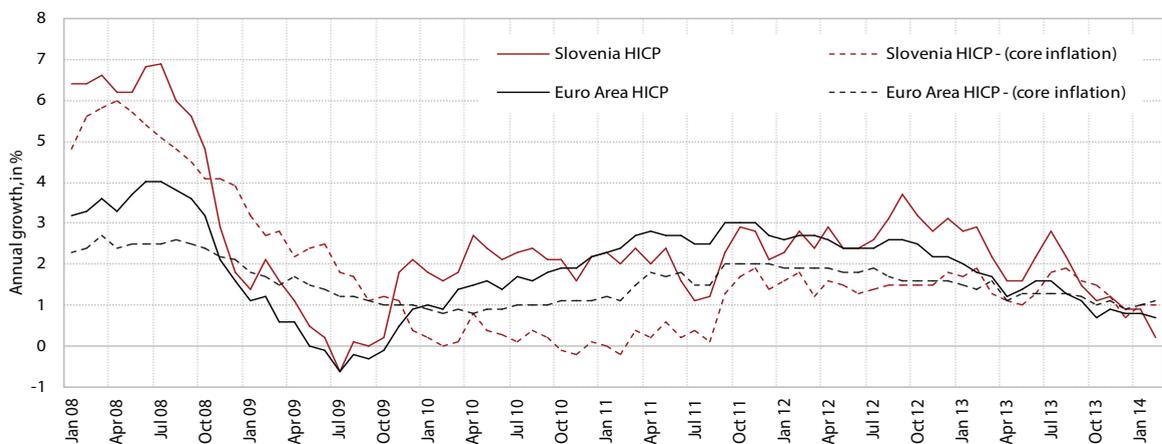
<sup>5</sup> HICP – The harmonised index of consumer prices is used for comparison of consumer price growth in the euro area and the EU.

Table: Annual price growth in Slovenia and the euro area, in %

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Consumer price index in Slovenia	9.0	8.9	2.3	2.8	5.6	2.1	1.8	1.9	2.0	2.7	0.7
Goods	7.1	8.8	2.0	2.1	6.0	1.3	1.9	2.7	2.7	2.7	0.7
Services	15.9	9.2	3.0	4.3	4.8	3.8	1.6	0.0	0.4	2.6	0.6
Administered prices	10.0	16.0	7.7	2.1	7.2	-7.8	12.6	11.5	7.1	4.6	-0.1
Energy	8.2	18.9	9.8	3.7	9.6	-11.9	14.7	14.3	9.1	6.4	-1.4
Other	11.4	12.0	3.0	-2.1	1.5	0.4	4.0	0.7	1.6	1.4	4.0
Consumer price index in the euro area (HICP)	2.5	2.5	2.2	1.9	3.1	1.6	0.9	2.2	2.7	2.2	0.8

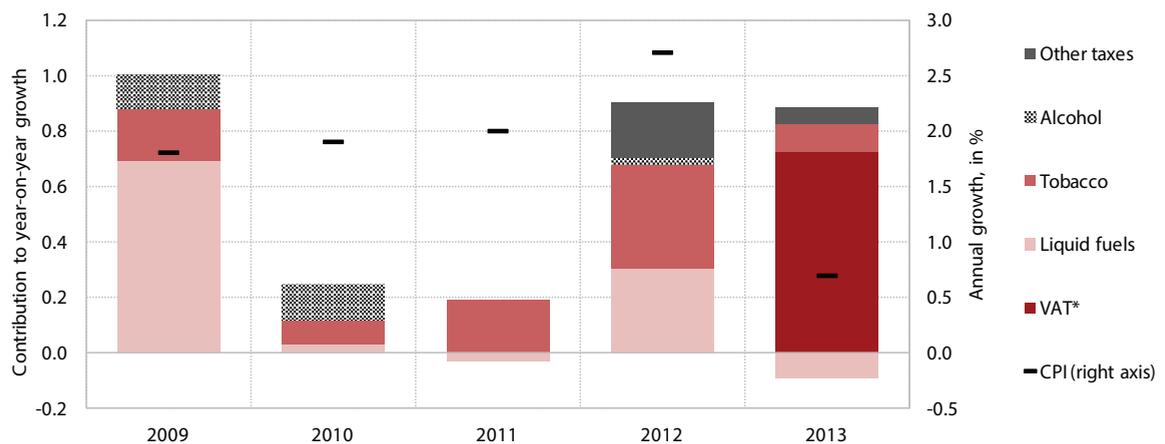
Source: SI-STAT Data Portal – Prices – Consumer price indices, 2014; annual data (SURS), 2014; Eurostat Portal Page – Economy and finance – Prices – Harmonized index of consumer prices, 2014; calculations by IMAD.

Figure 1: Annual growth in consumer prices, Slovenia and the euro area (HICP)



Source: Eurostat Portal Page – Economy and finance – Prices – Harmonized index of consumer prices, 2014.  
Note: core inflation – consumer prices excluding energy and unprocessed food prices.

Figure 2: The impact of tax changes on annual price growth, Slovenia



Source: SURS, Ministry of Finance; calculations by IMAD.  
Note: \* The impact of the increase in tax rates assuming limited spillover into retail prices.

## 1.4 General government balance

**The general government deficit in 2013 was the highest in recent history, but disregarding one-off factors, it was the lowest since 2008.** The total deficit accounted for 14.7% of GDP and was mainly a result of specific one-off transactions related to the recapitalisation of the banking system (10.3% of GDP). The deficit without one-off transactions, among which is also expenditure for the third quarter of funds paid to eliminate wage disparities in the public sector (0.3% GDP) and compensation paid to persons erased from the Permanent Population Register (0.4% of GDP),<sup>1</sup> totalled 3.7% of GDP, which is lower than in the previous year (-0.1 percentage points) and thus the lowest since the beginning of the economic crisis. The primary balance<sup>2</sup> without the one-off transactions was negative (-1.1% of GDP) and it was also lower than in 2012 (-1.7 % of GDP). The bulk of the deficit was generated at the central government level (14.5% of GDP). The total deficit at the local government level recorded a small deficit in 2013 (-0.2% of GDP) after a slight surplus in 2012 (0.1% of GDP). The social security funds were in balance after a modest deficit in the previous year (-0.3% of GDP).

**In 2013 general government revenue rose slightly, mainly under the impact of measures to increase tax revenue and the highest absorption of EU funds thus far.** Revenue increased by EUR 95 m and accounted for 44.7% of GDP (0.3 percentage points more than the previous year). The increase was partly a result of tax system changes (an increase in VAT rates, the introduction of taxes on financial services and the lottery, and a full-year effect of the increase in the CO<sub>2</sub> tax on automotive fuels, passed in 2012 and additionally increased in January 2013)<sup>3</sup> and greater efforts to improve tax collection. Total revenue from taxes thus rose by 1.6% last year (0.4% of GDP); some tax revenues declined, most notably revenue from personal income tax (-7.7%) after having more or less stagnated the previous year. Revenue from the corporate income tax, whose rate was reduced to 17% last year, is estimated as the same as for the previous year, but compared with 2011 it was much lower (-27.1% or 0.4% of GDP). Social security contributions declined further in 2013, by 1.9% (in 2012: -0.8 %).

The absorption of EU funds that are received by institutional units of the government sector increased substantially in 2013 (27.9%), being the highest thus far. After an increase in 2012 (6.2%), non-tax revenues declined last year (-2.7%).

**As a result of one-off transactions, general government expenditure reached a record high in 2013 (59.4% of GDP), but if these transactions are excluded, it was only slightly higher than in 2012 in nominal terms (0.3% or EUR 57 m).** Expenditure without one-off transactions rose by 0.3% (from 48.2% to 48.4% of GDP) after a strong reduction in the previous year (-4.3%). Primary expenditure (less interest expenditure) continued to decline, but at a much slower pace (from -4.8% to -0.6%). The dynamics of total expenditure excluding one-off transactions in 2013 reflect a policy mix that pursued consolidation by reducing the compensation of employees (-3.7% or EUR 168 m), intermediate consumption (-3.6% or EUR 88 m) and social transfers excluding pensions, and stimulated economic activity by increasing gross capital formation (12.8% or EUR 148 m). In addition to expenditure on gross fixed capital formation, the increase in expenditure in 2013 was mainly due to interest payments (20.6% or EUR 157 m) and pension expenditure (EUR 106 m), which reduced the effect of consolidation measures on the expenditure side.

**In 2013 the general government deficit in Slovenia deteriorated significantly compared with other EU countries<sup>4</sup> mainly due to the measures regarding banking system stabilisation.** The fiscal position worsened in eleven countries of the EU, and improved in seventeen. None of the EU countries recorded a surplus in 2013. The deficits rose from 0.1 percentage points of GDP (in Germany) to 11.7 percentage points (in Slovenia). The fiscal position improved the most in Denmark and Spain.

<sup>1</sup> One-off obligations of the general government, which incurred in 2013 on the basis of court decisions and regulations adopted by the government in 2013, which is in line with the ESA methodology (on an accrual basis).

<sup>2</sup> I.e., excluding interest payments.

<sup>3</sup> At the time of adoption, the effects of these tax changes were estimated at around 0.6% of GDP.

<sup>4</sup> The comparison with EU countries is based on data from the Winter Forecast of the European Commission (February 2014); for Slovenia the figures released by SURS (March 2014) were taken into account.

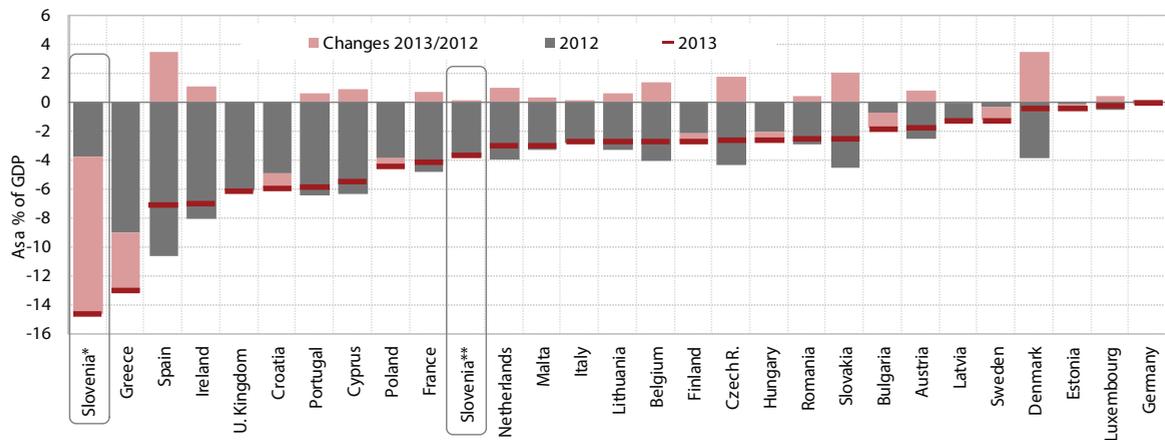
Table: General government revenue, expenditure and balance according to ESA95, Slovenia, as a % of GDP

	2008	2009	2010	2011	2012	2013
Revenue	42.2	42.3	43.6	43.5	44.4	44.7
Expenditure	44.1	48.7	49.5	49.9	48.4	59.4
General government deficit	-1.9	-6.3	-5.9	-6.4	-4.0	-14.7
General government deficit excluding one-off factors	-	-	-	-5.7	-3.8	-3.7
Central government	-1.3	-5.4	-5.3	-6.4	-3.8	-14.5
Local government	-0.6	-0.6	-0.3	0.1	0.1	-0.2
Social security funds	0.0	-0.4	-0.4	0.0	-0.3	0.0

Source: SI-STAT Data Portal – National accounts – General government accounts – Main aggregates of national accounts, March 2014.

Note: In the release of data for 2013, SURS revised the figures for 2008–2012. For 2008 and 2009 only the revised data for the deficit were released, while data for the remaining general government aggregates will be released in autumn 2014 together with the revised data according to the new ESA 2010 methodology. For 2008 and 2009 the table therefore includes data (revenue, expenditure and deficit for all government levels) that were published in the SI-STAT database before the revision (March 2014). The deficit for 2008 after the revision is the same as before the revision, while the deficit for 2009 totals -6.1%.

Figure: Deficit(-)/surplus(+) of the general government sector in EU countries in 2012 and 2013, as a % of GDP



Source: for EU countries, the European Commission, Winter Forecast, February 2014 (AMECO); for Slovenia, SURS, SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of national accounts, March 2014.

Note: \*Deficit for Slovenia including one-off factors. \*\*Deficit for Slovenia excluding one-off factors. Comparable data for other EU countries are not available.

## 1.5 General government debt

**The general government debt at the end of 2013 totalled EUR 25.3 bn or 71.7% of GDP.** The increase in the debt in 2013 (by EUR 6.1 bn or 17.3% of GDP) was the largest since comparable data have been available (from 1995 onwards). In the period since the beginning of the crisis at the end of 2008, debt as a share of GDP increased by nearly 50 percentage points, in 2013 mainly as a result of one-off transactions related to the strengthening and cleaning of the banking system (10.3% of GDP).<sup>1</sup> The deficit without one-off transactions, among which are also the wage settlement based on a court decision (0.3% of GDP) and compensation paid to persons erased from the Permanent Population Register (0.4% of GDP),<sup>2</sup> contributed 3.7% of GDP to the total debt increase. The increase also includes the issuance of bonds for the Bank Asset Management Company (EUR 1 bn or 2.9% of GDP)<sup>3</sup> related to the bank balance sheet repair, and pre-financing of the borrowing requirement in 2014, including the replenishment of the government's cash reserves, which were significantly reduced at the end of 2012 (by EUR 0.6 bn).

**The bulk of general government debt is from the central government (97% of total general government debt at the end of 2013) and long-term (97.4%). Most of it is denominated in euros.** The share of short-term debt otherwise rose in 2012 (to 2.1% of GDP), but in 2013 it declined slightly again (1.8% of GDP). Most of the debt is denominated in euros, but the share of debt denominated in US dollars and swapped into euros also increased. At the end of 2013, around 71.5% of the central government debt was in euros, 28.4% in USD. The local government debt dynamics slowed in the last two years after the fast increase in the period of 2008 to 2011 (by around EUR 100 m per year). The increase in 2013 was similar (EUR 26.2 m) to that in 2012 (EUR 22.4 m); at the end of 2013 local government debt amounted to 2.1% of GDP. The debt maturity profile is relatively evenly spread in the future years with a yearly average refinancing requirement of EUR 1.7 bn.<sup>4</sup>

<sup>1</sup> The CoCo bonds issued in 2012 (1.2% of GDP), which were converted into banks' capital at the beginning of 2013, are included in general government debt in 2012.

<sup>2</sup> One-off obligations of the general government, which incurred in 2013 on the basis of court decisions and regulations adopted by the government in 2013, which is in line with the ESA methodology (on an accrual basis).

<sup>3</sup> Consolidated general government debt does not include EUR 0.2 bn for the capitalisation of the BAMC.

<sup>4</sup> Ministry of Finance.

**Long-term instruments accounted for the largest share of central government financing (91%) in 2013.** The composition of borrowing was largely influenced by the conditions on the euro area debt market, as well as cost and strategic considerations, including the widening of the investor base. The government financed the bulk of the borrowing requirement (EUR 6.4 bn) by issuing a 5-year (USD 1 bn) and a 15-year (USD 2.2 bn) bond denominated in US dollars, a 3-year eurobond by means of private placement (EUR 1.5 bn) and 18-month treasury bills. The rest consisted of treasury bills (EUR 0.6 bn), loans issued domestically and a loan from the EIB. Part of the banks' recapitalisation was financed by re-opening various existing bonds of different maturities and denominated in euros (EUR 0.9 bn), and issuing treasury bills (EUR 0.1 bn).

**In most of 2013 government borrowing took place in an unfavourable environment.** In addition to international factors, the borrowing costs mainly reflected uncertainty related to delays in the transfer of bad claims, and doubts about the size of the system's capital shortfall and the fiscal impact of the bank balance sheet repair. After the issuance of bonds and bank recapitalisation following the release of the banking system review and the stress test results, the yield of 10-year government bonds and its spread compared with the German benchmark bond dropped in December to the lowest level since March 2011. All three major rating agencies lowered Slovenia's sovereign credit rating again in 2013, but the effect on yield dynamics was mostly overridden by investors' different perceptions of Slovenia's creditworthiness. In downgrading the sovereign credit rating, agencies exposed the rapid increase in debt related to the bank balance sheet repair (see Indicator 1.8).

**The debt ratio of the government of Slovenia, having been the seventeenth highest in the EU in 2012, was the fifteenth highest in 2013.**<sup>5</sup> The increase in the ratio was the third largest among EU countries in 2013. Besides the nominal increase in debt, in most countries the debt ratio dynamics were also influenced by a nominal change in GDP. The largest debt increases in the EU were recorded in countries facing recession and in those undergoing large post-crisis fiscal adjustments.

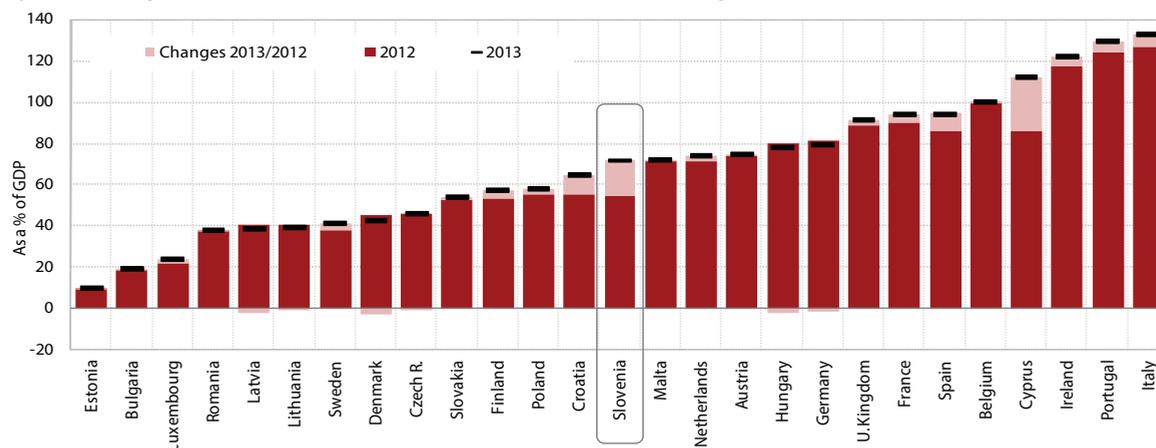
<sup>5</sup> The comparison with EU countries is based on data from the Winter Forecast of the European Commission (February 2014); for Slovenia, the figures released by SURS were taken into account (March 2014).

Table: Consolidated general government debt by sub-sector, Slovenia

	2008	2009	2010	2011	2012	2013
<b>In EUR bn</b>						
<b>General government, total</b>	<b>8.2</b>	<b>12.5</b>	<b>13.7</b>	<b>17</b>	<b>19.2</b>	<b>25.3</b>
Central government	8.1	12.1	13.2	16.4	18.6	24.8
Local government	0.4	0.5	0.6	0.7	0.7	0.7
Social security funds	0	0	0.1	0.1	0.1	0
Consolidated debt between sub-sectors	-0.3	-0.2	-0.1	-0.1	-0.2	-0.2
<b>As a % of GDP</b>						
<b>General government, total</b>	<b>22.1</b>	<b>35.2</b>	<b>38.7</b>	<b>47.1</b>	<b>54.4</b>	<b>71.7</b>
Central government	21.8	34.2	37.2	45.4	52.7	70.2
Local government	0.9	1.5	1.8	1.9	2.0	2.1
Social security funds	0.0	0.0	0.1	0.1	0.1	0.0
Consolidated debt between sub-sectors	-0.7	-0.5	-0.4	-0.4	-0.5	-0.5

Source: SI-STAT Data Portal – National accounts – General government accounts – Main aggregates of national accounts, March 2014.

Figure: General government debt in EU countries in 2012 and 2013 and changes 2013/2012



Source: for EU countries, the European Commission, Winter Forecast, February 2014 (AMECO); for Slovenia, SURS, SI-STAT Data Portal – National Accounts – General government accounts – Main aggregates of national accounts, March 2014.

## 1.6 Balance of payments

**Slovenia's current account recorded the biggest surplus<sup>1</sup> to date in 2013.** In the first three years of the economic crisis it remained close to balanced, but in 2012 it moved into a surplus, which then almost doubled last year to EUR 2,223.8 m (6.3% of GDP). The spike in the surplus was largely a consequence of a positive merchandise trade balance, which turned from deficit to surplus as exports growth accelerated while imports growth was subdued due to a decline in domestic demand. The services trade and current transfers surplus widened, while the net outflows of factor income narrowed.

**The goods balance was in surplus for the first time (EUR 631.9 m), partially because the imports of equipment for an unfinished investment in a major energy installation were not yet included in the balance of payments statistics.** Aside from exports outpacing imports in real terms, the merchandise trade surplus was driven by quantity factors. The terms of trade improved as well, with import prices dropping at a faster pace than export prices<sup>2</sup>. One significant factor affecting the size of the merchandise trade surplus was the fact that imports of investment equipment for a major energy installation are not yet included in the balance of payments statistics<sup>3</sup>. The precise amount thereof can be inferred on the basis of the gap between the merchandise trade balance in the current account statistics and the merchandise trade balance under the methodology of national accounts (ESA95), which stood at EUR 316 m in 2013.

**The surplus of trade in services widened primarily due to favourable trade in the category "other business services".** The surplus in the services balance (EUR 2,003.8 m) widened by EUR 200.5 m over the year before, which is largely attributable to a higher surplus in international trade-related intermediation services and a narrower deficit in the trade in licences, patents and copyrights. Net income from travel services rose, mostly as a result of a decline in domestic household spending abroad. Trade in communication services also contributed to the improvement in the total balance, as the deficit

turned to a surplus due to higher exports. The surplus in construction services narrowed further despite an uptick in exports, as imports rose at a faster pace.

**The deficit in factor income narrowed last year as a result of a lower net outflow of capital income, whereas the net inflow of labour income rebounded again.** The deficit in the balance of factor incomes (EUR 434.8) was down EUR 117.3 m over the year before. Net outflows from FDI equity were lower, mostly as a consequence of lower negative reinvested profits<sup>4</sup>. Net income from investments in equities rose marginally, which is attributable to lower dividend payments to foreign portfolio investors. Net interest payments on external debt totalled EUR 511.3 m, up EUR 61.1 m over the year before. The increase was almost exclusively a result of the continuation of borrowing by the general government and relatively high interest rates, while the private sector (mostly domestic commercial banks<sup>5</sup>) continued to deleverage. Banks received more interest from abroad than they paid. Net interest payments on inter-company debt dropped, mostly due to lower interest paid by Slovenian companies to foreign shareholders. The central bank had a positive net interest balance, as the value of its claims exceeds the value of its liabilities to the Eurosystem. Largely due to an increase in the number of Slovenian residents working abroad, net income from labour was slightly higher as well.

**The surplus in current transfers was slightly wider last year.** Despite the continued improvement in the disbursement of funds from the EU budget, which amounted to EUR 508.2 m in 2013 (from EUR 451.3 m in 2012)<sup>6</sup>, the surplus in current transfers of the general government sector was narrower due to an increase in the share of investment incentives that are included among general government transfers on the capital account. On the other hand, the deficit of private sector transfers dropped on account of lower net payments of other transfers.

<sup>1</sup> Data in EUR are available from 1996.

<sup>2</sup> The terms of trade improved by 0.7% following three years of deterioration. Import prices dropped by 1.6% and export prices by 0.8%.

<sup>3</sup> The principle of economic ownership is used in balance of payments statistics. In the specific case of the construction of unit 6 at Šoštanj Thermal Power Plant, this means that the transaction will be recorded when economic ownership is transferred from seller to buyer.

<sup>4</sup> Negative reinvested profit means that net profit (excluding extraordinary profit) was lower in a given year than dividends, or that companies posted losses.

<sup>5</sup> From September 2008 to the end of 2013, commercial banks repaid EUR 11 bn in gross external debt.

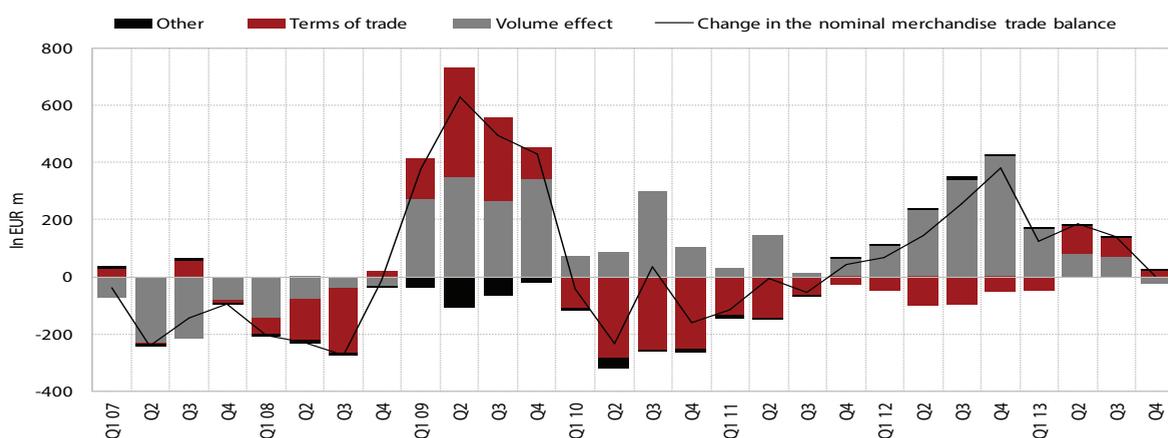
<sup>6</sup> Of the EUR 1,185.8 m in revenue budgeted in the supplementary budget, Slovenia received EUR 933.7 m from the EU budget last year (78.7% compared with 94.7% in 2012) and it paid EUR 425.4 m into the EU budget.

Table: The current account and terms of trade, Slovenia

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Current account, as a % of GDP</b>	-0.3	-2.7	-1.7	-1.8	-4.2	-5.4	-0.5	-0.1	0.4	3.3	6.3
Good	-4.5	-5.7	-3.6	-3.0	-4.2	-5.8	-1.2	-2.3	-2.6	-0.3	1.8
Services	2.8	2.3	3.2	3.2	3.0	3.8	3.3	3.6	4.1	5.1	5.7
Labour and capital income	1.0	0.1	-1.0	-1.4	-2.3	-2.8	-2.0	-1.7	-1.4	-1.6	-1.2
Current transfers	0.5	0.6	-0.3	-0.6	-0.7	-0.8	-0.5	0.2	0.4	0.1	0.1
<b>Real growth rates of trade in goods and services, in %</b>											
Exports of goods and services	1.1	13.1	10.6	12.5	13.7	4.0	-16.1	10.2	7.0	0.6	2.9
Imports of merchandise and services	11.3	7.1	6.7	12.2	16.7	3.7	-19.2	7.4	5.6	-4.7	1.3
<b>Terms of trade, index</b>											
Total	103.0	96.9	98.0	99.5	100.9	98.5	103.7	96.1	98.6	99.0	100.8
Goods	103.1	96.2	97.6	99.6	100.6	98.2	104.0	95.2	98.4	98.8	100.7
Services	100.6	102.1	100.0	99.5	102.7	99.4	99.9	101.1	100.3	99.9	100.0

Source: SI-STAT Data Portal – National accounts, 2014; Bulletin of the Bank of Slovenia, 2014; calculations by IMAD.

Figure: The contribution of volumes and prices to the merchandise trade balance



Source: SI-STAT Data Portal – National accounts, 2014; calculations by IMAD.

Note: The effect of the terms of trade and the volume effect are calculated based on data from the national accounts statistics. The contribution of the terms of trade shows the contribution of the growth of foreign trade prices to the year-on-year change in the nominal balance, taking into account the volume of merchandise trade in the same quarter of the previous year. The contribution of the volume effect shows the contribution of real growth in merchandise trade to the change in the nominal balance, taking into account the terms of trade in the same period of the previous year. The item 'Other' shows the mutual impact of the growth in prices and the growth in volume.

## 1.7 Gross external debt

**Despite a substantial increase in the general government debt, gross external debt dropped in 2013 as central bank liabilities to the Eurosystem declined and the deleveraging of commercial banks continued apace.** The total gross external debt stood at EUR 39.6 bn at the end of 2013, down EUR 1.3 bn over December 2012. The entire reduction was the result of a drop in short-term debt, as long-term debt rose after two years of decline and represented three-quarters of total debt<sup>1</sup>.

**Last year, following the biggest annual increase since the start of the crisis, general government debt expanded to 39.0% of total external debt, whereas the share of commercial banks narrowed to 18.9% after the fifth year of deleveraging.** The general government debt surged by EUR 4.4 bn last year to EUR 15.4 bn. In May the treasury issued 5- and 10-year bonds on the US market worth a combined USD 3.5 bn (EUR 2.7 bn) and in November it issued a 3-year EUR 1.5 bn bond on the euro market. The debt of other sectors (including corporates) rose yet again (by EUR 0.7 bn to EUR 10.7 bn), mostly as a result of the reclassification of foreign investments as loans. A decrease in the central bank's liabilities to the Eurosystem<sup>2</sup> accounted for the bulk of the drop in total external debt, as it plunged by EUR 3.4 bn to EUR 1.3 bn, the lowest level since Slovenia joined the euro area. Banks continued to reduce their foreign liabilities, which dropped by EUR 2.4 bn to EUR 7.5 bn. As in 2012, commercial banks repaid their loans and liabilities to foreign portfolio investors, whereas non-residents withdrew deposits from Slovenian banks. The gross external debt of affiliates (companies with a foreign ownership share of 10% or more) declined in 2013, dropping by EUR 0.6 bn to EUR 4.6 bn. Debt liabilities to foreign direct investors<sup>3</sup> in particular declined. In the period of 2008–2013 the total gross external debt rose by only 0.3 bn, but its structure changed profoundly. General government debt surged by EUR 11.7 bn, whereas the debt of commercial banks fell sharply, by EUR 10.4 bn.

**In terms of the guarantee structure, only publicly guaranteed debt rose in 2013.** Public debt<sup>4</sup> increased by EUR 4.4 bn to EUR 15.4 bn. Publicly guaranteed debt<sup>5</sup> dropped by EUR 3.5 bn to EUR 5.2 bn, almost entirely due to the decline in short-term central bank liabilities to the Eurosystem. At the end of 2013, public debt accounted for 39.0% of total gross external debt, an increase of 29.5 percentage points over 2008, whereas the share of publicly guaranteed debt was 13.2%, down 0.6 percentage points compared with 2008. *Non-guaranteed private debt* has been declining since the start of the crisis mostly as a result of deleveraging by banks, which continued at a rate of EUR 2.2 bn last year. Compared with 2008, it dropped by EUR 11.2 bn to EUR 18.9 bn.

**Slovenia is second only to Slovakia among the countries with the lowest gross external debt in the euro area.** Slovenia's gross external debt reached 112.2% of GDP at the end of 2013 (a decrease of 3.5 percentage points year-on-year) and remains well below the euro area average of 220.0% of GDP in 2012 (the latest year for which data are available).

<sup>1</sup> The share of total debt excluding the liabilities of affiliates for which maturity has not been published.

<sup>2</sup> The balance in the Eurosystem occurs with the settlement of cross-border liabilities between euro area banks in the TARGET2 system. These bilateral balances are automatically merged and offset through the Eurosystem at the end of each trading day, leaving the individual national central banks with a single net bilateral position to the ECB. Some national central banks have claims and other liabilities to the ECB in the TARGET2 system.

<sup>3</sup> Mostly due to the reclassification of loans.

<sup>4</sup> External debt is generated by the borrowing of the institutional sector General government (according to ESA95) on foreign financial markets. The government may borrow from international financial institutions, foreign governments or government agencies, foreign commercial banks and even from private lenders in the event of an issue of transferable securities on a foreign financial market.

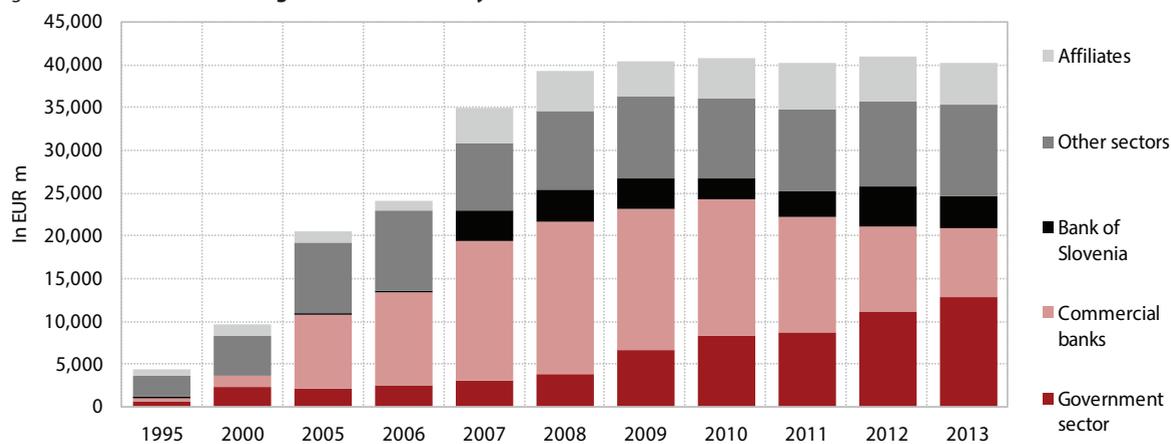
<sup>5</sup> Publicly guaranteed debt is a liability of a private legal entity, but payment is guaranteed by the state. Publicly guaranteed debt includes Bank of Slovenia liabilities to the Eurosystem incurred by the transfer of monetary policy from the central bank to the ECB.

Table: Slovenia's gross external debt position, end of year, in EUR m

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Total gross external debt</b>	4,275	9,491	20,496	24,067	34,783	39,234	40,318	40,723	40,100	40,849	39,566
Short-term debt	1,470	2,283	4,573	5,239	10,733	11,595	9,661	8,430	8,203	10,384	6,256
Public and publicly guaranteed debt	0	0	70	77	3,588	3,603	3,360	2,145	2,774	4,613	1,087
Non-guaranteed private debt	1,470	2,283	4,503	5,162	7,145	7,992	6,301	6,285	5,429	5,771	5,169
Long-term debt	2,083	5,895	14,509	17,710	20,058	22,820	26,456	27,627	26,553	25,225	28,652
Public and publicly guaranteed debt	1,178	2,883	3,729	4,275	4,508	5,533	10,602	14,351	14,158	15,173	19,584
Non-guaranteed private debt	905	3,012	10,780	13,435	15,550	17,287	15,854	13,276	12,395	10,052	9,068
Liabilities to affiliates	722	1,312	1,415	1,119	3,992	4,818	4,202	4,666	5,343	5,239	4,658
Public and publicly guaranteed debt	0	0	0	0	0	0	0	0	0	0	0
Non-guaranteed private debt	722	1,312	1,415	1,119	3,992	4,818	4,202	4,666	5,343	5,239	4,658

Source: Bulletin of the Bank of Slovenia, 2014.

Figure: Structure of Slovenia's gross external debt by sector



Source: Bulletin of the Bank of Slovenia, 2014; calculations by IMAD.

## 1.8 Yield on 10-year government bonds

**The dynamics of Slovenia's government borrowing cost in 2013 were, in addition to international factors, influenced particularly by the uncertainty regarding the pace and the fiscal impact of the banking system repair.** In the first quarter of 2013 the yield on the 10-year government bond fluctuated around 5%. The yield dynamics were also affected by the change of government in that period, but neither significantly nor permanently. In April 2013 the borrowing conditions changed radically under the impact of developments in the most exposed countries of the euro area (due to contagion from the Cyprus crisis in particular). Moreover, the yields required for Slovenian government bonds also rose (to 6.63%, the highest level in 2013) as a result of the uncertainty of international markets regarding the ability of Slovenia to resolve its banking system problems by itself. After the issuance of an 18-month treasury bill in the amount of EUR 1.1 bn in April, and the issuance of dual tranche bonds in the total amount of USD 3.5 bn on the US market, the yield reached the lowest value in the first half of the year (5.20% on May 10).<sup>1</sup> Given the increasing share of general government debt denominated in US dollars, last year's movements of Slovenian government bond yields were also significantly impacted by the Fed's policies. When the Fed announced its intention to reduce the pace of asset purchase, the yield on Slovenian government bonds rose again to 6.32% in June. The yield average in the period from June to October (6.10%) was relatively stable but high. After November's issue of a 3-year euro bond by means of private placement, and especially after the announcement of the asset quality review and stress test results on December 12 and the recapitalisation of the largest banks, the yield fell below 5% and was similar to March 2011 at the end of the year (4.39%). The decline also continued in the first quarter of 2014.

**The three major credit rating agencies further downgraded Slovenia's credit rating in 2013.** Standard & Poor's (S&P) and Fitch lowered Slovenia's credit rating by one notch in February and May, respectively. Moody's stripped Slovenia of its investment grade in April, but the impact of this downgrade on the government bond yield was neither significant nor permanent. Among the arguments for credit rating downgrades, all three

credit rating agencies referred to the anticipated debt burden associated with the government's support to the banks. At the beginning of 2014 Moody's already improved the outlook to stable from negative.

**The yields on government bonds of euro area countries continued to converge last year, reflecting an easing of financial stress in spite of the Cyprus turbulence and the spillover effects of the Fed's policies.** The yields of the core euro area countries remained fairly stable in 2013, being temporarily positively affected from the flight to safety during the Cyprus crisis. The Fed's announcement of a monetary stimulus withdrawal had an adverse impact on individual countries' bond yields, depending on the perception of the strength of the fundamentals of each country. Large peripheral countries were affected more, but only temporarily, as they nevertheless experienced the lowest borrowing costs in the last two years in the final quarter of the year. This was a result of the expressed willingness of the ECB to intervene on the government bond market, which has eased financial market tensions decisively since the second half of 2012. At the end of 2013, core countries exhibited similar yield levels as at the beginning of the year.

<sup>1</sup> The issue of a dual-tranche 10-year (6%) and a 5-year (4.95%) bond in a total amount of USD 3.5 bn. Swapped back to EUR, the yield on the 10-year tranche was 5.45% and on the 5-year tranche 4.59%.

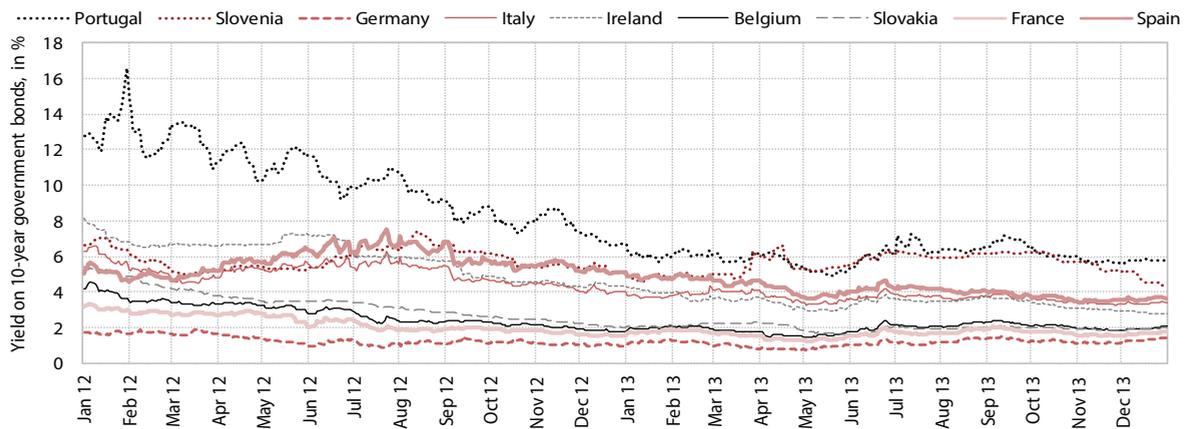
Table: Credit ratings (April 2014) and changes between 2008 and 2014

Country	Agency	As of April 2014	Change 2014/2008
Greece	Fitch	B-	↓10 *
	Moody's S&P	Caa3	↓14
Cyprus	Fitch	CCC	↓13**
	Moody's S&P	Caa3 (poz)	↓15**
Ireland	Fitch	BBB+	↓7
	Moody's S&P	Baa3 (poz)	↓9
Portugal	Fitch	BBB+ (poz)	↓7
	Moody's S&P	BB+ (neg)	↓8
Spain	Fitch	Ba3	↓10
	Moody's S&P	BB (neg)	↓8
Italy	Fitch	BBB	↓9
	Moody's S&P	Baa2 (poz)	↓11
Slovenia	Fitch	BBB-	↓8
	Moody's S&P	BBB+ (neg)	↓4
Italy	Fitch	Baa2	↓6
	Moody's S&P	BBB (neg)	↓4
Slovenia	Fitch	BBB+ (neg)	↓5
	Moody's S&P	Ba1	↓7
Slovenia	Fitch	A-	↓4
	Moody's S&P	A-	↓4

Source: Standard & Poor's, Moody's, Fitch, 2014.

Notes: \* In December 2012 Greece was initially downgraded to SD (selective default); in 2013 its rating was upgraded to B-; \*\* Cyprus was downgraded to SD in June 2013, then all credit rating agencies upgraded its rating slightly; neg - negative outlook; pos - positive outlook; change: cumulative downgrade in the period.

Figure: Yield on 10-year government bonds denominated in euros



Source: Bloomberg.

## 1.9 Development of the financial sector

**The level of development of Slovenia's financial sector has deteriorated in recent years compared with the EU average.** This is a consequence not only of the state of the banking system but also of the extremely shallow capital market, which is very poorly developed even compared with the new Member States. The poorly developed financial system constrains access to financing, acting as a drag on the economic recovery.

**The value of the indicator of total bank assets to GDP dropped for the fourth year in a row in 2013.** It reached 112.7% of GDP, down almost 18 percentage points over the year before. The drop is largely a result of a 13.8% decline in total bank assets, whereas GDP contracted minimally in nominal terms (0.1%). The trend was driven by the cleaning of bank balance sheets at the end of the year, when EUR 3.3 bn in non-performing loans were transferred to the Bank Assets Management Company, and the continued strong contraction of lending to the non-bank sector. Banks continued to deleverage abroad and, to a lesser extent, reduced their domestic liabilities. Outflows of household deposits surged compared with 2012, whereas the state mitigated liquidity pressure on the domestic banking system with new deposits, although their volume dropped substantially at the end of the year, by EUR 2.8 bn to EUR 1.3 bn, due to bank recapitalisation. In 2012 (the latest year for which data are available), Slovenia reached under 40% of the EU average in terms of total assets as a share of GDP, although that was still an improvement on the year before. In the EU this indicator declined at a faster pace than in Slovenia, even though total assets dropped at a slower rate than in Slovenia owing to more favourable GDP trends. The majority of the new Member States still have lower indicators (except Malta and Cyprus), although the gap narrowed considerably in the previous year.

**The value of the indicator of market capitalisation relative to GDP inched up in 2013, but was still at only slightly over a quarter of its peak in 2007.** Even though the number of shares listed on the Ljubljana Stock Exchange dropped, market capitalisation rose by 5.3% to EUR 5.2 bn. We estimate that the growth was largely driven by expectations regarding the privatisation of Slovenian companies in the last quarter of the year. This has aroused the interest of investors in companies listed on the Ljubljana Stock Exchange, where the benchmark SBI TOP index rose by 3.2% in 2013. The growth was entirely a result of

the positive trends in the final quarter, when the index added 6.6%. The share turnover dropped by 1.1%, however, and Ljubljana remains one of the least liquid stock exchanges in the EU as the turnover to market capitalisation ratio was only 0.05 compared with over 0.5 on the most liquid markets. Even though the value of this indicator improved last year, the gap with the EU widened. Market capitalisation to GDP was thus at around 20% of the average in the EU, where market capitalisation of shares expanded by 17.1% last year, although at approximately EUR 9,600 bn, it was still about a tenth below its peak in 2007.

**The volume of insurance premiums relative to GDP is the only indicator that has remained almost unchanged throughout the crisis; it is also where Slovenia has the narrowest gap with the EU average<sup>1</sup>.** Its value remained 5.8% of GDP in 2012, which is just over two-thirds of the EU average. We estimate that one of the reasons it has not significantly decreased is the difference in the structure of insurance premiums. In Slovenia, non-life insurance still accounts for over 70% of total gross written premiums. We estimate non-life premiums are less responsive to change in income and at EUR 1.5 bn they achieved the highest level ever in 2012. Nevertheless, growth has slowed down substantially during the crisis and preliminary data for the first nine months of 2013 indicate the volume of non-life premiums started to gradually contract. Life premiums are more responsive to change in income, but they are less relevant in Slovenia compared with the EU, where they account for about 60% of total premiums written. The majority of new Member States (except Malta) as well as Spain, Austria and Greece had lower values of this indicator than Slovenia.

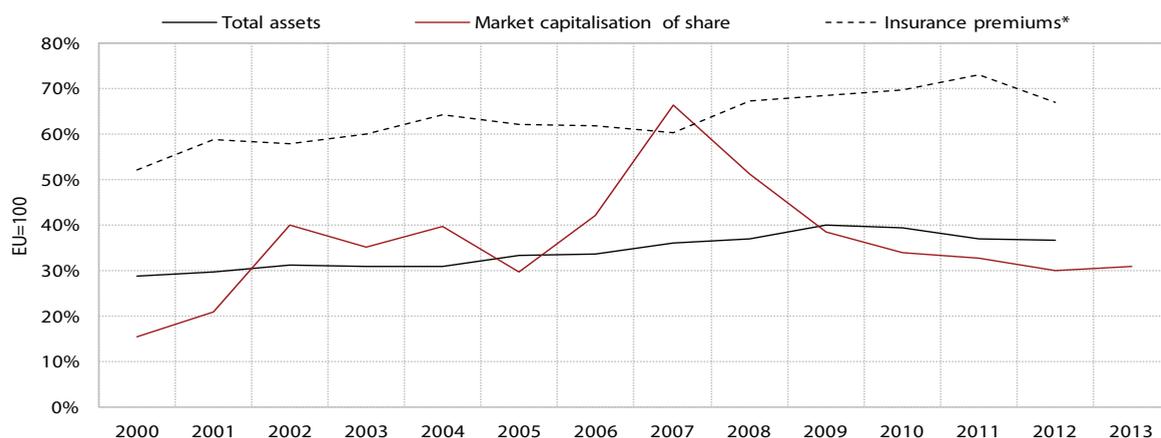
<sup>1</sup> Data for Estonia, Lithuania and Latvia are not yet available.

Table: Indicators of the development of the financial system

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total assets, as a % of GDP	58.3	70.4	101.8	109.1	122.4	127.9	145.7	141.8	134.8	129.3	112.7
Market capitalisation, as a % of GDP	1.6	15.6	23.3	37.1	57.1	22.7	23.9	19.8	13.5	13.9	14.7
Insurance premiums, as a % of GDP	4.2	4.4	5.4	5.6	5.5	5.4	5.9	5.9	5.8	5.8	N/A

Source: Financial Stability Report (various volumes), Annual Statistical Report (Ljubljana Stock Exchange – various volumes), Statistical Insurance Bulletin (Slovenian Insurance Association – various volumes), National Accounts (SURS), 2014.  
Note: N/A – not available.

Figure: Indicators of the development of the financial system, Slovenia, EU-28=100



Source: Financial Stability Report (various volumes), Annual Statistical Report (Ljubljana Stock Exchange – various volumes), Statistical Insurance Bulletin (Slovenian Insurance Association – various volumes), National Accounts (SURS), Eurostat, European Insurance in Figures.

## 1.10 Loan-to-deposit ratio

***The loan-to-deposit ratio in the Slovenian banking system sagged again in 2013 after the decline slowed in 2012.*** The loan-to-deposit ratio, which had been surging during the period of rapid economic growth and accelerated borrowing, had been dropping since 2008, when it stood at 1.64. In 2013 it dropped by as much as 0.16 points to 1.21, the second biggest decline since the start of the financial crisis. The only time a sharper drop was recorded was in 2009 (0.17 points), when the volume of deposits spiked due to the government's intervention and the lending activity of the Slovenian banks had not yet started to decline. The declining value of the indicator suggests that the Slovenian banking system is reducing its dependence on non-deposit sources of financing, in particular foreign bank sources, which dropped to EUR 5.7 bn by the end of 2013 to only 12.4% of the total assets of the banking system (compared with about 35% at the end of 2008). The indicator was declining for most of 2013, largely as a consequence of the deleveraging of non-bank sectors. The start of the restructuring of the banking system at the end of 2013 did not change the trend as, in addition to the volume of loans to non-banking sectors (down EUR 3.4 bn), the volume of their deposits also contracted (down EUR 2.5 bn) in December relative to November. Lending to corporates and NFIs contracted at the fastest pace in 2013 (by EUR 5 bn), but the deleveraging of households was also more pronounced than in 2012. The contraction of deposits is largely attributable to the recapitalisation of the bank sector, as the bulk of government deposits were converted to capital. Government deposits thus halved to EUR 1.3bn in 2013, the lowest level since 2008. Household deposits were down by EUR 500 m, the second consecutive year of decline. The contraction, although proceeding apace for much of the year, accelerated at the end of the first quarter and the beginning of the second quarter, when the situation in Cyprus escalated. On the other hand, deposits by corporates and NFIs expanded (by about EUR 570 m), which slightly mitigated the liquidity pressure on the banking system.

***Compared with other EU Member States, Slovenia still has an above-average loan-to-deposit ratio.*** In 2012, the final year for which international data are available, the loan-to-deposit indicator dropped at roughly the same pace in Slovenia and the EU as a whole and the gap remained at around 25 percentage points. The Scandinavian and Baltic countries

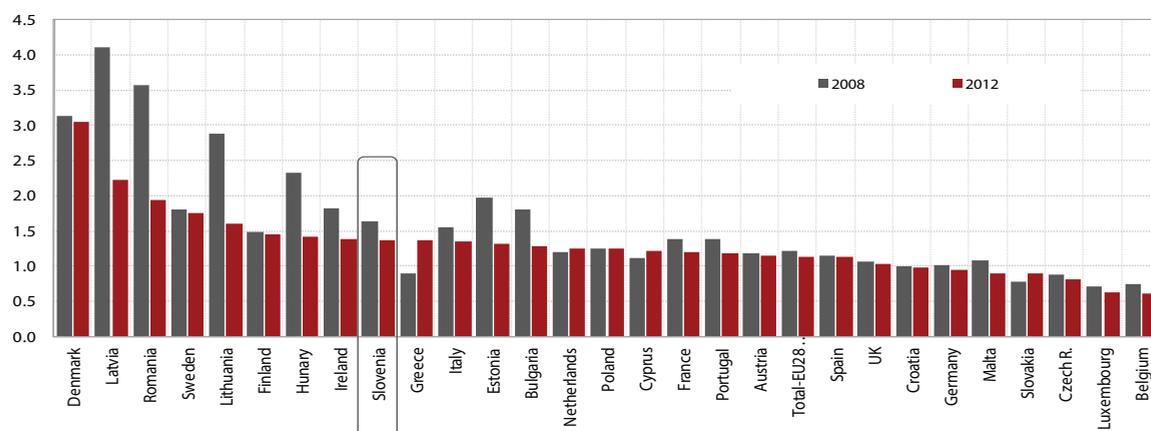
(excluding Estonia) as well as Ireland, Hungary and Romania had higher loan-to-deposit ratios than Slovenia. Even though the indicator recorded a drop that was bigger than in the EU by a factor of three since 2008, the decline was still less pronounced than in other countries, which had had above-average loan-to-deposit ratios coming into the crisis. We estimate that this is chiefly the consequence of the slow restructuring of the Slovenian banking system prior to 2013.

Table: The volume of loans and deposits by domestic and foreign non-bank sectors in the Slovenian banking system

In EUR m	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Loans</b>										
Households	3,429	4,292	5,387	6,852	7,881	8,442	9,311	9,482	9,298	8,948
Central government	1,258	587	571	421	394	511	703	654	1,150	1,098
Other non-bank sectors	9,702	12,002	15,431	21,953	26,270	26,452	26,198	25,106	23,481	18,527
<b>Deposits</b>										
Households	10,324	10,856	11,680	12,809	13,992	14,639	15,170	15,445	15,411	14,908
Central government	442	698	945	1,270	1,724	3,922	3,558	3,796	3,590	2,319
Other non-bank sectors	4,335	4,834	5,309	5,760	5,401	5,657	5,912	6,159	5,731	6,236

Source: Bank of Slovenia; calculations by IMAD.

Figure: Loan-to-deposit ratio, 2008 and 2012



Source: EBF; calculations by IMAD.  
Note: \*The data are for 2011.

## 1.11 Non-performing claims

**The volume of non-performing claims is one of the key indicators of the banking system.** Non-performing claims are defined as claims over 90 days in default. A higher share of such claims indicates lower banking system revenue, meaning that banks need to make additional provisioning, which severely affects their business results and heightens the need for additional capital to meet the capital adequacy requirements.

**In 2012 the share of non-performing claims in Slovenia was above the EU average by a factor of 2.5<sup>1</sup>.** After 2009 the increase in non-performing claims in the EU sharply levelled off to about 0.5 percentage points per year as many countries took action on bank resolution, but in Slovenia the quality of bank assets deteriorated at an average annual rate of 3 percentage points in this period. By the end of 2012 the share of non-performing claims exceeded 15% of total claims, which was among the highest in the EU. The quality of bank assets continued to deteriorate for much of 2013 (until the start of bank restructuring at a similar rate as in the preceding three years. At its peak in November, the share of non-performing claims reached 17.3% or EUR 7.8 bn. As the bank restructuring process got under way, the share of non-performing claims dropped to EUR 5.5 bn or 13.4% of total claims by the end of 2013, a level that is still high according to international comparisons. The challenge ahead will be to continue reducing the share of non-performing claims without additional public funding, which can be achieved only through improvement of the economic situation and better bank governance.

**Since the onset of the crisis, the share of non-performing claims increased at a faster rate than in the majority of other EU Member States, which we attribute to poor bank governance in the past, a stronger contraction of economic activity, and the deferral of bank resolution.** At the onset of the crisis banks eased the pressure on the expansion of non-performing claims by refinancing loans to corporates. But as access to financing tightened, the scope for refinancing narrowed, which accelerated the expansion of non-performing claims. We estimate that the initial surge in non-performing claims was largely a result of an inappropriate crediting policy of Slovenian banks, in particular banks in state ownership and those connected with narrow

interest groups. A significant portion of banks' activity had been focused on financing projects that were not entirely economically justified and were not dedicated to strengthening the competitiveness of the companies. Soon after the outbreak of the crisis, these companies were no longer able to pay back their matured liabilities. Based on data on the classification of bank investments in rating classes, it is clear that in the initial years of the crisis the share of non-performing claims<sup>2</sup> widened significantly only in certain industries (construction and industries where major takeovers had been undertaken). In recent years, the economic slowdown was also a significant factor behind the trend, as slower corporate activity severely exacerbated the burden of debt servicing. The significantly higher share of non-performing claims than in the EU is also attributed to the delayed reaction to the problems in the banking sector.

<sup>1</sup> Data for Finland and Germany are missing.

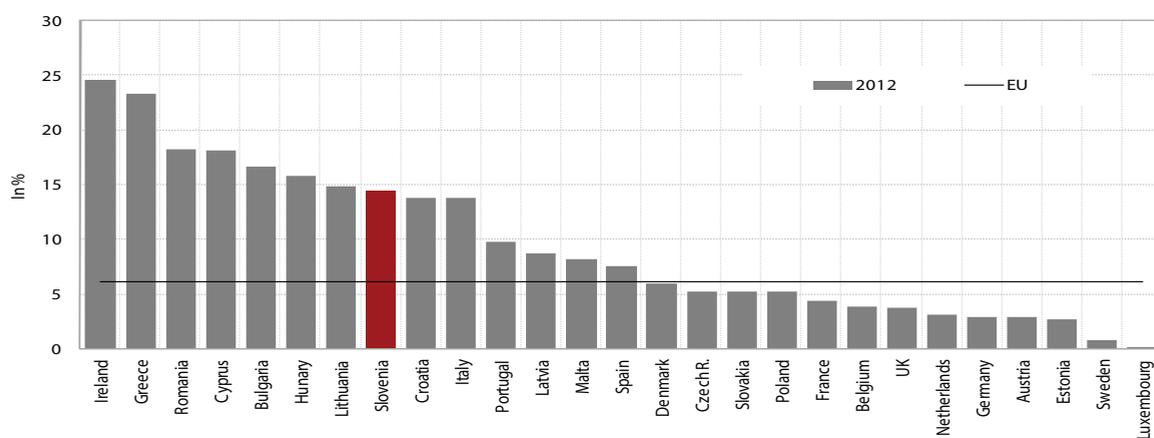
<sup>2</sup> D- and E-rated claims.

Table : Annual growth rates of the volume of non-performing claims in EU Member States , in %

	2009	2010	2011	2012
<b>EU*</b>	71.6	12.2	<b>13.7</b>	<b>12.8</b>
Austria	12.7	18.6	0.1	-0.1
Belgium	68.5	-7.8	15.1	5.4
Bulgaria	179.3	90.5	30.8	14.6
Croatia	N/A	49.9	14.9	8.8
Cyprus	34.7	33.0	59.5	84.8
Czech Republic	68.3	30.3	-0.6	5.0
Denmark	N/A	N/A	-0.9	12.9
Estonia	146.8	-3.7	-26.9	-35.0
France	48.8	8.7	9.2	0.7
Greece	61.6	68.9	47.5	46.8
Hungary	106.8	44.0	20.8	7.7
Ireland	380.1	-16.3	26.4	29.5
Italy	40.6	17.7	13.3	18.5
Latvia	541.6	7.6	-14.3	-43.0
Lithuania	226.3	-10.9	-29.2	-26.1
Luxembourg	-11.4	-21.9	53.6	-64.3
Malta	18.9	26.9	2.8	14.0
Netherlands	75.0	-12.4	-4.2	11.5
Poland	58.3	33.8	-2.8	25.3
Portugal	33.3	13.1	39.1	23.3
Romania	175.4	58.8	27.2	18.7
Slovakia	68.9	15.5	4.0	-4.0
<b>Slovenia</b>	<b>46.2</b>	<b>44.3</b>	<b>43.8</b>	<b>26.1</b>
Spain	48.9	15.3	28.4	17.4
Sweden	87.3	2.8	-7.4	6.1
United Kingdom	116.1	9.3	2.8	-4.7

Source: International Monetary Fund; calculations by IMAD.  
 Notes: \* Excluding Germany and Finland. N/A - not available

Figure: Non-performing claims as a share of all banking system claims, 2012



Source: International Monetary Fund; Bank of Slovenia; calculations by IMAD. Note: the EU average does not include Germany and Finland.

## 1.12 Labour productivity

**As the economy contracted, labour productivity<sup>1</sup> initially dropped in 2012, but then rose marginally in 2013 as employment adjusted to the sluggish economic activity.** Productivity plunged by 6.2% in 2009, when the economy sharply contracted. This was followed in 2010 and 2011 by increases (of 3.5% and 2.4% respectively) that almost entirely compensated the deep slump at the start of the crisis. Against the backdrop of modest economic growth (1.3% and 0.7% respectively), the rebound in productivity growth was largely underpinned by the decline in employment, which adjusted to slower economic activity with a delay. In 2012 and 2013 the economy contracted again, in 2012 at a pace that was significantly faster than the drop in employment, which again brought down productivity (by 1.7%). In 2013 employment was adjusted to past economic trends to a more significant degree, which returned productivity to growth (0.9%). The decline in productivity in 2012 is largely attributable to industries that recorded the most significant productivity gains in the preceding two years (in particular manufacturing, transport, and retail and wholesale trade), and construction, where productivity has been declining since the onset of the crisis. In 2013 subdued productivity growth was recorded in the majority of private sector industries except in finance, insurance and construction.

**After a far sharper decline in 2009, productivity growth in the subsequent years (with the exception of 2012) slightly outpaced that in the EU-28.** Real productivity growth had outpaced (3.5% and 2.4% respectively) that in the EU in 2010 and 2011 (2.5% and 1.4% respectively), but in the EU the decline had been less pronounced (2.8%) than in Slovenia (6.2%) in 2009. What is more, in both years the improvement in productivity stemmed from a larger degree than in the EU from the adjustment of employment, whereas economic activity was weaker than in the EU<sup>2</sup>. In 2012 economic activity in the EU as a whole contracted (-0.4%), but at a far slower pace than in Slovenia (-2.5%). Moreover, in the EU the decline in employment (-0.5%) was far more closely aligned to the contraction of GDP than in Slovenia; accordingly,

the productivity trend in the EU was less unfavourable than in Slovenia. In 2013 employment adjusted to slower economic activity and Slovenia recorded slightly higher productivity growth (0.9%) than the EU (0.4%).

**Labour productivity expressed in purchasing power standards was at 81% of the EU average in 2012 (the latest year for which the data are available), which is on a par with 2011 and 3 percentage points lower than at the outset of the crisis in 2008.** Since GDP contracted faster than in the EU, Slovenia's gap with the average level of productivity in the EU (based on purchasing power standards) widened by 4 percentage points in 2009 but narrowed by 1 percentage points on the back of faster productivity growth by 2011, where it remained in 2012. A significantly lower relative price level helped Slovenia retain its standing in labour productivity based on purchasing power standards in 2012 even though the decline in productivity was more pronounced than in the EU; the general level of the entire range of products and services which comprise GDP was at 80% of the EU average<sup>3</sup> in 2012 compared with 83% in 2011.

<sup>1</sup> Measured as the ratio between gross domestic product at constant prices and the number of employees based on the methodology of national accounts.

<sup>2</sup> In 2010 employment fell 2.2% in Slovenia and 0.5% in the EU; in 2011 it dropped by 1.6% in Slovenia but already slightly recovered in the EU (by 0.2%). GDP growth in Slovenia was 1.3% in 2010 and 0.7% in 2011, compared with 2.0% and 1.7%, respectively, in the EU.

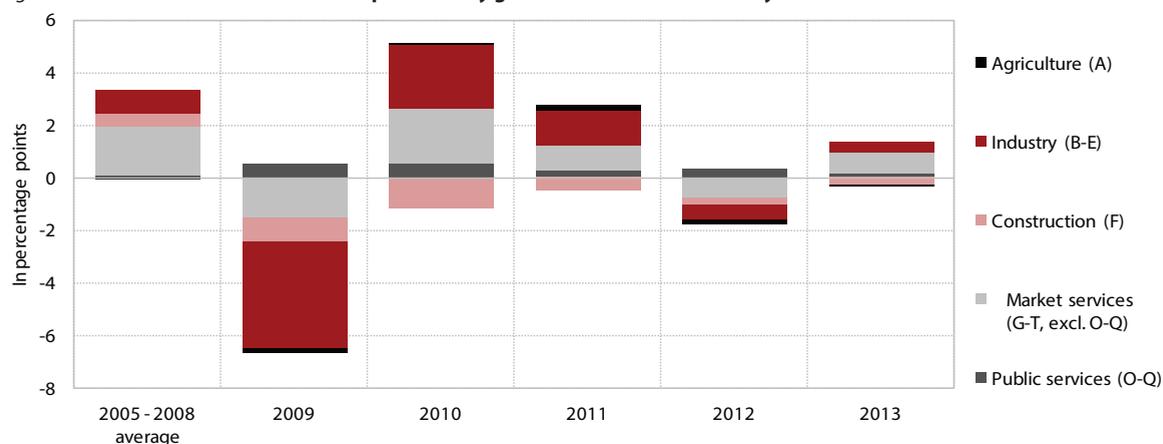
<sup>3</sup> The implicit GDP deflator was also lower (0.2%) than in the EU (1.5%) in 2012.

Table: Labour productivity based on Purchasing Power Standards (PPS), EU-28=100

	2005	2006	2007	2008	2009	2010	2011	2012
EU-28	100	100	100	100	100	100	100	100
Austria	119	119	117	117	116	115	116	115
Belgium	131	129	128	127	128	130	129	129
Bulgaria	36	36	38	40	40	41	43	44
Cyprus	83	84	85	91	92	91	90	93
Czech Republic	73	74	76	74	76	75	75	74
Denmark	107	107	105	106	107	113	112	112
Estonia	61	62	67	66	66	69	70	70
Finland	111	111	114	113	110	110	110	109
France	117	115	116	115	117	117	117	116
Greece	96	97	96	98	98	93	90	92
Croatia	75	74	76	78	76	75	78	81
Ireland	136	136	137	127	133	138	142	142
Italy	112	111	112	113	113	112	111	109
Latvia	48	49	51	52	53	61	64	66
Lithuania	55	57	60	62	58	68	73	74
Luxembourg	170	180	180	169	160	165	166	163
Hungary	68	68	67	71	72	72	73	71
Malta	95	93	92	95	97	97	94	92
Germany	109	109	108	108	104	107	109	107
Netherlands	115	115	115	116	113	111	110	109
Poland	62	61	62	62	66	68	70	74
Portugal	73	73	74	74	76	77	75	76
Romania	36	40	43	49	49	50	51	51
Slovakia	69	72	77	80	80	83	82	82
<b>Slovenia</b>	<b>83</b>	<b>84</b>	<b>83</b>	<b>84</b>	<b>80</b>	<b>80</b>	<b>81</b>	<b>81</b>
Spain	102	103	103	104	110	107	106	110
Sweden	112	113	115	114	112	115	114	114
United Kingdom	115	115	112	109	107	103	101	100

Source: Eurostat Portal Page - Economy and finance, 2014; calculations by IMAD.

Figure: Sectoral contributions to labour productivity growth in Slovenia's economy



Source: Calculations by IMAD based on SURS data (National accounts, 2013).

## 1.13 Market share

### **Preliminary data for 2013 indicate a turnaround of negative trends in Slovenia's export competitiveness.**

According to quarterly data, Slovenia's world market share increased in the first nine months of 2013 after five consecutive years of decline, with the rebound outpacing the EU average<sup>1</sup>. The turnaround was a result of increasing market shares in the majority of Slovenia's key trading partners within and outside the EU. Along with continued growth on the German, Italian, Austrian and Russian markets, market shares also increased in France, Croatia and the United States. Among manufactured goods, Slovenia's EU market share of chemical products continued to rise, the market share of machinery and transport equipment recovered after a three-year decline and the market share of manufactured goods classified by material remained level compared with 2012. However, the market share of miscellaneous manufactured articles contracted for the ninth year in a row. In the food and raw materials group, the market shares of electricity, oil and oil derivatives grew at the fastest pace yet again.

**In the period 2008–2012 the cumulative contraction of Slovenia's global market share in goods was among the sharpest in the EU.** In 2008–2010 Slovenia was in the group of EU countries with the most pronounced erosion of world market share (fourth place). As its market share remained roughly unchanged from the previous year in 2011 (-0.7%), while the decline in overall EU market share slowed (to 2.3%), Slovenia was in the middle of the EU Member States in 2011. In 2012 the decline of Slovenia's market share (-6.6%) was sharper than in the EU (-3.3%) yet

again. Slovenia's gap with the pre-crisis level was therefore among the widest in the EU (21.7%, the sixth sharpest decline). This indicates that the export competitiveness of the Slovenian economy has been strongly undermined during the crisis, which is partly a consequence of the regional and output structure of the country's exports (see Chapter 1.3).

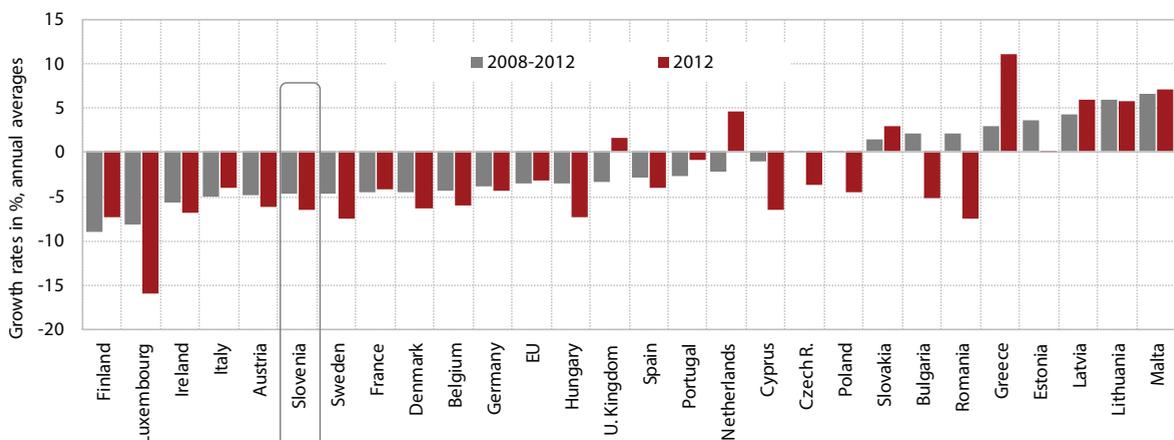
### **In 2012 Slovenia's market share in its key trading partners exceeded the 2007 level in Germany and Croatia.**

After having expanded for a year, Slovenia's market share in the EU contracted in 2012 (-4.9%), dropping significantly below the pre-crisis level (by 6.4% against a gap of 1.6% in 2011). The deterioration on the EU market is largely attributable to the declining market share in France (by almost a fifth) and in the majority of relatively less important EU markets<sup>2</sup>. The market shares in Germany, Italy and Austria, which are among Slovenia's key markets in the EU, rose. Outside the EU, the market share in Croatia and the US contracted again. In Russia, Serbia, Bosnia and Herzegovina and Macedonia, Slovenia's market share increased. In 2012 the market share in Slovenia's key trading partners exceeded the pre-crisis level only in Germany and Croatia.

### **In product markets, only the share of high-tech products exceeded the pre-crisis level in 2012.**

Among the key products of the manufacturing sector (SITC classification)<sup>3</sup>, the markets shares of the majority of products contracted in 2012, the exceptions being medical and pharmaceutical products, and machinery specialised for particular industries. The former was the only group aside from power generating machinery and equipment to exceed the pre-crisis level. In the *food and raw materials* group, the market share of oil and oil derivatives grew to significantly above the pre-

Figure: Market shares of EU Member States on the world market, average annual growth rates in %



Source: United Nations Commodity Trade Statistics Database, January 2014; calculations by IMAD.

<sup>1</sup> The annual increase in Slovenia's world share of merchandise exports was 3.3% in the first nine months (EU: 2.0%).

<sup>2</sup> Belgium, Bulgaria, Cyprus, Finland, Greece, Ireland, Lithuania, Netherlands, Poland, Portugal, Romania, Spain, Sweden, and the UK.

<sup>3</sup> With merchandise exports shares higher than 2%.

<sup>4</sup> The market share of electricity was 1.7-times higher than in 2007 and the market share of oil and oil derivatives rose by a factor of 4.3 in the same period.

crisis level, as did the market share of electricity<sup>4</sup>. This was a consequence of larger trade volumes in recent years, which were, however, largely not the result of changes in the structure of domestic consumption (see indicator 1.16). In terms of factor intensity, in 2012 all groups lost world market share, with the least pronounced decline registered for high-tech products (-1.7%) and resource-intensive products. The market share of medium-tech products declined by almost a

tenth and the market shares of low-tech and labour-intensive products declined by over a tenth, so that only the share of high-tech products exceeded the pre-crisis level in 2012 (1.8% above the 2007 level). The biggest gap compared with the pre-crisis level was recorded for low-tech and labour-intensive products (by almost a third), whereas the market shares of medium-tech and resource-intensive products were over a third below the 2007 level.

Table 1: Slovenia's world market share according to SITC

SITC code		Share in Slovenia's exports in 2012, in %	Share on the world market, annual growth in %		
			2001-2007	2008-2012	2012
<b>0 do 9</b>	<b>Total*</b>	<b>100.0</b>	<b>4.7</b>	<b>-5.1</b>	<b>-8.0</b>
0 do 4	Food and crude materials	14.0	5.8	1.4	-4.9
5 do 8	Manufactured goods	85.8	5.3	-4.6	-7.7
5	Chemicals and related products n.e.s.	17.8	5.7	-0.1	1.7
54	Medical and pharmaceutical products	10.0	4.9	0.8	0.2
6	Manufactured goods classified chiefly by material	22.1	2.8	-4.5	-6.6
..62	..Rubber manufactures	2.6	4.0	-6.7	-18.3
..64	..Paper, paperboard and articles of paper pulp, of paper or of paperboard	2.6	1.4	-1.6	-5.7
67	Iron and steel	3.8	3.1	-2.7	-5.2
68	Non-ferrous metals	3.0	0.8	-5.8	-2.3
69	Manufactures of metals, n.e.s.	4.6	5.9	-6.0	-9.4
7	Machinery and transport equipment	35.8	8.5	-5.0	-9.8
71	Power-generating machinery and equipment	3.1	4.3	0.6	-2.7
..72	..Machinery specialised for particular industries	2.6	9.3	-3.8	5.3
74	General industrial machinery n.e.s.	5.6	9.3	-5.8	-9.3
77	Electrical machinery, apparatus and appliances	10.2	6.1	-3.0	-10.8
78	Road vehicles	11.6	9.5	-7.7	-14.7
8	Miscellaneous manufactured articles	10.1	0.3	-9.0	-12.9
82	Furniture and parts thereof	2.5	-1.0	-14.0	-22.8
89	Miscellaneous manufactured articles n.e.s.	3.4	7.4	-4.8	-10.8

Source: United Nations, UNCTAD, January 2014; calculations by IMAD. Note: SITC – Standard International Trade Classification. \*All allocated products: SITC from 0 to 8 + 961+971.

Table 2: Slovenia's market share on the world market and in its main trading partners, in %

	2000	2005	2007	2008	2009	2010	2011	2012
<b>Share of world market<sup>1</sup></b>								
Slovenia	0.141	0.176	0.196	0.186	0.184	0.165	0.164	0.153
EU-27	38.400	39.065	38.598	36.935	36.860	34.087	33.200	32.100
<b>Slovenia's market shares in main trading partners<sup>2</sup></b>								
Germany	0.474	0.457	0.472	0.459	0.470	0.450	0.485	0.488
Italy	0.498	0.589	0.687	0.630	0.626	0.608	0.617	0.626
Austria	0.959	1.203	1.328	1.311	1.280	1.311	1.231	1.312
France	0.204	0.311	0.287	0.275	0.351	0.328	0.279	0.225
United Kingdom	0.055	0.086	0.115	0.110	0.110	0.106	0.108	0.086
Poland	0.470	0.446	0.515	0.487	0.437	0.480	0.432	0.421
Hungary	0.525	0.536	0.940	0.838	0.828	0.822	0.845	0.752
Czech Republic	0.468	0.521	0.574	0.507	0.514	0.458	0.478	0.537
Croatia	8.724	8.729	8.267	8.155	8.154	8.176	8.613	8.368
Serbia	N/A	N/A	5.447	5.109	5.587	5.381	4.932	5.023
Bosnia and Herzegovina	N/A	9.030	7.514	7.586	8.304	7.673	7.203	7.478
Russian Federation	0.564	0.587	0.473	0.445	0.429	0.342	0.339	0.383

Source: United Nations Commodity Trade Statistics Database, January 2014; calculations by IMAD.

Note: <sup>1</sup>The market share of exports is calculated as a share of merchandise exports of Slovenia or the EU (intra and extra) in world merchandise exports. <sup>2</sup>Slovenia's market shares in its main trading partners are calculated as shares of Slovenia's merchandise exports in the merchandise imports of its trading partner. N/A - not available.

## 1.14 Unit labour costs

**After one year of growth, unit labour costs dropped in 2013 according to preliminary data. Before 2011 real unit labour costs had grown for three consecutive years, in 2008 and 2010<sup>1</sup> on account of rapid wage growth and in 2009 due to a decline in labour productivity. The dip in 2011 was a consequence of slower wage growth.** Specifically, public sector wages remained unchanged for the second consecutive year due to austerity measures, while the growth of private sector wages declined. When labour productivity dropped in 2012 due to slower economic activity, real unit labour costs rebounded despite a concomitant decline in wages. But as labour productivity improved and wages dropped in 2013, real unit labour costs decreased. The decline in economic activity otherwise continued, but amid a more pronounced decline in employment.

**In 2013 the improvement in the ratio between unit labour costs and value added per employee in manufacturing was similar to that in the economy overall, after a sharper decline and faster rebound in the first years of the crisis.** In 2008–2009 strong contraction of foreign demand led to an above-average decline in value added in manufacturing, and consequently in labour productivity. The growth in real unit labour costs in manufacturing (12.3%) thus significantly outpaced that of the economy as a whole (7.6%) despite a more modest increase in compensation of employees per employee. Real unit labour costs in manufacturing had started to drop in 2010 and in 2011 declined at a far faster pace (4.4%) than overall unit labour costs (1.8%). As foreign demand recovered, a larger increase in value added and a steeper decline in employment led to productivity gains in manufacturing significantly outpacing overall productivity in the economy. The increase in the minimum wage buoyed compensation of employees, particularly in 2010,<sup>2</sup> but at a pace that was slower than labour productivity gains. When economic activity recovered in 2012, the ratio between labour costs and labour productivity declined in manufacturing as well (by 0.4%), but not as sharply as in the economy overall (0.8%). In 2013 the cost competitiveness of manufacturing improved at a similar rate as in the economy as a whole, as productivity improved but wages, which dropped across the economy as a whole, rose.

**Despite relatively favourable trends in the last three years, in 2013 Slovenia was still in the group of countries which saw their cost competitiveness deteriorate at an above-average rate; nevertheless, the situation in manufacturing was better than in the economy as a whole.** The erosion of cost competitiveness in 2008–2009 was less pronounced in the EU than in Slovenia, but whereas it continued to falter in Slovenia in 2010, in the EU the negative trend had already been reversed<sup>3</sup>. Until 2011 Slovenia's relatively weak position had been a consequence of above-average growth in compensation of employees per employee amid a concurrent sharper decline in labour productivity than in the EU. Since 2011 Slovenia's relative standing has been gradually improving due to a deterioration of compensation of employees per employee, which has been rising in the EU. The improvement of labour productivity, on the other hand, was slightly slower than in the EU in 2011–2013. In Slovenia unit labour costs thus exceeded the 2007 level (before they started rising) by 5.6% in 2013 (in the EU by 2.5%). Manufacturing was in a relatively better position than the economy as a whole, as unit labour costs in the sector were 4.6% above their 2007 level compared with 4.1% in the EU.

<sup>1</sup> In 2008 it was a consequence of the adjustment of wages to high past inflation and productivity, and the elimination of wage disparities in the public sector; in 2010 it was driven by the increase in the minimum wage.

<sup>2</sup> Additionally, it was affected in 2010 by changes in the structure of employment.

<sup>3</sup> In 2010 cost competitiveness deteriorated in only three Member States, with Slovenia registering the second biggest decline.

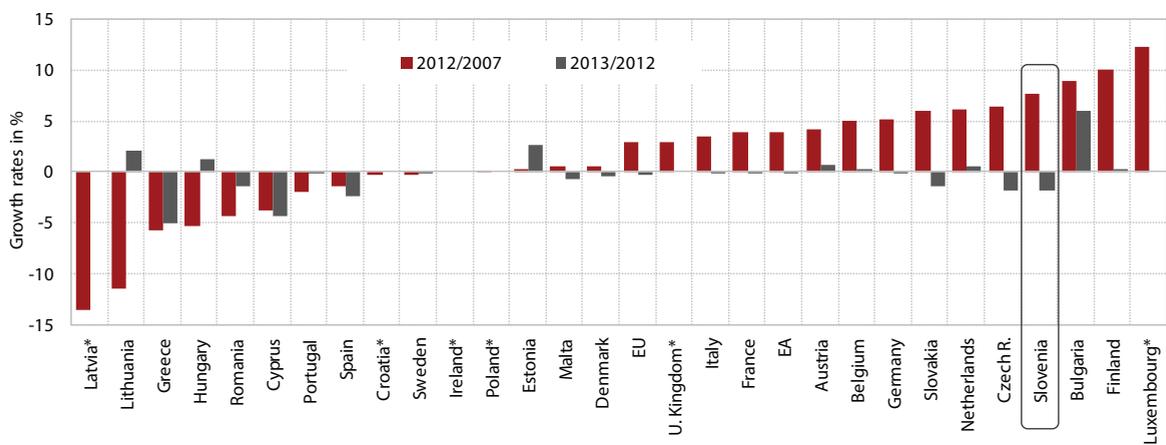
Table: Unit labour costs in Slovenia and the EU

Real annual growth rates, in %	2001–2007	2008	2009	2010	2011	2012	2013 <sup>3</sup>
<b>Unit labour costs<sup>1</sup></b>							
Slovenia	-0.7	2.2	5.1	1.5	-1.9	0.5	-1.8
EU-27	-0.7	1.1	3.1	-1.4	-0.7	0.7	-0.3
EMU-17	-0.7	1.8	3.3	-1.5	-0.4	0.6	-0.1
<b>Unit labour costs<sup>2</sup> – Slovenia</b>							
Total	-0.8	2.2	5.3	1.8	-1.8	0.8	-1.3
Manufacturing	-0.9	3.0	9.1	-0.2	-4.4	0.4	-1.4

Source: SI-STAT Data Portal – Economy, 2013; Eurostat Portal Page – Economy and finance, 2013.

Notes: <sup>1</sup>Compensation of employees per employee at current prices divided by GDP per employee at current prices; <sup>2</sup>Compensation of employees per employee at current prices divided by value added per employee at current prices.

Figure: Real growth of unit labour costs in Slovenia and EU Member States, in %



Source: Eurostat Portal Page – Economy and finance, 2014. Note: \* data not available.

## 1.15 Structure of merchandise exports by factor intensity

***In 2012 the share of high-tech products in merchandise exports widened at an accelerated pace as the share of low-tech products contracted.***

Having expanded at a subdued pace for several years, the share of high-tech products did not start picking up until 2008, when less competitive industries started to contract with the onset of the economic crisis. The process continued in 2009, but the share of high-tech products contracted again in the subsequent two years as the exports of other groups of products recovered, although it remained higher than before the start of the crisis. In 2012 it rose more substantially, to the highest level so far, and even slightly exceeded the average of the new Member States for the first time. The gap with the EU average consequently narrowed, but it remained high, at about 5 percentage points. In the entire period after 2008 the exports of pharmaceutical products in particular expanded, which, given the concurrent substantial contraction in the share of low-tech and labour-intensive products, accelerated the expansion of the share of high-tech products to a pace that was faster than before the crisis. The share of medium-tech products in Slovenia's merchandise exports meanwhile contracted for the third consecutive year in 2012 (by 1.0 percentage points)<sup>1</sup> as car exports continued to decline.

***The importance of products with low value added<sup>2</sup> in merchandise exports has been declining for several years as the share of labour-intensive products has been contracting, but since the start of the crisis the share of low-tech products has fallen significantly as well.*** The negative trend for labour-intensive products continued in 2012. The exports of such products turned out to be very sensitive to competition from countries with low labour costs and have been declining at an accelerated pace since EU accession, mostly on account of declining exports of textile products, furniture, paper and paperboard. Consequently, the relative share of labour-intensive products has been approaching the EU average in recent years, exceeding it in 2012 by less than 3

percentage points, although the level was still slightly (by 0.3 percentage points) above the average of the new Member States. The data for 2012 show a continued decline in the share of low-tech products in the structure of merchandise exports (by 0.3 percentage points), which had been relatively high until 2008 but have since been dropping. In the low-tech group, the exports of wire, iron and steel profiles, floating structures and miscellaneous articles of base metal recorded the biggest drop over the entire 2008–2012 period. Taking into account the latest changes, the share of low-tech products came very close to the EU average in 2012 (to within 2.2 percentage points).

***The share of resource-intensive products<sup>3</sup> continued to rise in 2012 on the back of higher volumes of trade in oil derivatives.*** The marked increase in the share of resource-intensive products after 2009 was the consequence of a significant uptick in the share of electricity and oil derivatives exports, which did not stem from increased domestic production of these groups of products. As a result of significant differences in prices on individual markets and expanded transmission capacities on the border with Italy, the transit of electricity from both Croatia and Austria towards Italy began to surge starting in 2010. The higher trading volume led to a robust increase in electricity imports and exports, and hence electricity's share in merchandise exports, despite the fact that net imports (the difference between exports and imports) accounted for only slightly over a fifth of the value of total electricity imports that year. The volume of trade in oil derivatives has been rising through the entire period as well and was the principal cause of the renewed increase in the share of resource-intensive products in 2012, hitting a record 19.4%.

<sup>1</sup> In the EU the share of exports of this product category increased (by 0.9 percentage points).

<sup>2</sup> The low-tech and labour-intensive products categories include products with the lowest value added per employee such as: clothing, textile products, footwear, furniture, glass and glass products, flat- and rolled-iron products, and base-metal products.

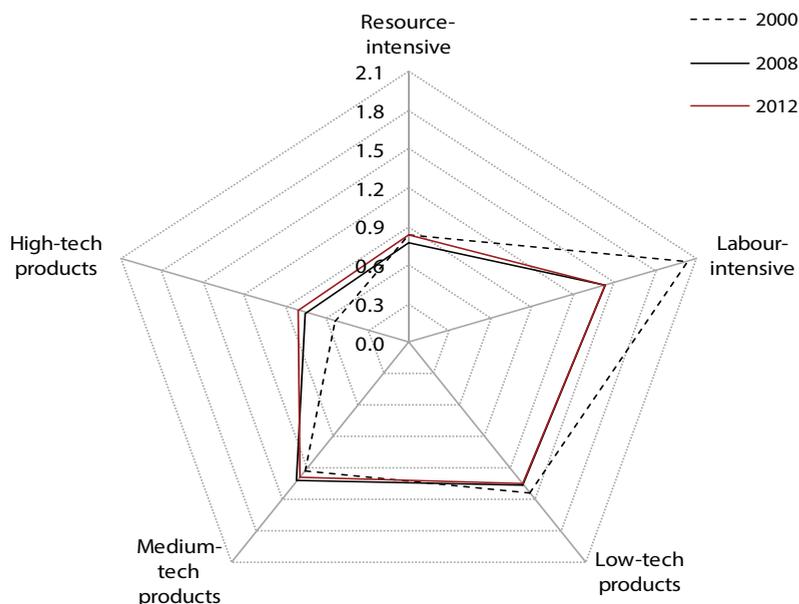
<sup>3</sup> The main groups of exported resource-intensive products in Slovenia's merchandise exports are: aluminium, finished mineral manufactures, electricity, rough and worked wood, veneer and other manufactured wood, wood manufactures, and non-alcoholic and alcoholic beverages.

Table: The structure of merchandise exports by factor intensity<sup>1</sup>, Slovenia and the EU

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Resource-intensive	EU-28	18.2	17.7	17.8	17.7	18.3	18.0	19.4	19.2	20.4	19.6	20.7	22.4	23.2
	EU-15	18.0	17.5	17.7	17.6	18.2	17.8	19.4	19.3	20.5	19.6	20.7	22.4	23.2
	EU-13	21.1	20.0	19.2	18.6	19.2	19.6	19.5	18.9	19.8	19.8	21.0	22.3	23.3
	<b>Slovenia</b>	<b>15.3</b>	<b>15.1</b>	<b>14.6</b>	<b>14.6</b>	<b>14.0</b>	<b>15.4</b>	<b>16.1</b>	<b>15.5</b>	<b>15.8</b>	<b>15.9</b>	<b>17.5</b>	<b>19.0</b>	<b>19.4</b>
Labour-intensive	EU-28	10.6	10.7	10.7	10.4	9.8	9.1	8.6	8.5	8.2	8.7	8.2	8.1	7.1
	EU-15	10.1	10.1	10.1	9.8	9.3	8.6	8.2	8.1	7.9	8.4	7.9	7.8	6.6
	EU-13	18.6	19.0	18.8	17.7	15.9	14.0	12.3	11.4	10.3	10.9	10.2	10.0	9.8
	<b>Slovenia</b>	<b>21.6</b>	<b>21.3</b>	<b>20.0</b>	<b>18.7</b>	<b>17.8</b>	<b>17.0</b>	<b>14.2</b>	<b>12.6</b>	<b>11.7</b>	<b>11.6</b>	<b>11.0</b>	<b>10.8</b>	<b>10.1</b>
Low-tech	EU-28	6.9	7.0	7.0	7.2	7.7	7.0	7.5	8.0	8.2	7.0	7.0	7.2	6.5
	EU-15	6.7	6.7	6.7	6.9	7.4	6.6	7.1	7.6	7.8	6.7	6.7	6.9	6.1
	EU-13	10.7	11.1	11.1	11.2	11.7	10.7	10.9	11.2	11.2	9.2	9.1	9.6	9.2
	<b>Slovenia</b>	<b>9.9</b>	<b>9.9</b>	<b>9.9</b>	<b>10.1</b>	<b>10.8</b>	<b>8.8</b>	<b>10.2</b>	<b>10.4</b>	<b>11.1</b>	<b>9.8</b>	<b>8.6</b>	<b>9.0</b>	<b>8.7</b>
Medium-tech	EU-28	29.8	30.3	30.5	30.9	31.0	30.1	29.9	30.7	29.9	28.4	28.6	29.8	28.9
	EU-15	29.8	30.3	30.5	30.7	30.8	29.8	29.5	30.2	29.5	27.8	28.0	29.2	28.1
	EU-13	29.6	30.0	31.0	32.6	32.9	32.9	33.9	35.1	33.8	33.4	33.0	33.7	33.9
	<b>Slovenia</b>	<b>36.2</b>	<b>36.2</b>	<b>37.3</b>	<b>37.3</b>	<b>38.3</b>	<b>40.2</b>	<b>39.1</b>	<b>40.9</b>	<b>39.3</b>	<b>39.9</b>	<b>39.6</b>	<b>37.9</b>	<b>36.9</b>
High-tech	EU-28	28.7	28.6	28.7	27.5	27.1	27.6	27.7	25.8	25.2	27.6	27.2	26.1	26.6
	EU-15	29.4	29.4	29.5	28.3	27.9	28.6	28.6	26.5	25.8	28.3	27.7	26.7	27.6
	EU-13	18.0	17.2	17.8	17.9	18.7	18.1	19.1	19.5	20.5	22.7	23.0	21.5	20.6
	<b>Slovenia</b>	<b>15.5</b>	<b>16.0</b>	<b>16.7</b>	<b>17.9</b>	<b>17.2</b>	<b>16.0</b>	<b>17.1</b>	<b>17.4</b>	<b>18.8</b>	<b>21.1</b>	<b>20.3</b>	<b>20.1</b>	<b>21.5</b>

Source: Handbook of Statistics 2007–2008 (United Nations), 2007; United Nations Commodity Trade Statistics Database, 2013; calculations by IMAD. Note: <sup>1</sup> The classification of products into individual groups is based on the UN methodology (Trade and Development Report, 2002), which does not include all products. Consequently, the sum of the five product groups does not necessarily equal 100.

Figure: Relative export advantage<sup>1</sup> index of Slovenia's exports by factor intensity



Source: Handbook of Statistics 2007-08 (United Nations); United Nations Statistics Division: Comtrade; calculations by IMAD.

Note: <sup>1</sup> Relative Export Advantage Index – RXA Balassa index (or coefficient) – compares the share of Slovenia's exports of a certain group of products with the share of exports of this group of products in the group of countries that serves as a reference (in this case, the EU-27).

## 1.16 Knowledge-intensive market services

**Following two years of growth, the value added of knowledge-intensive market services dropped in real terms in 2012, to below the pre-crisis level of 2008.**

The value added of knowledge-intensive non-financial market services<sup>1</sup> rose in real terms in 2010 and 2011 after having dropped in 2009, but in 2012 it slipped again to lag behind the level it had reached before the crisis in 2008. Among knowledge-intensive services, the value added of services that are more reliant on domestic demand declined in real terms in the 2009–2011 period<sup>2</sup>, with the decrease even more pronounced in 2012. On the other hand, the opposite trend was recorded for services that managed to offset the contraction of domestic demand with greater sales on foreign markets. Since 2009 real added value of architectural and engineering activities, technical testing, and analysis has sharply declined, which we attribute to the drying up of construction investments during the crisis and the consequent slump in demand for such services. The real added value of services that had stagnated after 2009 also dropped with the deterioration of the general economic situation in 2012 – advertising and market research, publishing, motion picture, video, television and radio programme production, telecommunications, and other professional and technical services. By 2012 revenue<sup>3</sup> from these services dropped to 16.7%<sup>4</sup> below the 2008 level, mostly due to lower domestic demand. On the other hand, value added rose in real terms in 2010–2012 after a decline in 2009 in computer programming, consultancy and other information activities, accounting, and business management and consultancy. In these services sales to foreign markets rose through 2009–2012, exceeding the 2008 level by over two-thirds by the end of the period.

**Given that value added in knowledge-based market services continued to increase in the EU, the recovery gap between Slovenia and the EU widened further in 2012.** Value added in the EU-28 as a whole already slightly exceeded the 2008 level in 2012,

whereas in Slovenia it lagged behind. The widening of the gap is largely attributable to sectors that remained dependent on the domestic market during the crisis years and only made forays into foreign markets in the last year: architectural and engineering activities, technical testing and analysis, advertising and market research, publishing, motion picture, video, television and radio programme production, telecommunications and other professional and technical activities. The total value added of all these services was about a tenth below the pre-crisis level in 2012, while the EU average already exceeded the 2008 level. On the other hand, the value added of services that since 2009 increased revenue by expanding sales on foreign markets (computer programming, consultancy and other information activities, law and accounting activities, and business management and consultancy) was about 14% above the 2008 level in Slovenia compared with an increase of just about 5% in the EU. The 2008 level was also significantly (by a fifth) exceeded in scientific and research activities, which remained roughly at the same level as in 2008<sup>5</sup> in the EU.

<sup>1</sup> Knowledge-intensive non-financial market services include information and communication (J) and professional, scientific and technical activities (M).

<sup>2</sup> Except in 2010.

<sup>3</sup> Net sales revenue from statistical data from balance sheets and income statements published by the Agency for Public Legal Records and Related Services (AJPES).

<sup>4</sup> Domestic sales dropped by a fifth, while foreign sales were still 5% lower in 2011 but slightly exceeded the 2008 level in 2012.

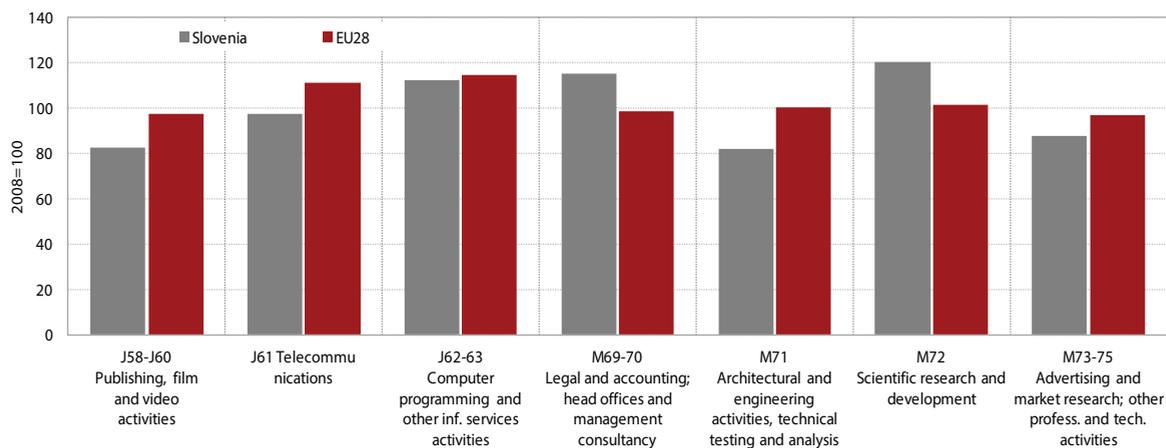
<sup>5</sup> The relatively substantial increase in value added was a consequence of a higher number of companies in this activity (by over a third), which had over 50% more employees than in 2008. The bulk of the increase was a consequence of a higher number of companies in natural sciences and engineering.

Table: Value added in knowledge-intensive non-financial market services in Slovenia, 2008=100

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
Knowledge-intensive NFMS	52.4	63.2	79.4	86.2	92.1	100.0	95.6	99.8	100.6	98.5
Information and communication activities (J)	35.4	54.6	76.6	83.6	91.1	100.0	96.3	99.7	100.1	99.7
Professional, scientific and technical activities (M)	63.0	68.6	81.2	87.8	92.7	100.0	95.1	100.0	100.9	97.7

Source: SI-STAT Data Portal – Economy - National accounts (SURS), 2014; calculations by IMAD.

Figure: Change in value added in knowledge-intensive non-financial market services, 2008–2012, Slovenia and the EU-28



Source: Eurostat Portal Page – Economy and finance – National accounts, 2014; calculations by IMAD.

Note: Data for value added of M69-70 and M71 for the EU-28 are estimated based on the change in value added regarding M69-71.

## 1.17 Network industries

***In electronic communications, competition is already fairly strong regarding broadband internet access, but in fixed and mobile telephony the market share of the biggest operator is still higher than in the EU, although the gap is narrowing.*** In the 2008–2011 period, the market share of the biggest provider on the *fixed telephony* market contracted by 20 percentage points but was still 13 percentage points above the EU-27 average<sup>1</sup>. Improved competition in fixed telephony is associated with the growing share of VoIP telephony, where new providers have been cropping up (VoIP had a 56% market share in Q2 2013, with PSTN and ISDN at 44%<sup>2</sup>). Fixed telephony is also being supplanted by *mobile telephony*, but in this segment market concentration is still high compared with the EU as well. Significant headway has been made since 2008 and the gap with the EU has narrowed substantially, but the market share of the dominant operator was still 14 percentage points above the EU average in 2012. *Broadband internet access* is the most competitive market and the market share of the biggest provider is already below the EU average. Services prices in fixed and mobile telephony were mostly lower than in the EU in 2010, the latest year for which price data are available<sup>3</sup>, but they dropped at a slower pace than in the EU<sup>4</sup> in the period 2010–2013. The ownership structure in electronic communications remained roughly unchanged, characterised by a high share of state ownership in the biggest provider.

***In electricity and gas supply, competition has been improving in recent years, as evident from the increasing rate of provider switching.*** Since switching *electricity* providers is fairly simple, the number of transitions has been increasing every year. According to data from AGEN-RS, 55,281 users switched providers in 2012 (5.9% of all users, compared with 4.2% in 2011). On the electricity

generation market, competition was far more limited than on the retail market in 2012 (HHI concentration indices of 4,738 and 1,575, respectively), but in terms of the market share of the biggest producer, Slovenia is comparable to the EU-28<sup>5</sup>. In the period between the liberalisation of the electricity market for all customers in the second half of 2007 and 2012, the concentration index on the retail market did not drop substantially, but the market shares of the principal providers changed significantly (the biggest provider in 2012 gained 22 percentage points in this period and the biggest provider in 2007 lost 12 percentage points of its market share). According to Eurostat data, the retail price of electricity for households (excluding tax) was 14.3% below the EU-28 average in the first half of 2013 (11.1% lower for industry), which is on a par with the general level of prices in Slovenia compared with the EU. On the *natural gas* market, competition was spurred by the arrival of a new provider in 2012. The market structure did not change significantly (HHI indices remained high, similar to the year before) but the prices dropped substantially. The price of natural gas for industry (excluding tax) was still 17.4% above the EU average in the first half of 2013 (compared with a 46.0% difference in the year before), while the gas price for households already dropped to near the EU average (0.6% above the average compared with 27.3% for the previous year). Whereas provider switching had previously been almost non-existent (0.1% of all customers switched suppliers in 2011), 11,294 or 8.6% of all customers switched in 2012. Much like in the electronic communications market, electricity and gas supply is characterised by a very high (almost 100%) share of state ownership of the dominant provider.

<sup>1</sup> For electronic communications the comparison is with the EU-27 (excluding Croatia).

<sup>2</sup> Explanation of acronyms: VOIP – Voice over Internet Protocol, PSTN – Public Switched Telephone Network, ISDN – Integrated Services Digital Network.

<sup>3</sup> Report on Telecoms Price Developments 1998–2010 (European Commission), 2010. Packages (baskets) of fixed and mobile telephony services are compared.

<sup>4</sup> The dynamics of price growth are evident from the HICP annual indices regarding telephony services.

<sup>5</sup> The internationally comparable Eurostat data (factoring in the entire output of the nuclear power station) was 52.4%, while the arithmetic mean of EU countries (including Croatia but excluding Bulgaria and Netherlands) was 56.3%.

Table: Market shares<sup>1</sup> of the biggest electronic communications providers, in %

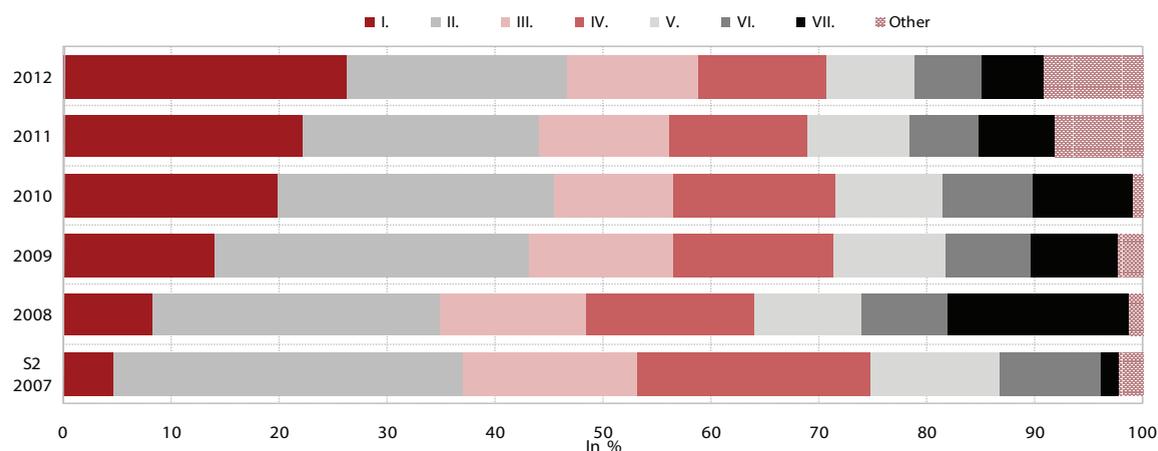
	Slovenia					EU-27					EU-3 <sup>2</sup>
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	
Fixed telephony	87	78	73	67	/ <sup>3</sup>	61	59	56	54	/ <sup>3</sup>	45
Mobile telephony	72	56	55	53	50	39	38	38	37	36	31
Broadband internet	49	46	43	42	39	46	45	44	43	42	27

Source: Digital Agenda Scoreboard 2013, Indicators on the electronic communications market (European Commission), 2013.

Notes: <sup>1</sup>Traffic in minutes (in December) for fixed telephony, number of active SIM cards (October) in mobile telephony, number of connections in broadband Internet (end of year).

<sup>2</sup> Average of 3 Member States with the lowest shares. <sup>3</sup> Data not available yet.

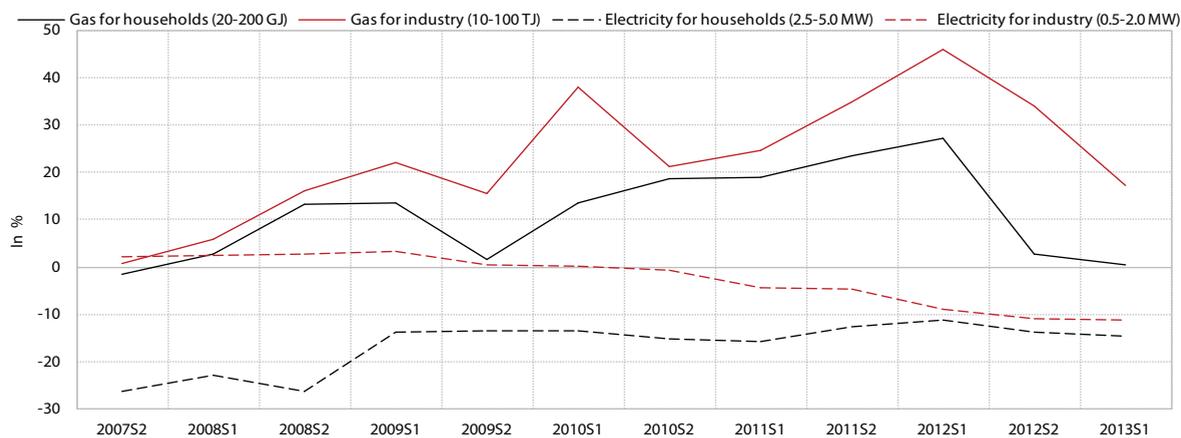
Figure 1: Market shares of providers<sup>1</sup> of electricity to final customers, Slovenia



Source: AGEN-RS.

Note: <sup>1</sup> The 7 biggest providers in 2012 are shown.

Figure 2: Discrepancies in energy prices between Slovenia and the EU-28



Source: Eurostat; calculations by IMAD.

## 1.18 Foreign direct investment

**After falling in 2009 and then rebounding in 2010 and in particular in 2011, inward FDI stock remained virtually unchanged in 2012 whereas outward FDI stock declined for the third consecutive year.** Inward FDI stock jumped 0.8% in 2012 to the highest level to date. Outward FDI stock, meanwhile, plunged by 7.4% and was 11.5% below its 2009 peak. The change in FDI stock is also confirmed by data on FDI flows in 2012. Inflows were relatively high in 2011 (EUR 717.7 m) but then turned negative in 2012 (-EUR 46.3 m). Inflows of EUR 21.0 m were recorded in outward FDI, which means Slovenian investors disinvested abroad. In 2012 Slovenia thus recorded a net FDI inflow of EUR 165.7 m, the result not of foreign investment in Slovenia, but the withdrawal from abroad of Slovenian investors. Breaking down the change in FDI stock to changes in equity capital and reinvested profit, and to changes in net claims (liabilities from inter-company loans), it is clear that the modest increase in inward FDI stock was the result of an increase in the net claims of foreign parent companies to their Slovenian subsidiaries (by EUR 16.4 m), whereas the stock of equity capital dropped slightly (by EUR 7.5 m). In outward FDI, Slovenian investors reduced their equity capital (by EUR 184.8 m) as well as net claims on their foreign subsidiaries (by EUR 261.0 m).

**Inward FDI stock relative to GDP reached its highest level to date in 2012, but this was more a consequence of the contraction of GDP than increasing inward FDI stock; the ratio remains significantly lower than in the vast majority of EU Member States.** As a share of GDP, inward FDI stock rose significantly in the period 2005–2008 (from 21.7% to 30.1% of GDP). In 2009 the relative size of FDI dropped to 30%, whereupon it gradually expanded between 2010 and 2012 to reach its highest level to date, 33.2%. Outward FDI stock had also surged in the second half of the previous decade (from 9.9% to 17.7% of GDP in 2005–2009), whereupon it declined for three years to reach 15.9% in 2012. After 2007 the share of inward FDI increased faster than in the EU (by 5 percentage points in Slovenia compared with an increase to 46.6% of GDP from 44.4% in the EU), which was largely a consequence of the faster pace of contraction of the economy in Slovenia. Slovenia remains among the EU countries with the lowest inward FDI stock as a share of GDP, with only Greece, Italy and Germany behind it. In terms of outward FDI stock as a share of GDP, it lags behind Cyprus, Estonia and Hungary among the new Member States.

**FDI flows in 2013 indicate a renewed slump in inward FDI and weak additional investment abroad, although equity flows show a significantly more positive trend.** In 2013 outflows from inward FDI reached as much as EUR 491.3 m. Although they are almost entirely the result of a single accounting operation that was neutral in balance of payments terms<sup>1</sup>, the fact remains that even excluding this operation FDI inflows were very modest in 2013. In outward FDI, there were investments (outflows) of EUR 53.6m, a significant improvement on disinvestments of EUR 212.0 m in 2012. Net FDI outflows thus totalled EUR 544.9 m in 2013. Taking into account the strong impact of a single accounting operation on the net outflow, the structure of inward FDI shows a more favourable picture, as equity capital jumped by EUR 411.0m and the flow of reinvested profit was a negative EUR 150.5 m; the worst trend was recorded in inter-company loans, where the net liabilities of Slovenian subsidiaries to parent companies abroad fell sharply by EUR 751.9 m, which is largely a consequence of the aforementioned conversion of inter-company loans into ordinary loans to third parties. Despite the strongly negative inward FDI flows, the increase in the equity capital of foreign investors would appear to indicate confidence of foreign parent companies in their Slovenian subsidiaries. The results of surveys among foreign subsidiaries in Slovenia show a similar picture. Although the survey for 2013 shows a decline compared with the preceding three years in the share of foreign subsidiaries which expect higher sales (54.4%) and hiring (30.5%), the share of those which project an expansion surged to 43.2% (compared with 34.8% in 2011 and 34.6% in 2012). It is encouraging that manufacturing and export-oriented companies with foreign capital forecast above-average expansion of their activity in Slovenia, although that is not the case for large and medium-sized companies with foreign capital.

<sup>1</sup> An operation in which a leasing firm in foreign ownership transferred its intra-company loans to its Slovenian subsidiary directly to the final recipients of these loans. Since intra-company loans between the parent company and its subsidiaries are treated as FDI inflows and loans to independent customers are not, the result of this accounting operation in the balance of payments was an outflow of inward FDI and an inflow of foreign loans in the same amount.

Table: Flows and stock of inward and outward FDI<sup>1</sup> in Slovenia, 2000–2013<sup>2</sup>

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>INWARD FDI</b>										
Year-end stock	3,109.8	6,133.6	6,822.3	9,765.1	11,325.7	10,625.4	10,925.3	11,715.2	11,724.3	10,873.4 (30,9)
Inflow	149.1	472.5	513.3	1,106.4	1,329.5	-474.1	271.8	717.7	-46.3	-491.3
Stock as a % of GDP	14.8	21.7	22.0	28.2	30.4	30.0	30.8	32.4	33.2	n, p,
<b>OUTWARD FDI</b>										
Year-end stock	825.3	2,788.7	3,452.2	5,456.3	6,325.8	6,328.3	6,121.4	6,045.2	5,599.3	5,655.0 (30,9)
Outflow <sup>3</sup>	-71.7	-515.6	-687.0	-1,362.3	-1,002.1	-188.9	156.4	-84.6	212.0	-53.6
Stock as a % of GDP	3.9	9.9	11.1	15.8	17.0	17.9	17.3	16.7	15.9	N/A.

Source: Bank of Slovenia, IMAD.

 Notes: <sup>1</sup>Companies in which a foreign investor has a 10% or higher share. <sup>2</sup>Since 1996, the figure also includes foreign direct investment via indirect affiliation. Since 2007, equity-related claims and liabilities cover all claims and liabilities a company has with the direct foreign owner as well as with all non-resident companies which are part of the foreign owner's group of companies (see International Economic Relations – Bank of Slovenia, March 2007, pp. 11–13). <sup>3</sup>Negative value denotes outflow; N/A – not available.

Figure 1: Inward FDI stock relative to GDP in the EU-27, 2005 and 2012

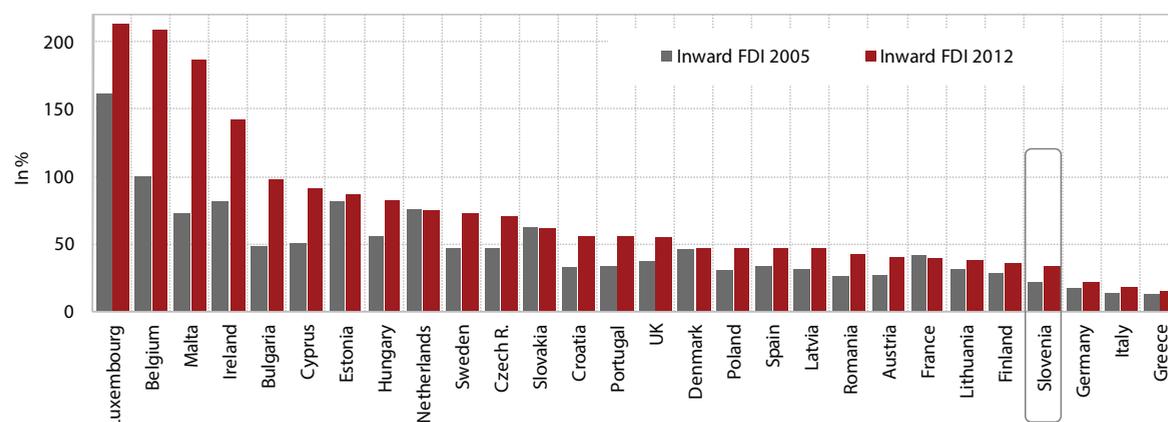
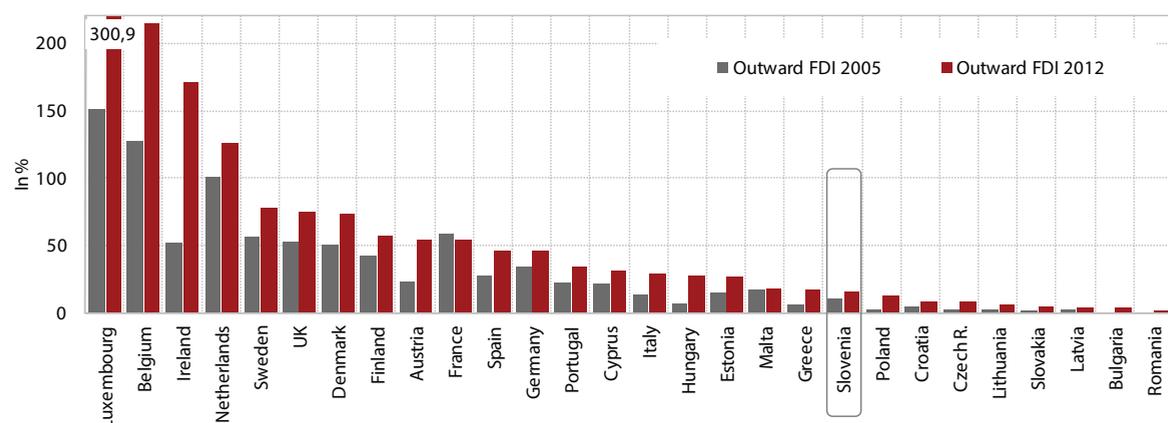


Figure 2: Outward FDI stock relative to GDP in the EU-27, 2005 and 2012


 Source: UNCTAD, World Investment Report, Annex Tables, <http://unctad.org/en/pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx>; for Slovenia the previous table.

## 1.19 Entrepreneurial activity

**Early-stage entrepreneurial activity continued to strengthen in 2013 and rebounded to its pre-crisis peak.** According to the Global Entrepreneurship Monitor (GEM), following three years of decline, the rate of total early-stage entrepreneurial activity (TEA-index)<sup>1</sup> grew robustly for the second year running in 2013<sup>2</sup> and achieved the pre-crisis (2008) peak of 6.5%, an increase of 1.1 percentage points over the year before. Expansion of early-stage entrepreneurial activity was driven by a growing share of nascent entrepreneurs (those who have been paying wages under three months) as well as the share of new entrepreneurs (those who have been paying wages or salaries for less than 3.5 years), with the share of the latter already exceeding the pre-crisis level. In the preceding three years, entrepreneurial activity had been mainly opportunity-driven, but last year the share of necessity-driven entrepreneurial activity rose significantly for the first time. In the period 2008–2012 the share of necessity-driven entrepreneurs averaged 0.6%, but in 2013 it surged by 1.2 percentage points to a new peak of 1.6%. The robustness of early-stage entrepreneurial activity in recent years can be partially attributed to the increase in the number of self-employment subsidies in the crisis period. In 2009–2012 a total of 17,007 persons received such subsidies and in 2013 an additional 4,293<sup>3</sup> did (Employment Service of the Republic of Slovenia, 2014). Accordingly, the total level of entrepreneurial activity rose to the 2008 level despite the stagnation of established businesses.

**In 2013 early-stage entrepreneurial activity already slightly exceeded the average in the EU, where it dropped for two consecutive years but was still above the level before the crisis.** In terms of early-stage entrepreneurial activity, Slovenia exceeded the average in the 23 EU countries included in the GEM survey<sup>4</sup> (6.3%) by 0.2 percentage points in 2013. However, it is still well below the rates in some countries, for example, the four new Member States (Latvia, Estonia, Lithuania, Romania), in which it exceeded 10%. Due to the declining share of nascent

entrepreneurs and the stagnation of the share of new entrepreneurs, the average EU rate of total early-stage entrepreneurial activity declined for the second consecutive year in 2013, which dragged total entrepreneurial activity in the EU down to 12.0%. Nevertheless, the EU's average early-stage entrepreneurial activity has exceeded the pre-crisis level of 5.3% since 2011, as both opportunity- and necessity-driven entrepreneurship are above pre-crisis levels.

**The growing entrepreneurial activity as evident from GEM data has so far not translated into a bigger impact of newly established<sup>5</sup> business entities on total employment and value added.** Newly established companies and sole traders accounted on average for 11.8% of total employment and 10.4% of total value added in the period 2009–2012, their contribution having dropped marginally since the start of the crisis. Wholesale and retail trade (G) accounted for the lion's share of employment (58.7%) as well as of the value added (53.1) of newly established companies in 2012, although its share dropped in the last year. Manufacturing (C) and transportation and storage (H) also accounted for a significant percentage of employment and value added, although the share of the former was rising in recent years, whereas the share of the latter remained fairly stable (about a tenth). New sole traders on average contributed 0.5% to total employment and 0.3% to total value added in the 2009–2012 period, roughly the same as in the period before the crisis.

**The four-year survival rate in 2012 was the highest in electricity supply and the majority of knowledge-intensive services.** The survival rate of companies founded in 2008 was 89.7% in 2009 and dropped to 79.5% in 2012. In 2012 the highest four-year survival rates were recorded in education (92.2%), electricity supply (90.2%), health and social care (87.9%), information and communication activities (87.3%), and professional, scientific and technical activities (86.5%). Construction, an industry grappling with a sharp decline in demand and huge financial difficulties, had the lowest four-year survival rate (59.7%). In other activities the share did not drop below 75%. Among sole traders, the four-year survival rate was significantly lower in 2012, at just 64.0%.

<sup>1</sup> See the notes below the table for a methodological explanation of the measures of entrepreneurial activity.

<sup>2</sup> Data are from the survey carried out in the first half of the year.

<sup>3</sup> The share of refunded subsidies in 2007–2013 was about 2% of the total funds allocated for this purpose (Employment Service of the Republic of Slovenia, 2014).

<sup>4</sup> Among the participants, 20 Member States that were the same as in 2012 participated, whereas Austria and Denmark left the survey while the Czech Republic, Croatia and Luxembourg joined.

<sup>5</sup> For the analysis in the 2008–2012 period, data on new business entities (companies and sole traders) based on registration t+1 were taken from the Slovenia Business Register (PRS). In addition to newly established business entities without a predecessor, this data may include businesses created due to statutory changes (division, merger of (parent) companies).

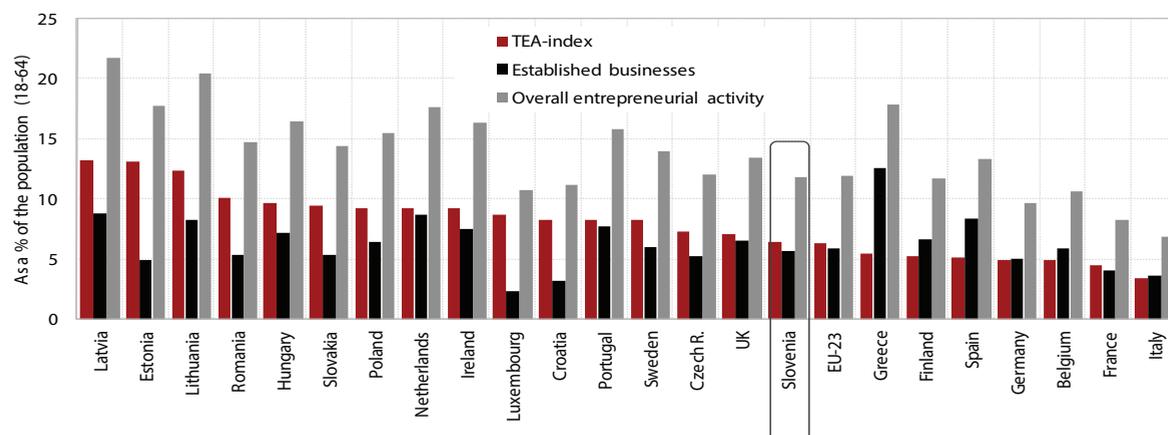
Table: Selected indicators of entrepreneurial activity, Slovenia, 2002–2013, as a % of the population (aged 18–64)

	2002	2005	2006	2007	2008	2009	2010	2011	2012	2013
TEA-index <sup>1</sup>	4.6	4.4	4.6	4.8	6.4	5.4	4.7	3.7	5.4	6.5
TEA-nascent entrepreneurs <sup>2</sup>	3.3	3.0	2.9	3.0	4.1	3.2	2.2	1.9	3.0	3.6
TEA-new entrepreneurs <sup>3</sup>	1.5	1.4	1.8	1.8	2.4	2.1	2.4	1.8	2.5	2.9
TEA-opportunity <sup>4</sup>	3.3	3.8	4.0	4.2	5.6	4.7	3.7	3.0	4.9	4.7
TEA-necessity <sup>5</sup>	1.4	0.5	0.5	0.5	0.8	0.5	0.8	0.4	0.4	1.6
Established business <sup>6</sup>	-	6.3	4.4	4.6	5.6	5.7	4.9	4.8	5.8	5.7
Overall entrepreneurial activity <sup>7</sup>	-	10.1	9.0	9.3	11.8	10.8	9.5	8.4	11.2	11.9

Sources: Rebernik et al., 2002; Rebernik et al., 2004; Rebernik et al., 2005; Rebernik et al., 2006; Rebernik et al., 2007; Rebernik et al., 2008; Bosma et al., 2009; Rebernik et al., 2010; Rebernik et al., 2011; Rebernik et al., 2012; Rebernik et al., 2013; Amoros et al., 2014.

Notes: <sup>1</sup> The TEA-index is the rate of total early-stage entrepreneurial activity measuring the share of the population engaging in entrepreneurship. It includes individuals who have started setting up a new business or engaging in new business activities, including self-employment (<sup>2</sup> TEA-nascent entrepreneurs who have been paying wages or salaries for no more than three months). It also includes individuals employed as owners/managers of new businesses who have been paying salaries for no longer than 42 months. (<sup>3</sup> TEA new entrepreneurs). <sup>4</sup> TEA-opportunity measures the share of the population who engage in entrepreneurial activity in order to exploit a perceived business opportunity. <sup>5</sup> TEA-necessity measures the share of the population who have set up a business out of necessity. <sup>6</sup> Established businesses represent the share of people who own a firm that has been operating for more than 42 months. <sup>7</sup> The overall entrepreneurial activity rate includes the TEA index and the share of established businesses.

Figure: Selected indicators of entrepreneurial activity in Slovenia and 23 EU Member States included in the GEM, 2013



Source: Amoros et al., 2014; calculations by IMAD.

Note: Weighted average of 23 EU Member States included in the GEM 2013 survey. The countries are ranked by TEA-index.



## **THE SECOND PRIORITY:**

### **Use of knowledge for economic development**

- 2.1 Share of the population with tertiary education
- 2.2 Education expenditure
- 2.3 Adult participation in education
- 2.4 Gross domestic expenditure on R&D
- 2.5 Intellectual property
- 2.6 Use of the Internet and e-services

## 2.1 Share of the population with tertiary education

**The share of the population with tertiary education further increased in 2013 and nearly reached the EU average.** According to the Labour Force Survey, the share of the adult population (25–64 years) with tertiary education in 2013 (second quarter) was 27.8%, which was an increase of 1.7 percentage points compared with the previous year. In 2005–2013, this share grew faster than the EU average mainly due to high youth participation in tertiary education in Slovenia and to the significant rise in the number of graduates, resulting in recent years from the concurrent completion of studies under both Bologna and the previous tertiary education systems. Considering the decline in the number of students enrolled in tertiary education as a result of the demographic changes (i.e. the decrease in the size of the generation that could enrol in tertiary education), we can expect slower growth in the number of graduates in the future, and hence an increase in the share of the population with tertiary education.

**In 2013 the share of the population with tertiary education mostly increased among the young (25–34 years), greatly exceeding the EU-28 average.** In the second quarter of 2013, it reached 37.9% and was thus higher than in other age groups<sup>1</sup>; this share also represented a notable increase compared with the previous year. The share of young people aged 30–34 with tertiary education amounted to 41.5%, thus exceeding the tertiary education target of the EU 2020 Strategy (a target of 40% by 2020). During the SDS implementation period (2005–2013), the share of the population with tertiary education rose most notably in the 25–34 age group (by 13.1 percentage points), which is attributed to the high participation of young people (20–24 years) in tertiary education and to a significant increase in the number of tertiary education graduates. As a general rule, individuals with tertiary education have the potential to positively affect economic growth, yet the current crisis sharply decreased their employment opportunities. Poor job prospects fuel the emigration of individuals with tertiary education, which in the long run weakens the country's human capital.

<sup>1</sup> The shares of the population with tertiary education in other age groups were as follows: 32.3% in the group aged 35–44, 22.9% in the group aged 45–54, and 18.8% in the group aged 55–64.

**In 2012 the positive trends in the number of science and technology graduates continued; in 2011 their share exceeded the EU-27 average.** The number of science and technology graduates in 2012 grew by 7.3% (to 5,096), which was, however, less than in the previous two years. According to the last internationally comparable data, their increase in 2011<sup>2</sup> was above the EU average – as was the case in the SDS implementation period as a whole. As a consequence, also the number of science and technology graduates per 1,000 population aged 20–29 years increased considerably (to 19.6 in 2012), which is related to increasing enrolment until the 2009/10 academic year. However, enrolment has been declining since the 2010/11 academic year mainly owing to demographic reasons, and a slowing rise in the number of such graduates can be expected also in the future. Their share in the total number of graduates in 2011 exceeded the EU average for the first time in the SDS implementation period and in 2012 reached 24.7%, which entails that the favourable trends of the past years continue. The share of students enrolled in science and technology has remained at roughly the same level in the past three years (around 26.7%). Individuals with such an education are important drivers of innovation activity. Unfortunately, the current crisis has decreased their employability.

**The number of doctorates awarded in science and technology rose considerably in 2012,** amounting to 253, which is 18.2% more than the previous year and also much higher than at the beginning of SDS implementation (2005)<sup>3</sup>. The pronounced increase in the number of doctorates awarded in science and technology during the period of SDS implementation is also related to the introduction of third-cycle Bologna programmes, when the number of people enrolled in doctorate programmes increased at a rapid pace. Despite favourable trends, however, the share of doctorates awarded in science and technology (44.5% in 2012) is lower than at the beginning of SDS implementation and – considering the data for 2011 – also lower than the EU average<sup>4</sup>. At the same time, the number of registered unemployed with doctorates increased due to the crisis.

<sup>2</sup> In 2011 the number of science and technology graduates in Slovenia rose by 14.2% while the EU-27 average grew by 9.2%.

<sup>3</sup> The number of doctorates awarded in science and technology grew by 41.3% between 2005 and 2012.

<sup>4</sup> The share of doctorates awarded in science and technology in Slovenia in 2011 was 40.9%, while the EU-27 average was 43.3%.

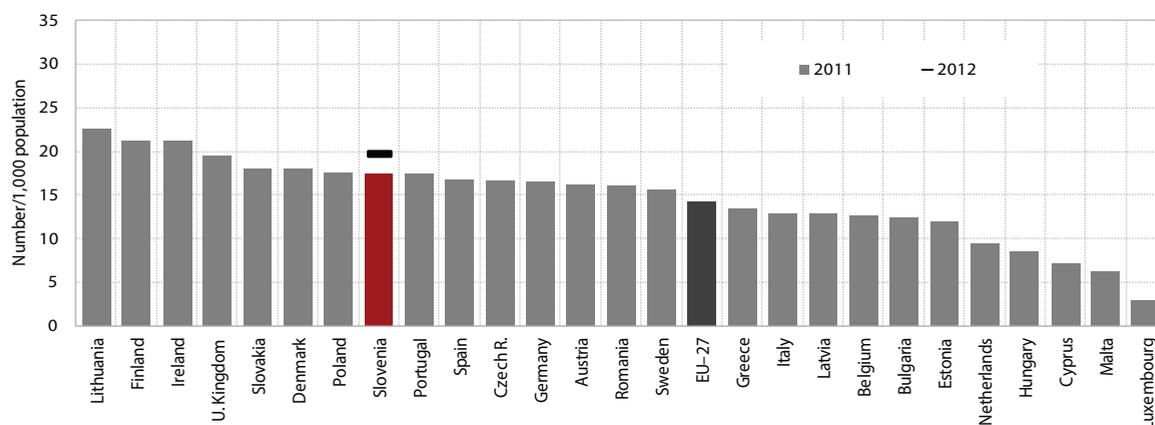
Table: Share of the population aged 25–64 with tertiary education, 2nd quarter, in %

	2002	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>EU-28</b>	<b>19.5</b>	<b>22.1</b>	<b>22.7</b>	<b>23.3</b>	<b>24.1</b>	<b>24.9</b>	<b>25.6</b>	<b>26.5</b>	<b>27.4</b>	<b>28.3</b>
Austria	15.1	17.6	17.7	17.7	18.1	19.1	19.5	19.0	19.9	20.8
Belgium	27.9	30.7	31.0	31.4	31.9	32.4	35.2	34.9	35.2	35.4
Bulgaria	21.1	21.4	21.7	22.1	22.8	22.9	22.8	23.6	23.4	25.3
Cyprus	29.1	27.8	29.9	33.0	34.6	34.4	35.2	37.4	39.5	39.4
Czech Republic	11.8	13.1	13.5	13.7	14.3	15.4	16.7	18.0	18.8	20.2
Denmark	29.0	32.9	34.8	30.1	30.7	31.6	32.3	32.3	33.0	33.9
Estonia	29.0	33.8	32.7	34.1	33.4	36.1	36.1	37.0	37.9	38.3
Finland	32.4	34.5	34.9	36.4	36.5	37.1	38.0	39.6	39.7	40.5
France	N/A.	25.0	26.0	26.7	27.1	28.5	28.9	29.6	30.9	31.9
Greece	17.9	20.5	21.3	21.9	22.5	22.7	23.7	25.1	26.2	27.2
Croatia	15.4	15.8	15.8	16.0	16.7	17.6	19.2	19.1	18.8	19.2
Ireland	24.4	28.3	30.1	31.2	32.7	34.2	36.2	37.3	38.8	40.4
Italy	10.4	11.9	12.7	13.5	14.3	14.4	14.7	15.0	15.6	16.3
Latvia	19.6	21.5	21.4	22.7	23.5	23.1	26.7	27.8	28.7	31.4
Lithuania	21.9	26.5	27.2	29.2	30.4	30.0	32.3	33.0	33.8	35.9
Luxemburg	18.3	26.5	24.0	28.6	28.3	34.0	34.5	35.9	38.6	40.2
Hungary	14.0	17.0	17.8	17.9	19.1	19.8	20.0	20.9	22.0	22.5
Malta	8.8	12.1	12.4	12.4	13.3	13.6	14.5	17.0	18.2	18.8
Germany	21.4	24.5	24.2	24.4	25.1	26.3	26.4	27.3	27.9	28.4
Netherlands	24.7	29.9	29.8	30.3	32.0	32.3	32.1	31.5	32.8	33.2
Poland	12.2	16.5	17.8	18.8	19.6	21.2	22.2	22.9	24.2	25.6
Portugal	9.5	12.7	13.4	13.6	14.2	14.7	15.5	16.9	18.4	18.6
Romania	10.0	11.0	11.8	12.0	12.9	13.2	13.4	14.3	15.1	15.6
Slovakia	10.8	13.9	14.4	14.4	14.6	15.6	17.1	18.3	18.7	19.6
<b>Slovenia</b>	<b>14.5</b>	<b>20.0</b>	<b>21.5</b>	<b>22.9</b>	<b>21.9</b>	<b>22.5</b>	<b>23.7</b>	<b>25.5</b>	<b>26.1</b>	<b>27.8</b>
Spain	24.6	28.2	28.7	29.2	29.6	29.8	30.9	31.7	32.5	33.6
Sweden	26.2	29.3	30.3	31.2	31.9	32.8	33.6	34.6	35.5	36.8
United Kingdom	25.6	28.3	29.3	30.4	31.6	32.9	34.5	36.7	37.9	39.2

Source: Eurostat Portal Page – Population and social conditions, 2014.

Note: N/A – not available.

Figure: Number of science and technology graduates per 1,000 population aged 20–29



Source: Eurostat Portal Page – Population and social conditions, SI-STAT data portal – Demography and social statistics – Education (SURS), 2014.

## 2.2 Education expenditure

**Total public expenditure on education<sup>1</sup> as a share of GDP<sup>2</sup> in 2011 maintained the high level of the previous year.** It amounted to 5.68% of GDP and exceeded the 2010 EU average (the latest international data). In 2011 expenditure relative to GDP increased only at the preschool level, while the heaviest decline was recorded in primary education as a result of reduced expenditure on educational institutions. Total public expenditure on education as a share of GDP in 2011 remained at a similar level as in 2005. As a result of lower enrolment, expenditure in the cited period declined quite considerably at the primary and upper secondary levels of education. The most notable increase was recorded at the preschool level owing to a significant rise in the number of participating children and the related capacities and staff. At the level of tertiary education, expenditure in the SDS implementation period grew and in 2010 exceeded the EU average (Slovenia: 1.37% of GDP, EU: 1.26% of GDP), which is mainly attributed to high youth participation in tertiary education. In 2011 public expenditure on education in real terms maintained the previous year's level, while in 2005–2011 it recorded an annual average increase of 1.0%, mainly at the preschool level, while decreasing in upper secondary education.

**The structure of public expenditure on education saw an increase in expenditure on transfers.** In 2011, 9.1% of expenditure on education was intended for transfers to students and households<sup>3</sup>, and the remainder directly for educational institutions. The share for transfers increased for the second consecutive year in 2011 and in 2010 exceeded the EU average (Slovenia: 8.3%; EU: 7.1%). In 2011 it was also slightly higher than in 2005. The share of public expenditure intended for transfers was the highest in tertiary education (23.4%), where it remained at the 2010 level. In 2010 it also substantially exceeded the EU average (18.2%). A considerable increase was recorded in 2011 in the share of public expenditure

on transfers at the upper secondary level of education, which was related to lower expenditure on educational institutions and higher expenditure on transfers as a result of a higher number of recipients of national scholarships.

**The share of private expenditure on education maintained approximately the same level as in 2010.** In 2011 the share of private expenditure in total expenditure on education<sup>4</sup> amounted to 11.5%, while public expenditure totalled 88.5%. With 11.6% in 2010, the share of private expenditure was below the EU average (14.2%). Among all levels of education, private expenditure was the highest at the preschool level (18.8% in 2011) and the lowest at the primary level of education. In preschool education, it exceeded the average of the 21 EU Member States that are OECD members in 2010 (Slovenia: 20.9%; EU-21: 11.3%). The situation was quite different at the tertiary level of education, where in 2010 private expenditure was significantly below the EU-27 average (Slovenia: 15.3%; EU: 20.7%). Between 2005 and 2011, the share of private expenditure declined (by 1.5 percentage points) at all levels of formal education, most notably in tertiary education<sup>5</sup>. A considerable decrease was also seen in private expenditure at the preschool level<sup>6</sup>, while private expenditure in primary and upper secondary education increased.

**Expenditure on educational institutions per student increased in 2010 but remained low at the level of tertiary education.** In 2010, expenditure at all levels of education amounted to EUR 6,633.9 PPS, recording an increase of EUR 108.7 PPS compared with the previous year but still lagging behind the EU-27 average. For the second consecutive year, expenditure per student was the highest at the tertiary level (EUR 7,296.4 PPS), but still much lower than in the EU (EUR 9,638.4 PPS). At the ISCED 1 level (the 1<sup>st</sup> to 6<sup>th</sup> years of primary school), expenditure amounted to EUR 6,884.1 PPS, while at the ISCED 2-4 levels (the 7<sup>th</sup> to 9<sup>th</sup> years of primary school and upper secondary school) it amounted to only EUR 6,223.4 PPS. Between 2005 and 2010, expenditure per student at all education levels increased less than in the EU.

<sup>1</sup> Total public expenditure on education comprises the total budgetary expenditure on formal education of youth and adults at national and municipal levels. It includes direct public expenditure on educational institutions and transfers to households (scholarships, subsidies for meals, transport, accommodation, textbooks, etc.). Financial data for Slovenia are gathered by using internationally comparable methodology based on the UOE questionnaire (the common questionnaire of Unesco, OECD and Eurostat).

<sup>2</sup> The share of total public expenditure on education in GDP is calculated with regard to the GDP revision, SURS, August 2013.

<sup>3</sup> Expenditure on transfers to students and households comprises: school fees, meals, travel, accommodation, textbooks, etc.

<sup>4</sup> The share of private expenditure on educational institutions in the total expenditure on educational institutions (public and private) is shown here. Private expenditure on educational institutions includes the expenditure of households and other private entities paid directly to educational institutions (expenditure on school fees, meals, so-called "school in nature" programmes, accommodation for pupils and students in residence halls, etc.).

<sup>5</sup> Such decline was mainly due to a higher number of full-time students and to the introduction of Bologna programmes that are free of charge for all full-time second-cycle students.

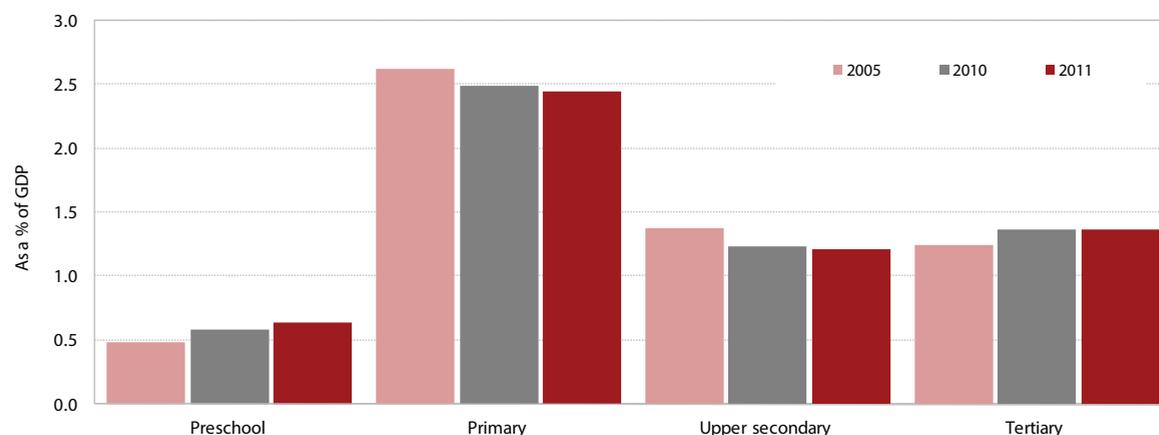
<sup>6</sup> 2008 saw the adoption of the Act Amending the Preschool Institutions Act, under which parents with more than one child enrolled in kindergarten pay a one-category lower fee for the older child and are exempt from the fee for younger children.

Table: Expenditure on education

	Total public expenditure on education, as a % of GDP			Expenditure on educational institutions per student, in EUR PPS			Share of private expenditure, in %		
	2005	2009	2010	2005	2009	2010	2005	2009	2010
<b>EU-27</b>	<b>5.04</b>	<b>5.41</b>	<b>5.44</b>	<b>5,674.2</b>	<b>6,502.3</b>	<b>6,900.1</b>	<b>12.6</b>	<b>13.8</b>	<b>14.2</b>
Austria	5.44	5.98	5.89	8,088.3	8,955.1	9,217.8	8.6	8.6	9.0
Belgium	5.92	6.57	6.57	6,428.2	7,661.3	8,036.5	5.8	5.7	5.2
Bulgaria	4.25	4.58	4.1	1,951.6	2,874.0	2,639.7	13.9	14.5	15.7
Cyprus	6.95	7.98	7.92	6,580.4	8,755.7	9,144.6	16.7	18.3	19.3
Czech Republic	4.08	4.36	4.24	3,790.6	4,620.2	4,600.5	12.4	12.0	12.3
Denmark	8.3	8.74	8.8	8,088.8	9,164.0	9,604.8	7.7	4.2	5.5
Estonia	4.88	6.09	5.68	2,823.6	4,145.6	4,221.6	N/A	5.8	7.0
Finland	6.3	6.81	6.84	6,199.0	7,092.9	7,379.0	2.2	2.4	2.4
France	5.67	5.9	5.86	6,292.5	7,041.0	7,337.4	9.2	9.8	10.2
Greece	4.09	N/A	N/A	4,479.4	N/A	N/A	6.0	N/A	N/A
Ireland	4.72	6.47	6.47	6,023.1	N/A	N/A	6.3	5.8	7.5
Italy	4.41	4.7	4.5	5,898.7	6,296.5	6,097.3	8.6	9.3	9.9
Latvia	5.09	5.64	5.01	2,679.3	3,721.8	3,628.6	13.8	9.8	10.8
Lithuania	4.88	5.64	5.38	2,444.3	3,509.1	3,739.1	9.8	11.0	11.8
Luxemburg	3.78	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hungary	5.46	5.12	4.88	3,799.9	N/A	N/A	8.7	N/A	N/A
Malta	6.58	5.32	6.74	5,911.4	6,853.8	7,645.4	5.3	19.9	18.8
Germany	4.57	5.06	5.08	6,617.3	7,248.1	7,737.9	18.0	15.0	14.1
Netherlands	5.53	5.95	5.96	7,329.8	8,339.1	8,522.8	15.7	16.5	16.7
Poland	5.47	5.09	5.17	3,066.7	3,917.5	4,452.3	9.3	13.3	13.8
Portugal	5.21	5.79	5.62	4,811.5	5,310.8	N/A	7.4	6.5	7.4
Romania	3.48	4.24	3.53	1,437.2	2,395.0	2,078.6	N/A	2.6	3.3
Slovakia	3.85	4.09	4.22	2,693.7	3,997.1	4,173.1	16.1	16.1	15.8
<b>Slovenia</b>	<b>5.73</b>	<b>5.69</b>	<b>5.68</b>	<b>5,995.5</b>	<b>6,525.2</b>	<b>6,633.9</b>	<b>13.0</b>	<b>11.5</b>	<b>11.6</b>
Spain	4.23	5.01	4.97	5,678.8	6,946.5	6,865.2	11.4	12.9	14.6
Sweden	6.89	7.26	6.98	7,026.3	7,967.2	8,311.7	3.0	2.6	2.5
United Kingdom	5.36	5.64	6.22	7,154.9	7,827.1	8,334.6	19.9	31.1	31.4

Source: Eurostat Portal Page – Population and social conditions, 2014; Expenditure on formal education, 2005–2008 SURS (2011); Expenditure on formal education (2013).  
 Note: N/A – not available.

Figure: Total public expenditure on formal education, by level of education, Slovenia



Source: Expenditure on formal education, 2011 – SURS (2013); Expenditure on formal education, 2007–2010 SURS (2012); Expenditure on formal education, 2005–2008 SURS (2011).  
 Note: Indicators for Slovenia are calculated based on the latest revision of GDP (August 2013).

## 2.3 Adult participation in education

**The level of adult participation in formal education is slightly higher than the EU-27 average, but it declined further in 2012 and was the lowest in the entire SDS implementation period.** The participation of the adult population (25–64 years) in all levels of formal education<sup>1</sup> in the 2011/12 academic year amounted to 3.3%. According to the latest available international data for 2011 (2010/11), adult participation was above the EU average, while in 2005–2011 it declined, as it did in the EU as a whole.

**Adult participation exceeded the EU average only in tertiary education.** In 2012, the participation of adults (aged 25–64) in primary education was low, about the same as in recent years of SDS implementation, lagging also slightly behind the EU average. The share of people with incomplete primary education, which is much lower in younger than in older age groups, is declining, thus decreasing the potential number of candidates for this level of education. Nevertheless, there is still a potential population of participants in primary education as regards middle and older age groups. In 2012, adult participation in upper secondary education remained at the same level as in the previous year. Owing to high completion rates of young people in upper secondary education, and with young, better educated people moving to older age groups, the potential number of adults interested in enrolment in upper secondary education is declining. Nevertheless, it is necessary to increase state incentives for adult participation in upper secondary education and thus provide for the financial accessibility of such education. Slovenia stimulates adult participation in upper secondary education by co-financing education under the “Reducing the Educational Deficit” programme, which has proved successful in practice. However, since 2012/13 enrolment in upper secondary education under active employment policy programmes is no longer possible. Among all levels of education, adult participation (25–64 years) is the highest at the tertiary level. The latter amounted to 2.5% in 2012/13 but declined compared with the year before. According to the latest international comparison, adult participation in tertiary education in 2011 was higher than the EU average (Slovenia: 2.7%; EU: 2.5%) but the gap has been closing. A new law on higher education is being prepared, which envisages that under certain conditions, studies will

be free for students of any age. The Resolution on the Master Plan for Adult Education in the Republic of Slovenia for 2013–2020, adopted in 2013, provides for incentives for greater participation of adults in higher vocational education.

**Adult participation in non-formal education declined in 2012 and reached the 2008 level.** The participation of adults (aged 25–64) in non-formal education totalled 8.5% in 2012. It declined for the second year in a row and reached the level recorded in 2008. In 2012, it was still above the EU average yet the difference was smaller than the previous year. Adult participation in non-formal education recorded a decline that was more substantial than in the EU also in 2005–2012. The participation of people with low education (completed primary school at most) lags far behind the participation of those with upper secondary and tertiary education.<sup>2</sup> In 2012, it remained about the same as in the previous year but still lagged behind the EU average. Considering that people with low education on average have lower incomes than those with upper secondary or tertiary education, they have difficulties regarding the financial accessibility of education. Therefore, it would be sensible to increase state incentives for the participation of people with low education in non-formal education. In terms of age, adult participation in non-formal education in 2012 was the highest in the 35–44 age group,<sup>3</sup> where it also exceeded the EU average the most. In terms of activity status, participation was highest for persons in employment despite the significant drop compared with the previous year.

<sup>1</sup> Full-time and part-time students in all levels of formal education (low, secondary and tertiary education).

<sup>2</sup> The participation rate of people with low education in non-formal education was 1.9%, in upper secondary education 6.3%, and in tertiary education 17.0%.

<sup>3</sup> In 2012, adult participation in non-formal education in the 35–44 age group was 10.5%, in the 25–34 age group 8.9%, in the 45–54 age group 8.6%, and in the 55–74 age group 5.6%.

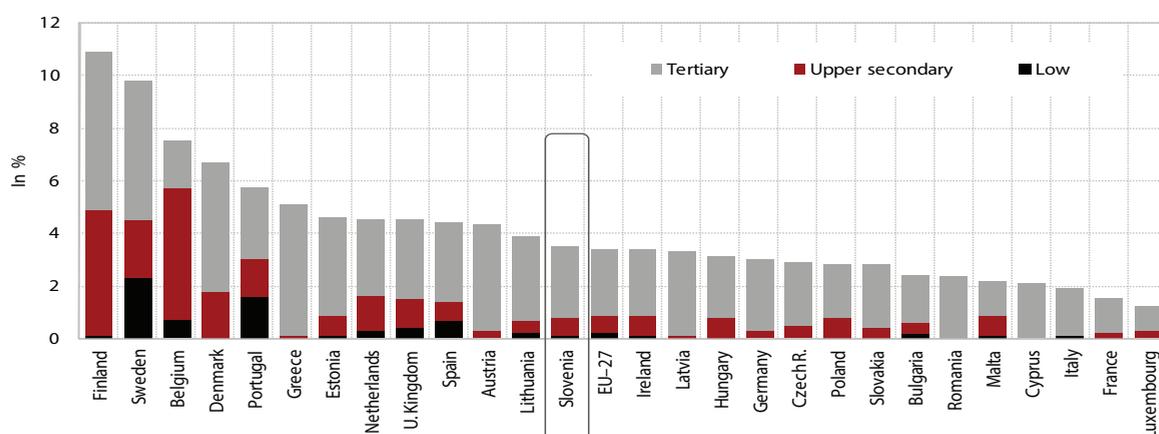
Table: Participation of the population aged 25–64 in formal and non-formal education, EU, in %

	Participation in all levels of formal education, in %					Participation in all levels of non-formal education <sup>1</sup> , in %			
	1998	2000	2005	2010	2011	2003	2005	2011	2012
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.3</b>	<b>N/A</b>	<b>6.3</b>	<b>6.5</b>
<b>EU-27</b>	<b>2.8</b>	<b>3.3</b>	<b>4.2</b>	<b>3.3</b>	<b>3.3</b>	<b>5.3</b>	<b>6.9</b>	<b>6.4</b>	<b>6.5</b>
Austria	3.2	3.4	2.6	4.2	4.4	N/A	10.5	10.3	10.9
Belgium	N/A	5.2	7.4	7.6	7.6	N/A	6.5	4.8	4.4
Bulgaria	1.5	1.5	1.7	2.3	2.4	0.5	0.2	0.2	0.3
Cyprus	N/A	0.3	1.1	2.2	2.2	6.6	4.8	5.7	5.3
Czech Republic	1.0	1.1	2.7	2.9	2.9	4.4	3.9	9.5	8.9
Denmark	4.7	5.0	6.7	6.3	6.7	13.1	22.0	27.9	27.3
Estonia	N/A	N/A	4.4	4.3	4.5	3.1	2.4	7.8	8.8
Finland	5.6	6.9	9.5	10.7	10.8	12.2	16.4	16.7	17.4
France	N/A	N/A	1.5	N/A	N/A	6.5	5.2	4.9	5.0
Greece	0.9	0.6	3.0	N/A	N/A	2.9	0.6	1.0	1.5
Croatia	N/A	N/A	1.1	1.3	1.4	N/A	0.6	0.4	0.6
Ireland	1.7	2.0	2.8	3.7	3.4	6.7	4.1	3.0	3.1
Italy	1.7	1.9	2.2	2.1	1.9	N/A	3.0	3.2	4.1
Latvia	1.5	2.9	4.9	3.7	3.3	4.7	3.8	3.1	4.7
Lithuania	0.9	1.6	4.3	4.1	3.9	N/A	2.8	3.7	3.5
Luxemburg	N/A	0.3	0.4	N/A	N/A	5.4	7.4	11.4	11.6
Hungary	1.5	2.3	4.0	3.1	3.1	N/A	1.5	1.0	1.2
Malta	N/A	0.8	1.9	1.9	2.3	N/A	4.3	4.8	4.9
Germany	2.6	2.4	2.3	2.7	3.0	3.6	5.2	5.1	5.1
Netherlands	2.9	2.6	2.5	2.8	4.5	11.0	9.2	9.6	9.5
Poland	N/A	2.1	N/A	N/A	N/A	N/A	1.8	1.8	1.8
Portugal	2.8	3.3	3.4	6.9	5.6	N/A	1.3	5.9	6.3
Romania	N/A	N/A	N/A	N/A	2.5	0.2	0.2	0.5	0.3
Slovakia	N/A	N/A	2.2	2.9	2.8	4.0	3.2	2.1	1.7
<b>Slovenia</b>	<b>1.5</b>	<b>2.5</b>	<b>4.4</b>	<b>3.9</b>	<b>3.5</b>	<b>9.5</b>	<b>9.5</b>	<b>9.8</b>	<b>8.5</b>
Spain	2.4	2.5	3.7	3.9	4.3	3.5	8.0	8.2	8.1
Sweden	9.0	10.3	9.4	9.5	9.8	27.5	16.4	20.2	21.9
United Kingdom	7.1	11.0	13.9	4.1	4.5	N/A	25.2	13.4	13.6

Source: Eurostat Portal Page – Population and social conditions – Education and training, 2014.

 Notes: N/A – not available. <sup>1</sup> Data on adult participation in non-formal education are available from 2003 onwards.

Figure: Participation rates of the population aged 25–64 in individual levels of formal education, 2011



Source: Eurostat Portal Page – Population and social conditions – Education and training, 2014.

## 2.4 Gross domestic expenditure on research and development

**The share of gross domestic expenditure on R&D (GERD) increased further in 2012 and rose to 2.63% of GDP.** This result is attributable to several factors and corresponds to the period since SURS has been improving the coverage of reporting units.<sup>1</sup> In the mentioned period, GERD increased considerably in real terms while real GDP growth was modest, even negative in the first two years. In 2012, real GERD growth slowed significantly (1.2%) compared with 2011 (17.8%), totalling EUR 928.3 m. During the economic crisis, GERD in Slovenia has increased by 32.9% in real terms and exceeded by far the EU average (4.1%). The older EU Member States increased GERD much less than the countries that joined in 2004. Thus, in 2012, Slovenia exceeded the average European GERD as a share of GDP for the third consecutive year, by 0.57 percentage points.

**The share of the business sector in the funding of GERD increased also in 2012.** In 2012, real growth of expenditure on R&D in the business sector slowed sharply to 2.8% (2011: 23.5%), while its share in the funding of GERD rebounded to total 62.2%, coming very close to the highest share, recorded in 2008. During the course of the economic crisis, funding from abroad increased as well, accounting for 8.6% of total investments in R&D (2008: 5.6%). Following a slow rise in government sector funding, which even decreased in 2012, the share of government sector investments in R&D decreased to 28.7% (2008: 31.3%). The contributions of the higher education sector and the private non-profit sector remained stable and relatively modest throughout 2008–2012 (2002: 0.5% in total). With a GDP share of 1.64% achieved in 2012 (2008: 1.04% of GDP), Slovenia came close to the EU 2020 target of the business sector investing 2% of GDP in R&D.

**Following amendments to legislation,<sup>2</sup> the volume of tax relief on investment in R&D rose significantly in 2012, the majority being claimed by taxpayers**

**from technology-intensive activities.** A total of 571 taxpayers claimed tax relief (2011: 515, 2008: 483) and the volume of tax relief amounted to EUR 183.9 m (an increase of 83.6% compared with 2011). In the 2009–2012 period, for which comparable data are available, most tax reliefs on investment in R&D were claimed by taxpayers from technology-intensive manufacturing activities,<sup>3</sup> accounting for 85% of the total tax relief claimed in manufacturing.<sup>4</sup> In the period of the economic crisis, except in 2011, manufacturers of pharmaceutical raw materials and preparations (C 21) have accounted for a good half of the tax relief claimed.

**The favourable trends relating to the share of researchers in the business sector continued also in 2012 despite slower growth in their number.** The total number of researchers in full-time equivalents rose by 1.3% (2011: 13.9%), 2.4% in the business sector alone (2011: 33.1%). Their share rose to the highest level to date (52.0%). Despite more rapid growth in the EU average as regards the number of researchers in the business sector in 2012 (3.0%), Slovenia exceeded the European average for the second consecutive year (2012: 46.4%). Moreover, Slovenia significantly narrowed the gap with the countries with the highest share of researchers in the business sector (in Austria, Sweden, Ireland, Denmark and Finland, they account on average for 60.3% of all researchers). According to the most recent available data (2011), the share of researchers employed in service activities<sup>5</sup> in Slovenia rose significantly, reaching 41.7%, two fifths of them working in scientific, research and development activities (M 72) and a fourth in ICT activities (J).

<sup>1</sup> On the basis of Eurostat's recommendations, SURS has been improving the coverage of reporting units since 2008, particularly in the business sector (more in the 2013 Development Report).

<sup>2</sup> In 2012, the general tax relief on investment in R&D rose from 40% to 100%, while the additional regional relief was abolished (Official Gazette of the RS, No. 30/2012).

<sup>3</sup> The chemical and pharmaceutical industry (C20-21); the manufacture of ICT and electrical equipment (C26-27); the manufacture of other machinery and equipment (C28); the manufacture of transport vehicles (C29-30).

<sup>4</sup> In 2009–2012, taxpayers in manufacturing on average claimed almost four fifths of the total tax relief on investments in R&D. The remaining fifth was claimed by taxpayers in service activities.

<sup>5</sup> NACE activities: G–N.

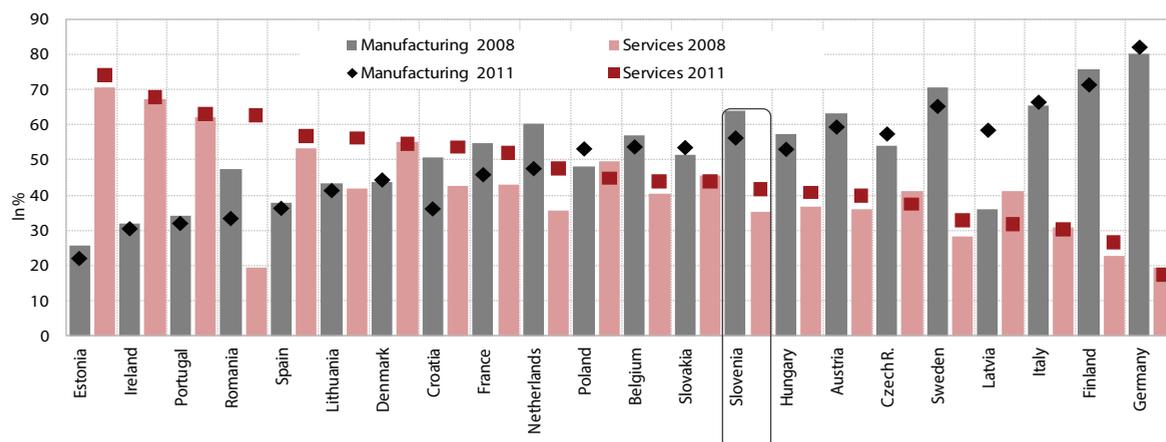
Table: Gross domestic expenditure on R&D in Slovenia and selected EU Member States, as a % of GDP

	1996	2000	2005	2007	2008	2009	2010	2011	2012
<b>EU-28</b>	<b>N/A</b>	<b>1.85</b>	<b>1.82</b>	<b>1.84</b>	<b>1.91</b>	<b>2.01</b>	<b>2.00</b>	<b>2.04</b>	<b>2.06</b>
Austria	1.60	1.93	2.46	2.51	2.67	2.71	2.80	2.77	2.84
Belgium	1.76	1.97	1.83	1.89	1.97	2.03	2.10	2.21	2.24
Czech Republic	0.92	1.17	1.22	1.37	1.30	1.35	1.40	1.64	1.88
Denmark	1.84	2.24	2.46	2.58	2.85	3.16	3.00	2.98	2.99
Estonia	N/A	0.60	0.93	1.08	1.28	1.41	1.62	2.37	2.18
Finland	2.53	3.35	3.48	3.47	3.70	3.94	3.90	3.80	3.55
France	2.27	2.15	2.11	2.08	2.12	2.27	2.24	2.25	2.26
Croatia	N/A	N/A	0.87	0.80	0.90	0.85	0.75	0.76	0.75
Ireland	1.30	1.11	1.25	1.28	1.45	1.69	1.69	1.66	1.72
Italy	0.98	1.04	1.09	1.17	1.21	1.26	1.26	1.25	1.27
Latvia	0.42	0.45	0.56	0.60	0.62	0.46	0.60	0.70	0.66
Lithuania	0.49	0.59	0.75	0.81	0.80	0.84	0.79	0.91	0.90
Hungary	0.64	0.81	0.94	0.98	1.00	1.17	1.17	1.22	1.30
Germany	2.20	2.47	2.51	2.53	2.69	2.82	2.80	2.89	2.92
Netherlands	1.98	1.94	1.90	1.81	1.77	1.82	1.86	2.03	2.16
Poland	0.65	0.64	0.57	0.57	0.60	0.67	0.74	0.76	0.90
Portugal	0.56	0.73	0.78	1.17	1.50	1.64	1.59	1.52	1.50
Romania	0.68	0.37	0.41	0.52	0.58	0.47	0.46	0.50	0.42
Slovakia	0.91	0.65	0.51	0.46	0.47	0.48	0.63	0.68	0.82
<b>Slovenia</b>	<b>1.29</b>	<b>1.38</b>	<b>1.44</b>	<b>1.45</b>	<b>1.66</b>	<b>1.85</b>	<b>2.10</b>	<b>2.47</b>	<b>2.63</b>
Spain	0.81	0.91	1.12	1.27	1.35	1.39	1.40	1.36	1.30
Sweden	N/A	N/A	3.56	3.43	3.70	3.62	3.39	3.39	3.41

Source: Eurostat Portal Page – Science and technology – Research and development, 2014; SURS, 2014.

Notes: Data for 2012 are final only for Finland, Croatia, Hungary, Poland, Slovakia, Slovenia and Spain; data for other countries are provisional; data for EU-28 are Eurostat estimates; N/A – not available.

Figure: Researchers employed in manufacturing and service activities as a % of total researchers in the business sector



Source: Eurostat Portal Page – Science and technology – Research and development, 2013.

Note: For Austria, Denmark, Ireland, Germany and Sweden, data relate to 2009 and not to 2008.

## 2.5 Intellectual Property

**In 2013, Slovenia filed a considerably higher number of patent applications with the European Patent Office (EPO), yet during the period of the crisis its gap with the European average increased.** Provisional data show that in 2013<sup>1</sup> Slovenian applicants filed 65.6 patent applications per million population with the EPO, while the European average was 130.4. Such a large gap is a constant feature in nearly the entire 2005–2013 period. The number of Slovenian patent applications per million population grew by a fourth in 2013 compared with the year before, bringing Slovenia two places up among the EU Member States (2012: 15<sup>th</sup>). Despite such progress, however, this indicator for Slovenia is still below the pre-crisis level (down by 5.4% compared with 2008), while in the EU it rose by 15.8%. The share of applicants from the business sector in 2009 (the last year for which data are available) was 86.2%<sup>2</sup> (2004: 79.3%), just above the EU average.

**The favourable trends in applications for Community trademarks and designs continued in 2013.** Slovenian applicants filed 129 applications for Community trademarks<sup>3</sup> with the OHIM<sup>4</sup> per million population, which represents a continuation of the growth recorded over the past two years (2013: 25.4%, 2012: 40.3%). Slovenia enjoyed higher growth than the EU as a whole, and reduced its gap with the EU average, with this indicator amounting to 80.3% of the average (2012: 67.2%). In 2013, Slovenian applicants also filed 75 Community design applications<sup>5</sup> with the OHIM per million population, which is a fifth more than the year before. Considering that the EU average remained at the previous year's level

(124 Community designs per million population), Slovenia's gap narrowed. As regards registered Community designs and trademarks, Slovenia has been exceeding the 2008 level since 2010 and 2013, respectively. According to the SIPO, the number of national applications filed for trademarks and designs decreased by 12.6% and 10.7% in 2013, respectively, which could point to a stronger appeal of the European Community trademark and design system, which provides legal protection throughout the EU.

**Intellectual property rights (IPR) intensive industries significantly contributed to GDP and employment in Slovenia in 2008–2010.** Based on the findings of an EPO and OHIM study (2013), IPR-intensive industries<sup>6</sup> generated 26% of all jobs and 40% of GDP in the EU. Among them, the most notable contribution was made by trademark-intensive industries, particularly the leasing of intellectual property (NACE 2008: N 77.40) with 212 trademarks per 1,000 employees. In Slovenia, IPR-intensive industries generated 30% of employment and 39% of GDP in 2010. Similarly as the EU, most of it was generated by trademark-intensive industries.

<sup>1</sup> The data on patent applications for 2012 and 2013 are taken from the EPO annual report, meaning that they refer to the current year. These are not necessarily the first patent applications on a global scale, as stated by Eurostat (for more information, see the Slovenian Economic Mirror 2/2009).

<sup>2</sup> The remainder comprised applicants from the government or private non-profit sector (3.4%), the higher education sector (2.7%), individual applicants (6.9%) and applicants that cannot be classified in a sector (0.8%). The EU average: 3.5%, 2.8%, 6.9% and 1.2%, respectively.

<sup>3</sup> A trademark or service mark is any sign (or any combination of signs) protected by the law, capable of distinguishing identical or similar goods/services and of being graphically represented. A trademark is valid for ten years from the filing date and may be renewed (2011 SIPO Annual Report, 2013).

<sup>4</sup> Office for Harmonization on the Internal Market.

<sup>5</sup> A design entails the appearance of a product protected by law provided that it is new and has an individual character. Design protection lasts for five years and can be renewed (2011 SIPO Annual Report, 2013).

<sup>6</sup> NACE classes (4-digit level) where the number of patents, trademarks and designs per employee exceeds the average in the NACE section (1-digit level). The study relies on micro-data on 240,000 companies in the EU Member States (for more on the methodology, see the EPO and OHIM, 2013).

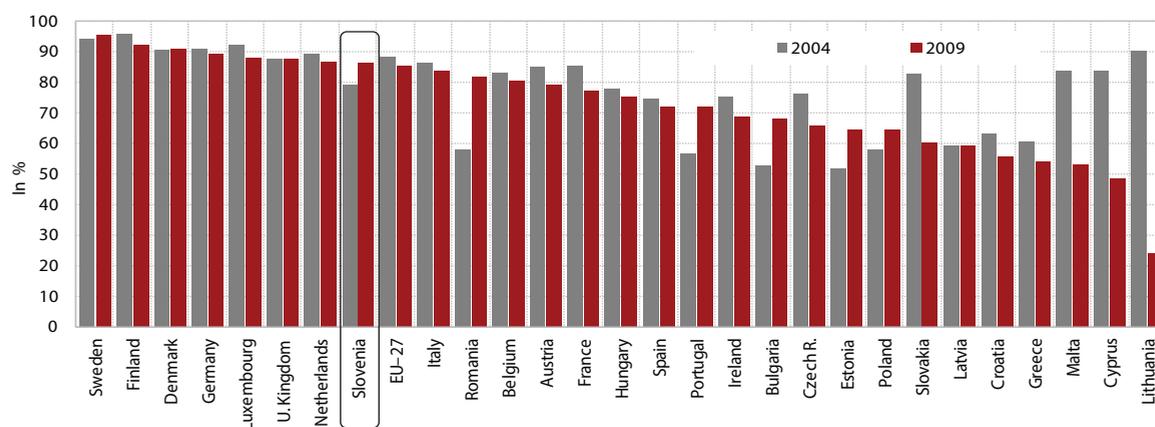
Table: Patent applications with the EPO by year of first filing<sup>1</sup>, per million population

	2000	2005	2006	2007	2008	2009	2010 <sup>2</sup>	2011 <sup>3</sup>	2012 <sup>4</sup>	2013 <sup>4</sup>
<b>EU-27</b>	<b>107.1</b>	<b>115.9</b>	<b>117.5</b>	<b>116.5</b>	<b>112.6</b>	<b>111.4</b>	<b>109.6</b>	<b>107.5</b>	<b>129.9<sup>5</sup></b>	<b>130.4<sup>5</sup></b>
Austria	148.0	185.0	210.8	205.2	192.4	199.9	196.7	194.0	222.9	236.0
Belgium	128.5	144.1	145.4	145.9	137.3	128.7	123.2	115.5	170.5	168.9
Bulgaria	0.9	3.1	3.5	1.6	2.5	2.0	1.5	1.5	1.8	3.0
Cyprus	9.0	22.4	8.3	13.3	14.3	18.5	21.8	n. p.	61.5	52.0
Czech Republic	6.5	10.6	15.0	18.0	20.0	16.8	17.4	17.3	13.2	14.2
Denmark	184.0	218.2	206.9	234.1	231.6	210.6	212.0	204.9	287.6	344.3
Estonia	4.1	4.7	15.8	21.0	25.4	32.8	38.5	44.3	31.7	31.1
Finland	277.5	252.7	254.5	237.1	233.7	245.0	241.8	243.4	343.3	349.2
France	120.7	133.4	133.6	134.7	134.6	133.1	133.0	132.4	151.9	148.7
Greece	5.2	10.0	9.5	9.3	8.2	8.3	7.9	7.5	7.5	6.0
Croatia	3.5	7.5	8.0	6.7	6.5	5.2	4.3	3.5	4.4	2.3
Ireland	55.2	67.4	69.3	74.2	73.6	75.2	78.1	80.0	129.4	119.4
Italy	70.4	83.9	85.8	82.4	78.7	72.4	68.2	63.8	63.2	62.1
Latvia	3.8	8.2	7.6	7.2	10.0	8.3	8.5	9.0	12.2	39.5
Lithuania	1.3	2.6	2.8	2.9	4.8	2.3	2.4	2.3	6.3	7.4
Luxembourg	186.1	221.1	230.0	152.7	194.4	144.7	118.1	107.1	765.9	741.1
Hungary	11.9	13.4	16.4	18.8	17.8	17.9	18.4	18.3	10.6	10.4
Malta	11.8	27.9	16.9	16.8	13.4	16.3	16.2	76.6	55.1	102.0
Germany	269.1	290.4	291.1	292.8	277.8	281.0	277.7	272.3	333.3	324.9
Netherlands	218.5	214.3	227.2	200.7	207.2	204.1	196.1	194.5	302.6	347.2
Poland	1.1	3.4	3.7	5.3	6.1	7.5	8.7	9.9	10.0	9.6
Portugal	4.1	11.8	10.1	11.7	10.7	8.7	8.2	7.1	7.1	9.0
Romania	0.3	1.3	0.9	1.5	1.6	1.4	1.5	1.5	1.7	1.5
Slovakia	2.1	5.8	7.5	7.0	6.6	5.3	5.0	4.3	6.5	5.4
<b>Slovenia</b>	<b>25.5</b>	<b>54.4</b>	<b>49.8</b>	<b>59.3</b>	<b>69.3</b>	<b>59.8</b>	<b>63.0</b>	<b>64.4</b>	<b>52.5</b>	<b>65.6</b>
Spain	20.1	31.6	30.8	31.0	31.3	33.0	34.1	35.3	33.0	32.2
Sweden	259.6	268.2	288.2	303.2	296.7	275.1	270.5	259.9	372.3	383.8
United Kingdom	103.6	93.8	94.8	90.4	85.0	85.3	82.2	79.5	74.3	71.5

Source: Eurostat Portal Page – Science and technology – Patent statistics, 2014; EPO Annual Report – statistics 2013, 2014.

 Notes: <sup>1</sup> Data for 2012 and 2013 relate to patent applications that are not necessarily the first on a global scale, but were filed with the EPO in the current year (EPO Annual Report – statistics 2013, 2014). <sup>2,3</sup> Eurostat estimate. <sup>4</sup> Provisional data. <sup>5</sup> IMAD estimate based on the calculation of data for Member States. N/A – not available.

Figure: Patent applications in the business sector, as a % of total patent applications



Source: Eurostat Portal Page – Science and technology – Patent statistics, 2014.

## 2.6 Use of the Internet and e-services

**After two years of stagnation, Internet use is again in line with EU trends, although the impacts of the crisis are still reflected in a decline in Internet use by vulnerable population groups.** The share of Internet users, which had been unchanged since 2010, rose slightly more markedly in 2013. The share of users (16–74 years) who used the Internet in the last three months (73%) and those who used it once a week (69%) came quite close to the EU average (76% and 72%). Similarly, an increase was recorded in the share of older Internet users (55–74 years), which is mainly attributable to the implementation of the Simbioza project, an inter-generational cooperation project intended to improve computer literacy among the elderly. Slovenia has thus slowly narrowed the still relatively wide gap with the EU as regards the share of older users (10 percentage points). After stagnating for three years, also the trends in the middle age group (25–54 years) improved. The share of Internet users in this group reached the EU average, although in the past three years Slovenian users aged above 45 used the Internet less than in the EU. The share of young Internet users has not increased since 2009, but is already very high and above the EU average. The crisis significantly affected the educational structure of Internet users. The share of less-educated users, which dropped in 2011, lags well behind the EU average, where it increased even during the crisis. This is most probably due to the impact of the relatively severe reductions in labour-intensive industries and construction on the income status of less-educated users during the crisis. Last year, the share of users with secondary education rose to the level of the EU average, while the share of Internet users with higher education continues to exceed the EU average.

**Compared with the EU, Slovenian users continue to make less use of advanced e-services, with the exception of e-government, which improved in 2013.** Users in Slovenia use the Internet nearly the same or more than in the EU for simple services, such as seeking information, reading online news from various media, looking for a job, selling goods and services, and less for e-banking, online shopping, e-mail, online travel booking, and downloading software. Also their participation in social and professional networks is lower. Given that data on the ability of users regarding various Internet-related services do not reveal any significant deviations from the EU, the more modest use of advanced e-services could be attributed to lower trust in the security of e-services among Slovenian users. As regards

e-government, users in Slovenia make greater use of the Internet for seeking information and downloading official forms than in the EU, and in the past year they have also caught up with the EU as regards submitting completed forms. A detailed Eurostat survey on the use of e-government, however, reveals that Slovenian users are reluctant to submit completed forms online because a relatively large share (compared with the EU) of users question the security of such submissions and prefer to send paper forms or even deliver them in person. A less important reason (also compared with the EU) is a lack of knowledge.

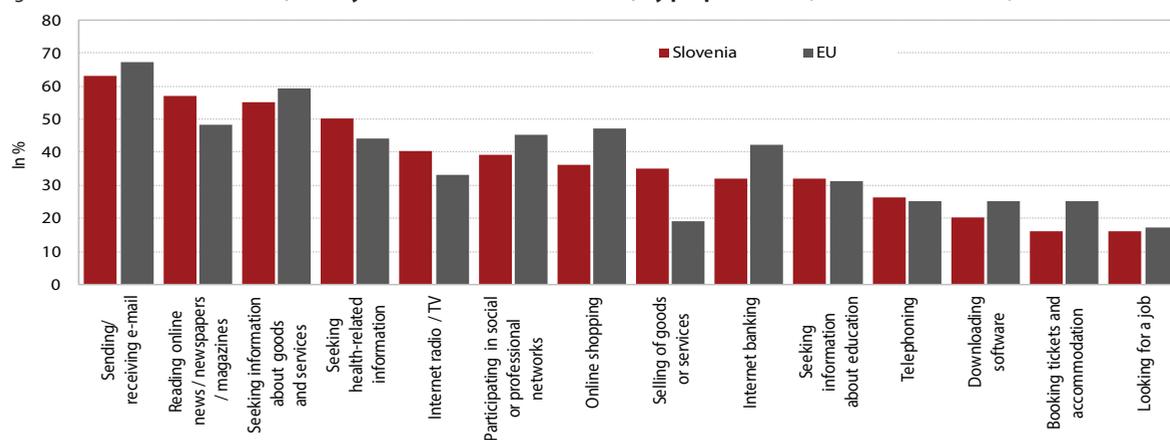
**In 2013, household accessibility to the Internet lagged (more than hitherto) behind the EU owing to the growing impact of the economic crisis on the financial standing of the population.** The share of households with Internet access at home reached 76%. After being close to the EU average in recent years, this share dropped last year by 3 percentage points. Broadband access, which is used by most households with Internet access, recorded a modest rise (to 74%) and lagged behind (for the first time after 2009) the EU average after a few years of rapid increase. As regards the types of broadband connections, a rapid expansion was recorded by wireless and mobile access, although regarding wireless access Slovenia still lags behind the developed countries (OECD STI Scoreboard, 2013). Over the past two years, the gap between Slovenia and the EU widened most notably for households of the first income quartile, while trends in other income groups were also slightly less favourable than in the EU, which could be attributed to the growing deterioration of income status during this time of crisis. The latter is also reflected in the relatively large share of households without Internet owing to the high costs of access and equipment, which is not decreasing and remains high in comparison with the EU. In addition to costs, the reasons for not having an Internet connection include security concerns and a lack of knowledge, while a high share of the population also state that they do not need it. The latter two reasons, in particular, point to the lack of e-competency and to the persistence of the digital divide in Slovenia despite the relatively high share of Internet users. A possibility to bridge the digital divide is thus seen, in addition to improved cost-efficiency, in the education of older and less-educated users, where Slovenia continues to lag markedly behind the EU in terms of Internet usage.

Table: Internet usage and access by households and individuals, Slovenia, 2005–2013<sup>1</sup>, in %

	2005	2006	2007	2008	2009	2010	2011	2012	2013	EU 2013
Households with Internet access at home	48	54	58	59	64	68	73	74	76	79
Households with broadband Internet access at home	19	34	44	50	56	62	67	73	74	76
Internet users in the last three months (16–74 years)	47	51	53	56	62	68	67	68	73	76
By age:										
16–24 years	84	86	89	94	98	97	99	97	98	95
25–54 years	54	59	62	65	73	80	80	81	84	84
55–74 years		14	14	17	22	28	29	32	40	50
By education:										
Low (or unskilled)	21	22	25	29	40	42	31	40	40	52
Medium	48	53	56	57	61	69	71	73	78	80
High	90	90	90	89	93	94	95	95	97	95

Source: SI-STAT Data Portal – Information society (SURS), 2014; Eurostat Portal Page – Information society, 2013.  
Note: <sup>1</sup> Data for all years refer to the first quarter of the year.

Figure: Share of Internet users (16–74 years in the last three months) by purpose of use, Slovenia and the EU, 2013



Source: Eurostat Portal Page – Information society, 2014.  
Note: \*Data for 2012.



## **THE THIRD PRIORITY:**

### **An efficient state**

- 3.1 General government expenditure by function (COFOG)
- 3.2 Economic structure of taxes and contributions
- 3.3 Taxes and social security contributions
- 3.4 State aid
- 3.5 Subsidies

## 3.1 General government expenditure by function (COFOG)

**For the first time since 2008, general government expenditure declined in 2012, namely by 5.9% compared with the previous year<sup>1</sup>.** General government expenditure shrank in all expenditure groups except in housing and community amenities. Nearly a half of the year-on-year decrease in total expenditure (- EUR 1,072.2 m) is attributed to a decline in expenditure on economic affairs, mostly due to lower expenditure on capital transfers. The latter were in fact relatively high the year before owing to capital injections and the takeover of the claims of some loss-making undertakings<sup>2</sup>. Major decreases were recorded also by expenditure on social protection, education and defence, totalling EUR 421.4 m altogether, while the reduction in other expenditure groups was less pronounced.

**In 2012, expenditure was still above the 2008 level by EUR 564.8 m and its share relative to GDP increased as well.** In 2008–2012, GDP in nominal terms shrank by 5.2%, while general government expenditure rose by as much as 3.4%. As a consequence, expenditure relative to GDP surged by 4 percentage points to 48.1%. A rapid growth was seen in the reference period in expenditure on social protection, general public services and health. The increase in expenditure on social protection (EUR 752.4 m) is related mainly to higher expenditure on old age (pensions) as a result of the growing number of pensioners<sup>3</sup> and to higher unemployment benefits, which significantly increased during the crisis<sup>4</sup>, despite the adoption of measures to limit the growth of these two expenditure groups. The rise in expenditure on general public services (EUR 205.4 m) is a result of the growing payments of interests on government debt. Nearly two thirds

of the growth in expenditure on health (EUR 152.9 m) between 2012 and 2008 can be attributed to higher compensation of employees as well as higher costs for goods and services. In the reference period, expenditure shrank most markedly in economic affairs (- EUR 305.1 m), followed by defence (- EUR 152.5 m), housing and community amenities (- EUR 54.4 m) and environmental protection (- EUR 39.4 m), while expenditure on public order and safety and on education recorded only minor reductions. The decline in expenditure on economic affairs after 2008 was a result of lower investments in transport, lower subsidies to transport and agriculture, and reduced capital transfers in communications, while the costs of goods and services in transport rose<sup>5</sup>. In defence, the decline was due to lower defence-related investments.

**The breakdown of expenditure has changed considerably since the onset of the crisis.** In 2012, Slovenia allocated 67.1% of total general government expenditure (3.2 percentage points more than in 2008) for social protection, education and health. The increase recorded over the past few years is almost entirely attributable to growing expenditure on social protection, while the share of expenditure on education has been declining since 2005. Since then it has dropped by 1.4 percentage points. The share of expenditure allocated for health has been rather volatile in recent years, exceeding the 2008 level by 0.5 percentage points in 2012. Expenditure on economic affairs, which in the pre-crisis years (2005–2008) gained 2 percentage points, has dropped by as much since the beginning of the crisis.

**The comparison with the EU-27 in the period 2008–2011 reveals that the highest increase in expenditure relative to GDP involved the same functions as in Slovenia, yet in Slovenia such rises were twice as high, which is also attributable to the relatively larger drop in GDP.** In this period, total general government expenditure as a share of GDP in Slovenia surged by 5.9 percentage points (EU-27 average: 2.1 percentage points). The largest increases were seen in social protection (SLO: 3.1 percentage points, EU-27: 1.6 percentage points), general public services (SLO: 1.0 percentage points, EU-27: 0.4 percentage points) and health (SLO: 0.7 percentage points, EU-27: 0.4 percentage points); Slovenia also increased expenditure in areas where such dropped in the EU-27 (economic affairs; recreation, culture, religion).

<sup>1</sup> General government expenditure by function is available only until 2012. Following the publication of data for 2012, the total general government expenditure for 2004–2011 was revised and expenditure financed from EU funds intended for legal entities outside general government was excluded. The impact of the revision is reflected in a lower value of expenditure on economic affairs. Thus, total general government expenditure relative to GDP is now lower than prior to the revision.

<sup>2</sup> Recapitalisation of NLB and some other state undertakings, takeover of the claims of Slovenian Railways, the assumption of debt of the public undertaking for the construction of hydroelectric power stations on the Sava River, and the payment of government guarantees due.

<sup>3</sup> See also Chapter 4.7.

<sup>4</sup> See also Chapter 4.2.

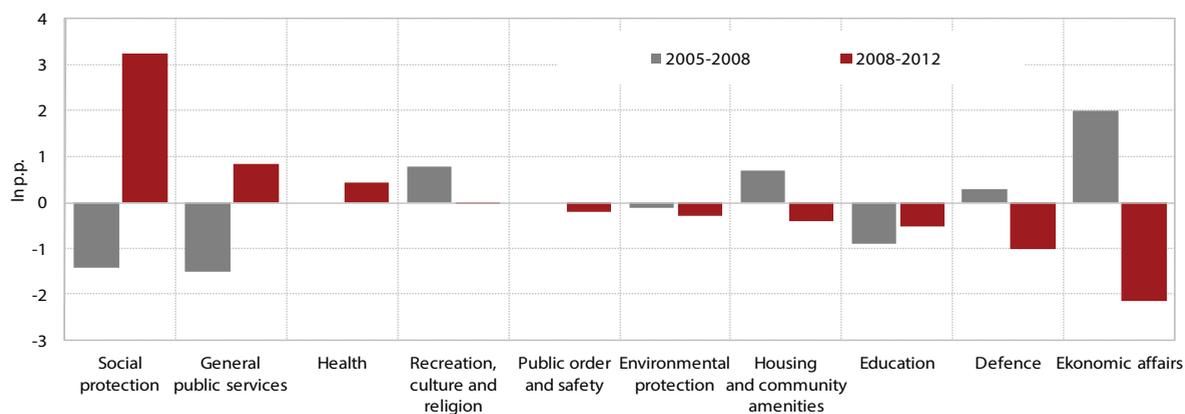
<sup>5</sup> Changes in transport are also a consequence of the institutional change that occurred in 2011 when, following the integration of two units of Slovenian Railways in the general government sector, subsidies shrank while compensation of employees and intermediate government consumption grew.

Table: General government expenditure by function, Slovenia, as a % of GDP

	2000	2005	2006	2007	2008	2009	2010	2011	2012
General public services	5.9	5.8	5.5	5.2	5.0	5.5	5.6	6.0	5.8
Defence	1.1	1.3	1.5	1.5	1.4	1.5	1.5	1.2	1.1
Public order and safety	1.8	1.8	1.8	1.7	1.7	1.9	1.9	1.9	1.8
Economic affairs	5.2	3.7	3.9	4.0	4.5	4.7	4.6	5.1	3.9
Environmental protection	0.6	0.8	0.8	0.8	0.8	0.9	0.7	0.8	0.7
Housing and community amenities	0.7	0.5	0.6	0.6	0.9	0.8	0.7	0.7	0.8
Health	6.4	6.3	6.3	5.9	6.2	7.1	6.9	6.9	7.0
Recreation, culture and religion	1.3	1.3	1.3	1.2	1.6	1.8	2.2	1.9	1.8
Education	6.2	6.7	6.4	5.9	6.1	6.5	6.6	6.6	6.4
Social protection	17.2	16.8	16.4	15.5	15.9	18.1	18.6	19.0	18.9
TOTAL EXPENDITURE	46.5	45.1	44.3	42.3	44.1	48.7	49.4	49.9	48.1

Source: General government expenditure by function, Slovenia, December 2013 (SURS); calculations by IMAD.

Figure: Change in the share of individual expenditure groups in total general government expenditure, Slovenia



Source: General government expenditure by function, Slovenia, December 2013 (SURS); calculations by IMAD.

## 3.2 Economic structure of taxes and contributions

**During the period of crisis, the trends in the economic structure of taxes in Slovenia have been similar to those in the EU-27; nevertheless, Slovenia still recorded a higher share of taxes on consumption and labour and a lower share of taxes on capital in total taxes and contributions<sup>1</sup>.** The share of taxes on consumption in total taxes and contributions in Slovenia in 2011 remained at the 2010 level (37.7%) and exceeded the EU average (34.5%<sup>2</sup>). Since the onset of the crisis in 2008, such difference has grown since Slovenia raised its share of taxes on consumption slightly more than the EU on average. Underpinned by growing household consumption, taxes on consumption in the cited period rose mainly under the influence of revenue from excise duties, as the latter surged, while revenue from VAT fell. In the EU, higher taxes on consumption were spurred by the increasing VAT rates. At 51.9%, the share of taxes on labour, which grew slightly compared with the year before, was higher than the EU average (47.2%) although the increase compared with 2008 was similar. Slovenia diverges from the EU average in its higher share of taxes on labour mainly because of the relatively high social security contributions and not because of the income tax; between 2008 and 2011, in fact, revenue from social contributions rose while revenue from income tax fell. In 2011, the share of taxes on capital fell for the fourth consecutive year and totalled 10.7% of all taxes and contributions (EU: 18.4%). A decline in the share of taxes on capital was seen also regarding the EU average but it was faster in Slovenia, where in 2011 the tax rate on corporate income further decreased. In taxes on consumption and labour, Slovenia ranked 10<sup>th</sup> among EU countries in 2012, while in taxes on capital, only Lithuania and Estonia recorded a lower share.

**SURS data for Slovenia for 2012 point to year-on-year increases in the implicit tax rate<sup>3</sup> on labour**

<sup>1</sup> The tax classification is based on the classification of taxes according to ESA-95 and the common rules for their classification. Taxes on consumption are defined as taxes on transactions between final consumers and producers and as taxes on the final consumption of goods. Taxes on labour are directly tied to wages and paid by employees or employers. Taxes on capital relate to taxes on capital, corporate income, income from household capital (annuities, dividends, interest, other income from property), capital gains, property, etc.

<sup>2</sup> The cited data for the EU-27 represent a non-weighted average. The weighted average amounts to the following: 29% in taxes on consumption, 50.8% in taxes on labour, and 20.5% in taxes on capital.

**and in the implicit tax rate on consumption, while the rate on capital declined compared with the previous year.** In 2012, the implicit tax rate on labour equalled 35.6% or 0.3 percentage points more than in the previous year. Revenue from taxes on labour decreased, for the first time also including revenue from social contributions, and an even greater decline was seen in the compensation of employees. The implicit tax rate on consumption went up by 0.5 percentage points to total 23.4%. Prior to that, it was falling (2009–2011) since revenue from taxes on consumption moved less favourably than the tax base, which is accounted for by household consumption. In 2012, however, revenue from taxes on consumption dropped; household consumption (-3.2%), which declined for the first time after a longer period of growth, dropped even more. The implicit tax rate on capital has been decreasing since 2008 and in 2012 equalled 19.7%, which is 0.6 percentage points less than in the previous year. Revenue from taxes on capital fell significantly in nominal terms, mainly owing to the lower tax on corporate income and the continuing reduction of tax rates and economic activity, while the decline in the tax base was not that pronounced. In 2012, all three implicit tax rates were lower than in 2008. Considering the trends presented by specific tax bases and revenues in 2013 (higher revenue from VAT, lower revenue from income tax and social contributions), a further rise in the implicit tax rate on consumption and a lower implicit tax rate on labour are expected in 2013.

**The latest internationally comparable data from Eurostat on implicit tax rates reveal that in 2011, Slovenia had higher taxes on consumption and lower taxes on capital and labour compared with the EU average.** The implicit tax rate on consumption in 2011 was 23.0%<sup>4</sup> in Slovenia and 20.1%<sup>5</sup> in the EU. Seven Member States had higher rates than Slovenia. The implicit tax rate on labour in Slovenia in 2011 was 35.2%, slightly lower than the EU average of 35.8%. Eleven EU countries had higher rates than Slovenia. The implicit tax rate on capital in Slovenia in 2011 was 20.5% and was significantly below the EA-17<sup>6</sup> average (28.9%).

<sup>3</sup> The implicit tax rate is defined as the ratio between taxes on consumption and final household consumption in the country according to the methodology of national accounts. The implicit tax rate on labour is calculated as the ratio between taxes on labour and the compensation of employees according to the methodology of national accounts, increased by payroll tax.

<sup>4</sup> According to Eurostat data, which until 2009 are the same for Slovenia as those published by SURS, while for 2009–2011 they present minimum differences. In calculating implicit tax rates, SURS applies the same methodology, yet the classification of taxes into individual economic categories requires a further breakdown; likewise, the decisions concerning the classification of taxes that fall between two economic functions can vary.

<sup>5</sup> The cited data for EU countries are a weighted average.

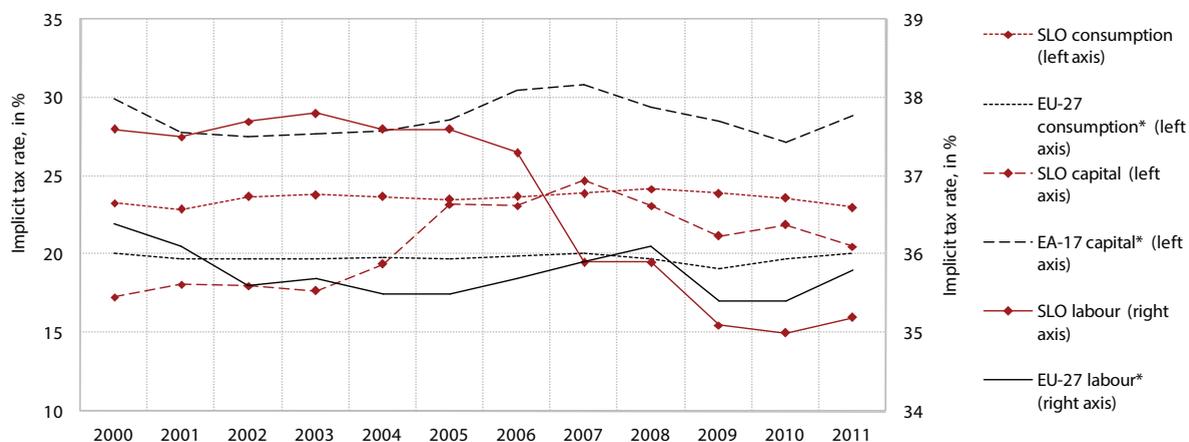
<sup>6</sup> EU-27 data not available.

Table: Implicit tax rate (ITR), as a % of the base

	ITR – consumption		ITR – labour		ITR – capital	
	2005	2011	2005	2011	2005	2011
<b>EU-27**</b>	<b>19.7</b>	<b>20.1</b>	<b>35.5</b>	<b>35.8</b>	<b>28.6 *</b>	<b>28.9 *</b>
Austria	21.7	21.2	40.8	40.8	24.2	23.6
Belgium	22.3	21.0	43.6	42.8	32.6	30.3
Bulgaria	22.8	22.4	33.2	24.6	N/A	N/A
Cyprus	19.7	17.7	24.4	26.7	27.1	24.7
Czech Republic	21.1	21.4	41.3	39.0	20.4	17.6
Denmark	33.9	31.4	37.1	34.6	49.9	N/A
Estonia	22.0	26.1	33.8	36.2	8.0	7.9
Finland	27.6	26.4	41.6	39.6	28.8	27.4
France	20.4	19.9	39.3	38.6	40.3	44.4
Greece	15.5	16.3	33.3	30.9	N/A	N/A
Ireland	26.1	22.1	25.4	28.0	N/A	N/A
Italy	17.1	17.4	41.1	42.3	28.2	33.6
Latvia	19.9	17.2	33.2	32.0	10.6	9.9
Lithuania	16.5	17.5	34.8	32.0	9.1	5.5
Luxembourg	26.3	27.2	30.0	32.8	N/A	N/A
Hungary	26.3	26.8	38.4	38.4	17.1	17.3
Malta	19.5	19.0	22.6	22.7	N/A	N/A
Germany	18.3	20.1	37.5	37.1	20.5	22.0
Netherlands	25.0	26.3	32.3	37.5	17.1	12.9
Poland	19.8	20.8	33.8	32.2	20.4	18.3
Portugal	19.7	18.0	22.4	25.5	29.3	31.6
Romania	17.9	21.6	28.1	31.4	N/A	N/A
Slovakia	21.8	18.7	32.9	31.9	18.3	14.8
<b>Slovenia</b>	<b>23.5</b>	<b>23.0</b>	<b>37.6</b>	<b>35.2</b>	<b>23.2</b>	<b>20.5</b>
Spain	16.7	14.0	32.3	33.2	35.5	N/A
Sweden	27.2	27.3	43.6	39.4	33.5	27.0
United Kingdom	18.1	19.5	26.2	26.0	38.4	34.9

Source: Eurostat: Taxation trends in the European Union, 2013; Government finance statistics, Implicit tax rates by economic function.  
 Notes: \* data for EA-17; \*\* weighted average; N/A - not available.

Figure: Implicit tax rate on consumption, labour and capital (as a % of the base)



Source: Eurostat: Taxation trends in the European Union, 2013; Government finance statistics, Implicit tax rates by economic function.  
 Note: \* The data for the EU are a weighted average.

### 3.3 Taxes and social contributions

**After increasing for two years, taxes and social contributions declined in 2012; however, the first data for 2013 point to a new increase.** Revenue from taxes and social contributions, which fell during the crisis for the first time in 2009 (- EUR 725 m), grew in parallel with the improved economic activity in 2010 and 2011, but declined in 2012, when economic activity slowed down again (- EUR 183 m). Taxes on income and wealth and social contributions decreased, while revenue from taxes on production and imports and from taxes on capital recorded a modest rise. 2012 saw the introduction of four new taxes<sup>1</sup>, which, however, had no particular impact on total tax revenue since they amounted to EUR 9 m or only 0.1% of the total tax revenue. For the second consecutive year, the biggest drop was seen in revenue from the corporate income tax (- EUR 165 m) as a consequence of less favourable business results, lower tax rates and higher tax reliefs (for capital formation, investment in R&D, and employment) introduced to stimulate activities during the economic crisis. Revenue from VAT, which, influenced by lower imports, fell markedly for the first time in 2009, declined again in 2012 (- EUR 106 m) under the influence of the nominal drop in private consumption for the first time during the crisis (- 3.2%). On the other hand, increases were seen in revenue from excise duties (up by EUR 92 m as a result of higher excise duties), revenue from taxes on CO<sub>2</sub> emissions (up by EUR 28 m as a result of the new tax on automotive fuels), and revenue from personal income tax (up by EUR 10 m). Revenue from personal income tax related to employment, which is the main source of personal income tax, fell, while revenue from personal income tax related to entrepreneurial activities and other income grew. The decline in revenue from social contributions (- EUR 43 m), which was recorded for the first time, followed the downward trend in the wage bill resulting from a lower number of persons in employment, while the average gross wage in nominal terms stagnated. In 2013 tax revenue increased (EUR 128 m), while revenue from social contributions declined further (- EUR 103 m). Revenue from taxes on production and imports were much higher than in the previous year, influenced by higher revenue from VAT following the increase in VAT rates in 2013 and improved recovery, as well as by higher revenue from the tax on CO<sub>2</sub> emissions introduced in 2012. Lower revenue from income tax led to a further reduction in revenue from taxes on income and wealth. Revenue from taxes on capital was slightly higher.

**The highest share of collected taxes and social security contributions, which pertains to the central government, is declining, while the shares of local governments and social security funds are rising.** In 2012, 48.2% of all collected taxes and social contributions pertained to the central government, which is 4.9 percentage points less compared with 2009 and 8.1 percentage points less compared with 1999, when the share was highest. A total of 39.8% of collected taxes and contributions pertained to social security funds; the share of such rose in recent years since social security contributions grew more favourably than taxes. It was higher only in 1995. With 11.2% of collected taxes and contributions, local governments recorded their highest share ever. Furthermore, 0.8% of collected taxes and contributions pertain to EU institutions.

**In 2012 the EU, on average, already recorded higher revenue from taxes and contributions than in 2008, whereas in Slovenia, the revenue was lower by EUR 626 m.** Slovenia was among the thirteen countries where revenue from taxes and contributions lagged behind 2008 levels in nominal terms. The more rapid increase in tax revenue in the EU was, to some extent, the result of faster economic recovery, while in the process of fiscal consolidation other EU countries also raised taxes earlier or more than Slovenia. In Slovenia, the share of taxes and contributions relative to GDP rose compared with the previous year owing to a relatively higher drop in GDP, namely by 0.3 percentage points to 37.9% of GDP, the same as in 2008. On average in the EU, such share accounted for 40.6% of GDP, which is 0.6 percentage points more than the year before and 0.3 percentage points more than in 2008.

**The share of taxes on production and imports and social security contributions relative to GDP is above the EU average, while the share of taxes on income and wealth and taxes on capital is lower.** In 2012 the share of taxes on production and imports in Slovenia was higher than the EU average, although compared with 2008 the increase was less pronounced than in the EU. During this period, this share increased in sixteen countries, the least in Slovenia. In fact, in order to achieve fiscal consolidation, several countries had raised their VAT rates even before 2013, when the VAT rate was also raised in Slovenia. The share of social security contributions was above the EU average yet lagged behind the average of the euro area. Since 2008, this share grew in 19 countries, the most in Slovenia. Slovenia diverges from the EU average mostly as regards the share of taxes on income and wealth, and the difference has further increased in recent years. The shares of revenue from personal income tax, which remained unchanged since 2008, and revenue from corporate income tax were both below the EU average. The share of taxes on capital was very low both on average in the EU and in Slovenia (around 0.2% and 0.0%, respectively).

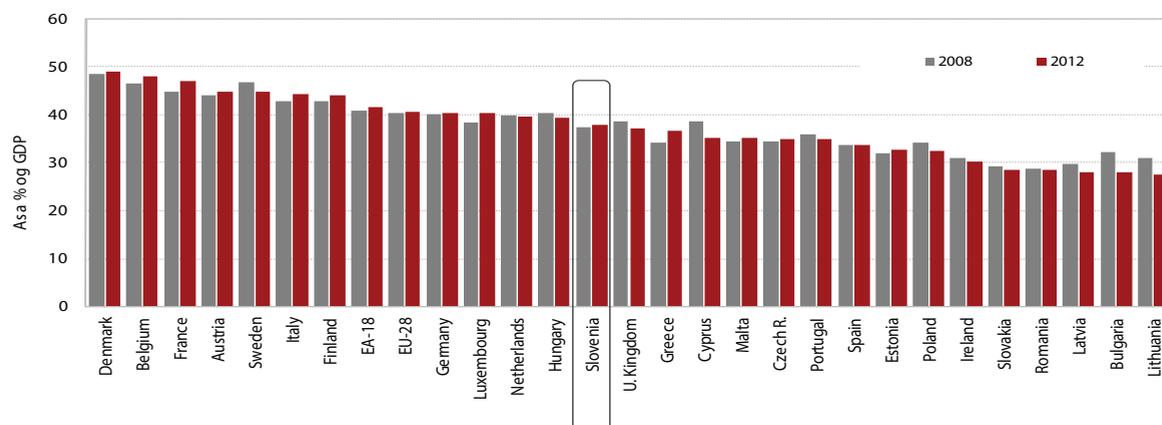
<sup>1</sup> Tax on the total assets of banks, the additional vehicle tax, the land use change tax, and tax on real property of higher value.

Table: Taxes and social security contributions, Slovenia and the EU

	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>As a % of GDP, Slovenia</b>									
Taxes and social contributions	37.5	39.0	38.6	38.0	37.6	37.5	38.1	37.6	37.9
Total taxes	23.1	24.5	24.3	24.1	23.3	22.3	22.6	22.3	22.4
Taxes on production and imports	15.7	15.8	15.2	14.9	14.4	14.0	14.3	14.3	14.6
Current taxes on income, wealth, etc.	7.3	8.7	9.1	9.2	8.9	8.3	8.2	8.0	7.8
Taxes on capital	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Social contributions	14.4	14.5	14.3	13.9	14.3	15.2	15.5	15.3	15.5
<b>As a % of GDP, EU</b>									
Taxes and social contributions	N/A	40.1	40.6	40.5	40.3	39.6	39.6	40.0	40.6
Total taxes	N/A	26.5	27.1	27.3	26.8	25.6	25.8	26.3	26.8
Taxes on production and imports	N/A	13.4	13.5	13.4	13.1	12.9	13.2	13.4	13.6
Current taxes on income, wealth, etc.	N/A	12.8	13.4	13.6	13.3	12.4	12.3	12.6	12.9
Taxes on capital	N/A	0.3	0.2	0.2	0.5	0.3	0.2	0.3	0.2
<b>Structure in %, Slovenia</b>									
Taxes and social contributions	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total taxes	61.6	62.8	63.1	63.4	62.0	59.9	59.3	59.3	59.1
Taxes on production and imports	42.0	40.4	39.4	39.2	38.2	37.3	37.7	38.0	38.5
Current taxes on income, wealth, etc.	19.4	22.3	23.6	24.1	23.7	22.0	21.5	21.2	20.5
Taxes on capital	0.2	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Social contributions	38.4	37.2	36.9	36.6	38.0	40.5	40.7	40.7	40.9

Source: SURS, Fiscal burden of taxable persons by taxes and social contributions, September 2013.

Figure: Taxes and social security contributions, as a % of GDP



Source: Eurostat, Main national accounts tax aggregates, January 2014.

## 3.4 State aid

**In 2012 state aid<sup>1</sup> relative to GDP was the highest since Slovenia's accession to the EU<sup>2</sup>.** Prior to the onset of the crisis in the second half of 2008, state aid had been gradually declining in line with the orientations of the European Commission's policy, which is not favourable towards such aid from the viewpoint of the internal market. In 2009 state aid nearly doubled as a result of measures to mitigate the consequences of the crisis and the introduction of a special scheme intended to remedy a serious disturbance in the economy, while its share in GDP rose even further because of the strong decrease in GDP. Following the phasing-out of anti-crisis measures, state aid in 2010 fell to 1.3% of GDP. Following the increase in state aid in line with the scheme to remedy a serious disturbance in the economy in 2011, intended for the recovery of the banking sector, and the rise in non-crisis state aid, state aid that year increased by EUR 246.8 m and in 2012 by EUR 308.4 m, accounting for 2.9% of GDP<sup>3</sup>. With the new state aid for banks in late 2013, state aid will be higher than in 2012, and Slovenia will probably also exceed the average state aid allocated by the EU for financial institutions in 2008–2012.

**The great variation in state aid in 2009–2012 arose mainly from the use of the special temporary scheme (state aid to remedy a serious disturbance in the economy); since 2010, other horizontal state aid has been increasing as well.** As much as EUR 243.4 m in state aid was allocated under this scheme in 2011, which is nearly as much as in 2009 and 2010 together (EUR 249.4 m), and even more in 2012 (EUR 482.9 m). Most of it (97%) was intended for financial institutions, which in the 2009–2012 period received a total of EUR 946.2 m. Following the onset of the crisis, other horizontal aid recorded significant growth as well. Following the partial withdrawal of anti-crisis measures in 2010, state aid did not further shrink in the following years, but, as a result of the introduction of new measures, rather rose, which is not in line with

the Commission's policy on its gradual reduction. Compared with 2011, state aid in 2012 rose by EUR 71.8 m, mainly for employment, where EUR 70.8 m was allocated to the new scheme only intended for the employment of persons with disabilities. The increase in horizontal aid (without the aid intended to remedy a serious disturbance in the economy) as a share of total state aid (2010: 61.3%; 2012: 71.7%) pursued the development goals defined in the Europe 2020 strategy. However, its structure was only partially encouraging. An increase was recorded in aid for R&D and training, which was indeed favourable, while less favourable was the decline in aid for small and medium sized enterprises and regional goals, intended to support the development of entrepreneurship and promote foreign direct investment. The amounts of state aid earmarked for special sectors further declined in 2012; state aid for land transport increased, while aid for other sectors (agriculture and fisheries, maritime transport, the coal sector) declined.

**State aid (excluding crisis aid and aid for rail transport<sup>4</sup>) is much higher than the EU-27 average.** According to the Commission's data (State Aid Scoreboard, 2013), the average state aid in the EU is more than one half lower than in Slovenia (EU: 0.5%; Slovenia: 1.3% of GDP). Only Latvia (1.6%), Malta (1.5%) and Finland (1.4% of GDP) recorded higher state aid.

**After the significant increase in 2009, aid granted under the de minimis<sup>5</sup> rule, which is not considered state aid, has been shrinking.** Totalling EUR 28.6 m in 2008, aid under this rule surged in Slovenia to EUR 84.5 m in 2009 and accounted for as much as 13% of total state aid. This significant increase was partly a consequence of measures adopted in response to the economic crisis, and partly a consequence of the shift from controlled state aid. Although declining since 2009, this aid also remained high in 2012 (EUR 52.1 m). It was granted for various purposes; in 2012 particularly for employment and agriculture, while aid for small and medium-sized enterprises decreased by over EUR 10 m compared with the year before.

<sup>1</sup> State aid arises from the EU's regime and represents all measures of a state in terms of its expenditures (subsidies, capital transfers) and revenues (reduced state revenues) allocated through various instruments (grants, tax exemption and relief, favourable loans, guarantees, etc.) to economic entities that have an impact on the single market of the EU. The impact of the market is defined arbitrarily, by rules adopted by the European Commission, the European Council and the European Court of Justice.

<sup>2</sup> A comparison with the pre-accession years, when total state aid had been taken into account, is not realistic, since following Slovenia's accession to the EU a significant portion of state aid to agriculture, i.e. measures under the Common Agricultural Policy (CAP), has no longer been considered state aid.

<sup>3</sup> Fifteenth Annual Survey on State Aid in Slovenia, 2013.

<sup>4</sup> In its latest survey, the European Commission only published data on state aid without crisis aid and aid for rail transport.

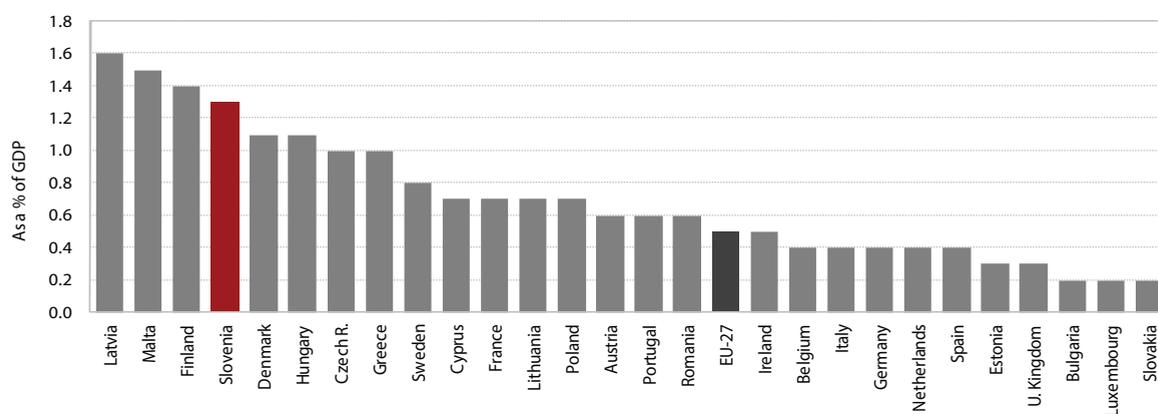
<sup>5</sup> The »de minimis« rule (aid of small amounts) is an instrument that allows Member States to grant subsidies of limited amount very rapidly, without notification to the Commission or entering into any administrative procedure. The rule is based on the assumption that, in the vast majority of cases, subsidies of a small amount do not have an effect on trade and competition between Member States and therefore do not constitute state aid pursuant to Article 87(1) EU. The ceiling for aid covered by the »de minimis« rule is EUR 200,000 per recipient over any three fiscal years.

Table: State aid (excluding crisis aid and aid for the railway sector), as a % of GDP

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>EU-27</b>	<b>1.0</b>	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>	<b>0.5</b>	<b>0.6</b>	<b>0.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.5</b>
Austria	1.1	0.7	0.5	0.8	0.4	0.6	0.8	0.7	0.6	0.6
Belgium	0.6	0.5	0.4	0.4	0.4	0.4	0.6	0.6	0.4	0.4
Bulgaria	N/A	N/A	0.1	0.1	0.6	0.6	0.5	0.1	0.1	0.2
Cyprus	N/A	2.7	1.4	0.6	0.7	0.6	1.0	0.7	0.8	0.7
Czech Republic	N/A	2.3	0.6	0.7	0.8	0.9	0.7	0.8	0.9	1.0
Denmark	0.6	1.0	0.8	0.7	0.8	0.8	1.0	1.0	1.0	1.1
Estonia	N/A	0.1	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3
Finland	2.8	1.4	1.3	1.3	1.1	1.1	1.2	1.2	1.5	1.4
France	0.8	0.6	0.5	1.7	0.5	0.7	0.8	0.8	0.7	0.7
Greece	1.4	0.7	0.4	0.4	0.5	0.9	1.1	0.9	1.2	1.0
Ireland	0.6	0.9	0.5	0.6	0.7	1.2	1.0	1.1	0.7	0.5
Italy	1.2	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.2	0.4
Latvia	N/A	0.7	1.1	1.3	2.2	0.6	0.7	1.0	0.9	1.6
Lithuania	N/A	0.3	0.5	0.5	0.6	0.4	0.6	0.6	0.7	0.7
Luxembourg	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.2	0.3	0.2
Hungary	N/A	1.1	1.8	1.5	1.4	2.1	1.7	2.1	1.2	1.1
Malta	N/A	3.3	3.5	2.7	2.3	1.9	1.9	1.3	1.5	1.5
Germany	1.6	0.8	0.8	0.8	0.6	0.7	0.7	0.5	0.5	0.4
Netherlands	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4
Poland	N/A	1.0	0.8	0.8	0.6	0.9	1.0	0.9	0.8	0.7
Portugal	1.1	1.6	0.9	0.9	1.3	0.9	1.0	1.0	1.0	0.6
Romania	N/A	N/A	0.6	0.7	1.2	0.6	0.7	0.2	0.5	0.6
Slovakia	N/A	0.4	0.6	0.5	0.4	0.6	0.5	0.5	0.2	0.2
<b>Slovenia</b>	<b>N/A</b>	<b>1.0</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>	<b>1.0</b>	<b>1.0</b>	<b>1.1</b>	<b>1.3</b>
Spain	1.1	1.1	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4
Sweden	0.5	0.4	1.0	1.0	0.9	0.9	0.9	0.8	0.8	0.8
United Kingdom	0.4	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.3

Source: State Aid Scoreboard, Autumn 2013, European Commission, 2013.  
 Note: N/A – not available.

Figure: State aid (excluding crisis aid and aid for the railway sector), 2012, as a % of GDP



Source: State Aid Scoreboard, Autumn 2013, European Commission, 2013.

## 3.5 Subsidies

**The very high general government subsidies provided in 2009 and 2010 mainly through measures to mitigate the economic crisis fell strongly in 2011 and 2012.** The consequences of the economic crisis were tackled through special anti-crisis measures, including subsidies. After remaining unchanged for several years, the share of subsidies in GDP (1.6%) increased to 1.9% of GDP in 2009 owing to an increase in subsidies (by EUR 99.5 m) and a decline in GDP. Some measures had a limited period of application and expired in 2010. New measures were adopted, increasing subsidies by an additional EUR 22.1 m. Given the expiry of anti-crisis measures as well as the institutional changes in transport<sup>1</sup>, subsidies decreased significantly in 2011. They fell by EUR 313.9 m, thus accounting for 1.1% of GDP<sup>2</sup>. In 2010 subsidies in Slovenia significantly exceeded the EU-27 average (1.3% of GDP), while their increase compared with the stable average recorded in 2005–2008 was lower in the EU (0.2 percentage points) than in Slovenia (0.7 percentage points). The decline in subsidies relative to GDP in 2011 brought Slovenia close to the EU average. However, the differences between countries remain significant (Austria 3.4%, Greece 0.1% of GDP).

**The classification of general government subsidies by function shows that Slovenia allocates the bulk of subsidies for economic affairs, particularly in the areas of transport, general economic, commercial and labour affairs.** In 2012 Slovenia allocated approximately two thirds of subsidies for economic affairs; this share was, however, lower than in the previous year by EUR 43.5 m. Although subsidies for transport fell strongly following the institutional change in the railway sector, they were still the highest among all functions. In 2012 they recorded a slight increase compared with the year before. The second most important function is general economic, commercial and labour affairs. In order to alleviate the impact of the economic crisis, these subsidies saw a significant increase and even tripled in 2009 and 2010 as a result of measures intended to preserve jobs. After representing around 30% of all subsidies for economic affairs in 2005–2008, subsidies for agriculture, forestry, fishing and hunting fell considerably, accounting for only 8.3% in 2012 (EUR 18.1 m).

**General government subsidies for other non-economic affairs slightly increased in 2008–2010 but fell in 2011–2012.** Subsidies for other non-economic affairs, averaging EUR 148 m per year in 2007–2009 and EUR 28 m more in 2010, dropped to approximately EUR 130 m per year in 2011–2012. Until 2008 most subsidies had been allocated for environmental protection, while in the following years the share of such fell by nearly a half; conversely, an increase was recorded in subsidies for social protection (for unemployment) and education.

**Since Slovenia still lacks a central register of beneficiaries, the efficiency of subsidies cannot be measured; data from corporate annual accounts, however, reveal that the business performance of beneficiaries is improving significantly.** In 2012 subsidies related to business results (EUR 392.2 m) raised the gross returns of beneficiaries by 1.6% and their operating profit by 35.9%; together with subsidies not related to business results, they increased total profit by as much as 39.4%. The beneficiaries of subsidies were predominantly companies that were more export-oriented than those that did not receive subsidies<sup>3</sup>. As in previous years, the number of beneficiaries was very high<sup>4</sup>, which can be attributed to numerous and fragmented subsidy programmes, where most available subsidies are received by large companies. A total of 56.6% of all subsidies relating to business results were allocated to only 72 large companies. The most subsidised companies generated 4.9% of net revenue from sales, 11.4% of revenue from sales in the EU markets, and 4.7% of revenue from sales in non-EU markets, thus accounting for 10.9% of total net revenue and employing 6.2% of all employees on the basis of working hours. The highest subsidy was allocated to a railway transport company, while most subsidies were intended for transport and storage, the processing industry, and professional, scientific and technical activities.

<sup>1</sup> With the reorganisation of Slovenian Railways, four units were established. Two of them – passenger transport and infrastructure – were part of the central government sector throughout 2011. This led to reduced subsidies and increased compensation of employees and intermediate consumption.

<sup>2</sup> SURS figures. The Eurostat figure for Slovenia is 1.3% of GDP.

<sup>3</sup> The beneficiaries of subsidies relating to business results recorded 51.4% of net revenue from sales on foreign markets; companies that did not receive subsidies recorded only 27.6%.

<sup>4</sup> Around 7.4% of all companies, whereby several companies received very low amounts. 86% of all subsidies relating to business results were received by only 10% of the beneficiaries.

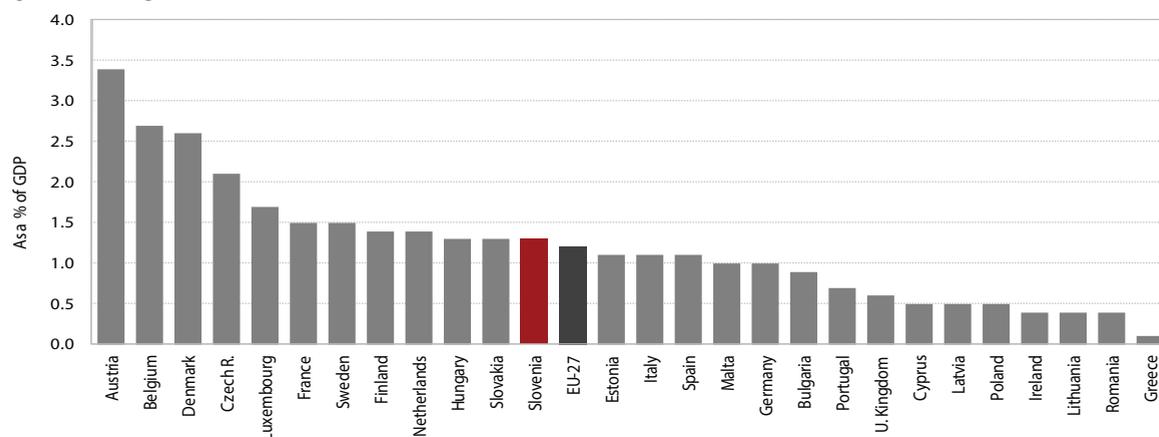
Table: General government subsidies in the EU-27, 1995–2011, as a % of GDP

	1995	2000	2005	2006	2007	2008	2009	2010	2011
<b>EU-27</b>	<b>N/A</b>	<b>N/A</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.1</b>	<b>1.3</b>	<b>1.3</b>	<b>1.2</b>
Austria	2.8	3.1	3.4	3.4	3.3	3.5	3.5	3.5	3.4
Belgium	1.2	1.2	1.6	1.7	1.9	2.1	2.2	2.6	2.7
Bulgaria	N/A	1.0	0.8	0.7	0.8	1.1	1.2	1.2	0.9
Cyprus	0.9	1.4	0.7	0.5	0.4	0.4	0.2	0.4	0.5
Czech Republic	2.6	2.7	1.7	1.8	1.7	1.6	2.0	1.9	2.1
Denmark	2.7	2.4	2.3	2.2	2.2	2.2	2.6	2.5	2.6
Estonia	0.8	1.1	0.7	0.9	0.9	1.0	1.0	1.1	1.1
Finland	2.7	1.5	1.3	1.4	1.3	1.3	1.4	1.5	1.4
France	1.6	1.5	1.4	1.4	1.4	1.4	1.7	1.7	1.5
Greece	0.4	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
Ireland	1.0	0.7	0.5	0.4	0.5	0.5	0.6	0.6	0.4
Italy	1.4	1.2	0.9	0.9	1.0	1.0	1.1	1.2	1.1
Latvia	1.2	1.0	0.5	0.7	0.8	1.2	1.1	0.8	0.5
Lithuania	N/A	0.8	0.7	0.7	0.9	0.7	0.6	0.5	0.4
Luxembourg	1.6	1.5	1.6	1.5	1.6	1.6	1.8	1.7	1.7
Hungary	2.2	1.7	1.4	1.4	1.4	1.1	1.0	1.1	1.3
Malta	1.7	1.4	2.0	2.1	2.0	2.1	1.1	1.0	1.0
Germany	2.1	1.7	1.1	1.1	1.0	1.0	1.2	1.1	1.0
Netherlands	1.0	1.5	1.2	1.1	1.2	1.2	1.6	1.6	1.4
Poland	N/A	N/A	0.6	0.6	0.6	0.6	0.5	0.5	0.5
Portugal	1.0	1.2	0.9	0.9	0.8	0.7	0.8	0.7	0.7
Romania	3.4	1.8	1.5	1.8	1.3	0.8	0.7	0.6	0.4
Slovakia	4.7	2.5	1.3	1.3	1.2	1.7	1.6	1.4	1.3
<b>Slovenia</b>	<b>2.2</b>	<b>1.9</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>1.6</b>	<b>2.1</b>	<b>2.3</b>	<b>1.3</b>
Spain	1.0	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1
Sweden	3.6	1.6	1.4	1.5	1.4	1.4	1.5	1.5	1.5
United Kingdom	0.7	0.4	0.6	0.7	0.6	0.6	0.7	0.6	0.6

Source: Eurostat Portal Page - Government finance statistics, latest publication 10 December 2013.

Note: N/A – not available.

Figure: General government subsidies, 2011, as a % of GDP



Source: Eurostat Portal Page - Government finance statistics, latest publication 10 December 2013.



## **THE FOURTH PRIORITY:**

### **Labour market and a welfare state**

- 4.1 Employment rate
- 4.2 Unemployment rate
- 4.3 Long-term unemployment rate
- 4.4 Temporary employment
- 4.5 Part-time employment
- 4.6 Social protection expenditure
- 4.7 Pension expenditure
- 4.8 Health expenditure
- 4.9 Expenditure on long-term care
- 4.10 Minimum wage
- 4.11 Risk of poverty
- 4.12 Material deprivation
- 4.13 Health care resources
- 4.14 Capacities of the education system
- 4.15 Life satisfaction

## 4.1 Employment rate

**In 2013 the employment rate significantly declined, falling below the EU average in the first half of the year.** Until 2008 the employment rate had been steadily rising, being slightly above the EU average in the entire period. In 2009 it dropped as the result of a pronounced reduction in economic activity, but its decline was smaller than the decline in GDP, partly due to the usual lag in the labour market's response to changes in economic activity, but also as a result of the government intervening by means of two emergency laws,<sup>1</sup> which offset the decline in employment and helped to preserve jobs temporarily. After the expiry of the emergency laws, in 2011 employment continued to adjust to the lower economic activity. The employment rate fell most notably the same year (by 1.8 percentage points to 64.4%), while it had already risen somewhat in the EU overall. Continuing to decline, it equalled the EU average in 2012 (64.1%), before falling below the EU average of 64.1% in the second quarter of 2013 (to 63%). Slovenia has thus moved further away from the high employment targets set in the SDS and the Europe 2020 strategy.

**With the economic crisis being hardest on sectors that predominantly employ men, the employment rate for men declined more than the employment rate for women.** The male employment rate had been rising until 2008, when it reached its high (72.2%) and equalled the average rate in the EU. During the economic crisis, activity has declined most notably in construction and manufacturing, the sectors that mainly employ men. The employment rate for men therefore fell much more than for women, but nevertheless remains higher than for women. In the second quarter of 2013 the male employment rate stood at 66.5%, being still slightly lower than in the EU overall (69.4%). The female employment rate is higher than in the EU. After rising rapidly in 2004–2008, it reached 64.2% in 2008. Since then it has been persistently declining; in the second quarter of 2013 it totalled only 59.2%, but was nevertheless still slightly higher than the average in the EU (58.8%).

**For the third consecutive year the number of employed persons fell the most in the construction sector, but for the first time was also down in public service activities.** According to data from the statistical register of employment, in 2013 the number of employed persons fell more (-2.3%) than in 2012. The decline was most pronounced in

the first quarter, mainly as a result of an increase in transitions from work to retirement in response to the pension reform adopted at the end of 2012. Similar to 2010–2012, in 2013 employment declined the most in the construction sector (by 9.3%). It was also lower in manufacturing (by 2.9%), trade (by 3.4%) and financial and insurance activities (by 3.6%), and – for the first time – in public services, particularly public administration (by 3.1%). The number of employed persons rose especially in agriculture (by 3.4%), being also slightly higher in professional, scientific and technical activities (by 1.5%). Among the active population, the number of employed persons declined in particular (by 2.6%), especially those employed by professional natural persons (by 6.1%), while the number of self-employed excluding farmers rose slightly.

**The employment rates of young and older persons still indicate strong labour market segmentation by age in Slovenia.** The employment rate of young people aged 15–24 declined for the fifth year in a row. In 2007–2010 it was otherwise slightly above the EU average, primarily on account of the high prevalence of student work, but in 2011 it declined further (by 2.6 percentage points to 31.5%) and fell below the EU average. The decline was even more notable in 2012 (by 4.2 percentage points to 27.3%), again mainly due to a fall in student work. A decline, albeit smaller, was also seen in 2013 (by 0.7 percentage points to 26.6%). In the second quarter of 2013 the employment rate of young people was thus 12.6 percentage points lower than in 2008, having fallen much more than in the EU overall (5.2 percentage points) as a consequence of a higher prevalence of temporary and less secure types of youth employment in Slovenia compared with the EU. The share of fixed-term employment of young people is otherwise the largest in the EU, which indicates strong segmentation of the labour market. On the other hand, the employment rate of older people rose during the crisis, from 32.8% in 2008 to 33.5% in 2013, mainly due to the rising employment rate of older women (as a result of pension legislation and a gradual increase in the female retirement age). Nevertheless, the employment rate of older persons in the second quarter of 2013 was the lowest in the EU.

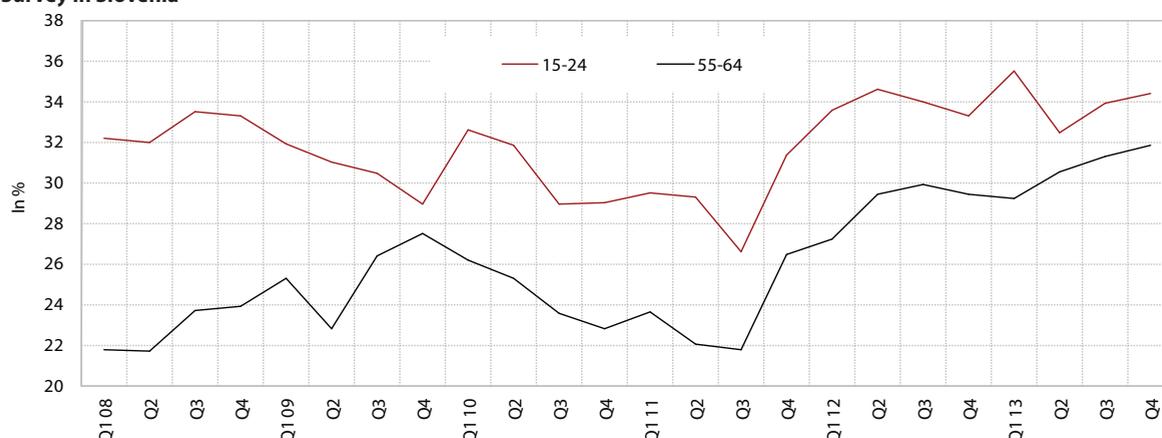
<sup>1</sup> Partial Subsidising of Full-Time Work Act, Official Gazette of the RS, No. 5/2009, and the Partial Reimbursement of Payment Compensation Act, Official Gazette of the RS, No. 42/2009.

Table: Employment rate (15–64 age group) according to the Labour Force Survey, in %

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013 Q2
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>63.4</b>	<b>64.3</b>	<b>65.3</b>	<b>65.7</b>	<b>64.5</b>	<b>64.0</b>	<b>64.1</b>	<b>64.1</b>	<b>64.1</b>
Austria	68.4	67.9	68.6	70.2	71.4	72.1	71.6	71.7	72.1	72.5	72.5
Belgium	56.3	60.9	61.1	61.0	62.0	62.4	61.6	62.0	61.9	61.8	62.0
Bulgaria	N/A	51.5	55.8	58.6	61.7	64.0	62.6	59.7	58.4	58.8	59.5
Cyprus	N/A	65.4	68.5	69.6	71.0	70.9	69.0	68.9	67.6	64.6	61.5
Czech Republic	N/A	64.9	64.8	65.3	66.1	66.6	65.4	65.0	65.7	66.5	67.8
Denmark	73.9	76.4	75.9	77.4	77.0	77.9	75.3	73.3	73.1	72.6	73.0
Estonia	N/A	60.3	64.4	68.1	69.4	69.8	63.5	61.0	65.1	67.1	69.0
Finland	59.7	68.1	68.4	69.3	70.3	71.1	68.7	68.1	69.0	69.4	70.3
France	59.6	61.7	63.7	63.6	64.3	64.8	64.0	63.9	63.9	63.9	64.2
Greece	54.5	56.6	60.1	61.0	61.4	61.9	61.2	59.6	55.6	51.3	49.6
Croatia	N/A	N/A	55.0	55.6	57.1	57.8	56.6	54.0	52.4	50.7	49.8
Ireland	54.1	64.5	67.6	68.7	69.2	67.6	61.9	59.6	58.9	58.8	60.2
Italy	50.8	53.4	57.6	58.4	58.7	58.7	57.5	56.9	56.9	56.8	55.7
Latvia	N/A	57.4	63.3	66.3	68.3	68.6	60.9	59.3	60.8	63.0	64.8
Lithuania	N/A	59.6	62.6	63.6	64.9	64.3	60.1	57.6	60.2	62.0	63.8
Luxembourg	58.5	62.7	63.6	63.6	64.2	63.4	65.2	65.2	64.6	65.8	65.4
Hungary	N/A	55.9	56.9	57.3	57.3	56.7	55.4	55.4	55.8	57.2	58.3
Malta	N/A	54.5	53.9	53.6	54.6	55.3	55.0	56.1	57.6	59.0	60.5
Germany	64.7	65.3	65.5	67.2	69.0	70.1	70.3	71.1	72.5	72.8	73.3
Netherlands	64.2	72.9	73.2	74.3	76.0	77.2	77.0	74.7	74.9	75.1	74.4
Poland	N/A	55.1	52.8	54.5	57.0	59.2	59.3	58.9	59.3	59.7	59.8
Portugal	62.5	68.2	67.5	67.9	67.8	68.2	66.3	65.6	64.2	61.8	60.8
Romania	N/A	64.2	57.6	58.8	58.8	59.0	58.6	58.8	58.5	59.5	60.2
Slovakia	N/A	56.3	57.7	59.4	60.7	62.3	60.2	58.8	59.3	59.7	59.8
<b>Slovenia</b>	<b>N/A</b>	<b>62.7</b>	<b>66.0</b>	<b>66.6</b>	<b>67.8</b>	<b>68.6</b>	<b>67.5</b>	<b>66.2</b>	<b>64.4</b>	<b>64.1</b>	<b>63.0</b>
Spain	46.8	56.1	63.3	64.8	65.6	64.3	59.8	58.6	57.7	55.4	54.4
Sweden	70.7	71.1	72.5	73.1	74.2	74.3	72.2	72.1	73.6	73.8	74.6
United Kingdom	68.1	71.0	71.7	71.6	71.5	71.5	69.9	69.5	69.5	70.1	70.4

Source: Eurostat Portal Page – Population and social conditions – Labour market, 2014.  
 Note: N/A – not available.

Figure: Employment rates of young and older people (in the 15–24 and 55–64 age groups) according to the Labour Force Survey in Slovenia



Source: Eurostat Portal Page – Population and social conditions – Labour market, 2014; calculations by IMAD.

## 4.2 Unemployment rate

**In 2013 the survey unemployment rate<sup>1</sup> rose more notably than in the previous year, having more than doubled since the onset of the crisis.** The survey unemployment rate has been rising since the third quarter of 2008, when it was the lowest (4.1%) since it was first measured. By 2013 it had already risen to 10.1%. With unemployment in the EU as a whole rising at a slower pace, the Slovenian unemployment rate almost reached the EU average by the second quarter of 2013 (a gap of 0.4 percentage points) after being 2.6 percentage points lower in 2008.

**The survey unemployment rates of women and people with lower educational skills rose substantially in 2013.** The survey female unemployment rate also reached a low (4.4%) in the third quarter of 2008 and has been continuously rising ever since. Having been lower than the unemployment rate of men at the beginning of the crisis, it surpassed it after a surge in 2012. After another substantial increase in 2013, it was as high as 11.0%. The male unemployment rate increased more strongly at the beginning of the crisis and then again in 2013, while in 2011 and 2012 it was rising more slowly than the corresponding rate for women. In 2013 it was 9.5% (in the second quarter of 2013 it was still slightly lower than in the EU overall). The survey unemployment of youth was also the lowest in the final quarter of 2008 (7.9%). Since the beginning of the crisis it has been rising more notably than the EU average and reached 22.1% in the second quarter of 2013. The surge in youth unemployment was, in addition to the deteriorated economic conditions, also related to the prevalence of temporary forms of employment. Given that enterprises often react to falling demand by not renewing fixed-term employment contracts and by reducing the extent of student work, fewer young people have found jobs in the period since the beginning of the crisis. People with lower educational levels and upper secondary education were hit the hardest by the crisis. Between 2008 and the second quarter of 2013, the survey unemployment rate of persons with a low level of education increased from 6.2% to 18.2% and of people with upper secondary education from 4.4% to 11.1%. In the second quarter of 2013 the survey unemployment rate of those with higher education was up 2.8 percentage points compared with 2008.

**After stagnating in 2012 overall, registered unemployment rose more strongly in 2013.** The number of registered unemployed had already increased significantly at the beginning of 2013, in response to the pension reform adopted at the end of 2012 and due to a substantial inflow of people who became unemployed due to the termination of their fixed-term employment contacts. In mid-2013 it started to drop for seasonal reasons, only to rise again in December due to a larger number of people who lost fixed-term employment and a smaller number of those who found jobs. A total of 124,015 persons were registered as unemployed at the end of December, 5.0% more than in December 2012. In 2013, registered unemployment averaged 119,827, up 8.8% on 2012. The total number of people registering as unemployed was somewhat higher than in 2012 on account of more first-time jobseekers, while fewer people than a year earlier registered due to a loss of employment (primarily as fewer people were laid off for business reasons or lost their jobs following bankruptcies). The total number of de-registrations was also up slightly on the previous year, mainly as more people found work, primarily due to the government becoming more involved in the implementation of active employment-policy schemes (public works, subsidies for self-employment<sup>2</sup>). There were fewer transitions from unemployment to inactivity and fewer people were deregistered for breaches of regulations. The registered unemployment rate increased more strongly towards the end of last year, averaging 13.1% over the year, up 1.1 percentage points on 2012. Between September 2008, when it was the lowest since 1990 (6.3%), and December 2013, the registered unemployment more than doubled (13.5%).

<sup>1</sup> The annual average for Slovenia is calculated from quarterly data.

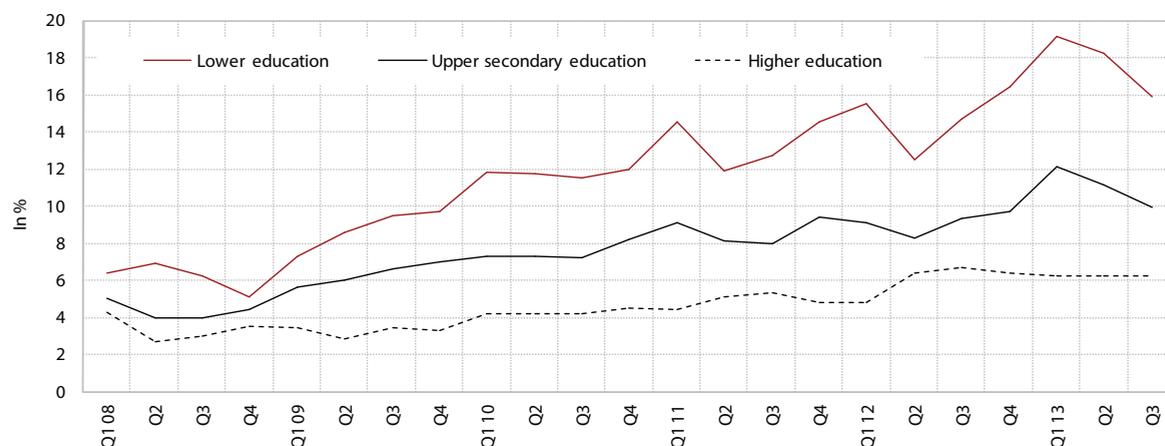
<sup>2</sup> Subsidised employment was up 3,518 persons (30.8%), while regular employment was up 3,216 persons (6.9%).

Table: Survey unemployment rate, in %

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013 Q2
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>8.9</b>	<b>8.2</b>	<b>7.2</b>	<b>7.0</b>	<b>8.9</b>	<b>9.6</b>	<b>9.6</b>	<b>10.5</b>	<b>10.8</b>
Austria	4.4	4.7	5.2	4.8	4.4	3.8	4.8	4.4	4.2	4.3	4.5
Belgium	9.3	6.6	8.5	8.3	7.5	7.0	7.9	8.3	7.2	7.6	8.1
Bulgaria	N/A	16.2	10.1	9.0	6.9	5.6	6.8	10.2	11.3	12.3	13.0
Cyprus	N/A	5.0	5.3	4.6	3.9	3.7	5.4	6.3	7.9	11.9	15.5
Czech Republic	N/A	8.8	7.9	7.2	5.3	4.4	6.7	7.3	6.7	7.0	6.8
Denmark	7.0	4.5	4.8	3.9	3.8	3.4	6.0	7.5	7.6	7.5	6.7
Estonia	N/A	13.1	7.9	5.9	4.7	5.5	13.8	16.9	12.5	10.2	8.1
Finland	17.0	11.1	8.4	7.7	6.9	6.4	8.2	8.4	7.8	7.7	9.1
France	11.8	10.2	8.9	8.8	8.0	7.4	9.1	9.3	9.2	9.9	9.7
Greece	9.1	11.3	9.9	8.9	8.3	7.7	9.5	12.6	17.7	24.3	27.1
Croatia	N/A	N/A	12.7	11.2	9.6	8.4	9.1	11.8	13.5	15.9	16.6
Ireland	12.0	4.3	4.4	4.4	4.6	6.0	12.0	13.9	14.7	14.7	13.9
Italy	11.7	10.9	7.7	6.8	6.1	6.8	7.8	8.4	8.4	10.7	12.1
Latvia	N/A	14.2	8.9	6.8	6.0	7.5	17.1	18.7	16.2	15.0	11.4
Lithuania	N/A	16.0	8.3	5.6	4.3	5.8	13.7	17.8	15.4	13.4	11.7
Luxembourg	2.9	2.3	4.5	4.7	4.1	5.1	5.1	4.4	4.9	5.1	6.2
Hungary	N/A	6.6	7.2	7.5	7.4	7.8	10.0	11.2	10.9	10.9	10.3
Malta	N/A	6.3	7.3	6.9	6.5	6.0	6.9	6.9	6.5	6.4	6.7
Germany	8.2	7.9	11.2	10.3	8.7	7.5	7.8	7.1	5.9	5.5	5.3
Netherlands	7.2	2.7	4.7	3.9	3.2	2.8	3.4	4.5	4.4	5.3	6.6
Poland	N/A	16.4	17.8	13.9	9.6	7.1	8.2	9.7	9.7	10.1	10.5
Portugal	7.1	3.9	7.7	7.8	8.1	7.7	9.6	11.0	12.9	15.9	16.7
Romania	N/A	7.1	7.2	7.3	6.4	5.8	6.9	7.3	7.4	7.0	7.5
Slovakia	N/A	19.1	16.3	13.4	11.1	9.5	12.0	14.4	13.6	14.0	14.0
<b>Slovenia</b>	<b>N/A</b>	<b>6.9</b>	<b>6.5</b>	<b>6.0</b>	<b>4.9</b>	<b>4.4</b>	<b>5.9</b>	<b>7.3</b>	<b>8.2</b>	<b>8.9</b>	<b>10.4</b>
Spain	22.7	13.8	9.2	8.5	8.3	11.3	18.0	20.1	21.7	25.0	26.3
Sweden	8.9	5.5	7.8	7.1	6.2	6.2	8.4	8.6	7.8	8.0	8.8
United Kingdom	8.7	5.6	4.8	5.4	5.3	5.6	7.6	7.8	8.0	7.9	7.6

Source: Eurostat Portal Page – Population and social conditions – Labour market, 2014.  
 Note: N/A – not available.

Figure: Survey unemployment rate by educational attainment in Slovenia, in %



Source: Eurostat Portal Page – Population and social conditions – Labour market, 2014.

## 4.3 Long-term unemployment rate

**The long-term unemployment rate<sup>1</sup> increased substantially again in 2013.** After falling persistently in 2000–2009, it has been rising ever since the onset of the crisis. Having been below the EU average until 2009, it has increased faster than in the EU overall since the beginning of the crisis and reached the EU average already in the first quarter of 2013. By the second quarter of 2013 it had already risen to 5.1%. The very long-term unemployment rate has also increased faster in Slovenia during the crisis than in the EU overall. From 2009, when it was the lowest and below the EU average, by the second quarter of 2013 it had nearly tripled (2.8%) and reached the EU average. The increase in long-term unemployment is a sign of a growing mismatch between labour force supply and demand. Long periods of unemployment can lead to human capital erosion, which in turn decreases the individual's attractiveness to employers and increases the chance of his or her withdrawal from the labour market into inactivity. When the economy starts to recover, long-term unemployment typically falls more slowly than total unemployment.

**Despite a larger increase during the crisis, the long-term unemployment rate of men remains lower than the corresponding rate for women.** Before the crisis, the long-term unemployment rate of men had been lower than for women, but at the beginning of the crisis it rose more than for women due to an increased inflow of unemployed, particularly from the manufacturing and construction sectors, which have been most affected by the crisis and mainly employ men. In the second quarter of 2013 the long-term unemployment rate of men was nevertheless still lower than for women, at 4.9%, and still slightly below the EU average. The female long-term unemployment rate in the same period was already 5.4%, higher than in the EU as a whole.

**In 2013 every second unemployed person in Slovenia had been unemployed for at least one year.** In the second quarter of 2013, the share of long-term unemployed in total employment totalled 49.5%, which is somewhat more than in the same period in 2012 (by 1.5 percentage points). In 2008 it was 42.2% (EU: 37.2%). After a substantial increase in 2010 (by

13.2 percentage points), it is above the EU average. The share of men is roughly the same as the share of women, but the former increased more during the crisis owing to a stronger increase in the number of long-term unemployed men. Between 2009 – when it was at its lowest (28.3%) – and the second quarter of 2013, the share of long-term unemployed men rose to 49.1%, while the corresponding share of women increased from 32.1% to 49.9% in the same period, both being higher than in the EU.

---

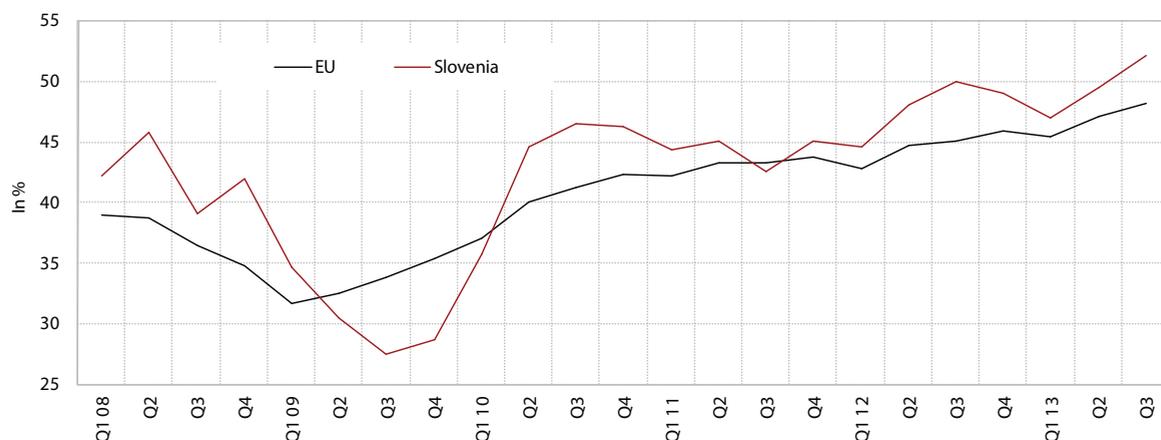
<sup>1</sup> The long-term unemployment rate is the ratio of the number of long-term unemployed (people unemployed for a year or more) to the active population (i.e. employed and unemployed persons). The very long-term unemployment rate is the rate of unemployment that lasts for more than two years.

Table: Survey unemployment rate, in %

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013 Q2
<b>EU-28</b>	<b>N/A</b>	<b>4.2</b>	<b>3.8</b>	<b>3.1</b>	<b>2.6</b>	<b>3.0</b>	<b>3.9</b>	<b>4.2</b>	<b>4.7</b>	<b>5.1</b>
Austria	1.0	1.3	1.3	1.2	0.9	1.0	1.1	1.1	1.1	1.1
Belgium	3.7	4.4	4.2	3.8	3.3	3.5	4.1	3.5	3.4	3.7
Bulgaria	9.4	6.1	5.0	4.1	2.9	3.0	4.8	6.3	6.8	7.2
Cyprus	1.2	1.3	0.9	0.7	0.5	0.6	1.3	1.6	3.6	5.6
Czech Republic	4.3	4.2	3.9	2.8	2.2	2.0	3.0	2.7	3.0	3.0
Denmark	0.9	1.1	0.8	0.6	0.5	0.6	1.5	1.8	2.1	1.9
Estonia	6.2	4.2	2.8	2.3	1.7	3.8	7.7	7.1	5.5	3.9
Finland	2.8	2.2	1.9	1.6	1.2	1.4	2.0	1.7	1.6	1.6
France	3.5	3.8	3.9	3.4	2.9	3.4	3.9	4.0	4.1	4.2
Greece	6.2	5.1	4.8	4.1	3.6	3.9	5.7	8.8	14.4	17.8
Croatia	N/A	7.5	6.8	5.9	5.3	5.1	6.7	8.6	10.3	10.8
Ireland	1.6	1.5	1.4	1.4	1.7	3.5	6.8	8.7	9.1	8.2
Italy	6.2	3.9	3.4	2.9	3.1	3.5	4.1	4.4	5.7	6.8
Latvia	7.9	4.4	2.7	1.7	2.1	4.9	8.9	8.8	7.8	5.6
Lithuania	8.0	4.2	2.3	1.2	1.1	3.2	7.5	8.0	6.6	5.0
Luxembourg	0.5	1.2	1.4	1.2	1.6	1.2	1.3	1.4	1.6	1.4
Hungary	3.0	3.2	3.4	3.4	3.6	4.2	5.5	5.2	4.9	4.8
Malta	4.5	3.5	2.9	2.7	2.5	3.0	3.2	3.0	3.0	2.8
Germany	4.1	6.0	5.8	4.9	4.0	3.5	3.4	2.8	2.5	2.4
Netherlands	0.8	2.1	1.9	1.4	1.1	0.9	1.2	1.5	1.8	2.4
Poland	7.4	10.3	7.8	4.9	2.4	2.5	3.0	3.6	4.1	4.4
Portugal	1.9	4.1	4.3	4.2	4.0	4.7	6.3	6.2	7.7	9.4
Romania	3.5	4.0	4.2	3.2	2.4	2.2	2.5	3.1	3.2	3.2
Slovakia	10.3	11.8	10.3	8.3	6.7	6.5	9.3	9.3	9.4	9.9
<b>Slovenia</b>	<b>4.1</b>	<b>3.1</b>	<b>2.9</b>	<b>2.2</b>	<b>1.9</b>	<b>1.8</b>	<b>3.2</b>	<b>3.6</b>	<b>4.3</b>	<b>5.1</b>
Spain	4.9	2.2	1.8	1.7	2.0	4.3	7.3	9.0	11.1	13.0
Sweden	1.4	1.0	1.0	0.9	0.8	1.1	1.6	1.5	1.5	1.5
United Kingdom	1.4	1.0	1.2	1.3	1.4	1.9	2.5	2.7	2.7	2.8

Source: Eurostat Portal Page – Population and social conditions – Labour market, 2014.  
 Note: N/A – not available.

Figure: The share of long-term unemployed in total unemployment according to the Labour Force Survey, Slovenia and the EU-28



Vir: Eurostat Portal Page – Population and social condition – Labour Market, 2014.

## 4.4 Temporary employment

**After a long period of growth, in the last two years the share of temporary employment in total employment in Slovenia declined.** The main factors in the frequent use of temporary employment are typically the rigid regulation of hiring and firing (the strong protection of regular employment), the uncertainty regarding future demand, and the regulation regarding using temporary employees. In Slovenia, too, in the period of modest growth employers opted for various forms of temporary employment as temporary jobs can be cut relatively quickly with no firing costs. Employers were thus able to adjust employment to declining demand by not renewing fixed-term employment contracts. Therefore, after increasing in the period of modest economic growth (2010 and 2011), in the last two years the share of temporary employment declined. The decline in temporary employment in the last two years was also a result of the decline in student work<sup>1</sup>. In the second quarter of 2013, 15.4% of all employed people were in temporary employment, 1.3 percentage points fewer than in the same period a year earlier. In the second quarter of 2013 a new Employment Relationship Act (ZDR-1) came into force, which reduced the protection of regular employment. In the future, this could result in a further decline in temporary employment<sup>2</sup>.

**The prevalence of temporary employment in Slovenia has been above the EU average in the past ten years.** The share of temporary employment in the EU averaged 13.8% in the second quarter of 2013 and did not change in the last year. The share of this type of employment in Slovenia has been exceeding the EU average for more than ten years, which can be attributed to the relatively strong protection of regular employment and the existence of student work. During the implementation of SDS, the gap first widened and then declined in the last three years.

**Temporary employment is more frequent among women, but in the past year it declined more for women than for men.** As in other countries, in Slovenia, too, temporary employment is more prevalent among women than among men. However, the difference in Slovenia is greater than in the EU. In the second quarter of 2013, 14.8% of employed men (aged 15–64) had temporary jobs (0.9 percentage points less than a year before). The share for women was 16.1% (1.7 percentage points less than the

previous year). In the past year the number of women in temporary employment was down by 12.8% and the number of men in temporary employment by 8.5%. The larger decline in temporary employment among women is, in addition to lower demand for student work, the result of lower employment in the sectors employing predominantly women (e.g. public services and trade).

**Temporary employment is the highest among young people, the reason being student work, which is still an important reason for labour market segmentation.** During the crisis the share of young people (aged 15–24) in temporary employment increased<sup>3</sup>, partly because for them this represented an increasingly important source of income and partly because of higher interest among employers due to the procedural and price attractiveness of this type of employment<sup>4</sup>. In the second quarter of 2013 this share fell to 68.4%, down 1.5 percentage points on a year earlier. Despite the decline, Slovenia has the highest share of young people in temporary employment, which to a large extent is the result of student work. In the past year the number of young people in employment dropped by 20%, which shows that the problem of youth employment is worsening. The number of young people with fixed-term employment contracts dropped by almost a third, which is, in addition to the decline in student work, the main reason for the lower share of temporary employment among young people.

**During the economic crisis the prevalence of temporary employment has increased among people with tertiary education, while among people with upper secondary education or less it declined.** In the past year the number of employed persons with tertiary education was up by 4.9%, while the number of people with tertiary education in temporary employment was up by 8.7%. The share of people with upper secondary and lower levels of education<sup>5</sup> in temporary employment declined significantly in the past year. The share of temporary employment among employees with tertiary education rose to 14.5% in the second quarter of 2013 (up 2.5 percentage points on the second quarter of 2008). In conditions of general insecurity and modest demand for labour, this can indicate growing disparities between supply and demand for employees with tertiary education (see Chapter 2.1).

<sup>3</sup> In the second quarter of 2013 it was 1.7 percentage points higher than in the second quarter of 2008.

<sup>4</sup> The share of student work in total employment of the 15–24 age group was 40.9% in the second quarter of 2013, 5.6 percentage points higher than in the second quarter of 2008.

<sup>5</sup> The share of temporary employment among people with only lower education was 13.7% in the second quarter of 2013 (6 percentage points lower than in the previous year) and among people with upper secondary education 16.2% (1.5 percentage points lower than in the previous year).

<sup>1</sup> In the second quarter of 2012 it was 14.2% lower at the annual level; in the second quarter of 2013 it was 4.2% lower.

<sup>2</sup> In the second quarter the share of temporary employment in total employment was lower than a year before.

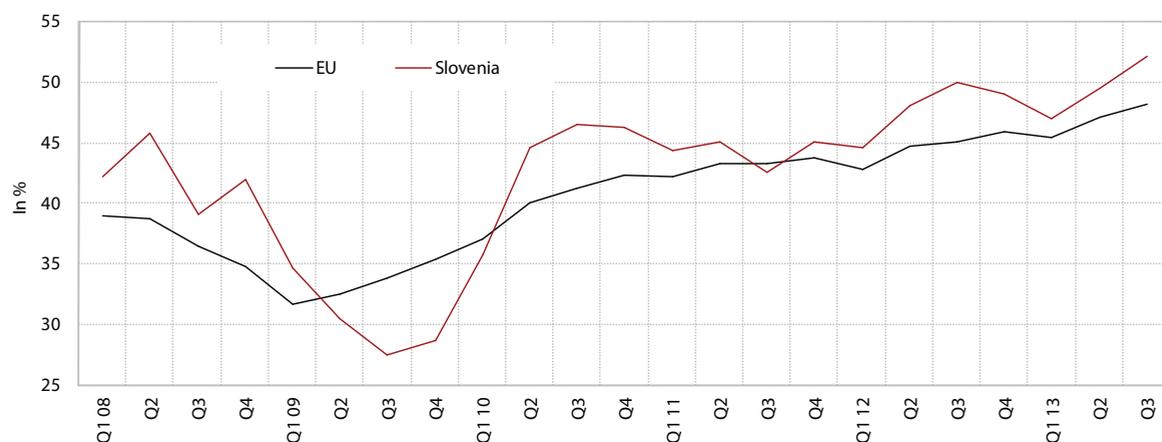
Table: The share of temporary employment in total employment in the 15–64 age group, %<sup>1</sup>

	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>EU-28</b>	<b>12.2</b>	<b>13.9</b>	<b>14.5</b>	<b>14.6</b>	<b>14.2</b>	<b>13.5</b>	<b>14.0</b>	<b>14.2</b>	<b>13.8</b>	<b>13.8</b>
Austria	8.6	8.8	8.7	8.8	8.7	8.6	8.9	9.0	9.0	9.1
Belgium	9.0	9.1	8.8	8.8	7.7	8.2	7.5	8.8	8.1	8.2
Bulgaria	N/A	6.3	6.2	5.7	5.1	5.2	4.8	4.1	4.8	6.1
Cyprus	10.7	13.9	13.9	12.9	14.4	14.5	15.0	14.5	15.3	16.7
Czech Republic	7.2	8.0	8.1	7.9	7.4	7.4	8.2	8.0	8.3	9.2
Denmark	10.2	9.9	9.6	9.5	8.8	9.0	8.5	9.2	8.6	8.6
Estonia	2.3	3.3	3.3	2.3	1.8	2.3	4.2	4.7	3.1	3.6
Finland	17.7	18.1	18.0	17.3	16.9	15.9	16.8	16.7	17.3	16.8
France	N/A	14.0	15.1	15.1	15.0	14.3	15.2	15.3	15.3	16.4
Greece	13.8	12.1	10.9	11.2	11.6	12.2	12.8	11.9	9.9	9.9
Croatia	N/A	12.8	11.6	13.0	12.9	12.3	12.7	13.4	13.4	14.7
Ireland	5.3	2.5	7.5	9.2	8.0	8.4	9.5	10.4	10.3	10.0
Italy	10.1	12.4	13.0	13.4	13.9	12.8	12.9	13.7	14.2	13.5
Latvia	6.7	8.4	7.1	5.3	2.8	3.7	6.7	7.6	4.7	5.1
Lithuania	3.8	5.1	4.7	3.7	2.7	2.7	2.6	3.5	2.9	3.2
Luxembourg	3.4	5.3	6.1	6.9	7.7	7.4	6.6	6.4	7.5	8.6
Hungary	6.8	7.2	6.7	7.5	7.8	8.2	9.7	9.2	9.6	11.2
Malta	3.9	4.0	3.8	5.5	4.0	4.9	4.9	5.2	6.6	7.5
Germany	12.8	13.9	14.2	14.3	14.7	14.3	14.6	14.7	13.8	13.4
Netherlands	13.8	15.1	16.1	17.9	18.0	17.9	18.5	18.0	19.1	20.1
Poland	5.6	25.4	27.1	28.1	26.9	26.5	27.0	26.9	27.3	26.9
Portugal	19.8	19.5	20.2	22.2	23.3	21.7	23.0	22.8	21.0	21.8
Romania	2.9	2.6	1.9	1.6	1.3	0.9	1.1	1.9	1.9	1.5
Slovakia	4.0	4.9	5.0	5.3	4.0	4.1	5.7	6.7	6.9	7.0
<b>Slovenia</b>	<b>12.8</b>	<b>16.8</b>	<b>17.9</b>	<b>18.5</b>	<b>16.9</b>	<b>16.4</b>	<b>17.7</b>	<b>17.5</b>	<b>16.7</b>	<b>15.4</b>
Spain	32.4	33.3	34.4	31.9	29.4	25.3	24.9	25.6	23.7	23.1
Sweden	14.3	16.0	17.3	17.7	16.4	15.5	16.4	16.8	16.5	16.6
United Kingdom	6.6	5.4	5.5	5.7	5.2	5.4	6.1	6.1	6.1	5.9

Source: Eurostat Portal Page – Population and social conditions – Labour market – Employment, 2014.

 Note: <sup>1</sup> Data for the second quarter of the year. N/A – not available.

Figure: Share of temporary employment among young people, second quarter of 2013



Source: Eurostat Portal Page – Population and social conditions – Labour market – Employment, 2014.

## 4.5 Part-time employment

**After the rise in the 2008–2010 period, the share of part-time employment<sup>1</sup> in total employment declined in the past two years.** The increase in the prevalence of part-time employment in the 2008–2010 period was caused primarily by the Partial Subsidizing of Full-Time Work Act, which supported the shortening of working time. Part-time employment as a share of total employment in the 15–64 age group stood at 9.3% in the second quarter of 2012, up 0.8 percentage points on a year earlier. In 2013 it increased most notably among young people aged 15–24; it stood at 46.1% in the second quarter of 2013 (up 9.2 percentage points on a year earlier), which was primarily the result of a large increase in temporary employment through the Student Employment Service.

**During the crisis the prevalence of part-time employment increased among people with tertiary and upper secondary levels of education.** The number of people with tertiary education in part-time employment was 88% higher in the second quarter of 2013 than in the second quarter of 2008. Their share was 6.5% in the second quarter of 2013, up 2.3 percentage points on the second quarter of 2008. Since the beginning of the crisis, the number of people with upper secondary education in part-time employment has also increased. Their share was 9.8% in the second quarter of 2013, up 1.8 percentage points on the second quarter of 2008. The increase in part-time employment among people with upper secondary and tertiary education in 2013 was the result of more people being employed through the Student Employment Service, which is usually part-time work<sup>2</sup>.

**The share of part-time employment in Slovenia remains below the EU average, except for part-time youth employment.** The share of part-time employment in total employment (the 15–64 age group) in Slovenia (9.3%) was significantly lower than the EU average (19.7%) in the second quarter of 2013. Nevertheless, Slovenia has a much higher share (46.1%) of young people (aged 15–24) in part-time

employment than the EU average (32.5%), which can also largely be attributed to student work, most of which is performed by young people aged 15–24 in part-time employment.

**The lower share of part-time employment in Slovenia than in the EU is mainly the result of a lower share of this type of employment among women.** Some 12.3% of women worked part-time in the second quarter of 2013 (EU: 32.3%), while the corresponding figure for men was 6.7% (EU: 8.8%). In the past year the shares of women and men working part-time in Slovenia went up by 1 and 0.6 percentage points, respectively. In the 2008–2013 period the prevalence of part-time employment increased more among women<sup>3</sup>.

**Slovenia has the lowest share of involuntary part-time employment in the EU.** Although the share of people involuntarily working part-time grew slightly in Slovenia in the 2008–2012 period, it was the lowest in the EU in 2012 (8.6%). The corresponding figure in the EU overall was 27.6%. In the EU overall, the main reasons for part-time employment are the inability to find full-time work (27.6%)<sup>4</sup> and childcare and care for adults in need of assistance (22.7%)<sup>5</sup>. The main reasons stated by part-time workers in Slovenia are sickness or disability (around 20%; EU: 4.1%) and education and training (26%; EU 10.2%); the latter is related to student work in Slovenia. It is estimated that almost half of part-time employment in Slovenia is a reflection of systemic possibilities for part-time work that are wholly or partly financed by the government<sup>6</sup>. Part-time employment, which is characteristic of countries with high shares of such employment (so-called voluntary part-time employment, which is due to the interest of employers or employees), is less frequent in Slovenia. On the one hand, this is due to disproportionately high labour costs, which reduces the employers' interest, and, on the other hand, to the relatively low incomes of individuals resulting from this type of employment. The low share of people working part-time is probably also a consequence of the modestly developed service sector, which in other countries employs a large share of people in part-time employment.

<sup>1</sup> Part time employment is defined as work for fewer hours than the standard full-time schedule. The term also includes persons who are not in an employment relationship. According to the Labour Force Survey, part-time employment means that workers work less than 36 hours per week.

<sup>2</sup> In the second quarter of 2013, the extent of student work declined by 4.1% over the previous year, but the extent of part-time student work increased by 13.3%.

<sup>3</sup> The share of women working part-time increased by 2 percentage points and the share of men by 0.4 percentage points.

<sup>4</sup> In Slovenia, 8.6% of people working part-time stated this reason.

<sup>5</sup> The share for Slovenia is 7.8%.

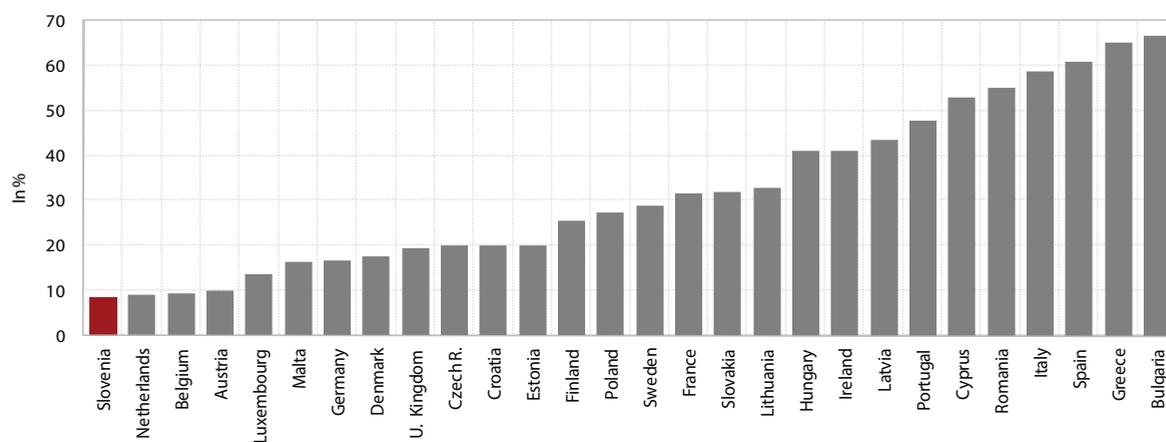
<sup>6</sup> The possibility of working part-time is stipulated by the Pension and Disability Insurance Act, the Parental Protection and Family Benefit Act and the Health Care and Health Insurance Act.

Table: The share of part-time employment in total employment in the 15–64 age group, %<sup>1</sup>

	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>EU-28</b>	<b>17.4</b>	<b>17.6</b>	<b>17.7</b>	<b>17.7</b>	<b>18.2</b>	<b>18.7</b>	<b>18.9</b>	<b>19.3</b>	<b>19.7</b>
Austria	20.4	21.5	22.0	22.7	24.1	24.5	24.4	24.8	25.6
Belgium	21.7	22.9	22.5	22.4	23.0	24.1	25.1	24.5	23.6
Bulgaria	2.3	1.9	1.7	1.9	2.3	2.2	2.3	2.5	2.6
Cyprus	7.5	6.7	6.1	6.6	7.5	8.1	8.9	9.4	11.5
Czech Republic	4.3	4.4	4.4	4.3	4.8	5.2	4.7	4.9	5.9
Denmark	21.5	22.9	23.2	23.7	25.3	26.2	25.6	25.5	25.4
Estonia	6.8	7.1	7.0	5.6	10.7	10.4	9.5	9.7	8.7
Finland	13.2	13.0	13.0	12.3	12.7	13.6	13.6	13.9	13.5
France	17.2	17.2	17.3	16.9	17.2	17.7	17.8	17.9	17.6
Greece	4.6	5.6	5.5	5.2	5.8	6.1	6.2	7.2	8.0
Croatia	7.7	6.6	5.9	6.9	7.6	7.6	7.3	6.4	7.0
Ireland	N/A	16.9	17.6	18.0	20.7	21.8	22.9	23.4	23.5
Italy	12.6	13.2	13.3	14.4	14.2	14.8	15.3	17.0	17.8
Latvia	8.9	6.0	6.4	5.7	7.6	8.9	8.1	9.3	7.8
Lithuania	6.3	8.6	7.9	6.3	8.2	7.7	7.9	8.5	8.1
Luxembourg	17.4	17.1	17.5	16.3	17.0	17.8	18.1	18.7	18.7
Hungary	4.1	3.9	3.8	4.1	5.2	5.3	6.5	6.5	6.5
Malta	8.8	9.6	10.7	11.4	11.0	11.2	11.9	12.6	14.1
Germany	23.6	25.4	25.6	25.4	25.5	25.7	25.9	25.8	26.4
Netherlands	45.8	45.8	46.3	46.7	47.6	48.5	48.5	49.1	50.1
Poland	9.7	9.0	8.5	7.6	7.8	7.8	7.3	7.2	7.0
Portugal	8.4	8.1	8.9	8.8	8.6	8.5	9.7	11.1	11.3
Romania	9.6	8.6	8.6	8.8	8.6	10.5	9.4	9.5	9.0
Slovakia	2.3	2.7	2.6	2.1	3.8	4.0	4.1	4.0	4.8
<b>Slovenia</b>	<b>7.8</b>	<b>8.4</b>	<b>8.8</b>	<b>8.1</b>	<b>9.7</b>	<b>10.5</b>	<b>9.1</b>	<b>8.5</b>	<b>9.3</b>
Spain	12.6	12.1	11.8	11.9	12.8	13.4	14.0	14.8	16.3
Sweden	24.3	24.3	24.3	26.1	26.0	25.9	25.4	25.1	24.7
United Kingdom	24.6	24.3	24.2	24.2	25.0	25.7	25.6	26.1	25.8

Source: Eurostat Portal Page – Population and social conditions – Labour market – Employment, 2014.  
 Note: <sup>1</sup> Data for the second quarter of the year. N/A – not available.

Figure: The share of people in involuntary part-time employment, 2012



Source: Eurostat Portal Page – Population and social conditions – Labour market – Employment, 2014.

## 4.6 Social protection expenditure

**The growth in social protection expenditure<sup>1</sup> was modest in 2011; however, since the beginning of the crisis it has increased significantly.** After rising by almost 7% in 2009, the growth in real expenditure on social protection slowed down already in 2010; in 2011 it was up by only 0.4% in real terms. Expenditure as a share of GDP did not change compared with 2010<sup>2</sup>. The low growth was primarily a result of government fiscal consolidation measures. Despite a higher number of recipients of social transfers and pensioners, in 2011 expenditure declined in real terms in all functions, except for family/children and for survivors', old age and unemployment. Expenditure on social exclusion not elsewhere classified and on disability and housing dropped the most.

**In 2011, too, the highest growth was recorded by expenditure related to the consequences of demographic changes and the economic crisis.** Expenditure on unemployment was up most notably in year-on-year terms in 2011 (by 20.1% in real terms) as a result of a rise of 19.2% in the number of claimants of unemployment benefits and higher benefits introduced by the Labour Market Regulation Act. Expenditure on families and children was also up (by 0.7% in real terms). The growth was largely the result of expenditure on old age, which represents the highest share of total social protection expenditure and which was up 2.1% in real terms, primarily as a result of the 3.1% rise in the number of pensioners.

**The breakdown of social protection expenditure does not change much from year to year.** Expenditure on old age accounted for the largest share of total social protection expenditure in 2011 (40%); in recent years the share has been increasing owing to demographic changes. The share of expenditure on unemployment has also increased since the beginning of the economic crisis. On the other hand, the share of expenditure on sickness and health care declined the most, but was nevertheless close to a third of the total. Expenditures on old age and on sickness and health care also accounted for the largest shares of total social protection expenditure in the EU overall (38.3% and 28.2% respectively). Slovenia and the EU

alike earmark the smallest shares for housing (2%) and social exclusion not elsewhere classified (1.5%). In the EU overall, the share of expenditure on old age increased the most (by 0.5 percentage points), while the share of expenditure on unemployment decreased the most (by 0.4 percentage points).

**Per capita social protection expenditure at purchasing power parity in Slovenia remained at 71.2% of the EU average in 2011.** In per capita PPS terms, expenditure in Slovenia has been at almost three-quarters of the EU average (71.2%) since the beginning of the crisis. The lower level of total expenditure than the EU average is mostly the result of the lower level of expenditure on unemployment, disability, old age, family/children and housing. In terms of individual categories of social protection expenditure, Slovenia only surpasses the EU average in expenditure on social exclusion not elsewhere classified (107%). Expenditure is lower than in the EU also due to the system of social transfers, which targets poorer people.

**As regards social protection receipts, general government contributions continued to increase in 2011.** The share of general government contributions grew to 34.6%, up 1.4 percentage points on 2010 and 5.5 percentage points in 2008. The higher share of general government contributions is partly a consequence of the economic crisis, since during the crisis some budget expenditure increased significantly. The shares of employers' social contributions (26.1%) and social contributions paid by the protected persons (38.2%) together represent almost two thirds of total social protection receipts and remained at almost the same level as in 2010. The share of such was lower than in 2008, mostly as a result of the decline in employment. The share accounted for by social contributions in Slovenia nevertheless remains 8.1 percentage points above the EU average (due to a higher share of social contributions paid by the protected persons, while the share accounted for by employers' social contributions is 10% lower than in the EU), and the share accounted for by general government contributions is almost 6 percentage points lower than in the EU. Social protection receipts in Slovenia thus mostly stem from contributions by employees (38.2%), in contrast to the EU, where the largest share is accounted for by general government contributions (40.2%).

<sup>1</sup> Including expenditure on social benefits, administration costs and other expenditure.

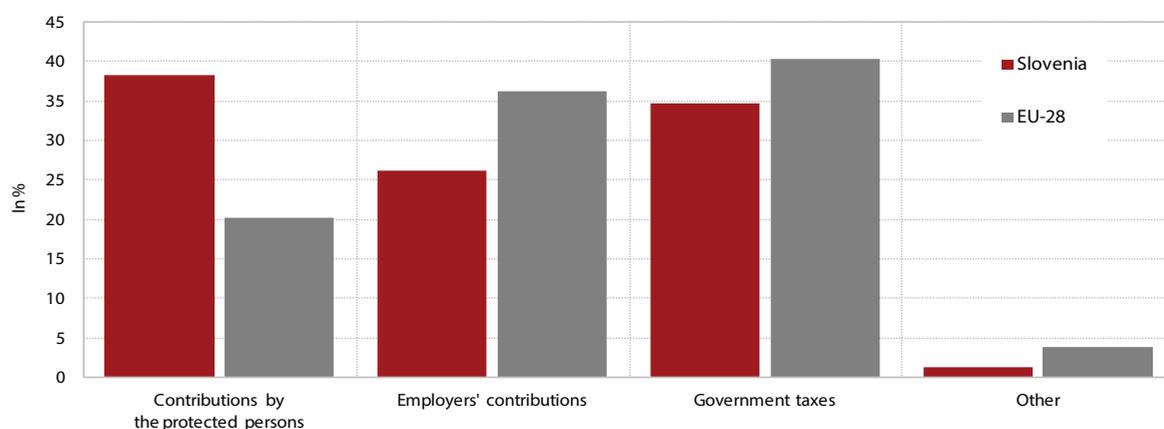
<sup>2</sup> The share of expenditure on social benefits was up by 0.2 percentage points, while the share of expenditure on administration costs was down by 0.1 percentage points. The share of other expenditure remained the same as in 2010.

Table: Social protection expenditure in Slovenia and in the EU, as a % of GDP

	2005	2006	2007	2008	2009	2010	2011
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>26.8</b>	<b>29.7</b>	<b>29.4</b>	<b>29.1</b>
<b>EU-27</b>	<b>27.0</b>	<b>26.6</b>	<b>26.1</b>	<b>26.8</b>	<b>29.6</b>	<b>29.3</b>	<b>29.0</b>
Austria	28.8	28.3	27.8	28.5	30.7	30.6	29.5
Belgium	27.3	27.0	26.9	28.3	30.6	30.1	30.4
Bulgaria	15.1	14.2	14.1	15.5	17.2	18.1	17.7
Cyprus	18.4	18.5	18.2	19.5	21.1	22.1	22.8
Czech Republic	18.4	18.0	18.0	18.0	20.3	20.2	20.4
Denmark	30.2	29.2	30.7	30.7	34.7	34.3	34.3
Estonia	12.6	12.1	12.1	14.9	19.0	18.0	16.1
Finland	26.7	26.4	25.4	26.2	30.4	30.6	30.0
France	31.5	31.2	30.9	31.3	33.6	33.8	33.6
Greece	24.9	24.8	24.8	26.2	28.0	29.1	30.2
Croatia	N/A	N/A	N/A	18.7	20.8	21.0	20.6
Ireland	17.5	17.8	18.3	21.5	26.5	28.5	29.6
Italy	26.3	26.6	26.6	27.7	29.9	29.9	29.7
Latvia	12.8	12.7	11.3	12.7	16.9	17.8	15.1
Lithuania	13.2	13.3	14.4	16.1	21.2	19.1	17.0
Luxembourg	21.7	20.4	19.3	21.4	24.3	23.1	22.5
Hungary	21.9	22.5	22.7	22.9	24.3	23.1	23.0
Malta	17.8	17.7	17.7	18.1	19.6	19.4	18.9
Germany	30.1	29.0	27.8	28.0	31.5	30.6	29.4
Netherlands	27.9	28.8	28.3	28.5	31.6	32.1	32.3
Poland	19.7	19.4	18.1	18.6	19.2	19.2	19.2
Portugal	24.5	24.5	23.9	24.3	26.8	26.8	26.5
Romania	13.4	12.8	13.6	14.3	17.1	17.6	16.3
Slovakia	16.5	16.4	16.1	16.1	18.8	18.7	18.2
<b>Slovenia</b>	<b>23.0</b>	<b>22.7</b>	<b>21.3</b>	<b>21.4</b>	<b>24.2</b>	<b>25.0</b>	<b>25.0</b>
Spain	20.6	20.5	20.8	22.2	25.4	25.8	26.1
Sweden	31.1	30.3	29.2	29.5	32.0	30.4	29.6
United Kingdom	25.8	25.6	24.7	25.8	28.6	27.4	27.3

Source: Eurostat Portal Page – Social protection, 2013.  
 Note: N/A – not available.

Figure: Breakdown of social protection receipts in 2011, %



Source: Eurostat Portal Page – Social protection receipts by type (ESSPROS), 2013.

## 4.7 Pension expenditure

**After a decline in 2012, pension expenditure<sup>1</sup> increased in 2013, but less than in the years before 2012.** PDII pension expenditure in 2013 amounted to EUR 4.254 billion, up 2.6% year-on-year in nominal terms and up 0.7% year-on-year in real terms. With the decline in GDP (by 0.5% in nominal terms), its increase as a share of GDP (by 0.36 percentage points to 12.06%) was even higher. The growth of pension expenditure in the past year was limited by intervention measures (only 0.1% pension indexation and limited payment of the annual bonus for retired persons with a pension less than EUR 622<sup>2</sup>). Without these measures, pension expenditure would again have increased significantly in 2013 as the number of retired persons<sup>3</sup> was up by 2.8%, i.e. 16,500 beneficiaries, compared with the previous year (in 2012 it grew by 15,000). The high growth in recent years can be attributed to retirements in larger post-war generations and accelerated retirement due to the anticipated tightening of the conditions for old-age retirement under the new reform that should have been implemented at the end of 2010 but was actually realised at the end of 2012. Thus, primarily due to rapid retirement before the adoption of the new pension act<sup>4</sup> in January and February 2013, the number of old-age pensioners was up by 5% year-on-year<sup>5</sup>. After stagnating in 2012, in 2013 expenditure on old-age pensions was up by as much as 2.1% in real terms, while expenditure on other types of pensions<sup>6</sup> was down by 3.2% in real terms (other pension expenditure excluding old-age pensions was down by 2.6% – see note 1).

**Despite intervention measures, the share of the total revenue of the Pension and Disability Insurance Institute (PDII) accounted for by the state budget**

**increased significantly<sup>7</sup>.** In 2013 the budgetary transfer was EUR 1.585 billion, EUR 169 million higher than a year earlier. The ratio of the budgetary transfer to total PDII revenue thus stood at 32.0%, which is the highest figure so far. The rise in this figure in recent years has been the result of higher growth in PDII expenditure than in revenue from social contributions. In 2013 the latter declined by as much as 4.0% in nominal terms, which is the largest drop so far and mostly the result of a further decline in the wage bill (the number of the insured was down by 2.6% and the average gross wage by 0.2%). Contribution-based revenue covered only 72.2% of PDII expenditure (if compared only with pension expenditure, 76.9% of pensions), while the figure for 2008 is 79.5% (88.3% of pension expenditure).

**In terms of the share of GDP, pension expenditure in Slovenia is still rising; the recent reform is expected to halt the rise for only a brief period.** Slovenia's share of pension expenditure<sup>8</sup> in GDP in 2011 (latest data) remained below the EU average. Slovenia earmarked 11.4% of GDP for all pension categories combined, 0.1 percentage points more than in 2010; the EU-28 average was 13.0%. In the EU, pension expenditure as a share of GDP increased by 0.9 percentage points relative to the pre-crisis year of 2008; in Slovenia it was up by as much as 1.8 percentage points. The new pension act (ZPIZ-2<sup>9</sup>) is expected to stabilise pension expenditure in the medium-term, but it will start rising again, meaning that the new pension system does not ensure long-term fiscal sustainability (by 2060 pension expenditure is expected to grow by more than 5 percentage points<sup>10</sup>). With the rapidly rising share of older people in Slovenia, the employment rate of older workers is one of the lowest in the EU and the duration of working life is below the EU average. Therefore, radical changes in the pension system need to be prepared as soon as possible in order to ensure its sustainability after 2020.

<sup>1</sup> According to the PDII balance sheets, which comprise the following pension categories: old-age, disability, survivors, farmer's, military pensions, pensions claimed by Slovenian citizens in other republics of former Yugoslavia, pensions remitted to other republics of the former Yugoslavia, pensions remitted abroad, annual bonuses, other pensions.

<sup>2</sup> Which will apply up to and including the year after the first year that GDP growth exceeds 2.5%. This measure was first introduced in 2012 (Fiscal Balance Act (ZUJF), Official Gazette of the RS, No. 40/2012, Article 143 (6)).

<sup>3</sup> Recipients of old-age, disability, survivors, military, widow's/widower's pensions, advance pension payments, farmer's pensions under the Farmers' Old-Age Insurance Act (PDII data).

<sup>4</sup> The ZPIZ-2 was adopted in December 2012 and entered into force at the beginning of 2013.

<sup>5</sup> A person is considered to be retired in the month when he or she receives the first pension.

<sup>6</sup> Disability, survivors, farmer's and military pensions.

<sup>7</sup> The difference between the PDII's revenues from contributions and other sources and its expenditure is covered by the government from the state budget and other sources. These are all funds under the item *Transfers from the state budget to the PDII (MF)*.

<sup>8</sup> According to the European System of Integrated Social Protection Statistics (ESSPROS) methodology.

<sup>9</sup> Pension and Disability Insurance Act (ZPIZ-2), Official Gazette of the RS, No. 96/2012.

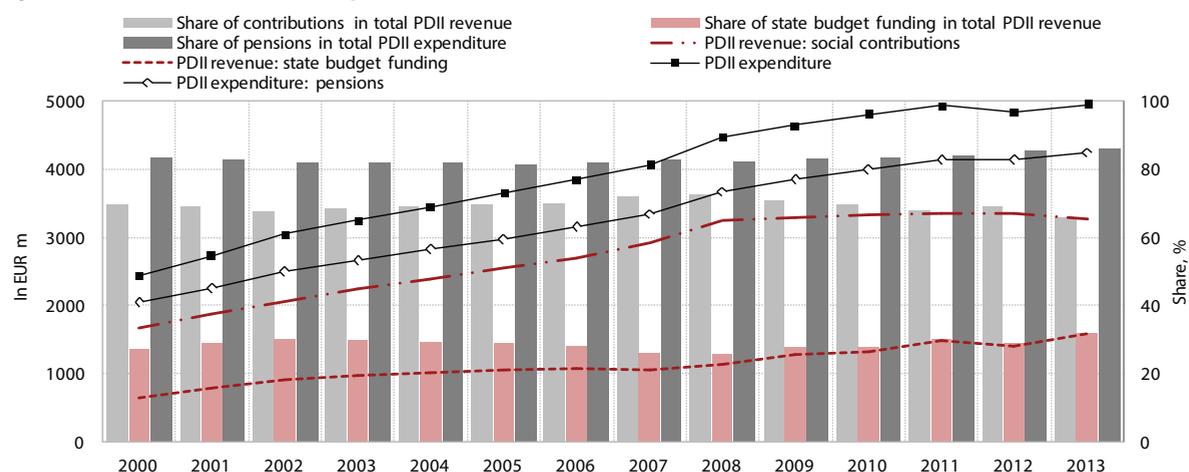
<sup>10</sup> Modernisation of the pension system in the Republic of Slovenia (ZPIZ-2), <http://www.mdds.gov.si/>.

**Table: Share of the population aged 65 or more, the employment rate of older workers, the duration of working life and the statutory retirement age**

	Share of the population aged 65 or older, %		Employment rate of older workers (55–64 years)		Duration of working life*		Statutory retirement age as of 1 January 2013	
	2000	2013	2000	2012	2000	2012	Men	Women
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>52.6</b>	<b>32.9</b>	<b>35.0</b>	<b>N/A</b>	<b>N/A</b>
Austria	15.4	18.1	30.5	44.4	33.5	36.9	65	60
Belgium	16.8	17.6	27.1	41.4	30.2	32.2	65	65
Bulgaria	16.2	19.2	24.0	51.1	29.0	31.6	63 y 8 m.	60 y 8 m.
Cyprus	11.2	13.2	51.3	56.1	34.1	36.3	63 y 6 m.	63 y 6 m.
Czech Republic	13.8	16.8	38.2	52.4	33.6	34.3	62 y 6 m.	< 61 y 4 m.
Denmark	14.8	17.8	58.2	64.4	38.3	39.3	65	65
Estonia	14.9	18.0	51.3	65.2	33.3	36.2	63	62
Finland	14.8	18.8	45.9	62.3	36.4	37.4	63–68	63–68
France	15.8	17.5	32.1	47.9	31.9	34.6	60–67	60–67
Greece	16.5	20.1	40.5	42.2	31.6	32.0	67	67
Croatia	N/A	18.1	N/A	N/A	30.5	31.1	N/A	N/A
Ireland	11.2	12.2	46.5	55.1	33.2	34.1	65–66	65–66
Italy	18.1	N/A	29.0	42.6	28.5	30.5	66 y 3 m.	62 y 3 m.–66y3m.
Latvia	14.8	18.8	39.7	61.8	31.7	35.0	62	62
Lithuania	13.7	18.2	45.1	58.7	33.6	34.0	62 y 10 m.	60y 8m.
Luxembourg	14.3	14.0	27.0	41.9	29.2	32.5	65	65
Hungary	15.0	17.2	22.9	40.0	27.5	30.4	62	62
Malta	12.1	17.2	29.6	34.9	28.8	31.6	61	60
Germany	16.2	20.7	42.9	65.4	34.3	37.5	67	67
Netherlands	13.6	16.8	39.0	61.5	35.5	39.6	65 y 1 m.	65 y 1 m.
Poland	12.1	14.2	31.3	41.8	31.1	32.1	65	60
Portugal	16.0	19.4	52.4	53.4	35.7	36.9	65	65
Romania	13.2	16.4	50.0	42.9	36.0	31.9	64 y 6 m.	59 y 6 m.
Slovakia	11.4	13.1	24.3	48.5	32.1	32.8	62	62
<b>Slovenia</b>	<b>13.9</b>	<b>17.1</b>	<b>24.0</b>	<b>35.1</b>	<b>31.8</b>	<b>33.6</b>	<b>65</b>	<b>63 y 6 m.</b>
Spain	16.7	17.7	40.9	53.5	30.8	34.7	65–65 y 1 m.	65–65 y 1 m.
Sweden	17.3	19.1	68.6	77.0	36.8	40.6	61–67	61–67
United Kingdom	15.8	17.2	52.9	61.1	36.9	38.1	65	> 60

Source: Eurostat, 2013, MISSOC – Comparative Tables on Social Protection.

Notes: N/A – not available; \*The number of years a person aged 15 or more is expected to be active on the labour market; &gt; the retirement age is already higher than the stated age, which refers to the year before it started to increase; &lt; the retirement age applies to women without children and is reduced with regard to the number of children.

**Figure: Selected PDII revenues and expenditures, Slovenia**


Source: Bulletin of Government Finance, Pension and Disability Insurance Institute 2000–2013, 2013.

## 4.8 Health expenditure

### **Total health expenditure declined again in 2013.**

It was equivalent to 9.0% of GDP<sup>1</sup> in 2012 and, according to the first provisional estimate of the Health Insurance Institute of Slovenia (HII), to 8.8% of GDP in 2013. As a result of declining revenues from compulsory health insurance contributions (and in view of the target that compulsory health insurance should be financed without any further borrowing or increase in the contribution rate), public health expenditure declined for four consecutive years in real terms, having declined by as much as 8.6% over the entire 2010–2013 period<sup>2</sup>. In 2012 public health expenditure as a share of GDP was thus 6.5%, according to the HII estimate, and declined in 2013 to 6.3% of GDP<sup>3</sup>. At the same time, there was a change in the ratio of public to private expenditure on health. The share of public expenditure declined; it stood at 72.4% in 2012 and at 71.9% in 2013. In the 2009–2013 period a series of measures were introduced to balance HII operation. The majority of measures focused on reducing the prices of health services, transferring a portion of expenditure on health to complementary health insurance schemes, lowering expenditure on medicines, medical devices, sickness allowances and obligations under international agreements. These measures significantly reduced health care providers' revenue from compulsory health insurance, which had an impact on increasing the losses of these providers, particularly hospitals.

### **During the crisis, health expenditure in Slovenia shrunk much more than on average in OECD countries.**

In 2010–2011 growth in health expenditure was significantly slower or even negative in almost all OECD countries. After averaging 4.1% per year in real terms in OECD countries in 2000–2009 (3.8% in Slovenia), it declined to 0.2% in 2010–2011 (in Slovenia it fell annually by 1.2%). Expenditure declined the most in countries that were more strongly affected by the crisis, although growth in health expenditure remained positive in more than half of the OECD countries. The measures to reduce health expenditure were more or less similar to those in Slovenia: cutting or curbing growth in wages,

employment, administrative costs, coverage of health services from public funds and sales margins on medicines (OECD, 2013).

### **Out-of-pocket health expenditure has recorded moderate growth during the crisis years.**

The main factor with regard to financial access to health services is out-of-pocket health expenditure, which can be a significant financial burden on low-income households. In Slovenia out-of-pocket expenditure is relatively low as most health services and medicines are covered by compulsory and complementary health insurance schemes. Out-of-pocket expenditure accounted for only 11.8% of total health expenditure in 2011 (in 2012 12.4% and in 2013 12.6%, according to estimates), compared with 21.5% in the EU-27; per capita, this is EUR 184 or EUR 216 in PPS terms in Slovenia and EUR 378 in PPS terms in the EU. During the crisis, a significant share of the shortfall in public funding was compensated for by complementary health insurance schemes, so that out-of-pocket expenditure increased only marginally. The slowdown in out-of-pocket household expenditure during the crisis also indicates that health is, to a certain extent, a luxury good. According to the more detailed data of the Household Budget Survey, households in the first two income quintiles had cut down on their health expenditure in 2009–2012, allocating an increasingly large share of disposable income to food and other essentials, and postponing purchases of health services and goods that have to be paid out of pocket (dental care, prosthetics, corrective glasses). On the other hand, for households with higher incomes (the fifth quintile) the growth of health expenditure did not slow down significantly. The share of health care in total household consumption declined for low-income households (from 2.8% in 2009 to 2.5% in 2012), while the corresponding share for households with higher incomes increased (from 1.7% in 2009 to 2.1% in 2012). Obviously, during the crisis households with higher incomes limited expenditure on other goods more than they limited their health care expenditure, while households with lower incomes increasingly have problems affording health expenditure. Slovenian households allocate the largest shares of out-of-pocket expenditure to medical goods (31%; of which 26% for over-the-counter medicines), therapeutic appliances (23%; of which 18% for glasses), various other health services (physiotherapy) and alternative medicine (12%), dental care (10%) and specialist outpatient care (9%). In 2009–2011, increases in out-of-pocket expenditure were recorded by medical goods and ancillary services (laboratory, diagnostic imaging, patient transport), while significant decreases in out-of-pocket expenditure were recorded by dental care, specialist outpatient care, and various other health services (physiotherapy, alternative medicine).

<sup>1</sup> The share in GDP is calculated based on the GDP revision of September 2012 (SURS, National Accounts).

<sup>2</sup> According to international recommendations (OECD, 2011), the GDP implicit price deflator and not the consumer price index was used to calculate real growth. When the consumer price index is used as the deflator, public expenditure was down 14.4% in 2010–2013, and 4.7% in 2013.

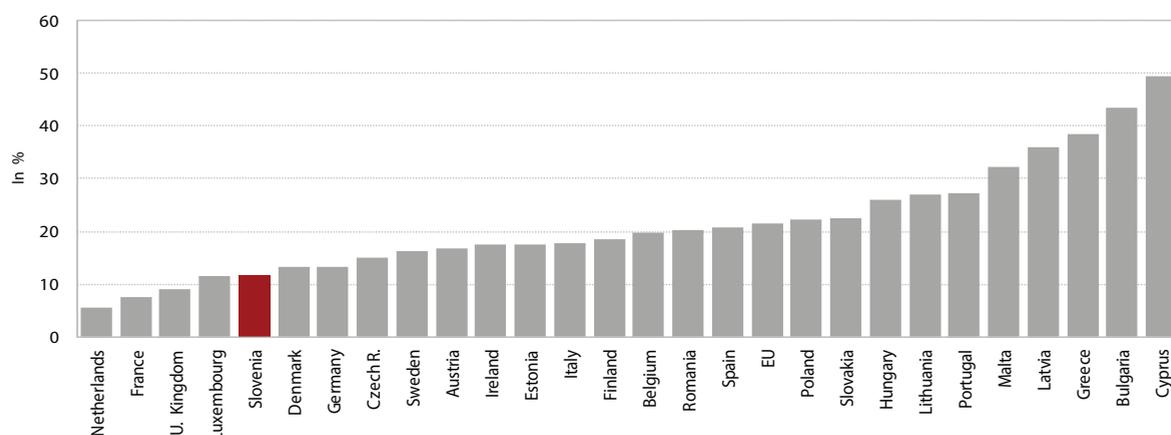
<sup>3</sup> HII Business Report 2013 (draft, March 2014). Data according to SHA methodology, estimated in conjunction with SURS. For calculating expenditure in GDP, for 2013, SURS's First Release, i.e. February 2014, was taken into account.

Table: Health expenditure

	Total health expenditure <sup>3</sup> , as a % of GDP <sup>1</sup>			Public health expenditure, as a % of GDP <sup>1</sup>			Private health expenditure, share of total health expenditure, %		Out-of-pocket expenditure, share of total expenditure, %	
	2000	2010	2011	2000	2010	2011	2000	2011	2000	2011
<b>EU-27<sup>1</sup></b>	<b>8.0</b>	<b>9.8</b>	<b>9.6</b>	<b>6.1</b>	<b>7.5</b>	<b>7.3</b>	<b>24.5</b>	<b>24.0</b>	<b>21.4</b>	<b>21.5</b>
Austria	9.9	11.1	10.8	7.6	8.4	8.0	24.4	24.1	16.0	16.8
Belgium**	9.0	10.5	10.5	6.1	7.9	8.1	25.4	24.0	20.0	19.7
Bulgaria	6.1	N/A	N/A	3.8	4.2	4.0	39.1	44.7	N/A	43.4
Cyprus	5.7	7.3	N/A	2.4	3.2	3.2	58.4	56.8	N/A	49.4
Czech Republic	6.3	7.4	7.5	5.7	6.3	6.2	9.7	16.5	9.7	14.9
Denmark	8.7	11.1	10.9	7.3	9.5	9.5	16.1	14.8	14.7	13.2
Estonia	5.3	6.3	5.8	4.1	5.0	4.7	22.8	21.1	19.9	17.6
Finland	7.2	9.0	9.0	5.1	6.7	6.6	28.7	25.2	22.3	18.6
France	10.1	11.7	11.6	8.0	9.0	8.9	20.6	23.3	7.1	7.5
Greece	8.0	9.5	9.1	4.8	6.6	5.9	40.0	32.6	N/A	38.4
Croatia	N/A	N/A	N/A	6.7	6.6	6.6	13.9	15.3	N/A	N/A
Ireland	6.1	9.3	8.9	4.6	6.4	6.6	24.9	29.6	15.3	17.4
Italy	7.9	9.4	9.2	5.8	7.4	7.4	27.5	22.8	24.5	17.8
Latvia	6.0	N/A	N/A	3.2	4.1	3.6	46.1	41.6	N/A	36.1
Lithuania	6.5	7.1	6.9	4.5	5.1	4.7	30.3	28.7	N/A	27.0
Luxembourg	7.5	7.2	6.6	6.4	6.6	6.5	14.9	15.7	11.8	11.6
Hungary	7.0	8.1	8.0	5.1	5.1	5.0	29.3	35.2	26.3	26.0
Malta	6.8	9.5	9.9	4.9	5.5	5.6	25.8	32.6	N/A	32.3
Germany	10.3	11.5	11.3	8.3	8.8	8.4	20.5	24.2	11.4	13.2
Netherlands	8.0	12.1	12.0	5.0	10.3	10.2	33.6	14.3	7.3	5.5
Poland	5.5	7.0	6.9	3.9	5.0	4.8	30.0	28.8	30.0	22.3
Portugal	8.8	10.8	10.2	6.2	7.1	6.6	33.4	35.9	24.3	27.3
Romania	5.2	6.0	5.6	3.6	4.8	4.7	32.7	19.8	N/A	20.3
Slovakia	5.5	9.0	8.0	4.9	5.8	5.5	10.6	36.2	10.6	22.6
<b>Slovenia<sup>2</sup></b>	<b>8.3</b>	<b>9.0</b>	<b>8.9</b>	<b>6.1</b>	<b>6.6</b>	<b>6.5</b>	<b>26.0</b>	<b>26.3</b>	<b>10.5</b>	<b>11.8</b>
Spain	7.2	9.6	9.5	5.2	7.1	7.0	28.4	26.4	23.6	20.7
Sweden	8.2	9.5	9.5	6.9	7.7	7.6	15.1	19.1	16.6	16.2
United Kingdom	7.0	9.8	9.6	5.5	8.0	7.7	21.2	17.3	11.4	8.9

Source: Eurostat Statistics Database; OECD Health Data 2013; WHO Health for All Database; for Slovenia for 2011: Health expenditure and sources of funding (SURS) June 2013. Notes: <sup>1</sup> For the EU-27 non-weighted arithmetic average – calculations by WHO. <sup>2</sup> The share of GDP is calculated on the basis of the revised GDP from September 2013 (SURS, National accounts); N/A – not available. Out-of-pocket expenditure for Bulgaria, the Czech Republic, Denmark, Latvia, the Netherlands, Austria and the United Kingdom for 2010.

Figure: Household out-of-pocket expenditure as a share of total health expenditure, 2011



Source: Health at a Glance Europe 2013 (OECD Health Data 2013, Eurostat Statistics Database).

## 4.9 Expenditure on long-term care

**Total expenditure on long-term care (LTC)<sup>1</sup> in Slovenia increased further in 2011**, and was equivalent to 1.32% of GDP (2010: 1.29%), of which public expenditure was 0.98% and private expenditure 0.34% of GDP. Due to the austerity measures in the public sector, public expenditure on LTC increased only slightly in 2011 (by 1.8% in real terms). However, private expenditure continued to increase much more (by 8.0% in real terms), especially private expenditure on long-term social care services. These mainly involve co-payments for accommodation and food in residential homes for the elderly, which in 2011 continued to rise mainly due to an increase in capacity (new homes for the elderly), and a higher, and hence more expensive, standard of care in new, mostly private, homes run on a concession basis. In terms of funding, the proportion of total LTC expenditure accounted for by private expenditure thus increased again in 2011 (to 25.7%), while by function of care<sup>2</sup>, the share of LTC expenditure accounted for by long-term social care was up (to 42.6%). Private expenditure has been increasing much faster than public expenditure for a number of years.

**In Slovenia, half of public expenditure on LTC is financed by compulsory health insurance.** In 2011, the Health Insurance Institute of Slovenia (HII) earmarked EUR 177 million or 50% of public expenditure on LTC for LTC services. These funds are intended for health care in institutions for elderly, disabled adults and severely disabled children, hospital in-patient long-term care and part of community nursing. Almost a quarter of all public expenditure on LTC is contributed by the Pensions and Disability Institute of Slovenia (PDII) (in 2011, EUR 77 million or 22% of public expenditure), namely, expenditure on care allowances, which are also partly

covered by the Ministry of Labour, Family, Social Affairs and Equal Opportunities (EUR 13 million or 4% of public expenditure). These funds of the HII, the PDII and the Ministry (75% of public expenditure) are used to finance long-term health care. The remaining 25% of public expenditure is intended for long-term social care, which is partly financed by the state budget (particularly the Ministry) and partly by local government budgets.

**Slovenia continues to lag behind the OECD average in total and public expenditure on LTC as a share of GDP.** LTC expenditure is also rapidly growing in the OECD; however, given that the OECD countries are revising the statistical measurement of this type of expenditure<sup>3</sup>, for most countries the most recent available data indicate a higher average than in previous years. Total (public and private) expenditure averaged 1.54% of GDP in 2011 (2010: 1.56%) in 24 OECD countries, and 1.52% of GDP in 19 European countries. However, data on public expenditure alone tend to be more reliable for international comparisons, as proper records on private expenditure are still lacking. Public expenditure in the 19 European countries for which data are available averaged 1.39% of GDP in 2011 (2010: 1.40%), almost the same percentage as in the 25 OECD countries shown in the Figure (1.40% of GDP). However, alongside different development levels, the gaps between the countries also reflect differences in the systems of long-term care and the influence of demographic factors and life patterns, particularly regarding the role of the family and informal care.

**Long-term projections of public expenditure on long-term care<sup>4</sup> indicate that as a share GDP it will more than double by 2060.** Under the AWG reference scenario, which takes account of population ageing in particular, public expenditure on long-term care in Slovenia is projected to rise by 0.3 percentage points of GDP by 2020 or by 1.6 percentage points of GDP by 2060. Public expenditure on long-term care in the EU is expected to rise by an average of between 0.3 percentage points and 0.5 percentage points of GDP by 2020 (various scenarios) or by between 1.5 percentage points and 3.1 percentage points of GDP by 2060 (European Commission and Economic Policy Committee: 2012 Ageing Report, May 2012).

<sup>1</sup> As defined by the OECD, Eurostat and WHO (A System of Health Accounts 2011, pp. 88–95 and p. 114).

<sup>2</sup> The SHA methodology requires that LCD expenditure be broken down by function. **Long-term health care** is mostly financed from public sources. These are mostly the HII funds intended for health care services in residential homes for the elderly and specialised social institutions, extended hospitalisation, and partly home-nursing service providing long-term health care. Long-term health care also includes PDII funds earmarked for attendance allowances for people dependent on assistance with basic activities for daily living (ADL). Close to one half of expenditure (43% in 2011) on **long-term social care**, which is related to instrumental activities of daily living (IADL), is covered by public funds (state budget and local government budgets), while slightly more than half comes from private sources (57.0%). Private funds mostly comprise top-up payments for accommodation and food in residential homes for the elderly and other types of institutional care, as well as household expenditure on assistance at home.

<sup>3</sup> After the revision of the System of Health Accounts methodology, the exact definition of long-term care is included in A System of Health Accounts (OECD, Eurostat, WHO), 2011. In 2012, an OECD study on the statistics of long-term care expenditure was made, which also includes Slovenia, entitled: Accounting and mapping of long-term care expenditure under SHA 2011 (Marn et al., 2012).

<sup>4</sup> Long-term projections of public expenditure related to population ageing, which also include expenditure on long-term care, are made every three years by the Ageing Working Group of the Economic Policy Committee of the European Commission. The last round of projections was completed in May 2012.

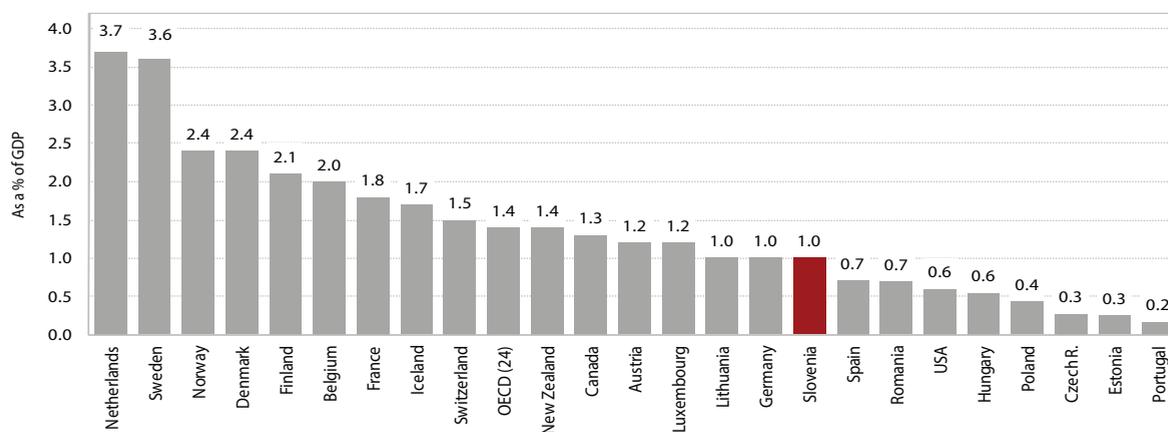
Table: Expenditure on long-term care by source of funding and by function

	EUR m			As a % of GDP			Breakdown, %			Real growth, %	Average annual real growth, %
	2005	2010	2011	2005	2010	2011	2005	2010	2011	2011/2010	2005-2011
Long-term care	317	456	477	1.10	1.29	1.32	100.0	100.0	100.0	3.3	4.7
<b>By source of funding:</b>											
Public expenditure	247	344	355	0.86	0.97	0.98	78.0	75.4	74.3	1.8	3.8
Private expenditure	70	112	122	0.24	0.32	0.34	22.0	24.6	25.7	8.0	7.4
<b>By function:</b>											
Health care	197	267	274	0.69	0.75	0.76	62.2	58.6	57.4	1.2	3.3
Social care	120	189	203	0.41	0.53	0.56	37.8	41.4	42.6	6.3	6.8

Source: SURS – Health expenditure and sources of funding (publication: June 2013).

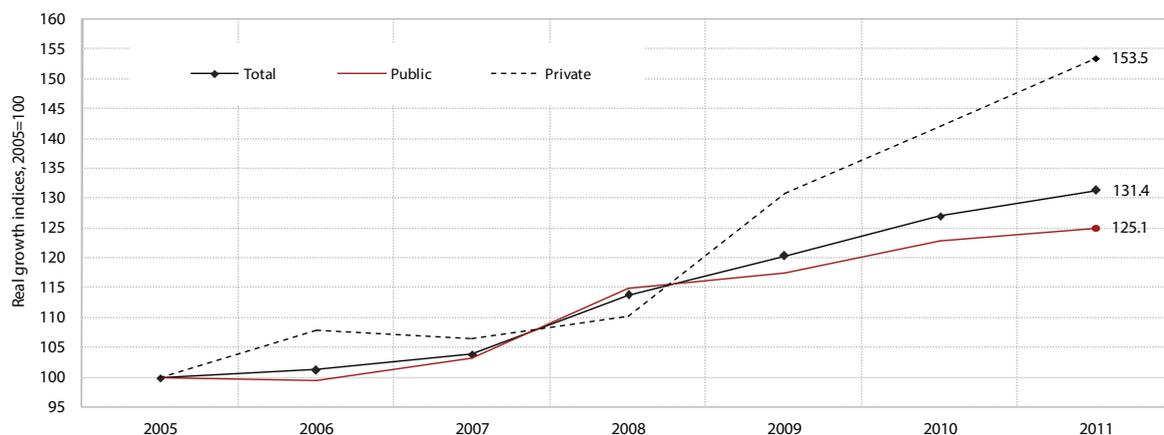
Note: According to international recommendations, instead of the consumer price index, the GDP implicit price deflator was used to calculate constant prices (AHRQ, 2011 and OECD Health at a Glance 2013).

Figure 1: Public expenditure on long-term care as a % of GDP, 2011



Source: Eurostat. Note: The OECD average includes 24 countries for which data are available (IMAD calculation). 2008: Luxembourg, 2010: Denmark, Iceland, Canada, New Zealand, the US, the Czech Republic.

Figure 2: Real growth of expenditure on long-term care, Slovenia



Source: SURS – Health expenditure and sources of funding (release: June 2013).

Note: According to international recommendations, instead of the consumer price index, the GDP implicit price deflator was used to calculate constant prices (AHRQ, 2011 and OECD Health at a Glance 2013).

## 4.10 Minimum wage

**In 2013 the minimum gross wage again grew more than the average gross wage<sup>1</sup>.** It amounted to EUR 783.66 and was 2.7% higher than in the previous year. For the fifth consecutive year it grew much more than the average gross wage, which, due to austerity measures in the public sector and a further decline in economic activity, even declined (by 0.2%). Since the beginning of the crisis, Slovenia has recorded one of the biggest drops in economic activity and the highest rise in the minimum wage in the EU (in the 2008–2013 period by almost 40% in nominal terms). Slovenia is also one of the few countries which during the crisis increased the minimum wage. In seven EU Member States the minimum wage remained unchanged for several years<sup>2</sup>, while in eight it declined<sup>3</sup>.

**After the coming into force of the new Minimum Wage Act the ratio between the minimum and the average gross wage increased significantly (from 41.2% in 2009 to 51.5% in 2013), which ranks Slovenia at the top of EU Member States.** This happened due to the latest change in legislation regulating the minimum wage, which introduced a significant increase in the amount of the minimum wage and its annual adjustment with inflation, irrespective of the trends in other macroeconomic indicators. In the mentioned period these indicators showed weakening of economic activity and did not enable more favourable trends in the average wage<sup>4</sup>. Only Greece has such a high ratio (2011: 50.1%); in other EU Member States it is between 31% and 47%. In addition to Slovenia, in 2012 the ratio also grew in eight and declined in seven out of the sixteen Member States for which data are available<sup>5</sup>.

**In 2013 the number of minimum wage earners increased the most since the adoption of the new Minimum Wage Act; relative to the year before the adoption of the act (2009), this number was 2.6-times higher (50,571).** In 2013 the number of minimum wage earners was up 12.4% in year-on-year terms. The share of minimum wage earners in all employed persons increased as well, by 1.1 percentage points to 8.6% (2009: 3.0%). Around 84%

of all minimum wage earners were in private sector activities<sup>6</sup>. Last year their number increased (by 3,700 to 42,589; 2009: 18,596), while between 2009 and 2013 their share of the total rose from 3.8% to 9.3%. In public service activities, the increase in the otherwise small share was much larger (from 0.3% to 4.6% or from 451 to 7,982 persons), while in the last two years the increase in the number (by 3,393) was primarily a consequence of the reduction in public servants' wages. Relative to the situation before the coming into force of the new act, the number of minimum wage earners rose most notably in education and in human health and social work activities, where it jumped by 40-times and 14-times, respectively. In absolute terms, the increase was the highest in wholesale and retail trade and in manufacturing. Together with administrative and support service activities, construction, and accommodation and food service activities, these sectors employ around 70% of all minimum wage recipients<sup>7</sup>. With the exception of wholesale and retail trade, workers in these sectors are typically low-skilled.

**In the previous four years, the increase in the minimum wage contributed to a significant rise in earnings in the private sector, and a decline in the share of low-wage earners and in income inequality, but it also led to losses in cost competitiveness (see indicator 1.4) and job losses.** In our estimation, in 2010–2012 more than half of the average gross wage growth (more than 3 percentage points of the 6.0%) can be attributed to the rise in the minimum wage<sup>8</sup>. The impact was the greatest in 2012 (2.2 percentage points), while in the next two years it was around half a percentage point. The increase in the minimum wage thus put significant pressure on unit labour costs in 2010 in particular, reducing the competitiveness of the economy. In the short term, around 7,000 people are estimated to have lost work due to the higher minimum wage; in the long term the figure will be much higher<sup>9</sup>. At the same time, the large increase in the minimum wage resulted in lower inequality of wage distribution and a lower share of low-wage earners<sup>10</sup> (2012: 17.3%; 2009: 19.3%). According to the latest European Union Structure of Earnings Survey, the comparable figure in the EU overall was 17.0% in 2010.

<sup>1</sup> The two grew by the same percent in the 1996–2009 period; the minimum wage grew slightly more than the average wage in the 2002–2006 period, when in addition to inflation it was adjusted to GDP growth. The current disparity is the greatest ever.

<sup>2</sup> In Belgium, Bulgaria, Estonia, Lithuania, Spain, Ireland and Portugal.

<sup>3</sup> In the Czech Republic, Greece, Croatia, Hungary, Poland, Romania, the UK and Latvia.

<sup>4</sup> The new Minimum Wage Act, which significantly increased the amount of the minimum wage, came into force in 2010; at the same time every year the amount is automatically adjusted to price growth.

<sup>5</sup> It went up in Bulgaria, Luxembourg, Hungary, Poland, Portugal and the UK and down in the Czech Republic, Croatia, Estonia, Latvia, Lithuania, Malta and Romania.

<sup>6</sup> Activities A–N and R–S; public service activities are defined as activities O–Q.

<sup>7</sup> Manufacturing 25.8%, wholesale and retail trade 17.1%, administrative and support service activities 11.5%, construction 9.7%, and accommodation and food service activities 6.0%.

<sup>8</sup> In private sector activities by 4.4 percentage points to 8.7%.

<sup>9</sup> See IMAD Working Paper No. 3/2010 (Brezigar et al.: Estimation of the Impact of the Minimum Wage Rise in Slovenia) and Economic Issues 2012 (Box 2: Effects of the rise in minimum wage in 2010 on the loss of jobs – Updated estimation of the labour demand function and estimation of the effects of the rise in minimum wage and labour costs on employment).

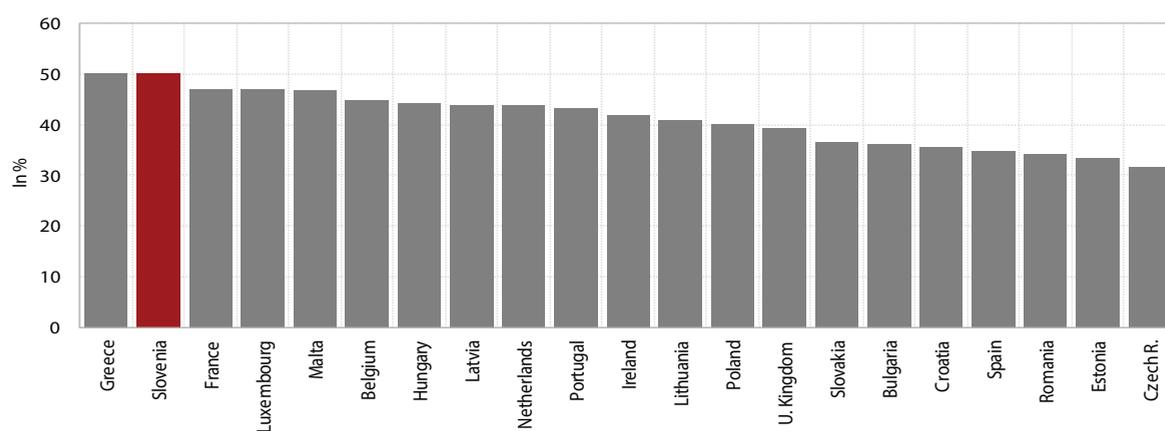
<sup>10</sup> According to the OECD's methodology, these are full-time workers who receive less than two-thirds of median earnings, i.e. up to EUR 897 in 2012.

Table: Average minimum gross wage, average gross wage and the ratio between the two, Slovenia

	Minimum gross wage	Nominal growth of the minimum wage	Real growth of the minimum wage	Average gross wage	Nominal growth of the average gross wage	Real growth of the average gross wage	Ratio of the minimum to the average gross wage
2000	322	10.3	1.3	800	10.6	1.6	40.3
2001	366	13.5	4.7	895	11.9	3.2	40.9
2002	408	11.5	3.7	982	9.7	2.0	41.5
2003	445	9.0	3.2	1.057	7.5	1.8	42.1
2004	476	7.0	3.3	1.117	5.7	2.0	42.6
2005	499	4.9	2.4	1.157	4.8	2.2	43.1
2006	516	3.3	0.9	1.213	4.8	2.2	42.5
2007	529	2.5	-1.1	1.285	5.9	2.2	41.2
2008	571	8.0	2.2	1.391	8.3	2.5	41.1
2009	593	3.7	2.8	1.439	3.4	2.5	41.2
2010	679	14.6	12.6	1.495	3.9	2.1	45.4
2011	718	5.7	3.8	1.525	2.0	0.2	47.1
2012	763	6.3	3.5	1.525	0.1	-2.4	50.0
2013	784	2.7	0.9	1.523	-0.2	-2.0	51.4

Source: SURS, SCA 2002 until 2008, SCA 2008 from 2009 onwards, MDDSZ, AJPES.

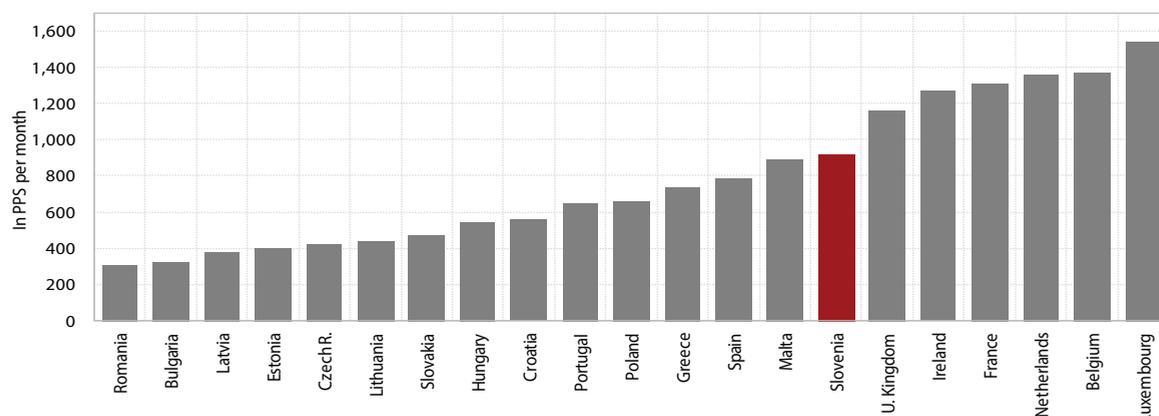
Figure 1: Ratio of the minimum gross wage to the average gross wage, 2012



Source: Eurostat Portal Page, 2014.

Note: For France, Greece, Ireland and the Netherlands data for 2011; for Belgium data for 2010. Other EU-28 Member States do not have statutory minimum wages, so no data are available for them.

Figure 2: Minimum gross wage, July 2013, PPS



Source: Eurostat Portal Page, 2014.

## 4.11 Risk of poverty

**In 2012 the at-risk-of-poverty rate<sup>1</sup> (13.5%) remained at about the same level as the previous year (-0.1 percentage points), and around 271,000 people (2,000 fewer than the previous year) were living below the at-risk-of-poverty threshold.** The rate is calculated based on income in 2011<sup>2</sup>, when modest economic growth (0.7%) was recorded, while employment fell and unemployment rose, wages stagnated, and the number of retired persons and recipients of social transfers increased. Together with the concentration of income mostly at the lower end of the income scale<sup>3</sup>, all this led to only a slight rise in the at-risk-of-poverty threshold, which amounted to EUR 606 for a single household and EUR 1,273 for a family of four<sup>4</sup>. Compared with the previous year, the threshold was up only by EUR 6 or 1%, which is the smallest increase since 2005<sup>5</sup>. Taking into account the concept of measuring relative poverty, with an almost unchanged threshold, the at-risk-of-poverty rate did not rise. The relative at-risk-of-poverty gap (19.1%) was the lowest in the past six years, i.e. at the level of 2005<sup>6</sup>. In 2012 the average income of people below the at-risk-of-poverty threshold was EUR 490.2 (EUR 10 more than in 2011). Income inequality – measured by the income quintile ratio (80/20) and the Gini coefficient – remained at about the same level as in the previous year and was again the lowest in the EU.

**Despite the increased risk during the crisis, Slovenia still belongs in the group of European countries with low at-risk-of-poverty rates.** The at-risk-of-poverty rate in Slovenia was the sixth lowest in the EU in 2012, but the risk of poverty in Slovenia is rising faster than the EU average. Between 2009 and 2012 the at-risk-of-poverty rate rose by 2.2 percentage points in Slovenia and by 0.5 percentage points in the EU overall. Slovenia is thus third behind Greece and

Croatia as regards the largest increases in the at-risk-of-poverty rates in four years. In terms of the at-risk-of-poverty threshold, Slovenia ranks approximately in the middle of the EU (in EUR and PPS terms).

**The impact of social transfers on lowering the risk of poverty increased in 2012 and was the largest in the past five years.** The at-risk-of-poverty rate before social transfers, having declined steadily since 2005, started to rise in 2010 and reached 25.2% in 2012. Social transfers lowered the risk of poverty by 11.7 percentage points in 2012, which is more than in the previous years and more than the EU average (by 8.9 percentage points). Despite emergency measures, the number of recipients of various social transfers and the average amount of benefits they received were slightly higher in 2011<sup>7</sup>.

**Compared with the previous year, in 2012 the at-risk-of-poverty rate decreased for some groups at greatest risk and increased for employed and unemployed persons.** It dropped the most for people aged 65 and over and for people under 18 years of age. It declined by 3.3 percentage points for single persons, who have the highest at-risk-of-poverty rate among all socio-economic groups, and for single-parent families and families with several children<sup>8</sup>. As regards activity status, the risk was reduced for retired persons and other inactive persons and increased for unemployed persons (46.9%), self-employed persons (23.8%) and employed persons (6.5%). In these groups, employed and unemployed men are more exposed than women. Trends for the 18+ age groups differ by gender. The at-risk-of-poverty rate for men aged 55–64 declined and for women of the same age increased; in the 65+ age group the situation was reversed. The at-risk-of-poverty rate for older women is still more than twice as high as for older men, so the high rate for older women is the reason that the at-risk-of-poverty rates for people aged 65+ in Slovenia are higher than in the EU overall, while in other age groups they are lower. In 2012 the at-risk-of-poverty rate for people aged 65+ declined.

<sup>1</sup> The at-risk-of-poverty rate indicates the percentage of people living below the at-risk-of-poverty threshold, which in accordance with the Eurostat methodology is set at 60% of the median equivalent disposable net income of all households, taking into account the OECD's equivalence scale.

<sup>2</sup> Source: Survey on Income and Living Conditions (SILC).

<sup>3</sup> This was caused by relative stagnation of the average wage, a further increase in the ratio between the minimum and average wage, an increased number of minimum wage earners, changes in the structure of employment and the stagnation (or decrease) of wages in some sectors with the highest wages. In addition, differences in wages were reduced by austerity measures in the public sector.

<sup>4</sup> The at-risk-of-poverty threshold is calculated for a household of two adults and two children younger than 14.

<sup>5</sup> 2010 was the only year in which the threshold decreased.

<sup>6</sup> The relative at-risk-of-poverty gap shows the difference between disposable income and the at-risk-of-poverty threshold.

<sup>7</sup> Income reference year.

<sup>8</sup> See Slovenian Economic Mirror, September 2013.

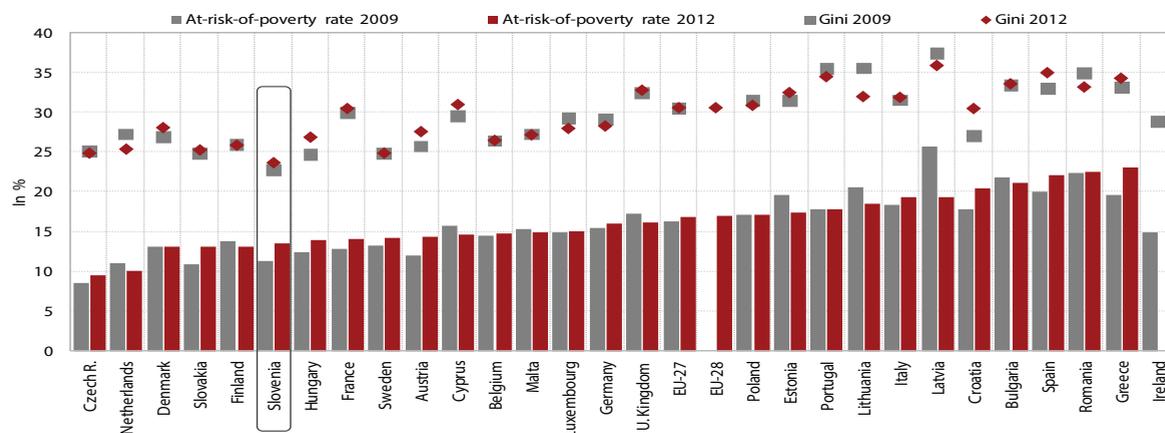
Table: Selected at-risk-of-poverty indicators for Slovenia and the EU<sup>1</sup> (excluding income in kind) by status, age and gender

		Men			Women			Total		
		2010	2011	2012	2010	2011	2012	2010	2011	2012
<b>At-risk-of-poverty rate before pensions and social transfers, %</b>										
total	<b>Slovenia</b>	<b>37.6</b>	<b>37.7</b>	<b>39.5</b>	<b>42.1</b>	<b>42.7</b>	<b>44.4</b>	<b>39.9</b>	<b>40.2</b>	<b>41.9</b>
	EU-28	41.1	41.8	41.8	45.8	46.3	46.3	43.5	44.1	44.1
<b>At-risk-of-poverty rate before social transfers, %</b>										
total	<b>SLO</b>	<b>23.0</b>	<b>23.0</b>	<b>24.2</b>	<b>25.4</b>	<b>25.5</b>	<b>26.2</b>	<b>24.2</b>	<b>24.2</b>	<b>25.2</b>
	EU-28	25.2	25.5	25.2	26.8	27.1	26.6	26.0	26.3	25.9
<b>At-risk-of-poverty rate, %</b>										
total	<b>Slovenia</b>	<b>11.3</b>	<b>12.2</b>	<b>12.5</b>	<b>14.1</b>	<b>15.0</b>	<b>14.6</b>	<b>12.7</b>	<b>13.6</b>	<b>13.5</b>
	EU-28	15.7	16.2	16.3	17.2	17.7	17.5	16.5	16.9	17.0
single person	<b>Slovenia</b>	<b>30.1</b>	<b>35.8</b>	<b>32.3</b>	<b>44.3</b>	<b>43.0</b>	<b>40.1</b>	<b>38.5</b>	<b>40.0</b>	<b>36.7</b>
	EU-28	23.9	24.6	24.8	26.1	26.5	25.8	25.2	25.7	25.4
under 18 years of age	<b>Slovenia</b>	<b>13.3</b>	<b>14.4</b>	<b>13.6</b>	<b>11.9</b>	<b>15.0</b>	<b>13.4</b>	<b>12.6</b>	<b>14.7</b>	<b>13.5</b>
	EU-28	20.5	20.6	20.4	21.0	21.0	21.2	20.7	20.8	20.8
65 and over	<b>Slovenia</b>	<b>9.5</b>	<b>10.5</b>	<b>11.7</b>	<b>27.1</b>	<b>27.8</b>	<b>25.0</b>	<b>20.2</b>	<b>20.9</b>	<b>19.6</b>
	EU-28	12.9	13.1	12.1	18.3	18.0	16.4	16.0	15.9	14.5
retired aged 65 and over	<b>Slovenia</b>	<b>9.5</b>	<b>10.4</b>	<b>11.7</b>	<b>27.2</b>	<b>27.9</b>	<b>24.9</b>	<b>20.2</b>	<b>20.9</b>	<b>19.5</b>
	EU-28	12.7	13.0	12.0	16.6	16.4	14.9	14.8	14.8	13.5
aged 18–64	<b>Slovenia</b>	<b>10.8</b>	<b>11.9</b>	<b>12.2</b>	<b>10.8</b>	<b>11.4</b>	<b>12.0</b>	<b>10.8</b>	<b>11.6</b>	<b>12.1</b>
	EU-28	14.6	15.2	15.8	15.7	16.4	16.7	15.1	15.8	16.3
retired aged 18–64	<b>Slovenia</b>	<b>16.6</b>	<b>16.0</b>	<b>12.4</b>	<b>13.8</b>	<b>12.8</b>	<b>13.2</b>	<b>15.0</b>	<b>14.1</b>	<b>12.9</b>
	EU-28	10.5	11.1	11.0	11.5	11.8	11.7	11.0	11.5	11.4
other inactive persons aged 18–64	<b>Slovenia</b>	<b>12.3</b>	<b>13.4</b>	<b>12.3</b>	<b>16.9</b>	<b>18.9</b>	<b>18.0</b>	<b>14.8</b>	<b>16.4</b>	<b>15.5</b>
	EU-28	26.9	27.0	27.9	27.3	28.2	28.8	27.2	27.8	28.5
unemployed	<b>Slovenia</b>	<b>44.6</b>	<b>45.2</b>	<b>48.1</b>	<b>43.7</b>	<b>44.0</b>	<b>45.5</b>	<b>44.1</b>	<b>44.6</b>	<b>46.9</b>
	EU-28	47.7	48.6	49.9	42.5	43.3	43.8	45.3	46.2	47.0
employed	<b>Slovenia</b>	<b>6.2</b>	<b>7.2</b>	<b>7.6</b>	<b>4.2</b>	<b>4.5</b>	<b>5.3</b>	<b>5.3</b>	<b>6.0</b>	<b>6.5</b>
	EU-28	8.9	9.4	9.7	7.8	8.3	8.4	8.4	8.9	9.1
self-employed	<b>Slovenia</b>	<b>21.8</b>	<b>23.1</b>	<b>24.2</b>	<b>20.7</b>	<b>23.9</b>	<b>22.9</b>	<b>21.4</b>	<b>23.4</b>	<b>23.8</b>
	EU-28	23.2	24.9	24.0	21.4	22.6	22.2	22.6	24.1	23.4

Source: Eurostat Portal Page, 2013.

 Notes: <sup>1</sup> For 2012 Eurostat estimate. Pensions included as income from work.

Figure: The at-risk-of-poverty rate and Gini coefficient



Source: Eurostat Portal Page, 2013.

## 4.12 Material deprivation

**The material deprivation rate, which measures deprivation in at least three items<sup>1</sup>, decreased by 0.3 percentage points to 16.9% in 2012, while the severe material deprivation rate (at least four items) increased by 0.5 percentage points to 6.6%.** Both rates are at about the level of 2008, when the severe material deprivation rate was the highest of all eight years since it was first measured and the material deprivation rate was among the highest. The decline in the material deprivation rate can be attributed to a lower material deprivation rate in the population above the at-risk-of-poverty threshold, while the rate for the population below the threshold increased. The fact that the share of those that do not feel deprived regarding any of the material deprivation items and those deprived in fewer items than a year before, and the share of those that feel deprived in five to nine items all increased, shows that a part of the population is less deprived and a part is more deprived. Material deprivation also differs by gender and age. Even though the total material deprivation rate declined, this is not true for males under 18 years of age and of women aged 18–64 years. As regards men, the severe material deprivation rate was up in all age groups and as regards women only for working age women, i.e. the 18–64 age group. The increase in the severe material deprivation rate is reflected in the increase in the average number of deprivation items by 0.1 percentage points to 3.6 items. The same upward trend in the intensity<sup>2</sup> of material deprivation was recorded in the EU overall and in ten other EU Member States.

**As in all previous years, in 2012 material deprivation (both rates) in Slovenia was below the EU average, but Slovenia is worse as regards the share of the population that is not materially deprived.** The material deprivation rate in the EU overall stood at 19.7%, up 1.2 percentage points on the previous year, while the severe material deprivation rate stood at 9.9%, up 1 percentage point on the previous year.

The share of the population deprived in none of the material deprivation items stood at 46.8%, down 1.9 percentage points on the previous year. However, there are wide variations from country to country. As regards the share of the population lacking none of the material deprivation items and as regards the material and severe material deprivation rate, Slovenia ranks approximately in the middle of the EU. It belongs to the group of countries in which the material deprivation rate dropped the most over the previous year (Latvia, Germany, Lithuania, Belgium and Slovenia). The rate jumped the most in Greece, the UK, Spain, Italy and Malta (between 5.3 and 2.3 percentage points). At the same time, Slovenia is among the three Member States where the share of the population not lacking any material deprivation item increased the most (together with Germany and Austria). As regards severe material deprivation, the rate was up in 16 countries.

**In Slovenia, most of the people who are materially deprived are regarded as such because they are unable to face unexpected expenses, afford a one-week annual holiday, or have difficulty paying for housing expenses.** The share of materially deprived people varies for each item used in calculating the material deprivation rate. In 2012, 44.6% of households in Slovenia did not feel "financial deprivation"; 45.7% of households felt deprived as regards their ability to deal with unexpected expenses (fewer than a year before), 29.6% as regards being able to afford a one-week holiday away from home, 21% as regards the cost of living, 8.9% as regards meals featuring meat (or a vegetarian equivalent), and 6.4% as regards keeping their home adequately warm. In terms of financial deprivation, Slovenia was 13<sup>th</sup> among the EU-28 Member States (behind Spain and the Czech Republic, and just in front of Italy and Slovakia). The situation was very different as regards consumer durables, where 93.5% of households did not feel deprived<sup>3</sup>. Slovenia was 8<sup>th</sup> among the EU-27 Member States<sup>4</sup>. The share of people deprived of all these items is much larger among the population below the at-risk-of-poverty threshold than among those above it. This is also shown by the indicator monitoring how many people have difficulties making ends meet. Almost 59.7% below the at-risk-of-poverty threshold have difficulty making ends meet, while the share regarding people above this threshold is 36.5%. However, among people above the at-risk-of-poverty threshold, the share of those who easily manage to live on their income was up in 2012, while among people below the at-risk-of-poverty threshold, the share of those who manage to live on their income only with great difficulty was up by 1.8 percentage points.

<sup>1</sup> Out of nine items of consumer durables or items posing an economic burden on households: 1. inability (of the household) to deal with unexpected expenses; 2. inability to afford a one-week annual holiday away from home; 3. inability to afford a meal with meat, chicken or fish (or a vegetarian equivalent) at least every second day; 4. being in arrears with mortgage or rent payments, utility bills, hire purchase instalments or other loan payments; 5. inability (of the household) to keep its home adequately warm; 6. inability to afford a washing machine; 7. inability to afford a colour TV; 8. inability to afford a telephone/mobile; 9. inability to afford a car.

<sup>2</sup> Defined as the average number of items that deprived households are deprived of.

<sup>3</sup> Deprived regarding the ability to afford a computer 4.6%, a car

3.8%, a colour TV 0.6%, a washing machine 0.3%, a telephone 0.2%.  
<sup>4</sup> It should be noted that what is measured is only the existence of a consumer durable and not its value or age.

Table 1: Material deprivation and severe material deprivation below the at-risk-of-poverty threshold by gender and age, Slovenia

	2005	2006	2007	2008	2009	2010	2011	2012
<b>Material deprivation (3 or more items out of 9)</b>								
TOTAL	14.7	14.4	14.3	16.9	16.2	15.8	17.2	16.9
Above the at-risk-of-poverty threshold	11.3	11.2	10.8	13.3	13	12	13.3	12.6
Below the at-risk-of-poverty threshold	38.9	38.7	41.4	42.7	40.9	41.9	42.1	44.1
<b>Severe material deprivation (4 or more items out of 9)</b>								
TOTAL	5.1	5.1	5.1	6.7	6.1	5.9	6.1	6.6
Above the at-risk-of-poverty threshold	3.4	3.4	3.3	4.5	4.3	3.8	4	4.1
Below the at-risk-of-poverty threshold	17.5	18	19.1	21.8	20.3	20.5	19.6	22.9
Men	18	18.9	19.9	22.7	20.6	18.8	19.4	24.6
0-17	18.8	18.2	20.6	21.1	17.5	22.3	18.4	26.4
18-64	18.6	19.8	19.9	23.6	22.7	16.6	20	24.5
65+	13.9	15.5	19	20.6	16.2	25.8	17.7	21.9
Women	17.1	17.3	18.4	21.2	20.1	21.8	19.7	21.5
0-17	13	10.9	13.9	17.8	18.4	24	20.7	22.6
18-64	17.9	17.9	19.7	23.3	24.3	24.9	21.6	24.3
65+	18	19.4	18.6	19.9	15.6	16.5	16.5	16.1

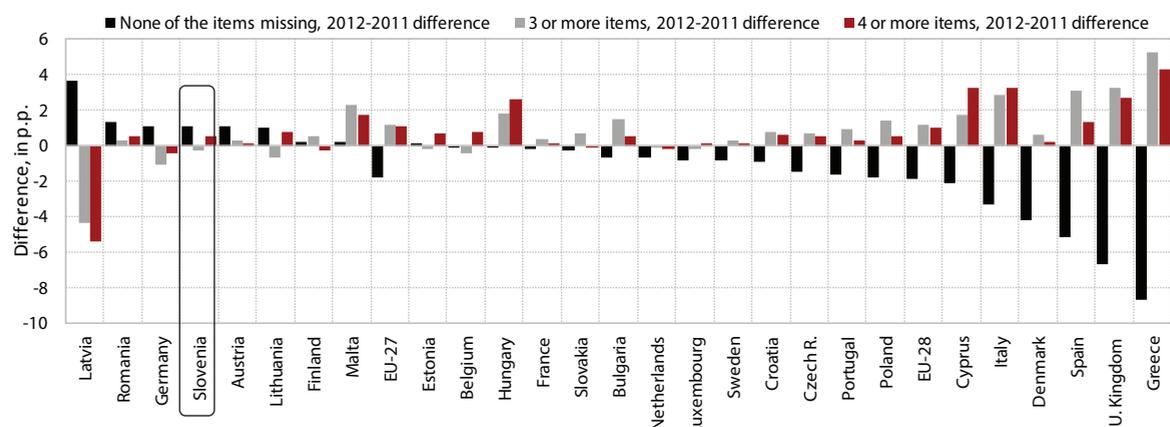
Source: SURS.  
Note: Income excludes income in kind.

Table 2: Severe material deprivation by quintiles and the first quintile for selected socioeconomic groups, Slovenia

	2005	2006	2007	2008	2009	2010	2011	2012
TOTAL	5.1	5.1	5.1	6.7	6.1	5.9	6.1	6.6
Fifth quintile	0.5	0.5	0.5	0.3	0.5	0.4	0.2	0.5
Fourth quintile	1.4	1.5	1.4	1.9	1.6	2.0	1.5	1.9
Third quintile	3.2	2.3	3.3	5.0	4.1	3.3	3.9	3.8
Second quintile	5.8	6.6	5.8	8.4	7.3	6.2	7.8	7.0
First quintile	14.7	14.6	14.6	17.7	17.0	17.7	17.1	20.0
One adult under 65 years	27.0	27.4	26.0	26.9	32.2	27.5	23.8	30.3
One adult aged 65+	17.6	17.5	18.7	15.1	12.5	16.7	16.5	16.2
Single person with dependent child	17.1	14.3	20.0	22.4	26.4	29.5	28.3	30.1
Single woman	19.3	19.1	19.8	17.3	18.3	21.7	19.1	19.9
Single man	26.8	26.5	25.5	25.7	24.6	22.1	21.7	28.5
Two adults with three or more dependent children	17.2	18.9	12.8	17.4	19.1	12.7	13.4	16.7

Source: Eurostat Portal Page, 2013.

Figure: Difference in the incidence of (severe) material deprivation and non-deprivation between 2008 and 2012



Source: Eurostat Portal Page, 2013.

## 4.13 Health care resources

**Although the number of physicians has been growing more strongly in recent years, Slovenia's gap with the EU remains significant.** According to the data of the National Institute of Public Health, in 2012 Slovenia had 5,228 practicing physicians, up 2.0% on 2011. The number of practising physicians per 100,000 population grew again, reaching 254.3 (2011: 249.5; EU: 346.1). In the 2000–2012 period, the number of physicians in Slovenia grew on average annually by 1.7%, which is the same as the EU average.

**Slovenia lags the most regarding the number of general practitioners.** After Slovenia took certain measures<sup>1</sup> to strengthen primary health care, in recent years the number of general practitioners has increased more than in the past, in 2011 and 2012 by almost 4% per year, and reached 1,127, or 55.81 general practitioners per 100,000 population in 2012. The gap with the EU average is nevertheless significant (2011: 79.1). The workload of general practitioners has been rising due to the increasing number of chronic patients, demographic changes and higher patient expectations. Adequate coverage by general practitioners would make it possible for certain services to be transferred from the secondary to the primary level in order to reduce costs, while better access to a general practitioner could prevent emergency admissions and reduce the cases of costlier treatment in specialised health care. One of the indicators showing the capacity of the primary level to assume a greater workload is the ratio of general practitioners to specialists. On this indicator too Slovenia lags behind the EU average: the proportion of general practitioners in the total number of physicians stands at 21%, compared with 30% in the EU and the OECD. Most countries are taking measures to address the shortage of general practitioners and entice medical graduates to become general practitioners (changes in financing, non-financial incentives); at the same time, more and more responsibilities at the primary level are being taken on by professional nurses. Slovenia has adequate opportunities to introduce changes in the responsibilities of nurses in view of the fact that the number of professional nurses has been growing

very rapidly in recent years<sup>2</sup> as well as in view of the high ratio of practicing physicians to nurses. The large inflow of nurses to the labour market will have to be regulated by additional systemic measures in both health care (a further transfer of certain duties from doctors to professional nurses) and long-term care (faster development of community nursing care). Given the restrictions on hiring in the public sector, professional nurses may otherwise have difficulty finding a job.

**In Slovenia, too, the decline in the number of acute care hospital beds accelerated in 2012.** Over the previous decade (2000–2010), the total number of hospital beds (beds for acute, non-acute, psychiatric and long-term hospital treatments) per 100,000 population declined by an average of 1.7% per year in Slovenia, and 1.9% in the EU overall. There has been a decline particularly in the number of acute care beds, which is related to new technologies and medications that are shortening the average length of inpatient stays, and to the transfer of certain hospital treatments to day hospitals or specialist outpatient clinics. In a number of countries the decline in the number of acute care hospital beds accelerated in 2010–2011 because of the economic crisis and austerity measures in public health care; at first there was no such response to the crisis in Slovenia. The number of acute care beds declined by 1.8% in 2012, which is probably related to the rationalisation of operations in hospitals. The total number of acute care hospital beds is roughly the same as in the EU overall (Slovenia: 3.63 per 1,000 population in 2012, EU: 3.67 per 1,000 population in 2010), while the total number of hospital beds in Slovenia is below the EU average, mainly because it does not include beds for long-term health care of patients in residential homes for the elderly.

<sup>1</sup> In 2010 and 2011 Slovenia took certain measures to strengthen primary health care: (i) the introduction of new teaching outpatient clinics where physicians specialising in general practice can register their patients; (ii) the introduction of so-called reference outpatient clinics where professional nurses assume greater responsibilities; and (iii) additional funding for the primary level of health care (Ministry of Health, 2012).

<sup>2</sup> In 2008–2012, on average 445 nurses graduated every year, 12% more than on average in the 2003–2008 period.

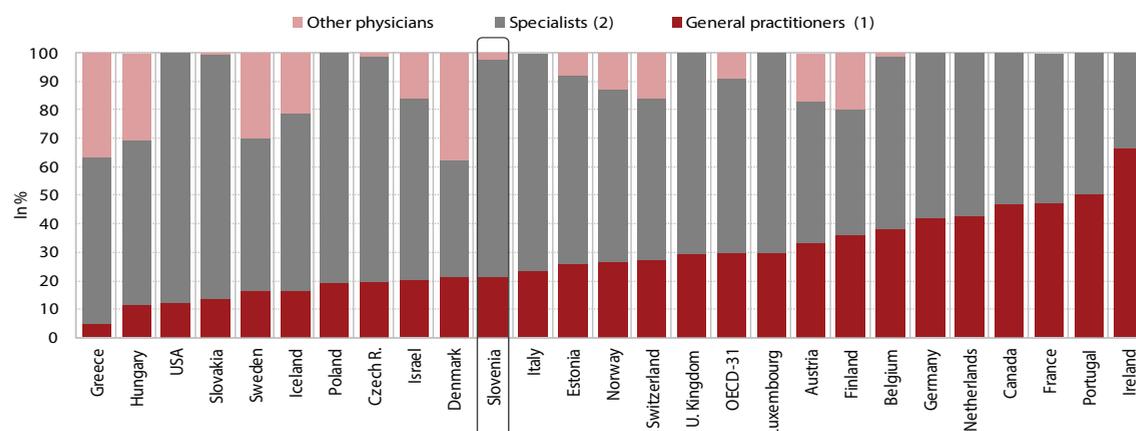
Table: Human resources in the health care system

	Practicing physicians per 100,000 population			General practitioners per 100,000 population		Practicing dentists per 100,000 population	Practicing nurses per 100,000 population		Ratio of nurses to physicians
	2000	2010	2011	2000	2011	2011	2000	2011	2010/2011
<b>EU-27<sup>1</sup></b>	<b>287.7</b>	<b>337.3</b>	<b>346.1</b>	<b>75.4</b>	<b>79.1</b>	<b>66.8</b>	<b>770.8</b>	<b>835.5</b>	<b>2.5</b>
Austria	380.6	478.1	482.5	137	159	56	720.6	790.7	1.6
Belgium <sup>4</sup>	282.9	297.0	299.6	120	111	70	583.8	659.5	3.1
Bulgaria	336.9	371.1	386.3	N/A	66.5	84.8	435.9	474.6	1.1
Cyprus	259.4	288.8	296.2	41.5	N/A	96.0	422.5	466.9	1.6
Czech Republic	336.9	358.1	363.7	73	70	71	805.3	846.1	2.2
Denmark	291.2	350	N/A	65	73.3	77.8	1261.4	1572.3	4.4
Estonia <sup>4</sup>	319.2	322.3	326.3	95	84	88	632.3	646.6	1.9
Finland <sup>3</sup>	249.9	290.0	330.0	N/A	117	74.4	954.6	997.0	4.0
France <sup>3</sup>	329.4	330.0	307.0	162	156	64	688.6	901.6	2.6
Greece <sup>3</sup>	432.8	612.6	614.5	N/A	30	129.1	292.8	364	0.5
Croatia	238.3	278.5	283.7	N/A	51		505.7	578.8	N/A
Ireland <sup>3</sup>	220.2	406.6	267.0	48	278	61	1400.5	1215.3	3.8
Italy <sup>4</sup>	606.9	608.9	409.9	82.8	96	56.3	N/A	658.9	1.6
Latvia	287.4	291.1	313.7	40.7	58.6	66.5	477.2	515.6	1.6
Lithuania	362.7	372.0	385.1	52.2	69.7	74.7	802.5	735.9	1.9
Luxembourg	213.8	276.9	275.7	64	82	84	755.9	1163.5	4.1
Hungary	268.2	286.9	295.8	N/A	33.5	52	548.3	638.4	2.1
Malta <sup>3,4</sup>	261.6	307.5	324.3	N/A	159.9	44.2	N/A	710.0	2.1
Germany	326.0	373.2	382.4	148	161	80	978.3	1154.3	3.0
Netherlands <sup>4</sup>	244.3	296.4	N/A	116	125.9	49.8	N/A	855.4	4.0
Poland	222.3	216.0	218.6	7.7	41	34	553.2	580.3	2.4
Portugal <sup>4</sup>	309.7	384.7	398.4	54	208	N/A	353.2	633.3	1.5
Romania	192.7	236.9	238.5	N/A	84.9	60.4	530.0	550.8	2.2
Slovakia <sup>3</sup>	323.3	N/A	N/A	N/A	N/A	50.0	747.7	619.3	1.8
<b>Slovenia<sup>2</sup></b>	<b>215.0</b>	<b>243.0</b>	<b>249.5</b>	<b>45.7</b>	<b>53</b>	<b>62</b>	<b>685</b>	<b>838.7</b>	<b>3.3</b>
Spain	330.8	377.9	398.9	N/A	77	60.4	373.5	548.1	1.3
Sweden	308.6	380.2	N/A	53	63.2	52	1031	1155	2.9
United Kingdom	195.8	271.8	277.7	64	80	54	916	897.2	3.1

Sources: Eurostat; OECD Health Data 2013; WHO HFA-DB.

Notes: <sup>1</sup> The source for the EU-27 average for physicians, general practitioners, dentists and nurses is the WHO HFA-DB (the methodologies of data reporting for these categories were standardised with Eurostat and the OECD). <sup>2</sup> Slovenia: the indicators in the text are for 2012, the data in the table are for 2011, as these are the latest available data for EU Member States. <sup>3</sup>FR, GR, NL, IR, FI, SK: all professionally active physicians and dentists (including those working in management, research, teaching positions, etc.); <sup>4</sup>BE, IT, PT, MT, IE: all licensed physicians and dentists; N/A – not available.

Figure: General practitioners, specialists and other physicians, share in the total number of physicians, 2011



Source: Health at a Glance 2013 (OECD 2013). Notes: <sup>1</sup> Specialist of general medicine, including family physicians and other general practitioners non-specialists. <sup>2</sup> Specialists, including paediatricians, gynaecologists and psychiatrists.

## 4. 14 Capacities of the education system

**The number of persons enrolled is increasing at lower levels and declining at higher levels of education.** Despite the break in the upward trend in the share of children in preschool education in 2012/13, the number of children in preschool education is still rising (to 83,090 in 2012/13, up 2.3% on the previous year) due to a larger number of births in previous years. For the second consecutive year, the number of pupils in primary schools was also up in 2012/13 (by 0.9% to 162,775), but it was lower than in 2005/06 when the SDS started to be implemented. As in the other years during the implementation of the SDS, the number of pupils in upper secondary education continued to decline (by 2.1% to 78,208); it was about a fifth lower than in 2005/06. Primarily due to the decline in the size of the generations of young people due to enrol in tertiary education, tertiary education enrolment also fell in 2012/13 (by 6.1% to 97,706) and was also lower than in 2005/06.

**The ratio of children to teaching staff (i.e. teachers and teachers' aides) in preschool education remained at about the same level as in previous years.** In 2012/13 it was 6.2 in the first age group (children aged 1–2) (2011/12: 6.3) and 9.4 in the second age group (children aged 3–5) (2011/12: 9.3). Since the start of the implementation of the SDS, the ratio has deteriorated slightly only in the first age group, whereas in the second age group it was more favourable than in the EU overall (2010/11: 13.7). The average number of children per class in preschool education remained at roughly the same level as a year earlier, averaging 12.4 in the first age group and 20.3 in the second age group. In both age groups the number was higher than in 2005, when SDS started to be implemented, which is related to the lack of available places in preschool education.

**The average number of pupils per class at ISCED level 1 was about the same as a year earlier, while at ISCED level 2 it declined.** The average class size at ISCED level 1, which covers the first six grades of elementary school in Slovenia (see the note under the table), was 18.5 in 2011, which is about the same as a year earlier (2010: 18.4). At ISCED level 2, which comprises grades 7–9, it was 19.2 and thus slightly lower than a year earlier (2010: 19.6). During the implementation of the SDS, at both levels of education the number of pupils per class was among the most favourable in the EU<sup>1</sup>. The lower class size in Slovenia is related

to more favourable norms in some cases (subsidiary primary schools, combined-grade classes, primary schools and institutions with special curricula, etc.). The student/teacher ratio at ISCED level 1 was also favourable in 2011, while at ISCED level 2 it was less favourable. Compared with the previous year, it did not change much at any level. Compared with 2005, the student/teacher ratio and the average number of pupils per class are more favourable at ISCED level 2 and slightly less favourable at ISCED level 1.

**The ratio of pupils to teaching staff in upper secondary schools remained rather unfavourable in 2011.** It was 14.3 and thus worse than in the EU overall. In the last three years the ratio of pupils to teaching staff was at the same level, while it slightly improved between 2005 and 2011. In the 2012/13 school year, the average number of pupils per class at the upper secondary school level was 28.5; compared with the previous school year, it declined across all educational programmes, except in matura courses and vocational training courses, where it was up. The average class size was also lower than in the 2005/06 school year.

**The ratio of students to teaching staff in tertiary education did not improve in 2013.** It stood at 18.1, i.e. at the previous year's level. The improvement from the previous years did not continue. In terms of the student/teacher ratio in tertiary education, in 2011 Slovenia lagged behind the average of the 21 European countries that are OECD members (15.9), even though compared with 2005 (the start of SDS implementation) the ratio in Slovenia improved more. The ratio of students to teaching staff in tertiary education in Slovenia is also high because students enrol in tertiary education for the benefits associated with student status.

<sup>1</sup> EU average not available.

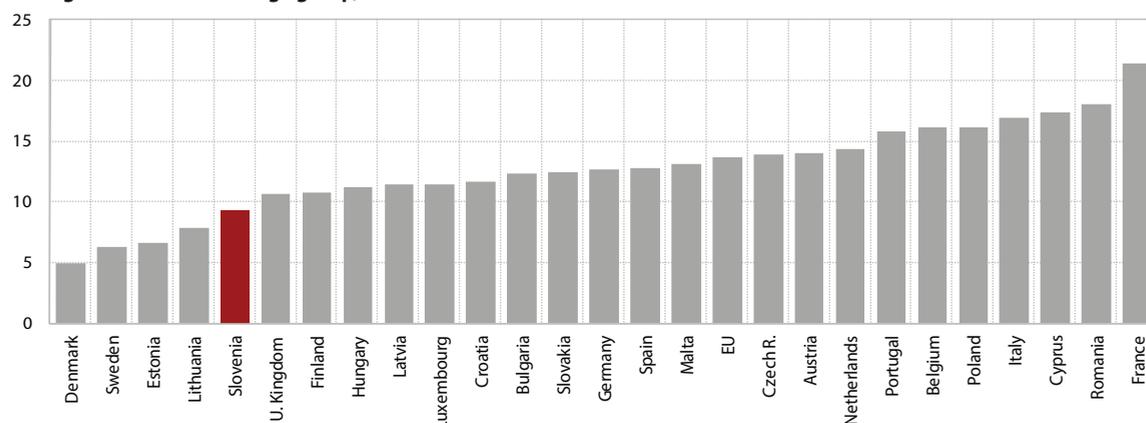
Table: The ratio of students to teaching staff

	ISCED 1			ISCED 2			ISCED 3			ISCED 5,6		
	2005	2010	2011	2005	2010	2011	2005	2010	2011	2005	2010	2011
<b>EU</b>	<b>16.2</b>	<b>15.6</b>	<b>15.5</b>	<b>13.3</b>	<b>12.0</b>	<b>11.6</b>	<b>12.7</b>	<b>13.4</b>	<b>13.7</b>	<b>16.4</b>	<b>15.8</b>	<b>15.9</b>
OECD	16.7	15.8	15.4	13.7	13.7	13.3	13.0	13.8	13.9	15.8	15.5	15.6
Austria	14.1	12.2	12.1	10.6	9.3	9.1	11.3	10.1	9.8	15.3	17.1	16.6
Belgium	12.8	12.4	12.4	9.4	8.1	8.1	9.9	10.1	10.1	19.6	19.3	20.1
Bulgaria	16.3	17.6	17.5	12.6	12.7	12.6	11.9	11.9	12.4	N/A	N/A	N/A
Cyprus	17.9	14.0	13.6	11.9	10.0	10.0	11.5	10.1	10.1	N/A	N/A	N/A
Czech Republic	17.5	18.7	18.7	13.5	11.2	11.1	12.8	14.0	11.7	19.0	20.0	21.0
Denmark	N/A	11.5	11.8	N/A								
Estonia	N/A	16.2	16.3	N/A	14.9	14.7	N/A	16.6	17.0	14.9	N/A	N/A
Finland	15.9	14.0	13.7	10.0	9.8	9.3	18.0	17.1	16.3	12.5	14.4	13.6
France	19.4	18.7	18.4	14.2	15.0	14.8	10.3	9.7	10.0	17.3	15.8	17.5
Greece	11.1	N/A	N/A	7.9	N/A	N/A	8.8	N/A	N/A	30.2	N/A	N/A
Croatia	18.1	14.7	14.3	13.2	10.6	10.3	10.7	10.6	9.6	N/A	N/A	N/A
Ireland	17.9	15.9	15.7	N/A	N/A	N/A	15.6	14.4	14.4	17.4	15.6	14.6
Italy	10.5	11.3	11.7	10.5	11.9	11.5	12.0	12.1	12.8	21.4	18.7	19.0
Latvia	12.2	11.9	11.4	11.2	9.3	8.1	12.1	12.1	10.9	N/A	N/A	N/A
Lithuania	11.3	9.9	9.9	8.8	7.8	7.5	N/A	N/A	7.9	N/A	N/A	N/A
Luxembourg	N/A	10.1	9.9	N/A	24.3	22.1	9.0	7.6	8.9	N/A	N/A	N/A
Hungary	10.6	10.8	10.7	10.4	10.7	10.5	12.2	12.5	12.4	15.9	13.9	16.3
Malta	12.1	14.4	12.9	8.4	8.1	7.0	17.4	12.1	11.6	N/A	N/A	N/A
Germany	18.8	16.7	16.3	15.5	14.9	14.2	14.0	13.2	13.8	12.2	11.6	11.4
Netherlands	15.9	15.7	20.6	N/A	N/A	15.3	16.2	16.5	35.5	N/A	14.7	15.1
Poland	11.7	10.0	11.0	12.7	12.7	10.0	12.9	12.1	11.1	18.2	16.0	15.6
Portugal	10.8	10.9	11.2	8.2	7.9	8.2	N/A	7.2	7.3	13.2	14.4	14.6
Romania	17.4	16.7	17.8	12.4	12.2	13.1	16.0	14.9	15.6	N/A	N/A	N/A
Slovakia	18.9	17.1	16.9	14.1	13.6	13.1	14.3	14.6	14.3	11.7	14.9	14.5
<b>Slovenia</b>	<b>15.0</b>	<b>16.2</b>	<b>16.0</b>	<b>11.1</b>	<b>8.0</b>	<b>7.9</b>	<b>14.5</b>	<b>14.3</b>	<b>14.3</b>	<b>22.7</b>	<b>20.3</b>	<b>19.2</b>
Spain	14.3	13.2	13.2	12.5	10.1	10.3	8.1	9.6	9.8	10.6	11.2	11.5
Sweden	12.2	11.7	11.3	12.0	11.4	11.3	14.0	13.1	13.0	8.9	12.5	12.1
United Kingdom	20.7	19.8	19.9	17.0	17.1	15.2	N/A	15.2	17.3	18.2	18.5	17.9

Source: Eurostat Portal Page – Population and social conditions, 2014.

Notes: According to the International Standard Classification of Education ISCED 1997, ISCED 1 comprises primary education or the first stage of basic education ISCED 2 lower secondary or the second stage of basic education, ISCED 3 upper secondary education, ISCED 5,6 tertiary education; N/A – not available. \* For tertiary education, data for 2005 are available for the EU-19 (the EU countries that were OECD members that year), while data for 2010 and 2011 are available for the EU-21 (the EU Member States that are OECD members); N/A – not available.

Figure: The ratio of the number of children enrolled in organised forms of early childhood education and the number of teaching staff in the second age group, 2011



Source: Eurostat Portal Page – Population and social conditions, 2014.

## 4. 15 Life satisfaction

### ***Life satisfaction<sup>1</sup> in Slovenia fell sharply in 2013.***

With regard to the percentage of satisfied people, with an annual average of 82% and 79% in November, Slovenia remains in the upper half of EU Member States. As regards the annual average, the result ranks Slovenia 12<sup>th</sup>, which is the same as in the previous year. The highest ranked are still the Scandinavian countries, followed by the Benelux countries, the United Kingdom, Malta, Germany, Austria and France. As regards the autumn survey, Slovenia was ranked slightly lower (14<sup>th</sup>). In the autumn of 2013 satisfaction fell in only 6 other countries (compared with 15 countries in the spring survey) but the fall was the largest in Slovenia.

### ***Slovenia is one of ten EU Member States in which life satisfaction has fallen over the past ten years.***

It declined from 90% in autumn 2004 to 79% in autumn 2013. Considering the autumn surveys, Slovenia is among the ten countries in which the share of satisfied people was lower in autumn 2013 than in autumn 2004. The fall was the largest in Greece (-28 percentage points), followed by Cyprus (-21 percentage points), Portugal (-20 percentage points), Spain (-12 percentage points), Slovenia (-11 percentage points) and Ireland (-10 percentage points). In the observed period, satisfaction increased the most in Germany (13 percentage points), followed by Latvia (13 percentage points), Lithuania (10 percentage points), and Poland and Slovakia (6 percentage points).

### ***As life satisfaction is a synthetic indicator, it is influenced by (dis)satisfaction with different areas of life.***

A special Social Climate survey, which has been conducted by Eurobarometer since 2009, measures – in addition to overall satisfaction – also satisfaction in 14 areas of life. In June 2013 more than half of respondents in Slovenia were satisfied with the area they lived in, the health care provision, their household financial situation, their own employment situation and relations with people from different cultural backgrounds. Fewer than half but more than a third of respondents were satisfied with the pension system and unemployment benefits. In other areas,

fewer than a third of respondents were satisfied, the fewest with the employment and economic situation in the country. People in Slovenia are more satisfied than in the EU-27 overall as regards relations with people from different cultural backgrounds, their own employment situation, the pension system and the affordability of energy. People in Slovenia are less satisfied than in the EU-27 overall (the comparison with the EU has worsened) as regards the effectiveness of the public administration, the way that the country is addressing inequality and poverty, unemployment benefits and the affordability of housing. In the entire period since 2009, people in Slovenia have been less satisfied than people in the EU-27 overall with the cost of living and the economic and employment situation in the country.

### ***Satisfaction with most of the evaluated areas declined in 2013; "pessimism"<sup>2</sup> was up.***

Compared with 2012, satisfaction with unemployment benefits, the way inequalities and poverty are being addressed, and the way the public administration is run declined the most. Surprisingly, satisfaction with one's personal employment situation grew. Compared with 2009, a large fall was recorded in satisfaction with the way the public administration is run. The only area in which satisfaction was higher than in 2009 was regarding the provision of health care, which, however, fell for the first time this year. In the last year, the share of "pessimists" grew in almost all areas covered, the most in areas regulated by the government, i.e. the public administration and the system of social security and protection. The areas assessed at the social level as the worst are assessed as rather high at the personal level. This disparity is quite large; one's personal employment situation (57% satisfied) compared with the employment situation in the country (4%), and one's household financial situation (58% satisfied) compared with the economic situation in the country (4%).

<sup>1</sup> Life satisfaction is the most important synthetic indicator of the quality of life or personal well-being. It is measured by various surveys. The indicator is shown on the basis of the Eurobarometer survey, which measures life satisfaction with the following question: All things considered, how satisfied would you say you are with your life these days? The possible answers are: very satisfied, satisfied, dissatisfied and very dissatisfied – for all Member States from the time that they joined the EU. When we talk about satisfaction, 'very satisfied' and 'satisfied' are combined.

<sup>2</sup> Pessimism marks the share of people who expect that in one year the situation will be worse and the share of people who assess the situation as being worse than five years ago. (See also: Zalc, Julien. European Public Opinion: Is this the end of pessimism? European Issues N0290, 8 October 2012, Policy Paper. Foundation Robert Shuman)

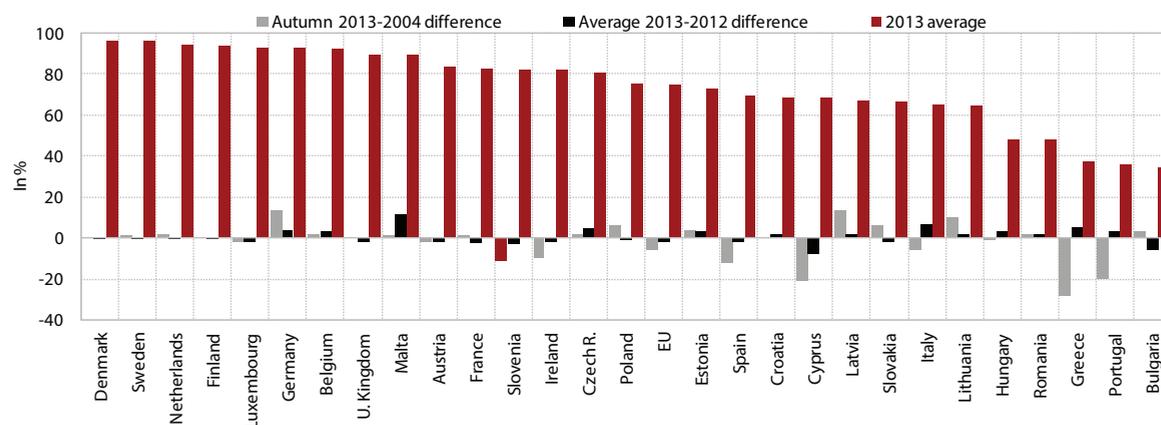
Table: Life satisfaction and satisfaction with different areas of life, June 2013

		Total satisfied (satisfied and very satisfied)		1-year expectations		5-year comparison	
		SI	EU-27	worse		worse	
				SI	EU-27	SI	EU-27
General life situation <sup>1</sup>	2012-2009	0	-2	5	-1	5	6
	2012	85	76	25	17	49	37
<b>How do you evaluate the situation in the following areas?</b>							
		Total good (good and very good)		Worse		Worse	
Residential area	2012-2009	-3	-3	3	2	10	7
	2012	84	84	21	12	40	24
Health care provision	2012-2009	21	-2	10	5	1	11
	2012	71	62	45	32	51	50
Household financial situation	2012-2009	-6	-2	12	0	9	5
	2012	61	62	34	20	56	40
Personal employment situation	2009	-5	0	10	3	4	5
	2012	53	52	22	14	39	28
Relations between people from different cultural backgrounds	2012-2009	-5	3	8	0	7	4
	2012	53	56	40	25	54	37
Unemployment benefits	2012-2009	2	2	22	6	21	11
	2012	45	38	64	37	72	49
Provision of pensions	2012-2009	-5	0	11	-9	14	17
	2012	44	40	53	40	67	58
The way the public administration is run	2012-2009	-23	-2	15	3	21	8
	2012	33	40	41	25	59	41
Affordability of energy	2012-2009	-11	-4	17	11	17	11
	2012	30	29	60	52	82	73
The way inequalities and poverty are addressed	2012-2009	-3	0	12	1	12	8
	2012	29	31	51	31	65	46
Cost of living	2012-2009	0	1	10	6	6	6
	2012	18	29	71	57	91	82
Affordability of housing	2012-2009	-3	-2	7	6	4	5
	2012	14	25	52	43	75	67
Economic situation in the country	2012-2009	-9	8	21	6	20	-8
	2012	8	30	64	42	93	70
Employment situation in the country	2012-2009	-3	7	17	4	17	-6
	2012	5	22	63	42	93	70

Source: Eurobarometer, Social Climate, 2013.

 Note: <sup>1</sup> The data from the special June 2012 Social Climate Survey, which do not differ from the standard Eurobarometer survey conducted in May; there is, however, a difference with the autumn survey (79%) and the 2013 average (82%).

Figure: Life satisfaction in EU Member States



Source: Eurobarometer, 2013.



## **THE FIFTH PRIORITY:**

### **Integration of measures to achieve sustainable development**

- 5.1 Greenhouse gas emissions
- 5.2 Emission-intensive industries
- 5.3 Energy intensity
- 5.4 Renewable energy sources
- 5.5 Share of road transport in total freight transport
- 5.6 Environmental taxes
- 5.7 Agricultural intensity
- 5.8 Tree-felling intensity
- 5.9 Age-dependency ratio
- 5.10 Life expectancy and healthy life years
- 5.11 Fertility rate
- 5.12 Net migration
- 5.13 Regional variation in GDP per capita
- 5.14 Regional variation in the registered unemployment rate

## 5.1 Greenhouse gas emissions

**In 2012 greenhouse gas (GHG) emissions declined by 2.8%, but owing to a further increase in transport emissions Slovenia made no visible progress towards lowering the emission intensity of the economy.** After two years of growth, emissions from the energy sector, which are still the largest source of GHG emissions (accounting for 32% of the total), declined by 4.3% in 2012. Energy-related emissions are almost entirely due to thermal power plants; about three quarters of all energy-related emissions in Slovenia are from the largest thermal power plant. A similar contribution to the decline was made by emissions from household fuel consumption, which dropped considerably for the second consecutive year (by 12%) as a result of changes in the fuel mix in favour of less emission-intensive energy products<sup>1</sup> and more efficient energy use. Emissions from industry (from both fuel consumption and industrial processes) also declined further in 2012 (-2.5%). Such emissions have been continuously declining since 2006 as a result of technological restructuring and more efficient energy use (additionally promoted in order to enhance competitiveness), and in recent years also due to the decrease in production activity. Conversely, the sale and consumption of transport fuels are increasing in Slovenia owing to the relatively favourable competitive conditions established through tax policies. After strong growth in 2011, transport emissions rose by 1.3% in 2012. They have been growing since data have been available (1986), except in 2009 and 2010. An additional acceleration in transport emissions growth has been observed as a result of stronger external trade flows through Slovenia after EU enlargements. In 2012, the share of transport emissions (31%) – which is very high according to international comparisons – almost surpassed the share of emissions from the energy sector. Being the only growing source of emissions in 2012, transport emissions slowed down the reduction in total emissions of GHG. The 2.8% reduction in total emissions was similar to the decline in GDP, so that the emission intensity of the economy remained comparable to the previous year (-0.3%).<sup>2</sup> In the whole period since 2008 Slovenia has thus made only slow progress towards improving the emission

<sup>1</sup> Household consumption of oil products declined significantly, as households replaced a portion of oil products with renewable sources and natural gas.

<sup>2</sup> Emission intensity is the ratio of a country's GHG emissions to its GDP. For methodological purposes, we used GDP at constant prices in the time comparison and GDP in purchasing power standards (PPS) for a given year in the international comparison.

intensity of the economy, which is moving it away from the EU average. In 2005 Slovenia generated 12% more emissions per unit of GDP than the EU average; in 2011 the difference was 26%.

**The economic crisis has moved Slovenia closer to meeting its international commitments regarding the reduction of GHG emissions, but whether it meets the targets by 2020 will be critically dependent on transport emissions.** By ratifying the *Kyoto Protocol*, Slovenia committed itself to reducing GHG emissions by an average of 8% in the 2008–2012 period compared with baseline emissions in 1986.<sup>3</sup> From 2008–2011 total GHG emissions in Slovenia declined much less compared with the base year (-2.2%)<sup>4</sup> than in the more advanced EU-15 Member States (-11.2%). With the exception of Slovenia, the most pronounced declines relative to the base year were recorded by new Member States, which was related to their extensive economic restructuring in the early 1990s. By allocating emission allowances to sectors that are included in the Emissions Trading System (EU ETS),<sup>5</sup> only emissions from sectors that are not covered by the EU ETS can have an impact on how Kyoto targets are met. If a country demonstrates proper forest management, it can include carbon sinks in meeting the Kyoto commitments. Moreover, it also has the option of purchasing part of the required reduction that it cannot achieve domestically from other Member States via the so-called flexible mechanisms. Taking into account carbon sinks and flexible mechanisms, Slovenia and a large majority of the other EU countries are on track to meet the Kyoto targets, according to the report of the European Environment Agency. Without these mechanisms, Slovenia would not be able to meet the targets, despite the economic crisis, which significantly reduced GHG emissions relative to the 2008 peak. At the end of the Kyoto period, the focus at the EU level will shift to the *Climate and Energy Package* with the goal of reducing GHG emissions by at least 20% by 2020. For sectors included in the EU ETS, the target is determined for the EU as a whole (a 21% reduction by 2020 compared with 2005). Their emissions accounted for around 40% of total emissions in Slovenia in 2012, which is 13% less compared with 2005. For emissions by sectors not included in the EU ETS (particularly transport,

<sup>3</sup> The common EU-15 target is an emission reduction of 8% compared with the base year of 1990, but the targets for individual countries differ (see Figure). Most new EU Member States have the same GHG reduction target, approximately 8% (with the exception of Poland and Hungary: 6%), but the base years differ. For Cyprus and Malta, no targets are defined under the Kyoto Protocol.

<sup>4</sup> In 2008–2012 by an average of 3.2%, according to the Slovenian Environment Agency (ARSO). For the EU, data for 2012 are not available yet.

<sup>5</sup> The EU ETS scheme primarily includes larger installations from the energy and manufacturing sectors.

household fuels, agriculture and waste), targets are set for each country separately; for Slovenia a 4% increase is allowed. In 2012 these emissions were 2.5% lower than in 2005, but it is precisely these emissions that had been growing fastest before the crisis and could increase significantly again if economic activity

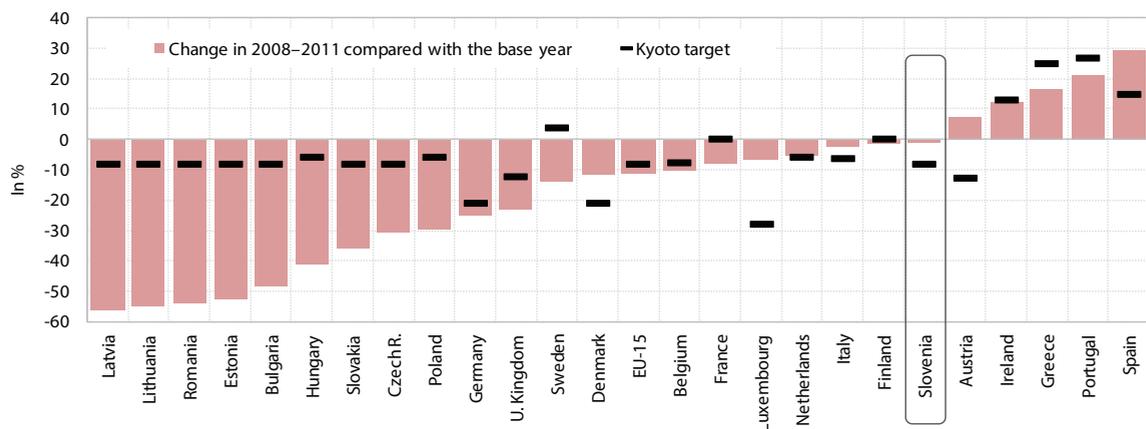
recovers as anticipated. In the future, Slovenia will have to focus more on measures in these areas, and their effectiveness will to a large extent depend on a successful reduction in transport emissions.

Table: Greenhouse gas emissions (in kt of CO<sub>2</sub> equivalents), Slovenia

	1986*	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>TOTAL</b>	<b>20,354</b>	<b>18,953</b>	<b>20,314</b>	<b>20,526</b>	<b>20,672</b>	<b>21,384</b>	<b>19,373</b>	<b>19,411</b>	<b>19,463</b>	<b>18,911</b>
Transport	2,008	3,862	4,428	4,647	5,229	6,158	5,325	5,265	5,699	5,773
Energy	6,729	5,498	6,325	6,379	6,596	6,388	6,088	6,214	6,259	5,990
Fuels in industry	4,406	2,269	2,486	2,593	2,346	2,305	1,918	1,900	1,704	1,637
Industrial processes	1,328	1,063	1,373	1,433	1,447	1,327	972	988	1,014	1,014
Fuels in households	2,366	3,053	2,585	2,367	1,920	2,282	2,185	2,213	1,969	1,732
Agriculture	2,334	2,133	2,003	2,020	2,076	1,963	1,995	1,957	1,903	1,871
Waste	566	670	707	681	655	574	506	491	506	488
Other	618	406	407	405	404	388	384	384	409	405

Source: ARSO. Report on GHG emissions, 2014.  
Note: \* Base-year emissions under the Kyoto Protocol.

Figure: Greenhouse gas emissions<sup>1</sup> compared with the Kyoto base year, 2008–2011 average, and targets<sup>2</sup>



Source: UNFCCC. 2013.

Note: <sup>1</sup> Excluding emissions related to land use and carbon sinks, and emissions in aviation and marine transport. <sup>2</sup> The gap between the average emissions in 2008–2011 and the Kyoto targets is only an approximate estimate of meeting the Kyoto Protocol commitments, as it excludes carbon sinks and flexible mechanisms and takes into account the actual emissions in EU ETS sectors.

## 5.2 Emission-intensive industries

**From 2010 onwards, emission-intensive industries have again recorded higher growth in output than other sectors.**

In the whole period from 2000 to the outbreak of the economic crisis, the total output of emission-intensive industries<sup>1</sup> in Slovenia grew faster than the output of other manufacturing industries. The gap closed in 2008 and 2009 primarily as a result of lower output in the manufacture of basic metals. With a general increase in production activity in 2010 and 2011, the increase in emission-intensive output again exceeded the average growth, but as output increased more slowly, the gap was less distinct. In 2012 and 2013 emission-intensive output increased further<sup>2</sup> on the back of relatively strong growth in the chemical industry and in 2013 also the manufacture of basic metals, while in other manufacturing sectors production activity declined. The share of value added in emission-intensive industries in total manufacturing thus remains close to a quarter (24.5% in 2012) and is one of the highest in the EU.<sup>3</sup> Given the greater significance of emission-intensive industries and greater energy intensity in manufacturing in Slovenia than in the EU as a whole, emissions trading<sup>4</sup> is likely to have a greater effect on production costs and consequently on performance and competitiveness than in other countries of the EU. To reduce exposure to higher costs it is therefore crucial for Slovenia to continue to reduce its energy intensity and to proceed with technological restructuring in emission- and energy-intensive industries.

<sup>1</sup> According to the World Bank methodology and the categories of the Standard Classification of Activities, emission-intensive industries include the following: the manufacture of chemicals and chemical products; the manufacture of paper and paper products; the manufacture of basic metals; the manufacture of cement, lime and plaster; and the manufacture of other non-metallic mineral products.

<sup>2</sup> In 2012 output in the manufacture of basic metals increased much more slowly than in the previous two years, and in the manufacture of other non-metallic mineral products (lime, plaster, etc.) it continued to shrink for the third consecutive year due to low demand from the construction sector. Emission-intensive output in 2012 thus mainly derived from growth in the chemical industry.

<sup>3</sup> In 2011 these industries generated 24.5% of gross value added of manufacturing in Slovenia (compared with the EU average of 19.3%). Furthermore, in Slovenia manufacturing also accounts for a higher share in the total value added of the economy (20.1%; compared with the EU average of 15.5%). The share of the chemical industry is particularly high compared with the EU average. The share of basic metals manufacturing is also higher than the EU average.

<sup>4</sup> The adopted climate and energy package and emissions trading system are likely to have a double effect on the costs for businesses: direct costs due to the purchase of allowances and indirect costs paid through higher electricity prices.

**Energy intensity in manufacturing remained unchanged in 2012 after six years of decline.**

Decomposition<sup>5</sup> analysis of energy consumption in manufacturing shows that the stagnation of energy intensity in 2012 mainly resulted from higher energy intensity within individual industries, i.e. the least favourable of the three factors analysed. This type of deterioration was seen particularly in the most energy-intensive manufacture of basic metals.<sup>6</sup> The decrease in energy consumption in 2012 was partly the result of a structural effect, i.e. a decrease in the share of sectors that consume more energy per unit of value added. This is mostly a result of the lower shares in total manufacturing output accounted for by the manufacture of other non-metallic mineral products, and by paper and paper products manufacturing, but their impact was smaller than the impact of higher production activity in the energy-intensive manufacture of basic metals. Final energy consumption<sup>7</sup> per unit of value added in total manufacturing (reflecting both the effect of the energy intensity of individual industries and the structural effect) declined significantly particularly from 2006–2008 (at an average annual rate of 7.7%). In 2009–2011 the results were slightly more modest than in the years before the crisis (with an average annual decline of 3.2%), particularly taking into account the smaller contribution of lower energy intensity in individual industries, while in 2012 the still relatively favourable trends came to a halt. Given that the decline in energy intensity in manufacturing is, in most cases, linked to the replacement of old technology with more efficient technology, which requires investment, the trends can also be attributed to the lower possibilities of such investment during times of financial and economic crisis; it should also be taken into account that a portion of energy consumption is, from the short-term perspective, fixed.

<sup>5</sup> GHG emissions in industry are generated in the production process (i.e. process emissions) or as a result of fuel combustion. This part focuses on emissions from fuel combustion, which represent the larger part of emissions from industry. The change in final energy consumption (energy consumption in TJ) in manufacturing is broken down into three sets of factors: change in the level of output, change in the output structure and change in the energy intensity within individual industries.

<sup>6</sup> With a 1.1% increase in output relative to the previous year, energy consumption in this industry rose by as much as 6.1%.

<sup>7</sup> Energy consumption by sector, in TJ (SURS).

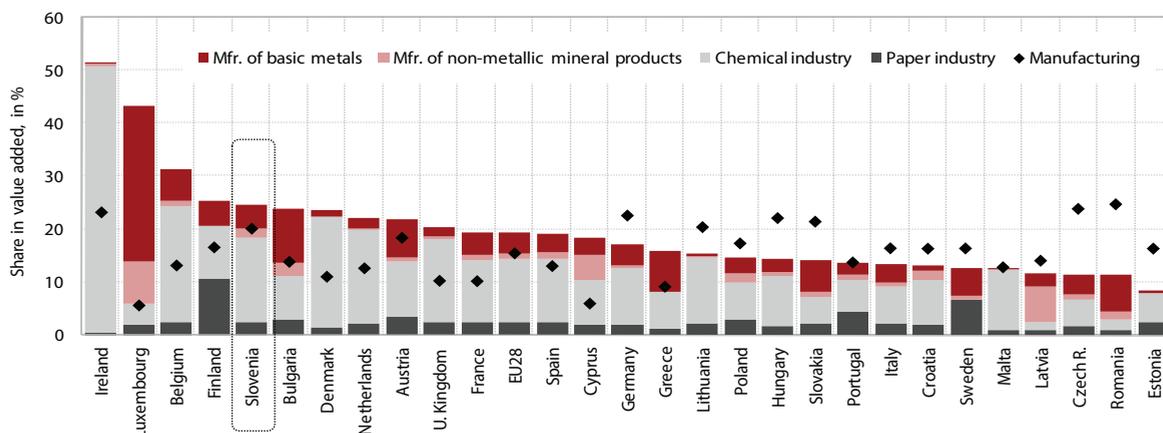
Table: Selected indices of emission-intensive industries and energy intensity in manufacturing, Slovenia

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Output in emission-intensive industries (index of real growth)	104.2	112.1	114.3	93.7	81.2	108.9	102.3	102.0	102.7
Manufacture of pulp, paper and paper products	102.5	99.0	98.5	89.8	89.8	101.3	100.7	97.0	100.3
Manufacture of chemicals, chemical products and man-made fibres	107.6	113.0	121.7	101.0	85.8	114.7	102.4	104.6	103.9
Manufacture of other non-metallic mineral products	93.1	106.2	105.8	102.5	72.4	98.7	90.7	95.9	98.3
Manufacture of basic metals	103.2	119.6	106.7	68.6	70.3	109.5	111.0	101.1	103.4
Output in manufacturing excluding emission-intensive industries	103.9	104.8	107.1	104.7	81.3	106.1	102.0	98.3	98.0
Share of emission-intensive industries in value added in manufacturing (%)	23.0	24.4	23.1	22.4	22.8	24.1	24.5	24.4	
Energy intensity in manufacturing (indices 2005=100)	100.0	95.4	86.2	78.5	77.8	75.6	71.1	71.0	

Source: SI-STAT Data Portal – National accounts and Mining and manufacturing (SURS), 2013; calculations by IMAD.

Note: Industrial-production indices for the period until and including 2004 are calculated from data on the volume of input, for the period from 2005 onwards from value data.

Figure: The share of emission-intensive industries in manufacturing and the share of manufacturing in the value added of the economy, 2011



Source: Eurostat, National accounts, 2013.

## 5.3 Energy intensity

***In 2012 primary energy consumption in Slovenia declined again; a significant factor in Slovenia moving towards the 2020 target of a 20% reduction in primary energy consumption was the continuation of weak economic activity.***

In addition to reducing greenhouse gas emissions and increasing the share of renewable energy sources, the energy and climate package of the EU aims at a 20% reduction in energy consumption by 2020 with regard to the anticipated consumption according to the baseline scenario with no additional measures. This means that two thirds of EU countries will have to reduce energy consumption with regard to the base year of 2005 by 2020, while the countries which are allowed to increase energy consumption (because of the anticipated higher growth to catch up with the EU's development level) will have to limit the increase. For Slovenia a 4.2% increase compared with 2005 is allowed, while in the EU-28 overall primary energy consumption should be reduced by 13.4%. The majority of countries are on track to reach the targeted savings,<sup>1</sup> most of them also owing to the worse-than-anticipated economic situation. This also holds true for Slovenia, where economic activity declined again in 2012 (by 2.5%), which contributed to a further reduction in primary energy consumption of 3.8%. To reach the targeted savings, Slovenia should not increase primary energy consumption by more than 6.3% in 2013–2020, which is comparable to the necessary reduction in the EU as a whole (6.3%). With economic activity in Slovenia declining again (-1.1%), we estimate that primary energy savings also occurred in 2013, but were smaller than in 2012.

***The energy intensity of the economy did not decline significantly in Slovenia in 2005–2012, and in contrast to the EU, the increase in energy consumption mainly stemmed from the use of liquid fuels in the transport sector.*** With a smaller reduction in primary energy consumption than in the EU (-0.3% and -1.1% per year, respectively) despite comparable average annual economic growth (+1.0% and +0.8%, respectively), Slovenia recorded a more modest decline in energy intensity in 2005–2012 than the EU as a whole (-1.2% and -1.9% per year,<sup>2</sup> respectively). Energy intensity calculated as primary energy consumption per unit of GDP in purchasing power standards (PPS)<sup>3</sup> was thus as much as 31.4% higher in

2012 than in the EU as a whole, in contrast to 16.2% in 2005. A breakdown by energy products shows that in the EU the rapid fall in primary energy consumption in 2005–2012 was mainly due to a decline in the use of liquid fuels<sup>4</sup> (-2.6% annually), which account for the largest share in their structure. Slovenia recorded practically no decline in liquid fuel consumption<sup>5</sup> in the same period (-0.3% per year), which can mainly be explained by soaring road freight transit through Slovenia as a result of stronger external trade flows after the last major EU enlargement. This conclusion is also corroborated by data from the Slovenian Roads Agency on the number of truck kilometres driven on Slovenian roads, which increased significantly in this period (+2.8% per year) despite modest economic activity (in both Slovenia and the EU). Moreover, the sale of liquid fuels in Slovenia was also stimulated by excise duty policy with lower prices of automotive fuels than in most neighbouring countries (particularly in 2008, 2011 and 2012). The structure of primary energy consumption in Slovenia otherwise differs from that in the EU particularly regarding the smaller share of natural gas consumption (in 2012 it was around 14 percentage points lower than in the EU), while the shares of liquid fuels, nuclear energy and RES were about 5 percentage points higher.

***An energy savings target of 20% is also set for final energy consumption,<sup>6</sup> where Slovenia is in a slightly worse position in comparison with other Member States due to the larger impact of automotive fuels.***

Final energy consumption, having decreased by an average of 1.1% per year in the EU in 2005–2012, remained almost unchanged in Slovenia (-0.1%). An analysis by category shows that the decline in final energy consumption in the EU was mainly attributable to a decline in energy consumed by industry (2.2% per year), especially since the outbreak of the economic crisis, and to more efficient energy consumption by households. In Slovenia energy consumption in industry declined even faster than in the EU<sup>7</sup> in the same period (-4.4%), but total final energy consumption did not fall much due to a concurrent significant increase in energy used for transport (+3.6% per year). Broken down by the categories of final energy consumption, Slovenia's

<sup>4</sup> The quantity of fuels used in transport did not change significantly at the EU level, but there were smaller losses in liquid fuel transformation, a decline in the consumption of fuel oil and a structural shift towards biofuels in energy consumption in transport.

<sup>5</sup> Liquid fuels sold in Slovenia are included in the Slovenian energy balance regardless of the country the buyer is from or in which country the fuel is used.

<sup>6</sup> Final energy consumption includes the consumption of primary energy reduced by energy for transformations, own use and losses.

<sup>7</sup> The reduction in Slovenia was also attributable to a significant decline in energy consumption owing to the restructuring of aluminium production.

<sup>1</sup> Assuming linear annual growth in the anticipated energy consumption and a linear annual movement towards the targeted energy consumption in 2020.

<sup>2</sup> In the time comparison, the indicator of the comparison of primary energy consumption per unit of GDP at constant prices is taken into account.

<sup>3</sup> For methodological purposes, GDP in purchasing power standards (PPS) for a given year is used in the international comparison.

share of energy consumption in the transport sector was 7 percentage points larger than in the EU as a whole, and accounted for as much as 39% of all sources of energy intended for final consumption. To reach the targeted savings of 20%, the EU countries have to reduce final energy consumption by a further 1.6% in the 2013–2020 period, while Slovenia should

not increase it by more than 4.8%, which is less than in primary energy consumption. As is the case with most other EU countries, Slovenia is nevertheless on track to meet these goals, but if economic activity picks up, the goals will become more difficult to achieve and the countries will have to take more vigorous measures regarding efficient energy use.

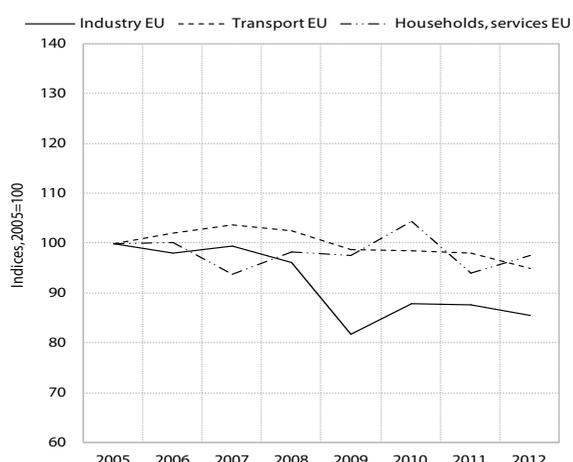
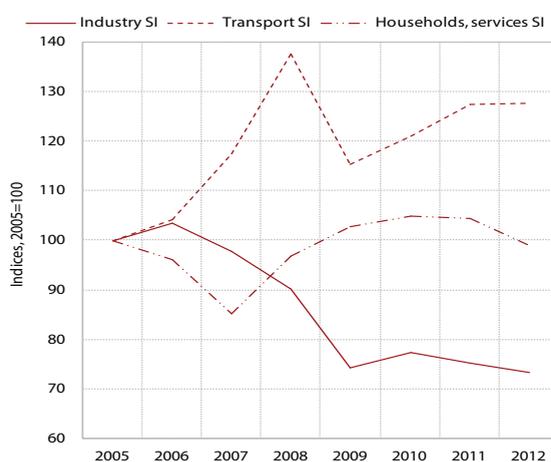
Table: Primary energy consumption, fixed-base index 2005=100

	2005	2006	2007	2008	2009	2010	2011	2012	Target* 2020
<b>EU-28</b>	<b>100.0</b>	<b>100.5</b>	<b>98.7</b>	<b>98.7</b>	<b>93.2</b>	<b>96.6</b>	<b>93.3</b>	<b>92.5</b>	<b>86.6</b>
Austria	100.0	99.5	98.5	99.6	93.5	100.3	97.9	97.4	96.5
Belgium	100.0	98.5	95.4	100.2	96.4	103.5	100.7	95.2	85.3
Bulgaria	100.0	103.6	101.7	100.1	89.5	91.8	98.3	94.0	83.6
Cyprus	100.0	103.9	108.6	114.3	111.0	107.2	105.9	100.1	113.5
Czech Republic	100.0	102.7	103.3	100.3	94.5	99.5	96.3	95.0	93.9
Denmark	100.0	107.7	104.9	102.4	98.2	103.1	95.7	92.6	92.3
Estonia	100.0	97.8	110.2	106.5	97.3	112.6	113.6	112.0	120.6
Finland	100.0	109.0	107.6	103.2	97.3	106.7	102.4	98.4	107.7
France	100.0	98.7	97.2	98.4	94.5	97.4	93.8	94.2	90.3
Greece	100.0	100.1	100.1	100.8	96.6	90.3	87.9	84.5	88.4
Croatia	100.0	100.5	104.9	101.6	98.6	96.9	96.5	92.3	0.0
Ireland	100.0	103.0	107.5	104.9	99.3	100.9	93.1	92.1	94.3
Italy	100.0	98.5	97.6	96.0	89.7	92.2	90.9	86.7	88.3
Latvia	100.0	103.6	106.2	101.8	98.6	104.4	95.2	98.8	119.5
Lithuania	100.0	97.7	101.0	102.2	97.9	76.7	73.0	74.1	82.0
Luxembourg	100.0	98.4	96.5	96.6	90.9	96.6	95.0	92.7	93.9
Hungary	100.0	99.2	96.6	96.7	91.4	93.7	90.9	84.6	104.5
Malta	100.0	94.6	100.9	99.8	90.3	99.1	97.2	94.3	86.6
Germany	100.0	103.3	97.8	99.4	93.3	98.1	92.9	93.8	87.2
Netherlands	100.0	98.3	96.6	99.8	96.4	102.7	95.7	97.3	87.6
Poland	100.0	104.7	104.5	105.9	102.4	109.1	109.4	106.1	109.6
Portugal	100.0	96.8	95.6	94.0	94.2	90.5	87.6	83.7	90.1
Romania	100.0	104.2	103.5	103.4	92.3	93.4	94.8	91.6	117.0
Slovakia	100.0	99.0	93.1	95.9	87.9	94.7	91.1	88.7	91.3
<b>Slovenia</b>	<b>100.0</b>	<b>100.0</b>	<b>100.1</b>	<b>106.5</b>	<b>97.3</b>	<b>100.0</b>	<b>102.0</b>	<b>98.1</b>	<b>104.2</b>
Spain	100.0	100.4	101.8	98.7	90.7	90.4	89.4	89.3	89.5
Sweden	100.0	96.9	96.8	96.5	89.7	99.9	98.1	98.5	94.2
United Kingdom	100.0	98.6	95.8	94.1	88.9	91.2	85.4	87.6	79.6

Source: Eurostat Portal Page – Europe 2020 indicators, 2014; EC Energy Efficiency, Reporting targets; calculations by IMAD.

Note: \* One of the three 20-20-20 environmental targets of the EU.

Figure: Final energy consumption by consumer sector in Slovenia and the EU in 2005–2012



Source: Eurostat Portal Page – Environment and Energy, 2014; calculations by IMAD.

## 5.4 Renewable energy sources

**The share of renewable energy sources (RES) continued to increase in 2012.** The share of RES in Slovenia was up significantly particularly in 2009 (from 15.0% to 18.9%), when final energy consumption declined sharply because of the crisis. Apart from that, the increase in the share of RES was also a result of the improved capture of data on the consumption of biomass and the inclusion of geothermal and solar energy consumption in statistical monitoring, and higher water levels. Amid a 1.4% decline in gross final energy consumption, the consumption of RES increased to 2.8% in 2012. The share of RES in gross final energy consumption thus rose to 20.2%. More than half of this growth came from higher use of biofuels in transport (in previous years their contribution was smaller), while almost a third derived from higher solar energy use. In 2013 hydroelectric power production was again above average (a fifth higher than in 2012), according to ELES data, and according to the Borzen reports on subsidies for RES, solar energy consumption also rose significantly. Amid lower economic activity and a consequent decline in energy demand, the share of RES in gross final energy consumption is estimated to have risen again in 2013 (to around 21%). To comply with the EU targets, Slovenia should reach a 25% share of RES in gross final energy consumption by 2020, while EU Member States should increase their average share from 14.1% in 2012 to 20% by 2020.

**Slovenia's share of RES for heating is two times higher than in the EU, the share of RES in electricity consumption is almost 50% higher, while the share in transport is lower than in the EU.** The share of RES for heating, which in recent years has also been rising as a result of the high prices of light fuel oil, reached almost 30.6% in Slovenia in 2012. Slovenia is in the upper third of EU countries with regard to this indicator, mainly thanks to the availability of wood for heating because of its large forest area. The largest part of RES for heating by far is thus accounted for by solid biomass (91%); around 5% is contributed by geothermal energy and the rest by biogas and solar energy (collectors). In 2012 the share of RES in transport (2.9%) was somewhat lower than in the EU (5.1%), while Slovenia ranked just below the upper quarter of EU countries in terms of RES use in electricity consumption (31.4%), mainly on account of the use of hydro-energy. Hydro-energy accounted for as much as nine tenths of total consumption of RES in electricity in Slovenia in 2012 (the rest was contributed by solar energy, biogas and other

biomass, in approximately equal shares). Overall in the EU, hydro-energy contributed much less to electricity production from RES than in Slovenia, around 45%, while the contribution of wind energy<sup>1</sup> was significant (around one quarter).

**Grants paid per unit of energy produced in subsidised RES power plants have increased significantly in the last few years, because their structure has changed in favour of solar energy.** In 2005, grants for promoting electricity generation from RES totalled EUR 16.8 m and were mainly intended for hydroelectric power plants. Subsidised production accounted for 2.5% of total production in Slovenian electric power plants, and the amount of support per power unit was EUR 0.048 per kWh. Since 2010 the amount of RES grants has increased substantially, to as much as EUR 94.4 m in 2013. The amount allocated for hydroelectric power plants has been reduced in favour of grants for electricity generation from biomass and biogas, while in the past two years the highest amount was allocated for solar power plants. Given that the level of support per unit of energy generated is highest for solar power plants (in 2013, EUR 0.270/kWh; EUR 0.125/kWh for electricity generation from biomass and biogas; EUR 0.057/kWh for hydroelectric power plants), the change in the structure of subsidised RES power plants is the main reason why the average amount of support per unit of power generated from RES rose by a factor of 3.4 compared with 2005, to EUR 0.165/kWh.<sup>2</sup> In 2013 subsidised production accounted for 3.8% of total electricity production in Slovenia. The shares of solar energy and biogas together remained relatively low (4.7%) despite rapid growth. In 2005–2012 total RES consumption also increased less in Slovenia than in the EU-28 overall (by 27.2%; in the EU by 51.2%). A shift towards more efficient energy use, which is a significant factor in reducing the costs of increasing the capacities of renewable and non-renewable energy sources, was also observed in the EU in this period. Gross final energy consumption in the EU as a whole declined by 6.6%, in contrast to Slovenia, where it increased by 0.7%.

<sup>1</sup> Slovenia has only just put into operation its first wind farm, which will probably be included in data for 2013.

<sup>2</sup> By comparison: in Slovenia the final electricity price for households in the first half of 2013 totalled EUR 0.161/kWh. In addition to the price of energy (EUR 0.062/kWh), this includes network costs and taxes and contributions. The price of electricity in Slovenia is lower than the EU average; amid comparable taxes, contributions and network costs, the difference is a result of the slightly lower price of energy in Slovenia.

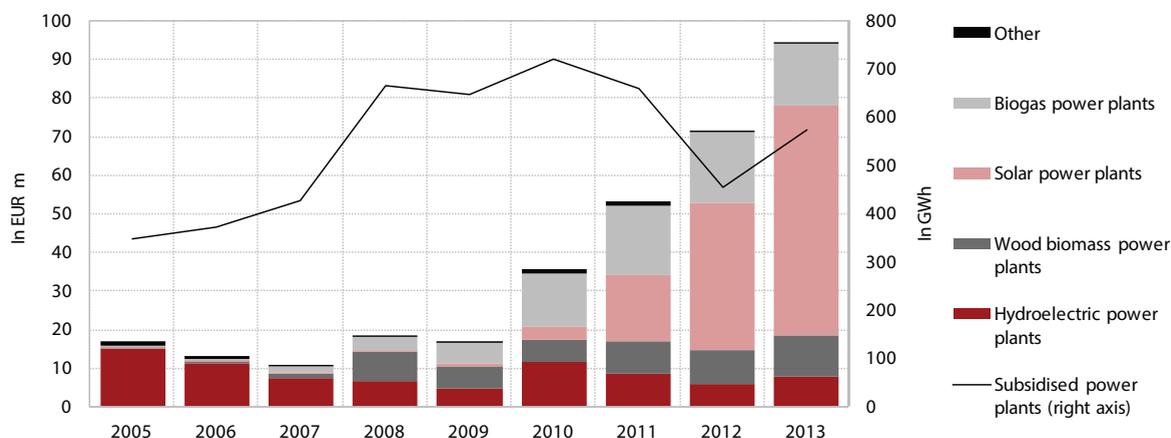
Table: The share of renewable energy sources in gross final energy consumption, in %

	2005	2006	2007	2008	2009	2010	2011	2012	Target* 2020
<b>EU-28</b>	<b>8.7</b>	<b>9.3</b>	<b>10.0</b>	<b>10.5</b>	<b>11.9</b>	<b>12.5</b>	<b>13.0</b>	<b>14.1</b>	<b>20.0</b>
Austria	24.0	25.6	27.5	28.3	30.4	30.8	30.8	32.1	34.0
Belgium	2.3	2.7	3.0	3.3	4.6	5.0	5.2	6.8	13.0
Bulgaria	9.5	9.7	9.4	10.7	12.4	14.4	14.6	16.3	16.0
Cyprus	3.1	3.3	4.0	5.1	5.6	6.0	6.0	6.8	13.0
Czech Republic	6.0	6.4	7.4	7.6	8.5	9.3	9.3	11.2	13.0
Denmark	15.6	15.9	17.9	18.6	20.4	22.6	24.0	26.0	13.0
Estonia	17.5	16.2	17.2	19.0	23.1	24.7	25.0	25.2	25.0
Finland	28.9	30.1	29.8	31.3	31.2	32.4	32.7	34.3	38.0
France	9.5	9.5	10.2	11.2	12.2	12.7	11.3	13.4	23.0
Greece	7.3	7.5	8.5	8.4	8.4	9.7	11.8	15.1	18.0
Croatia	12.8	12.8	12.1	12.1	13.1	14.3	15.4	16.8	20.0
Ireland	2.8	3.1	3.6	4.0	5.2	5.6	6.6	7.2	16.0
Italy	5.9	6.4	6.5	7.4	9.3	10.6	12.3	13.5	17.0
Latvia	32.3	31.1	29.6	29.8	34.3	32.5	33.5	35.8	40.0
Lithuania	17.0	17.0	16.7	18.0	20.0	19.8	20.2	21.7	23.0
Luxembourg	1.4	1.5	2.7	2.8	2.9	2.9	2.9	3.1	11.0
Hungary	4.5	5.1	5.9	6.5	8.0	8.6	9.1	9.6	14.7
Malta	0.3	0.4	0.4	0.4	0.4	0.4	0.7	1.4	10.0
Germany	6.7	7.7	9.0	8.5	9.9	10.7	11.6	12.4	18.0
Netherlands	2.3	2.6	3.1	3.4	4.1	3.7	4.3	4.5	16.0
Poland	7.0	7.0	7.0	7.8	8.8	9.3	10.4	11.0	15.5
Portugal	19.5	20.7	21.9	22.9	24.5	24.2	24.5	24.6	31.0
Romania	17.6	17.1	18.3	20.4	22.6	23.2	21.2	22.9	24.0
Slovakia	5.5	5.9	7.3	7.5	9.3	9.0	10.3	10.4	14.0
<b>Slovenia</b>	<b>16.0</b>	<b>15.6</b>	<b>15.6</b>	<b>15.0</b>	<b>18.9</b>	<b>19.2</b>	<b>19.4</b>	<b>20.2</b>	<b>25.0</b>
Spain	8.4	9.2	9.7	10.8	13.0	13.8	13.2	14.3	20.0
Sweden	40.5	42.6	44.1	45.2	48.2	47.2	48.8	51.0	49.0
United Kingdom	1.4	1.6	1.8	2.4	3.0	3.3	3.8	4.2	15.0

Source: Eurostat Portal Page – Europe 2020 indicators, 2020.

Note: \* One of the three 20-20-20 environmental targets of the EU.

Figure: Funds disbursed to support electricity production from RES, Slovenia



Source: 2004-2012 Ministry of Infrastructure and Spatial Planning, 3/4 2013 Borzen.

## 5.5 Share of road transport in total freight transport

**Although since 2009 the share of road freight transport has declined in Slovenia amid annual fluctuations, it remains significantly higher than in the EU overall, where it continued to decline in 2012.** In the EU the volumes of road and rail freight transport declined by almost the same rates (by 3.6% and 3.5%, respectively). Road freight transport in Slovenia decreased by a similar rate as in the EU (3.4%), but rail freight transport fell twice as much (by 7.5%). After the share of road freight transport in Slovenia exceeded the EU average in 2005, the gap with the EU was mainly increasing and reached as much as 7 percentage points in 2012. In the first three quarters of 2013, the number of tonne kilometres recorded by Slovenian road carriers declined further (by 2.2%), while transport by rail increased (by 4.4%). The share of road freight transport is thus estimated to have declined again, to around 81%, meaning that it could be on a downward trend after the 2009 peak despite annual fluctuations.

**The volumes of both road and rail freight transport per capita in Slovenia are among the highest in the EU; from the perspective of sustainable development, a faster increase in transport by road than by rail represents an unfavourable trend.** Before 2005 the number of tonne kilometres per capita recorded by domestic road carriers was comparable to the EU average, but in 2012 it was already 2.3 times higher<sup>1</sup> (road carriers from only two EU countries recorded a higher figure). A rapid increase in road transport activity in the past decade was typical of most Eastern European countries, while in the older Member States freight transport by domestic operators declined. In 2005–2012 road freight transport in the EU-28 as a whole shrank by 7.0% (in the EU-13: +40.1%; in the EU-15: -17.4%); in Slovenia road freight transport rose by 44.0% in the same period, which can be attributed to Slovenia's transit location at the crossing of the V and X trans-European corridors, where transport has increased significantly with the recent enlargements of the EU. Slovenia also has a relatively high volume of rail freight transport per capita (in 2012 it was 2.2 times higher than the EU average), which is related to the density of rail infrastructure and the connection with the Port of Koper. In the EU-28 the volume of rail freight transport declined slightly between 2005 and 2012 (by 2.3%; EU-13: -7.2%; EU-15: +0.5%), while in Slovenia it rose by 6.9%. This can mainly be attributed to a rapid increase in transport in our largest port,

<sup>1</sup> Slovenian carriers provide a relatively large volume of transport abroad, as is typical for operators from smaller countries.

where the volume of goods handled increased by a third (around 60% of the transit of goods through this port takes place by rail).

**As in 2005–2012, Slovenian road carriers performed more and more of their services abroad; the increase in freight transport on Slovenian roads was mainly due to transport carried out by foreign road carriers.** Freight transport rides by domestic carriers (in km) rose by 19.0% in 2005–2012.<sup>2</sup> Within that, the length of rides (solely) abroad increased by 132.7%, while the length of rides in the national territory and those that are at least partly connected to the territory of Slovenia (i.e. goods are loaded or unloaded in Slovenia) declined by 2.8%. Given that in the same period the number of kilometres driven on Slovenian roads by all trucks rose by 21.2%, it can be concluded that the share of transport carried out by foreign carriers in Slovenia increased. This is also confirmed by two analyses carried out by DARS based on the number of vehicles passing through toll stations on motorways, according to which foreign freight vehicles accounted for 53% of all passages in 2008,<sup>3</sup> while the traffic count in 2012 showed<sup>4</sup> that the share of foreign freight vehicles on Slovenian roads increased to 68%.

**Faster progress towards more sustainable modes of freight transport in Slovenia is also held back by slow modernisation of the rail infrastructure.** Slovenia's motorway network has nearly been completed as a result of extensive investment in the previous decade, and in terms of motorway density per capita Slovenia is at the top of the EU. Transport by rail could be increased particularly by constructing a second track of the Divača–Koper railway, which would also be beneficial for traffic growth in the port of Koper. In the 2007–2013 period, EUR 450 m of EU Cohesion Policy funds were earmarked for Slovenia to invest in railway infrastructure, of which only EUR 98 m had been disbursed for railway projects by the end of 2013 (EUR 38 m in 2013),<sup>5</sup> while the largest project planned, i.e., the second track between Divača and Koper, had already been postponed to the next financing period.

<sup>2</sup> In the same period, road freight transport by Slovenian operators measured in tonne kilometres rose by 44% (see the paragraph above). As there are no official statistical data on the tonne kilometres recorded by all operators in the Slovenian territory, we have used the number of kilometres performed by Slovenian operators in Slovenia (or at least partly in Slovenia) and compared them with data from the Slovenian Roads Agency on the number of kilometres of (domestic and foreign) trucks on Slovenian state roads.

<sup>3</sup> Freight vehicles registered at toll stations in the entire territory of Slovenia between 19 April 2008 and 26 April 2008 and between 4 May 2008 and 11 May 2008, DARS 2009.

<sup>4</sup> Proposals for a new price policy in the area of toll collection (explanation of the proposal of the new toll price list), DARS 2013.

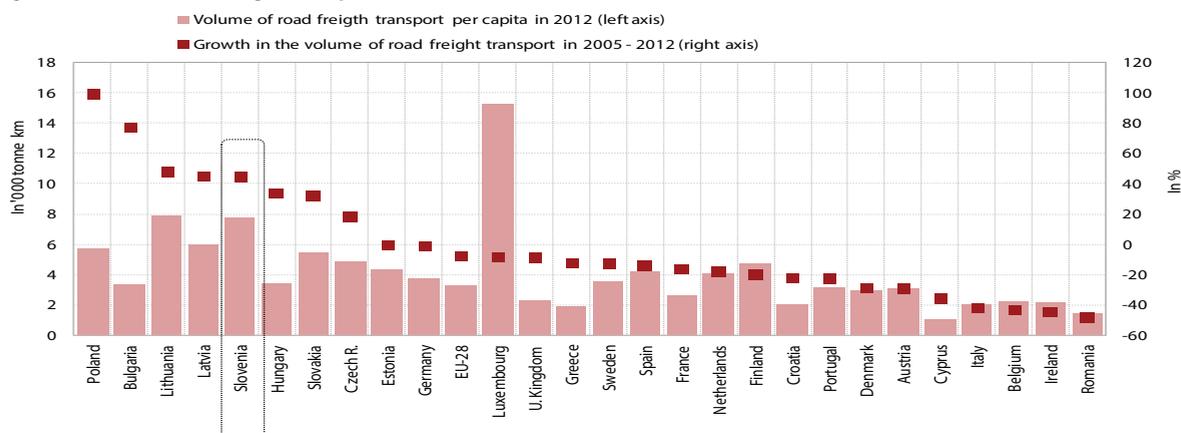
<sup>5</sup> Source: Ministry of Economic Development and Technology, 2013.

Table: Share of road transport in total freight transport in tkm, in %, 2000–2012

	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>EU-28*</b>	<b>73.7</b>	<b>76.4</b>	<b>76.3</b>	<b>76.3</b>	<b>76.3</b>	<b>77.5</b>	<b>76.4</b>	<b>75.5</b>	<b>75.1</b>
Austria	64.8	64.1	63.2	60.9	58.6	59.5	56.3	56.0	54.6
Belgium	77.4	72.4	71.1	69.7	68.5	72.9	67.9	66.3	59.8
Bulgaria	52.3	70.8	69.0	70.1	66.9	67.4	68.1	73.6	74.7
Cyprus	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Czech Republic	68.0	74.4	76.1	74.7	76.7	77.8	79.0	79.2	78.2
Denmark	92.1	92.2	91.8	92.2	91.3	90.8	87.0	87.8	88.2
Estonia	37.3	35.4	34.7	43.2	55.3	47.3	45.8	48.5	53.0
Finland	75.8	76.5	72.8	73.9	74.1	75.7	75.0	73.9	73.0
France	76.0	80.5	80.8	80.9	80.7	81.0	82.2	81.1	80.6
Greece	n. p.	97.5	98.1	97.1	97.3	98.1	98.0	97.1	97.1
Croatia	n. p.	75.9	74.8	75.0	72.7	73.7	71.2	74.0	73.6
Ireland	96.2	98.3	98.8	99.3	99.4	99.3	99.2	99.0	99.1
Italy	89.0	90.3	88.5	87.6	88.3	90.4	90.4	87.8	85.9
Latvia	26.5	29.8	39.0	41.9	38.7	30.2	38.1	36.2	35.8
Lithuania	46.6	56.1	58.4	58.5	58.0	59.9	59.1	58.8	62.3
Luxembourg	87.8	92.3	91.5	91.2	93.3	94.6	92.7	93.7	93.3
Hungary	68.1	69.2	71.6	74.5	74.7	78.8	75.1	75.9	75.2
Malta	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Germany	65.3	66.0	65.9	65.7	65.5	67.0	64.9	65.8	64.6
Netherlands	63.4	63.6	63.1	59.4	59.9	63.8	62.1	58.2	56.6
Poland	56.9	69.0	70.4	73.5	75.9	80.5	80.6	79.4	81.9
Portugal	92.5	94.6	94.9	94.7	93.9	94.3	93.9	94.0	93.4
Romania	42.9	67.3	70.5	71.3	70.2	60.0	49.2	50.2	53.3
Slovakia	53.0	70.3	68.8	71.8	73.8	77.9	74.8	76.6	77.6
<b>Slovenia</b>	<b>71.9</b>	<b>77.3</b>	<b>78.2</b>	<b>79.2</b>	<b>82.2</b>	<b>84.0</b>	<b>82.3</b>	<b>81.4</b>	<b>82.1</b>
Spain	92.8	95.3	95.4	95.8	95.7	96.4	95.8	95.4	95.2
Sweden	63.9	64.0	64.2	63.6	64.9	63.2	60.7	61.8	60.3
United Kingdom	90.0	88.2	88.2	88.9	88.3	87.8	88.7	87.4	87.2

Source: Eurostat Portal Page – Structural Indicators in transport, 2014; calculations by IMAD for 2007–2012.  
Notes: \* Before 2007, EU-27 with estimates for some countries.

Figure: Volumes of road freight transport in Slovenia and the EU<sup>1</sup>



Source: Eurostat Portal Page – Structural Indicators in transport, 2014; calculations by IMAD.  
Note: <sup>1</sup>Data not available for Malta, for individual years estimates for Bulgaria, Romania, Croatia and the UK.

## 5.6 Environmental taxes

**As a result of higher taxes on motor fuels, revenue from environmental taxes rose in 2012, which was reflected in a significant increase in their share of GDP (to 3.8%).** Revenue from environmental taxes was up 8% on 2011 in nominal terms due to larger inflows from *taxes on energy*. Within that, revenues from taxes on electricity and coal remained at the previous year's levels, while revenues from excise duties and the CO<sub>2</sub> tax on motor fuels introduced in July increased notably. Higher revenues in 2012 were primarily due to higher taxation of motor fuels,<sup>1</sup> rather than a larger amount of fuel sold (1.7%<sup>2</sup>), as had been the case in previous years. After two years the implicit tax rate on energy consumption thus rose again in 2012. Revenues from *transport taxes* continued to decline. Despite the introduction of an additional tax on vehicles with more powerful engines (July 2012), revenues from the tax on new motor vehicles declined amid persistently low demand for new vehicles during the crisis.<sup>3</sup> As a result of the increase in annual registration fees (in November 2012), revenues from this source rose slightly, but owing to an additional increase in July 2013 their impact on fiscal inflows will be more visible in 2013 and 2014. Revenues from *pollution and resource taxes* also declined in 2012. The contribution of higher revenues from water use charges was more than offset by lower revenues from the special water tax and some local utility charges.

**Slovenia receives relatively high revenues from environmental taxes, which is primarily the result of large energy consumption, particularly in transport.** In 2012 revenues from environmental taxes amounted to 3.8% of GDP in Slovenia, while the EU-28 average was 2.4%. The difference can be attributed to higher revenue from *taxes on energy*. Since 2009 Slovenia has recorded the highest revenues from energy taxes as a share of GDP of all EU Member States (in 2012, 3.1% of GDP; EU: 1.8% of GDP). In addition to tax rates, revenues from environmental taxes are also affected by the structure of the economy and the efficiency of resource use, which are reflected in the amount of energy consumed in the economy. The significantly above-average revenues from energy taxes in Slovenia are primarily a result of the extensive consumption of

energy products, particularly in transport. Although in Slovenia, too, taxes on energy products increased significantly after 2009, excise duties on (and the final prices of) some of the most commonly used energy products were still slightly below the EU average in the period analysed.<sup>4</sup> Revenues from *transport taxes*, i.e. taxes on the ownership and use of means of transport, were relatively low in Slovenia (0.4% of GDP; EU: 0.5% of GDP), which in view of the extent of transportation business and the number of passenger cars<sup>5</sup> probably entails that the tax burden is lower compared with other EU Member States. *Taxes on pollution and the use of natural resources* are relatively modest sources of fiscal revenue both in Slovenia and in most other EU Member States (0.3% of GDP; EU: 0.1% of GDP); nevertheless, through price signals they can be an important incentive for environmental objectives related to pollution control, waste management and efficient use of natural resources.

**Most of the environmental tax burden was borne by households.** A breakdown by direct environmental tax burden shows that according to the most recent data for 2011, around 65% of those liable to pay the tax were in the households sector, 15% were in the manufacturing sector (SKD C), and 5% (each) were in the sectors of transport (SKD H) and trade (SKD G). This can be attributed in part to methodological simplification, which ascribes most of motor fuel consumption to households. If energy taxes are excluded from the comparison, 55% of the remaining environmental taxes directly burden final consumers and affect the purchasing power of households rather than the competitiveness of the economy. The impact of environmental taxes on the most export-oriented sector of the economy, i.e. manufacturing, is very small (with the exception of energy taxes). Contrary to expectations, the costs of transport taxes are also mainly borne by households (65%), while the direct burden on the transport sector is small (6%). This sector is mainly affected by excise duties on motor fuels, but their impact on costs and hence the competitiveness of the transport sector is small with regard to the guidelines set by the EU.<sup>6</sup>

<sup>4</sup> In 2012, electricity prices for typical household consumers in Slovenia stood at 80% of the EU average (similarly in 2013); the level of motor fuels was at 91% (in 2013 at 95% of the EU average).

<sup>5</sup> In 2011 Slovenia had 519 passenger cars per 1,000 inhabitants. Only five EU Member States recorded a higher figure.

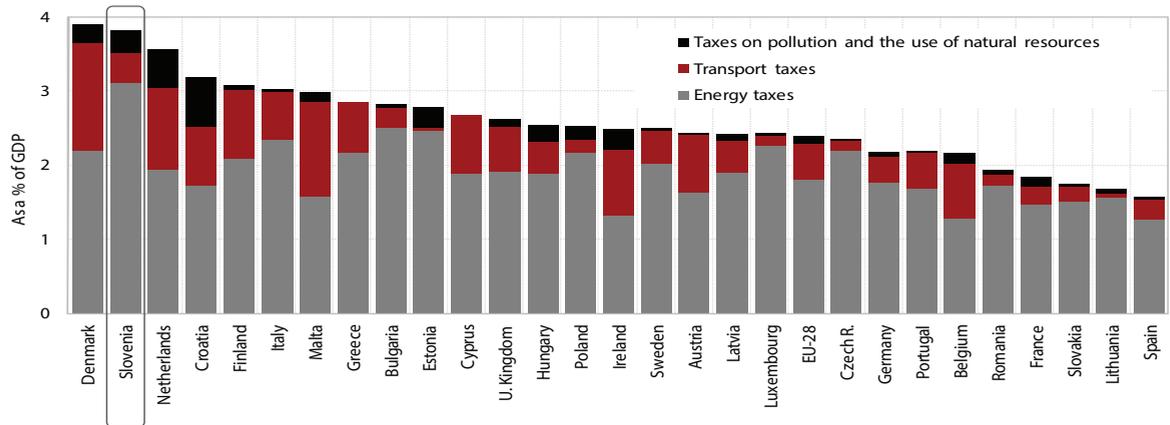
<sup>6</sup> As mentioned above, most of the excise duties on fuels are attributed to households, so that the share of the transport sector is too small in our estimation. With transport operators purchasing fuel in Slovenia being entitled to a refund of the difference with the minimum excise duty rate set by the EU, it can be concluded that Slovenia's excise duty policy has a favourable impact on the competitiveness of this sector, although it is less favourable in terms of improving energy and environmental efficiency.

<sup>1</sup> The average excise duty on diesel fuel increased by approximately 6%, and on petrol by 16%.

<sup>2</sup> According to the Ministry of Finance, the final quantity on which the excise duty was charged increased by about 6% for diesel fuel, while it dropped significantly for petrol (by 7.5%).

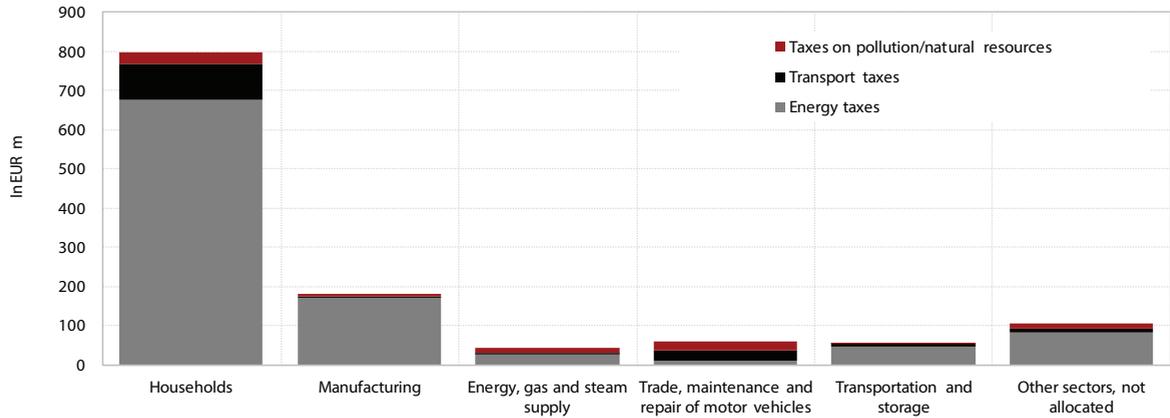
<sup>3</sup> Revenue from the tax on new motor vehicles decreased by 10.6% and first registrations of new passenger cars used by individuals were down 25.9% (SURS data).

Figure 1: Revenue from environmental taxes, 2012



Source: Eurostat Portal Page – Environment and energy, 2014.

Figure 2: Environmental tax burden by sector, Slovenia, 2011



Source: SI-STAT Data Portal – Environment and natural resources, 2013; calculations by IMAD.

## 5.7 Agricultural intensity

**The total consumption of mineral fertilisers, the consumption of main plant nutrients in particular, declined again in 2012.** After only a slight decline in the previous year, the total consumption of mineral fertilisers in agricultural production in 2012 was down by approximately 2%. Measured per hectare of utilised agricultural area (UAA), which increased last year,<sup>1</sup> it was around 7% lower than in the previous year. Within that, the consumption of main plant nutrients (NPK fertilisers)<sup>2</sup> was down more, around 4%, while per unit of UAA it was down 8%. The decline in the consumption of plant nutrients was achieved over a longer period, so that in 2012 it was more than a fifth lower, in total, than in 2005, and slightly less per unit of UAA. Lower fertilisation intensity is desirable not only in terms of the quality of produce, but also in terms of possible pollution of groundwater and consequently drinking water. Despite the decline, the consumption of NPK fertilisers in Slovenia is still relatively high<sup>3</sup> compared with the EU as a whole and the neighbouring countries (2011 figures: Slovenia 104 kg/ha, EU-27 87 kg/ha, Italy 66 kg/ha, Austria 54 kg/ha, Hungary 73 kg/ha).

**Pesticide consumption also declined substantially in 2012.** The total quantity of active ingredients in pesticides sold, which is not used solely in agriculture,<sup>4</sup> is decreasing in the long term in Slovenia. Last year it decreased by more than 9%, in total, being more than a quarter lower than in 2005. Measured per unit of UAA, this was a decline of almost 14% relative to the previous year and close to a quarter relative to 2005. A rough international comparison of pesticide consumption per unit of UAA shows that pesticide consumption in Slovenia is comparable to countries with similar breakdowns of cultivated plants and similar conditions for agricultural production, but this should be interpreted with caution.<sup>5</sup> Pesticide consumption in Austria and Hungary is lower than in Slovenia, while in Italy it is higher.

<sup>1</sup> In 2012, the utilised agricultural area expanded by around 5%, from 458 thousand to 480 thousand hectares.

<sup>2</sup> NPP fertilisers are mineral fertilisers that contain the three most important plant nutrients: nitrogen, phosphorus and potassium.

<sup>3</sup> Comparison with neighbouring countries that have similar conditions for agricultural production.

<sup>4</sup> Pesticides are also used for other purposes such as maintaining railways and roads, golf courses, parks and lawns.

<sup>5</sup> The figures for quantity are a sum of active ingredients with greatly varying levels of toxicity, so that a comparison of pesticide consumption between countries is not really appropriate. Slovenia uses a significant share of older types of pesticides. They are biologically weaker and used in greater quantities, but place a lower load on the environment. Higher pesticide consumption in Slovenia can also be explained by

**Agricultural efficiency measured by average yields of the most important crops and in livestock production by milk yield per animal improved in 2012 according to two indicators, and declined according to one.** The average yield of wheat increased by 5% and was thus again the highest in the period analysed, while the average yield of maize declined by around 19%, mainly due to the severe drought during the summer. Average yields of both crops are otherwise on the rise in the long term: for wheat they are already close to the EU average (2012: Slovenia 5.4 kg/ha, EU-28 5.1 kg/ha, Italy 4.1 kg/ha, Austria 4.1 kg/ha, Hungary 3.8 kg/ha), while they are above average for maize (2012: Slovenia 7.1 kg/ha, EU-28 6.1 kg/ha, Italia 8.1 kg/ha, Austria 10.7 kg/ha, Hungary 4.0 kg/ha). As Slovenia has relatively high livestock production, GHG emissions from this source are relatively high, although in a downward trend.<sup>6</sup> Intensity in milk production, one of the main agricultural activities in Slovenia, is still relatively low despite a modest increase. From the aspect of reducing the environmental burden per output, the average milk yield per animal could be increased further. In 2012 it increased by 4% (to 5.7 l/animal, EU-28 6.6 l/animal, Italy 6.5 l/animal, Austria 6.4 l/animal, Hungary 7.3 l/animal).

**Integrated farming declined last year, while organic farming increased again significantly after several years, yet much higher growth is needed to achieve the objectives.** The total area of agricultural holdings involved in controlled sustainable (organic and integrated) farming<sup>7</sup> grew by around 2% in 2012. The area cultivated using integrated methods was down, while the area cultivated organically, which is one of the most efficient ways of sustainably using natural resources, was up by more than 9%. A fifth of total UAA was thus cultivated sustainably; two thirds in integrated and one third in organic farming. A large majority of the latter is permanent grassland, with the fastest growth being recorded in olive groves. However, in the last few years the growth rates of total production have no longer satisfied the rapidly growing demand or met the targets set in the Rural Development Programme (64,000 hectares to be cultivated organically by 2013) and in the Action Plan for Organic Farming (20% of UAA by 2015). Only 35,000 hectares of land were organically farmed in 2012, which is around 7% of UAA. Nevertheless, owing to high growth in the initial period, the share is higher than in the EU as a whole and in Hungary, but lower than in Italy and much lower than in Austria, which has the highest share in the EU-28.

bad farming conditions and a large share of land area under permanent crops.

<sup>6</sup> According to the data and calculations of the Agricultural Institute of Slovenia.

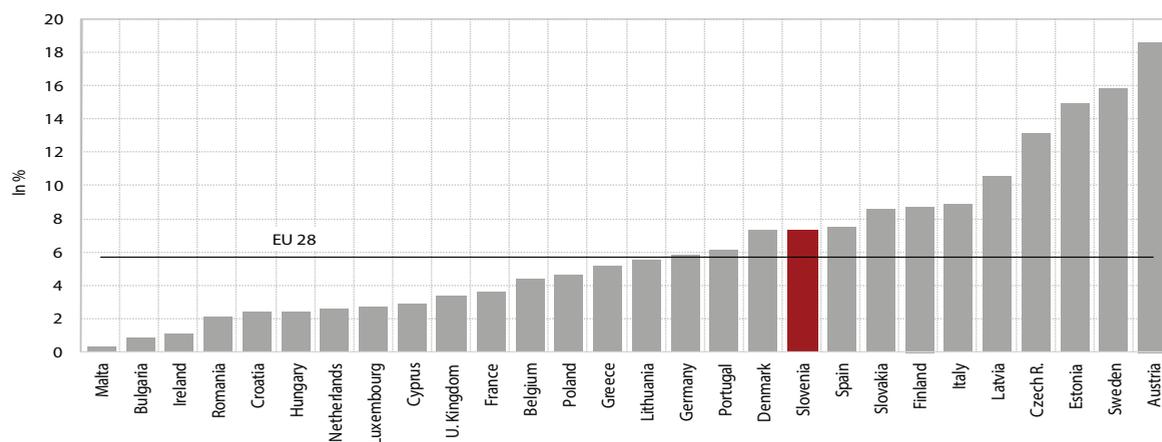
<sup>7</sup> Controlled agricultural holdings are those that have certificates as well as those that are in conversion.

Table: Selected agricultural intensity indicators, Slovenia

	1995	2000	2005	2008	2009	2010	2011	2012
<b>NPK fertiliser use</b>								
Use per unit of utilised agricultural area, kg/ha	134.6	146.8	115.3	104.9	94.8	103.0	104.1	95.9
<b>Pesticide sales</b>								
Pesticide sales, total, active substance, 1000 t	N/A	1.47	1.41	1.22	1.16	1.13	1.12	1.02
<b>Production intensity</b>								
Average yield of wheat, t/ha	4.2	4.2	4.7	4.5	4.0	4.8	5.2	5.4
Average yield of maize, t/ha	6.3	5.9	8.3	7.3	7.8	8.5	8.7	7.1
Number of livestock units per hectare, no./ha	N/A	1.0	0.9	N/A	N/A	0.9	N/A	N/A
Average milk yield per animal, t/cow	N/A	4.5	4.9	5.6	5.5	5.3	5.5	5.7
<b>Sustainable production</b>								
Controlled areas with organic farming, 1000 ha	N/A	5.4	23.2	29.8	29.4	30.7	32.1	35.1
Controlled organic farms, 1000	N/A	0.6	1.7	2.1	2.1	2.2	2.4	2.6
Controlled areas with integrated farming, 1000 ha	N/A	N/A	44.6	57.6	57.5	58.9	59.3	58.4
Controlled integrated farms, 1000	N/A	N/A	5.5	5.9	5.6	5.5	5.4	5.0

Sources: SI-STAT Data Portal – Environment and natural resources – Agriculture and fishing, 2012; website of the Ministry of Agriculture and the Environment; calculations by IMAD.  
 Note: N/A – not available.

Figure: Share of organic farming areas, 2012



Source: Eurostat Portal Page – Statistics – Agriculture and Fisheries, 2013; SURS, 2013. Note: Greece and Cyprus 2011.

## 5.8 Tree-felling intensity

**After two years of decline, total forest area rose slightly again in 2012, but these annual fluctuations were marginal.**

After growing rapidly in the previous century, total forest area remained roughly unchanged in the past few years (1.19 million ha), while it was up around 1% relative to 2005. Forests have an important role to play, both from an economic perspective as well as with regard to climate, water protection and other environmental factors. Nearly 60% of Slovenia's total area is covered with forest, which ranks Slovenia third in Europe behind Finland and Sweden. Changes at the local level, which were not favourable in the past, are also a significant factor. Forests were mainly expanding in remote areas, while shrinking in areas of intensive agriculture and especially suburban areas, where there is already little forest left.<sup>1</sup> At the beginning of 2014, as much as 40% of the total area was affected by ice damage, which will be reflected in both environmental and economic indicators for forestry in the next few years.

**Tree felling remained almost unchanged in 2012 and was relatively low in terms of potential felling.**

Slightly more than 3.9 m<sup>3</sup> of wood was removed, 0.4% more than in the previous year and around a fifth more than in 2005. Because potential felling<sup>2</sup> according to the forestry management plans increased as well, the gap between actual felling and potential felling did not shrink. In 2012, 68% of potential felling was carried out (a year earlier, 71%; in 2005, 75%). The shortfall is almost entirely the result of insufficient tree felling in privately-owned forests, which account for nearly three quarters of total forest area and where the costs of felling are relatively high due to fragmentation and small lots.<sup>3</sup> Most felling was for tree-tending and sanitary purposes, while felling for forest clearance and infrastructure was relatively insignificant. Sanitary felling, which is vital for forest development and is therefore the largest factor, declined slightly after the significant increase in the previous year, but was still almost 58% higher than in 2005. Felling for forest clearance and regeneration also decreased, as did unlawful forest activities whose

share in total felling is declining in the long term. On the other hand, felling for infrastructure and sanitary felling rose again, but the share of the latter remained relatively low, as there were no major natural disasters to cause damage to forest stands in 2012.

**The intensity of tree felling<sup>4</sup> declined slightly after having increased significantly in the previous year.**

The annual wood increment totalled over 8.4 million m<sup>3</sup> in 2012, 2% more than a year earlier. With a smaller increase in felling than wood increment, the intensity of tree felling declined by 0.6 percentage points to 46.6%. This was one of the highest tree-felling intensities in the period analysed, but still relatively modest and among the lowest in the EU. The Action Plan to Increase the Competitiveness of the Forest-Wood Chain in Slovenia by 2020 envisages that tree-felling intensity could increase to 75%. Without jeopardising the stability of forests and their habitats, Slovenia could cut down 6.5 million m<sup>3</sup> of wood per year, 2.6 million m<sup>3</sup> more than was cut in 2012.<sup>5</sup>

**Exports of raw wood categories were up significantly again amid somewhat lower production, so the untapped potential in the forest-food chain also increased.**

Despite somewhat higher tree felling, the production of raw wood categories declined<sup>6</sup> by 1.4% to 3.3 million m<sup>3</sup> in 2012. The volume of wood for heating decreased, while the volume of wood for industrial processes increased by approximately 8%, of which the volume of pulpwood and stackwood rose more notably, while the volume of roundwood for saw logs and veneers, i.e. the highest-quality wood, which can reach the highest value added, increased less. The share of wood for industrial processing rose to two thirds of total wood production (the share of wood for heating dropped to one third), which is still relatively low compared with more than three quarters recorded in the EU-28 as a whole. Wood exports have been increasing ever since 2005, particularly in the last two years. They were up almost 16% in 2012 alone, accounting for around 40% of production (in the previous year, 6 percentage points less). Exports of the highest-quality wood, i.e. roundwood for saw logs and veneers, rose most notably in 2012, by close to a third, and accounted for more than half of all total wood exports. As wood imports increased by a mere 3% in the same period, the majority being the lowest-quality wood, i.e. wood for heating, such movements are extremely unfavourable from the aspect of achieving higher value added in other sectors up the forest-wood chain.

<sup>1</sup> Source: Resolution on the National Forest Programme, 2007 (OG RS, No. 111/2007).

<sup>2</sup> Potential felling is determined in the forestry management plans of the Slovenia Forest Service with a view to ensuring the sustainable development (long-term stability) of all forests and their habitats, irrespective of ownership.

<sup>3</sup> According to some analyses (Medved, Matjašič, 2008; Krajnc, Piškur, 2006), tree felling in privately-owned forests is underestimated. Based on analysis of measurements in permanent sampling areas, they conclude that the intensity of tree felling in privately-owned forests is higher due to unlawful felling.

<sup>4</sup> The ratio of annual felling to annual wood increment.

<sup>5</sup> The Action Plan was adopted by the Government of Slovenia on 27 June 2012.

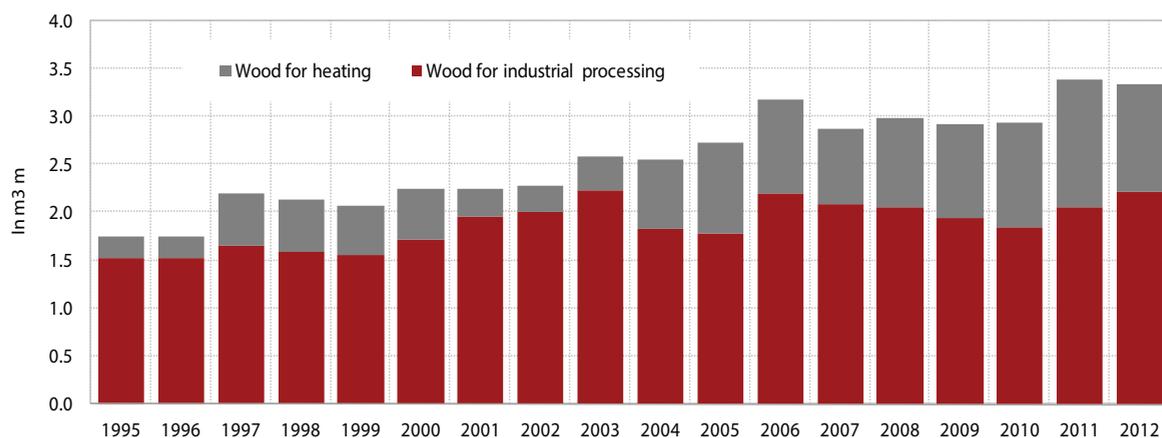
<sup>6</sup> The utilisation rate of felled wood for the production of raw wood categories depends on the type of felled trees and the structure of obtained wood categories.

Table: Forest area, wood increment, growing stock, felling and felling intensity, Slovenia

	1995	2000	2005	2008	2009	2010	2011	2012
Forest area, 1000 ha	1,098	1,134	1,169	1,185	1,186	1,185	1,184	1,185
Annual increment, 1000 m <sup>3</sup>	5,995	6,872	7,569	7,869	7,985	8,117	8,266	8,420
Growing stock, 1000 m <sup>3</sup>	228,493	262,795	300,795	322,195	327,459	330,982	334,105	337,817
Annual removal, 1000 m <sup>3</sup>	2,092	2,609	3,236	3,427	3,374	3,374	3,896	3,911
of which: tending	1,325	1,849	1,873	2,100	2,196	2,389	2,963	2,952
protection - sanitation	589	553	1,212	1,128	929	698	660	715
for infrastructure	15	40	49	61	64	64	88	94
clearance	35	53	65	68	82	122	89	73
unlicensed	113	91	35	48	74	68	60	39
regeneration	12	19	17	9	12	16	16	14
other	2	3	2	12	16	16	20	23
Felling intensity <sup>1</sup> , %	34.9	38.0	42.8	43.6	42.3	41.6	47.1	46.4

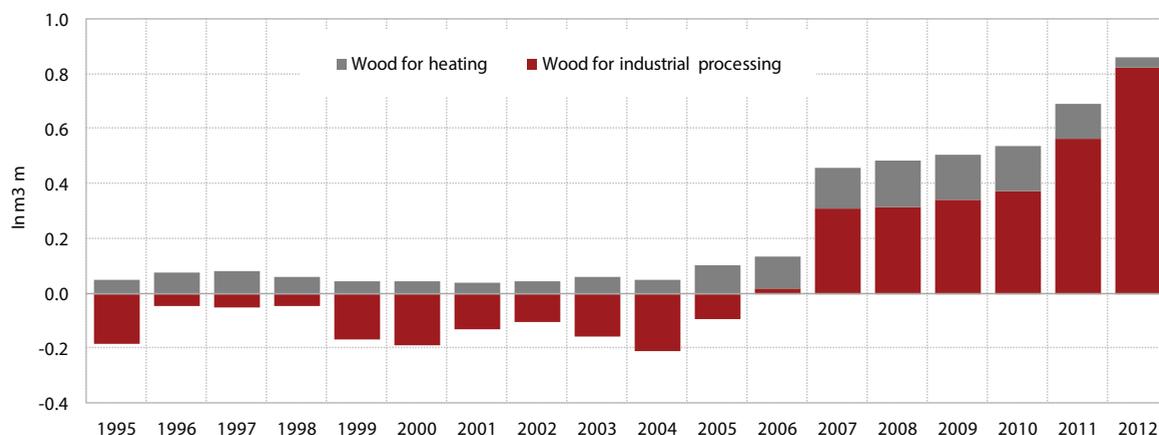
Source: SI-STAT Data Portal – Environment and natural resources – Forestry and hunting, 2013; Slovenia Forest Service, 2013; calculations by IMAD.  
Note: <sup>1</sup> Ratio of annual removal levels to the annual wood increment.

Figure 1: Wood production, Slovenia



Source: SI-STAT Data Portal – Environment and natural resources – Forestry and hunting, 2013; calculations by IMAD.

Figure 2: Net wood exports, Slovenia



Source: SI-STAT Data Portal – Environment and natural resources – Forestry and hunting, 2013; calculations by IMAD.

## 5.9 Age-dependency ratio

**Slovenia had nearly 50 children and older people per 100 working-age population (i.e. people between 20 and 64 years) at the beginning of 2013.** An increase in the age dependency ratio<sup>1</sup> is typical of developed countries, and projections indicate no halt, let alone reversal, in this trend. Until 2003 the *young-age dependency ratio* had been decreasing mainly due to the falling number of births and hence the number of children (0–14 years), while from 2004–2008 it was declining because the number of births increased more slowly than the working-age population, which was influenced by strong immigration. Since 2009 the young-age dependency ratio has been steadily rising due to an approximately 1.2% annual increase in the number of children amid lower growth in the working-age population, which has even turned into a decline. The *old-age dependency ratio* has been continuously rising for a quarter of a century, in line with increasing life expectancy. At the beginning of 2013<sup>2</sup> Slovenia had 22.8 young people and 26.9 older people (together 49.6) per 100 working-age population, which is 1 and 0.7 more, respectively, than a year earlier, and 0.3 and 2.9 more, respectively, than in 2005. The working-age population (20–64 years) started to fall in 2012 (-0.1%). In 2013 the decline was already more visible, the working-age population being already 0.5% or 6,000 persons lower than in the previous year. According to our projections,<sup>3</sup> it will continue to decline for quite a few decades.

**The number of older people exceeded the number of children<sup>4</sup> by 18.1% in 2013, so the upward trend in the ageing index continued after a pause in 2011.**

At the beginning of 2013, the ageing index was, consistent with previous trends, again higher (118.1) than the previous year (117.3). The share of children in the total population was otherwise slightly higher than the previous year (14.5%), but the share of older people increased more again, from 16.8% to 17.1%.

The working-age population (20–64 years) decreased, and its share declined by 0.4 percentage points to 63.6%. Moreover, the first larger post-war generation (people born in 1947) joined the ranks of the older population in 2012; this will also contribute to an increase in the share of older people in the years to come and is an important challenge for Slovenia on the road to sustainable public finances. Among older people, the number of those over 80 has also been growing very rapidly, totalling 92,855 at the beginning of 2013, twice as many as in 2000. The decline in the working-age population as a result of both larger generations entering the population of older people and smaller generations joining the working-age population, coupled with a rising number of people over 80, will have to be addressed by increasing the activity of older people and systemic adjustments in the area of long-term care (see indicators 4.7 and 4.9).

**The old-age dependency ratio in Slovenia is still below the EU average, but the gap is closing.**

In most of the older and larger EU countries life expectancy is higher than in Slovenia.<sup>5</sup> The ratio of older people to the total population in the EU as a whole is therefore also higher. Other countries also have low shares of children, but in Slovenia this share is below average (being the largest in Ireland, at 21.6%). In 2013 the ratio increased in all Member States except Luxembourg (EU 2012: 29.2 older people per 100 working-age population aged 20–64, 3.0 percentage points more than in Slovenia). The old-age dependency ratios are highest in Italy (35.2%), Germany, Greece and Sweden (32.9%), the countries which also have high shares of older people in the total population (Italy has the highest share, 20.6%, with the share of people over 80 totalling 6.1%; EU average: 4.9%). However, the share of the working-age population is also declining in the EU as a whole, the problems regarding the ageing of the population being similar to those in Slovenia.

<sup>1</sup> The age-dependency of the population is measured by three ratios: a) the old-age-dependency ratio, which is the ratio of the population aged 65+ to the working-age population; b) the young-age-dependency ratio, which is the ratio of the population aged 0–14 to the working-age population; and c) the total age-dependency ratio, which is the ratio of the young and older populations to the working-age population.

<sup>2</sup> Because Eurostat publishes detailed data on population by age only as of 1 January, for comparability with data on EU Member States the analysis of the age structure of Slovenia's population is shown as of 1 January.

<sup>3</sup> Working projection of the population, IMAD, 2013.

<sup>4</sup> The ratio of the older population (65+) to the young (0–14) population.

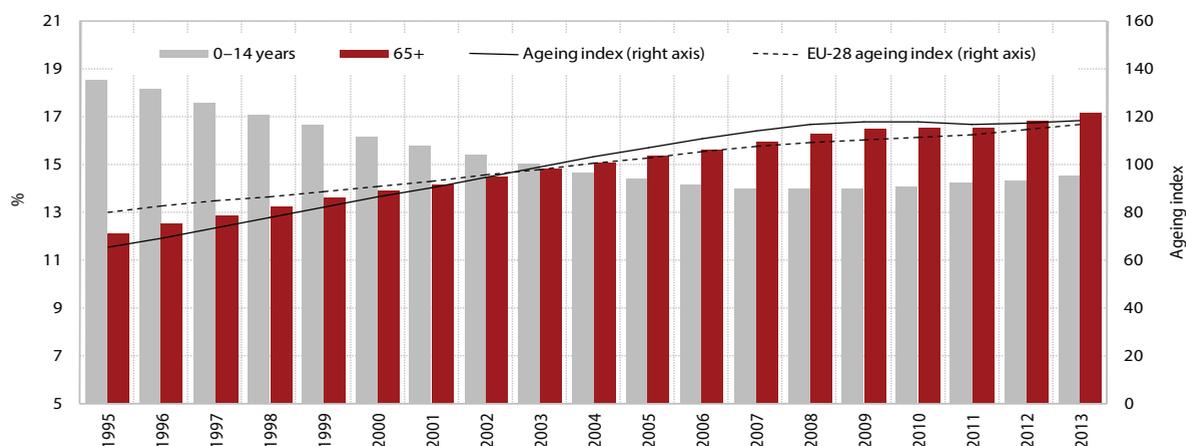
<sup>5</sup> See indicator 5.10.

Table: The age-dependency ratio of the population aged 65+, in %

	2010	2000	2005	2006	2007	2008	2009	2010	2010	2011	2012
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>27.2</b>	<b>27.5</b>	<b>27.8</b>	<b>27.9</b>	<b>28.2</b>	<b>28.5</b>	<b>28.7</b>	<b>29.2</b>	<b>29.9</b>
Austria	24.6	25.1	25.7	26.7	27.5	27.9	28.2	28.6	28.5	28.8	29.2
Belgium	26.2	28.1	28.9	28.8	28.6	28.5	28.5	28.6	28.5	29.0	29.4
Bulgaria	24.9	26.5	27.5	27.5	28.1	28.3	28.5	28.8	29.2	30.0	30.6
Cyprus	19.4	19.4	20.0	20.1	20.3	20.2	20.1	20.1	20.2	20.2	20.8
Czech Republic	22.1	22.0	21.8	22.0	22.3	22.5	23.0	23.7	24.3	25.3	26.5
Denmark	25.1	24.1	24.8	25.1	25.5	26.0	26.7	27.5	28.5	29.6	30.6
Estonia	22.6	24.8	27.4	27.8	28.4	28.6	28.4	28.2	28.1	28.6	29.3
Finland	23.4	24.5	26.2	26.4	27.3	27.4	27.8	28.3	29.3	30.6	31.9
France	25.3	27.1	27.9	28.0	27.8	27.9	28.1	28.3	28.6	29.4	30.3
Greece	24.9	26.9	29.2	30.0	30.0	30.1	30.2	30.7	31.7	32.5	33.4
Croatia	N/A	N/A	27.5	27.7	27.9	28.1	28.2	28.0	28.9	29.2	29.7
Ireland	20.9	19.3	18.2	17.8	17.4	17.3	17.7	18.3	18.9	19.6	20.5
Italy	26.5	29.1	31.7	32.2	32.7	32.9	33.1	33.3	33.4	34.1	35.2
Latvia	22.7	24.8	27.6	28.1	28.7	28.9	29.1	29.6	29.9	30.1	30.3
Lithuania	20.7	23.4	26.7	27.3	27.8	28.3	28.6	28.7	29.7	29.9	30.0
Luxembourg	22.3	23.3	22.9	22.8	22.7	22.6	22.4	22.4	22.2	22.2	22.2
Hungary	23.8	24.4	25.0	25.2	25.4	25.8	26.1	26.5	26.7	26.9	27.4
Malta	18.5	20.2	21.5	22.2	22.2	22.1	22.5	23.6	25.0	26.3	27.6
Germany	24.4	26.0	30.5	31.7	32.7	33.2	33.7	34.1	33.8	33.7	33.9
Netherlands	21.1	21.9	22.8	23.2	23.6	24.0	24.5	25.1	25.6	26.8	28.0
Poland	19.0	20.5	21.1	21.1	21.1	21.1	21.0	20.9	20.7	21.2	21.9
Portugal	24.9	26.5	28.1	28.4	28.7	29.0	29.4	29.9	30.7	31.4	32.0
Romania	20.2	21.7	24.6	24.8	24.8	25.4	25.5	25.6	25.5	25.8	25.9
Slovakia	18.8	18.8	18.4	18.5	18.6	18.7	18.8	19.1	19.2	19.5	20.0
<b>Slovenia</b>	<b>19.5</b>	<b>22.0</b>	<b>24.0</b>	<b>24.4</b>	<b>24.8</b>	<b>25.4</b>	<b>25.6</b>	<b>25.7</b>	<b>25.7</b>	<b>26.2</b>	<b>26.9</b>
Spain	25.3	27.1	26.0	26.2	25.9	25.7	26.0	26.5	27.1	27.6	28.3
Sweden	30.2	29.6	29.3	29.4	29.5	29.8	30.3	31.0	31.6	32.3	32.9
United Kingdom	26.9	26.8	26.8	26.6	26.6	26.7	26.9	27.3	27.6	28.2	29.1

Source: Eurostat Portal Page – Population and social conditions – Population, 2013.  
Note: N/A – not available.

Figure: The older population (65+) and the young (0–14) population as a percentage of the total population and the ratio between them (the ageing index), Slovenia, and the ageing index in the EU



Source: SURS, Eurostat, 2013; calculations by IMAD.

## 5.10 Life expectancy and healthy life years

***The life expectancy of men increased slightly again in Slovenia in 2012, while the life expectancy of women remained unchanged.***

Assuming that the current mortality patterns remain unchanged, a girl born in 2012 can expect to live 82.9 years; a boy can expect to live 77 years, which is 4.8 months longer than a year earlier. Compared with 2005, life expectancy rose by 2.9 years for boys and 1.6 years for girls. The gender gap, which was widest at the end of the 1980s (8 years), narrowed to 5.9 years by 2012 (i.e. by almost 5 months compared with the previous year). In 2012 life expectancy in Slovenia was similar to the EU average (80.3 years<sup>1</sup>); it remained lower than in older Member States (with the exception of Denmark) and higher than in the new Member States (except for Cyprus and Malta), which is conditional on the living standard and way of life. In 2011, life expectancy on average across the OECD countries exceeded 80 years for the first time in history. Increased longevity is attributed to improvements in living conditions, a reduction in certain risk factors (such as smoking) and progress in health care.<sup>2</sup> In Slovenia, a third of men and almost two thirds of women reach 80 years (i.e. die at the age of 80 or later).

***After two years of decline, disability-free life expectancy measured in healthy life years<sup>3</sup> increased in 2012.***

A girl born in 2012 can expect 55.6 years of healthy life, while a boy can expect almost 11 months more (56.5 years). This is 1.8 years and 2.5 years more, respectively, than a year earlier, but significantly less for girls than in 2005 (60.1 years; similar for boys). The quality of life for women as measured by this indicator thus deteriorated significantly in the last three years. However, this indicator measures subjective perceptions, so the results can also indicate greater criticism and higher sensitivity to activity limitation in evaluating one's own position. Slovenia ranks at the bottom of the EU in terms of the healthy life

years indicator. The share of years spent without activity limitation in the total life expectancy is the third lowest in the EU (for both women and men). In contrast to life expectancy, which is longer for women than for men, in 2012 the expected number of years spent free of activity limitation for men was 0.9 years longer than for women, while in 2005 the difference was still 3.7 years in favour of women. The relative indicator for women is actually even worse, considering that women live longer than men – a girl can expect to live 66.7% of her life without limitations in everyday activities (2005: 74.3%) and a boy 77.3% (2005: 76.3%).

<sup>1</sup> 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 methodological differences.

<sup>2</sup> OECD (2013), Health at a Glance: Europe 2013.

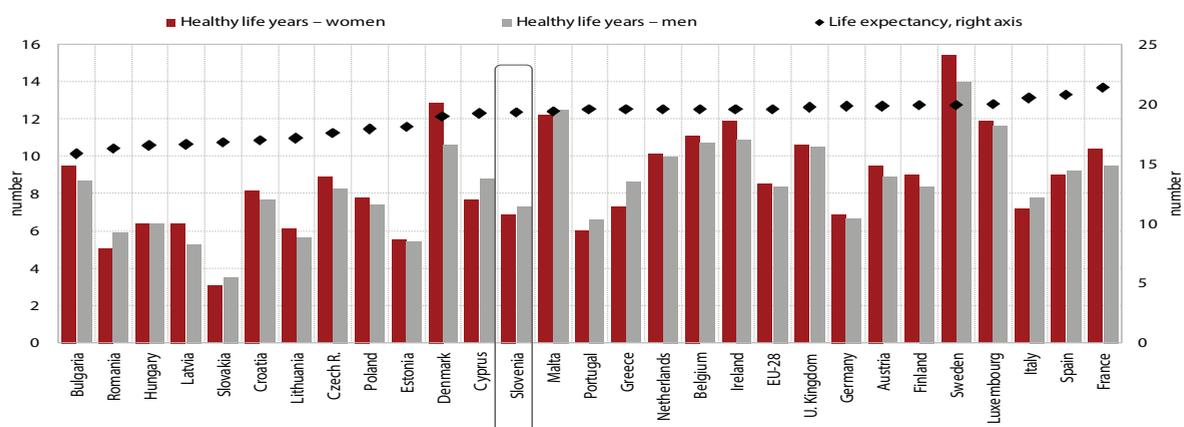
<sup>3</sup> The indicator of healthy life years measures the number of remaining years that a person of a specific age is expected to live without any severe or moderate health problems. The notion of health problems is based on self-perceived disability and measures limitations in usual activities due to health problems that have lasted for at least six months. This is a composite indicator which combines mortality and health status data. In March 2012 Eurostat revised the data, so that the series from 2004 to 2010 was calculated anew.

Table: Life expectancy in Slovenia and EU Member States

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>78.5</b>	<b>78.9</b>	<b>79.1</b>	<b>79.4</b>	<b>79.6</b>	<b>79.9</b>	<b>80.3</b>	<b>80.3</b>
Austria	76.9	78.3	79.5	80.1	80.4	80.6	80.5	80.8	81.2	81.1
Belgium	77.0	77.9	79.1	79.5	79.9	79.8	80.1	80.3	80.7	80.5
Bulgaria	71.0	71.6	72.5	72.7	73.0	73.3	73.7	73.8	74.2	74.4
Cyprus	77.4	77.7	78.7	80.1	79.8	80.6	81.0	81.5	81.2	81.1
Czech Republic	73.3	75.1	76.1	76.7	77.0	77.3	77.4	77.7	78.0	78.1
Denmark	75.3	76.9	78.3	78.4	78.4	78.8	79.0	79.3	79.9	80.2
Estonia	67.7	71.1	73.0	73.2	73.2	74.4	75.3	76.0	76.6	76.7
Finland	76.7	77.8	79.1	79.5	79.6	79.9	80.1	80.2	80.6	80.7
France	n. p.	79.2	80.3	80.9	81.3	81.4	81.5	81.8	82.3	82.1
Greece	77.5	78.2	79.5	79.8	79.7	80.2	80.4	80.6	80.8	80.7
Croatia	n. p.	n. p.	75.3	75.9	75.8	76.0	76.3	76.7	77.2	77.3
Ireland	75.5	76.6	79.0	79.3	79.8	80.2	80.2	80.8	80.9	80.9
Italy	78.3	79.9	80.9	81.4	81.6	81.7	81.8	82.2	82.4	82.4
Latvia	N/A	N/A	70.6	70.6	70.8	72.1	72.8	73.1	73.9	74.1
Lithuania	69.1	72.1	71.2	71.0	70.7	71.7	72.9	73.3	73.7	74.1
Luxembourg	76.8	78.0	79.6	79.4	79.5	80.7	80.8	80.8	81.1	81.5
Hungary	70.0	71.9	73.0	73.5	73.6	74.2	74.4	74.7	75.1	75.3
Malta	77.2	78.4	79.4	79.5	79.9	79.7	80.4	81.5	80.9	80.9
Germany	76.7	78.3	79.4	79.9	80.1	80.2	80.3	80.5	80.8	81.0
Netherlands	77.6	78.2	79.6	80.0	80.4	80.5	80.9	81.0	81.3	81.2
Poland	72.0	73.8	75.0	75.3	75.4	75.6	75.9	76.4	76.9	76.9
Portugal	75.4	76.8	78.2	79.0	79.3	79.5	79.7	80.1	80.7	80.6
Romania	69.3	71.2	72.3	72.8	73.3	73.5	73.6	73.8	74.6	74.5
Slovakia	72.4	73.3	74.1	74.5	74.6	74.9	75.3	75.6	76.1	76.3
<b>Slovenia</b>	<b>74.7</b>	<b>76.2</b>	<b>77.5</b>	<b>78.3</b>	<b>78.4</b>	<b>79.1</b>	<b>79.4</b>	<b>79.8</b>	<b>80.1</b>	<b>80.3</b>
Spain	78.1	79.3	80.3	81.1	81.1	81.5	81.9	82.4	82.6	82.5
Sweden	79.0	79.8	80.7	81.0	81.1	81.3	81.5	81.6	81.9	81.8
United Kingdom	76.7	78.0	79.2	79.5	79.7	79.8	80.4	80.6	81.0	81.0

Source: Eurostat Portal Page – Population and social conditions – Population – Demography – Mortality, 2014.  
Note: N/A – not available.

Figure: Healthy life years at age 65 relative to life expectancy, 2012



Source: Eurostat Portal Page – Population and social conditions – Health – Public health, 2014; Eurostat Portal Page – Population and social conditions – Population – Demography – Mortality, 2014.

## 5.11 Fertility rate

### **The number of births has been falling since 2010, when it was the highest in the last twenty years.**

While in 2011 fewer children were born than in the previous year for the first time since 2003, the number of births remained almost unchanged in 2012 (21,938 children; 9 fewer than the previous year). It was still higher than in 2008, when the figure exceeded 20,000 for the first time since 1991. Owing to the decreasing number of women of childbearing age, the total fertility rate<sup>1</sup> rose slightly (from 1.56 to 1.58 children per woman of childbearing age) and reached the highest figure since 1988. The fertility rate that still enables population renewal (2.1 children per woman of childbearing age) was last reached more than 30 years ago (1980: 2.11). According to provisional data, as many as 4.6% fewer children (-757) than in the comparable period of 2012 were born in the first nine months of 2013, which is estimated to be a result of fewer women of childbearing age, but may also reflect the uncertain economic situation.

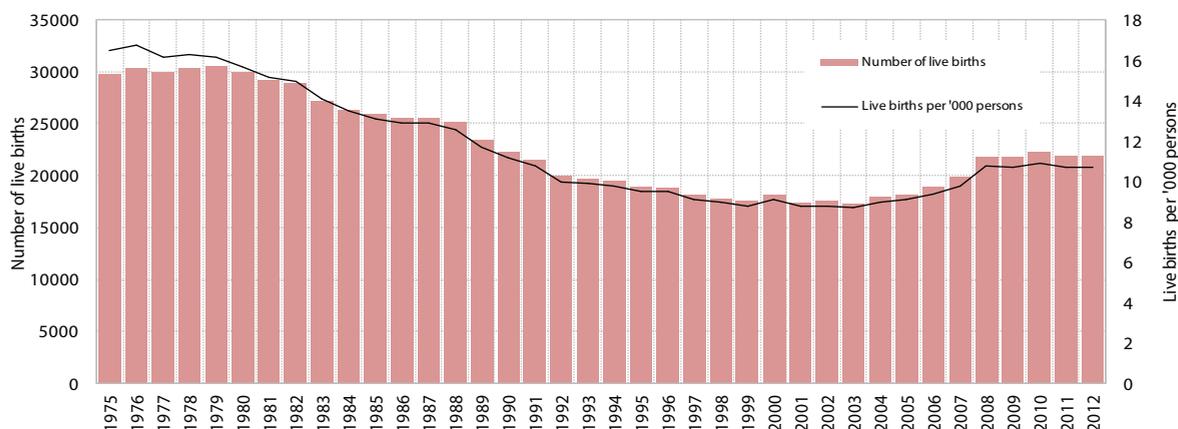
### **The decline in the number of women of childbearing age (15–49 years) seen since 1997<sup>2</sup> has accelerated in the last few years.**

The number of women of childbearing age, which had already been falling for fifteen years, albeit less notably, declined by 5,000 (1%) per year, on average, in the past two years. The increased fertility in 2004–2010 was thus a result of the postponement of births to a later age and the favourable economic situation rather than larger generations of women of childbearing age.

### **The mean age of women at childbirth continued to rise in 2012.**

It was 28.9 years at first childbirth and 30.5 years at the birth of all children. Relative to 2005, the age of women at birth increased by 1.1 years; compared with 1991, it was 4.8 years higher at the birth of the first child and 4.2 years higher at the birth of all children. In the last four years the mean age of women has increased more slowly, by slightly more than a month per year.

Figure 1: Number of live births, 1975–2012



Source: SURS, 2013.

<sup>1</sup> The total fertility rate is a sum of age-specific general birth rates in a calendar year. It indicates the number of live births per woman if during her entire childbearing period the age-specific fertility rates were to remain unchanged from the given calendar year.

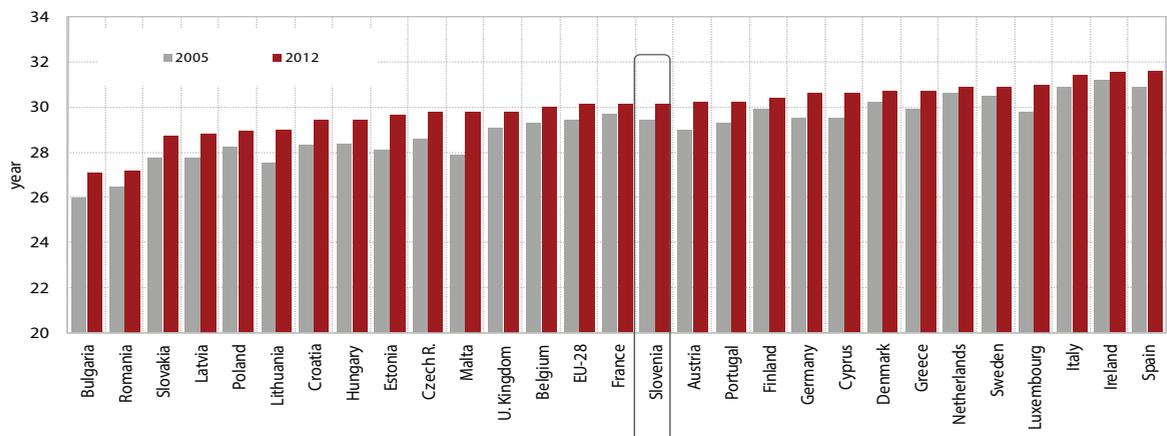
<sup>2</sup> Population data calculated at the yearly level.

Table: Total fertility rates in EU Member States

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>EU-28</b>	<b>N/A</b>	<b>N/A</b>	<b>1.51</b>	<b>1.54</b>	<b>1.56</b>	<b>1.61</b>	<b>1.60</b>	<b>1.61</b>	<b>1.58</b>	<b>1.58</b>
Austria	1.81	1.70	1.38	1.36	1.35	1.43	1.42	1.36	1.45	1.43
Belgium	1.56	1.67	1.76	1.80	1.82	1.85	1.84	1.86	1.81	1.79
Bulgaria	1.23	1.26	1.32	1.38	1.49	1.56	1.66	1.57	1.51	1.50
Cyprus	N/A	N/A	1.50	1.47	1.48	1.55	1.58	1.55	1.48	1.51
Czech Republic	1.28	1.15	1.29	1.34	1.45	1.51	1.51	1.51	1.43	1.45
Denmark	1.80	1.77	1.80	1.85	1.84	1.89	1.84	1.87	1.75	1.73
Estonia	N/A	1.38	1.34	1.33	1.37	1.38	1.36	1.39	1.36	1.38
Finland	1.29	1.26	1.26	1.31	1.38	1.53	1.53	1.57	1.56	1.58
France	1.17	1.23	1.33	1.36	1.38	1.45	1.38	1.37	1.34	1.32
Greece	1.84	1.89	1.86	1.91	2.01	2.08	2.10	2.07	2.03	2.01
Ireland	N/A	1.89	1.94	2.00	1.98	2.01	2.00	2.03	2.01	2.01
Croatia	1.38	1.36	1.52	1.58	1.69	1.72	1.70	1.72	1.61	1.56
Italy	1.71	1.87	1.92	1.98	1.96	1.99	1.99	2.02	2.00	2.00
Latvia	1.19	1.26	1.34	1.37	1.40	1.45	1.45	1.46	1.44	1.43
Lithuania	2.03	1.64	1.48	1.52	1.44	1.48	1.47	1.44	1.35	1.39
Luxembourg	N/A	1.25	1.39	1.46	1.54	1.58	1.46	1.36	1.33	1.44
Hungary	1.55	1.39	1.29	1.33	1.36	1.45	1.50	1.50	1.55	1.60
Malta	1.70	1.76	1.63	1.65	1.61	1.61	1.59	1.63	1.52	1.57
Germany	N/A	1.38	1.34	1.33	1.37	1.38	1.36	1.39	1.36	1.38
Netherlands	1.57	1.32	1.31	1.34	1.32	1.35	1.32	1.25	1.26	1.34
Poland	1.53	1.72	1.71	1.72	1.72	1.77	1.79	1.79	1.76	1.72
Portugal	1.42	1.36	1.41	1.41	1.38	1.41	1.39	1.44	1.43	1.44
Romania	1.62	1.37	1.24	1.27	1.31	1.39	1.40	1.38	1.30	1.30
Slovakia	1.33	1.31	1.39	1.40	1.42	1.53	1.57	1.54	1.46	1.53
<b>Slovenia</b>	<b>1.41</b>	<b>1.55</b>	<b>1.41</b>	<b>1.37</b>	<b>1.35</b>	<b>1.39</b>	<b>1.34</b>	<b>1.39</b>	<b>1.35</b>	<b>1.28</b>
Spain	1.31	1.27	1.32	1.40	1.38	1.47	1.49	1.51	1.39	1.34
Sweden	1.52	1.30	1.27	1.25	1.27	1.34	1.44	1.43	1.45	1.34
United Kingdom	1.81	1.73	1.80	1.84	1.83	1.85	1.86	1.87	1.83	1.80

Source: Eurostat Portal Page – Population and social conditions – Population – Demography – Fertility, 2014.  
Note: N/A – not available.

Figure 2: Mean age of women at childbirth, 2005 and 2012



Source: Eurostat Portal Page – Population and social conditions – Population – Demography – Fertility, 2014.

## 5.12 Migration coefficient

### ***Slovenia recorded low net migration in 2012; emigration of Slovenian citizens increased significantly.***

Among all demographic categories (births, deaths, migration), the economic crisis has the greatest impact on migration. After high immigration levels in 2007–2009 (around 30,000 people, on average), the number of people who migrated to Slovenia dropped by half in 2010. The number of emigrants, being less volatile, totalled 14,500 per year on average in 2006–2012; except for 2009, when it rose to 18,000, which can be attributed to the departure of foreign workers from the former Yugoslav republics in particular. The reasons for the decline in net migration,<sup>1</sup> first seen in the second quarter of 2009 before accelerating in 2010, were the deteriorated labour market situation and stricter conditions for obtaining residence permits for foreign nationals in Slovenia. According to SURS data, 15,022 persons immigrated to Slovenia in 2012 (up 6.7% on the previous year), while 14,378 persons emigrated from Slovenia (up 19.6%); 57% or 8,191 of emigrants were Slovenian citizens. The number of emigrants was up 75.1%, or 3,512 persons, on the previous year. In the 2007–2011 period, half as many Slovenian citizens moved abroad, around 4,000 per year on average. In the first nine months of 2013, net migration remained similar as in the same period a year earlier, according to preliminary data; the number of citizens who emigrated was otherwise 12.1% lower, yet still high (5,200).

### ***The number of foreign nationals migrating to Slovenia has been decreasing since 2009; most immigrants still come from the former Yugoslav republics.***

The greatest number of foreign nationals moved to Slovenia between 2007–2009, more than 27,000 per year on average, with approximately 12,000 per year since 2010. In 2012, 73.4% of immigrants came from former Yugoslav republics. Immigration from other EU Member States is still low; most of the immigrants from the EU were from Bulgaria (742 or 6% of all foreign immigrants). Most foreign nationals migrate to Slovenia to find employment and to reunite with families (2012: 41.3% and 48.1%, respectively). The number of foreign emigrants was the highest in 2009, when 15,000 people left, twice as many as in the previous year. With the onset of the crisis, they

probably moved elsewhere or returned home due to loss of employment and fewer work opportunities. Nevertheless, their net migration was 12,000. In 2010 approximately the same number of foreign nationals immigrated to as emigrated from Slovenia, but since then the net migration of foreigners has been rising. In 2012 it totalled around 6,000, with the number of foreigners emigrating being the lowest since 2004. Most of them moved to former Yugoslav republics or Bulgaria.

### ***Since 2009 migration flows of Slovenian citizens have been relatively high.***

In the 2005–2007 period, around 1,700 citizens on average immigrated from abroad every year, with approximately around 2,800 in 2008–2012. In the 2005–2007 period, 2,600 citizens on average moved abroad every year, in 2008–2011 more than 4,200, and in 2012 already more than 8,000. Net migration of Slovenian citizens, which has otherwise been slightly negative<sup>2</sup> since 2000, increased to 5,500 in 2012 (-2.6 per 1,000 population). Immigration and emigration flows of Slovenian citizens were the highest in the period at the beginning of the crisis; in 2012, 2,741 Slovenian citizens returned to Slovenia, which is 17.4% fewer than in the previous year, when their number was the highest since 1995 (since data have been available), while 8,191 Slovenian citizens left Slovenia, which is 19.8% more than in the previous year and the most ever. Most of them emigrated to Germany (27.7%) and Austria (15.0%). An above-average increase in emigration (75.1%) was recorded in the following age groups: 15–19 years (126.0%), 35–44 years (over 90%; 28.6% of them had at least two years of higher education<sup>3</sup>), and 65–69 years and 10–14 years (more than 80%). Half of Slovenian emigrants aged 15 years or more were inactive, while 6.9% were unemployed (i.e. 14.4% of the active population, which includes employed and unemployed persons). The mean age of Slovenian citizens who immigrated was 37.8 years and 38.5 years for citizens who emigrated,<sup>4</sup> which is higher than in the previous year.

<sup>1</sup> Net migration is the difference between the number of immigrants and the number of emigrants in a calendar year. Net migration per 1,000 inhabitants is the ratio of net migration to the average number of inhabitants in a calendar year multiplied by 1,000.

<sup>2</sup> The average net migration in 2000–2011 totalled around -1,000 or -0.5 per 1000 population.

<sup>3</sup> Among emigrants in the age group of 25–44, 31.3% had at least two years of higher education.

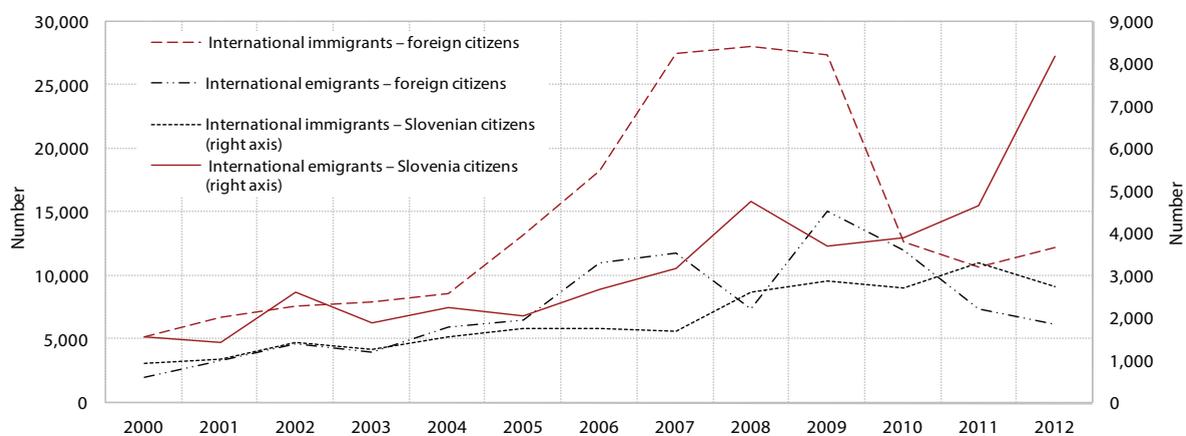
<sup>4</sup> The figures do not confirm the general opinion that mainly young people are emigrating, but it has to be pointed out that many people do not notify the administrative unit of their departure when they move abroad and are therefore not included in the statistical figures.

Table: Net migration (with statistical corrections), per 1,000 population

	1995	2000	2005	2006	2007	2008	2009	2010	2011	2012
<b>EU-28</b>	<b>1.2</b>	<b>2.1</b>	<b>3.3</b>	<b>3.3</b>	<b>3.2</b>	<b>2.6</b>	<b>1.6</b>	<b>1.8</b>	<b>1.8</b>	<b>1.7</b>
Austria	0.3	2.2	6.1	3.0	4.1	4.1	2.5	3.3	0.3	5.2
Belgium	0.2	1.3	4.7	4.9	5.5	5.9	5.9	7.9	6.5	4.3
Bulgaria	0.0	0.0	0.0	0.0	-2.3	-2.4	-2.5	-2.4	-0.7	-0.3
Cyprus	9.2	5.7	11.0	13.7	19.9	21.1	22.0	19.2	21.3	-0.7
Czech Republic	1.0	-2.7	3.0	2.9	7.7	6.5	2.4	1.4	1.6	1.0
Denmark	5.5	1.9	1.2	1.9	3.7	4.6	2.8	3.0	2.4	3.0
Estonia	-10.8	0.0	-1.7	-2.0	-0.5	-0.9	-1.0	-1.2	-1.3	-5.7
Finland	0.8	0.5	1.7	2.0	2.6	2.9	2.7	2.6	3.1	3.3
France	:	2.7	3.0	1.8	1.2	0.9	0.5	0.8	0.8	0.8
Greece	7.3	2.7	3.6	3.6	3.6	3.2	3.1	-0.1	0.4	-4.0
Croatia	-16.7	-11.7	1.9	1.6	1.3	1.6	-0.3	-1.1	-0.9	-0.9
Ireland	1.6	8.4	15.2	22.2	16.9	3.7	-4.2	-5.6	-7.4	-7.6
Italy	0.5	0.9	5.2	6.4	8.4	7.1	5.2	5.1	4.0	6.2
Latvia	-5.5	-6.9	-4.9	-4.0	-3.6	-10.3	-16.1	-17.0	-9.7	-5.8
Lithuania	-6.5	-5.8	-15.7	-8.0	-7.5	-6.2	-11.5	-26.8	-14.0	-7.1
Luxembourg	10.6	7.9	13.1	11.3	12.5	15.8	13.2	15.1	21.2	18.9
Hungary	1.7	1.6	1.7	2.1	1.4	1.6	1.7	1.2	1.3	1.6
Malta	0.2	2.3	4.0	0.1	3.8	5.7	5.6	0.2	4.0	7.4
Germany	4.9	2.0	1.0	0.3	0.5	-0.7	-0.1	1.6	3.4	4.9
Netherlands	1.0	3.6	-1.4	-1.6	-0.1	1.9	2.3	2.0	1.8	0.8
Poland	-0.5	-0.5	-0.3	-0.9	-0.5	-0.4	0.0	-0.1	-0.1	-0.2
Portugal	3.1	6.5	1.5	1.6	2.1	0.9	1.5	0.4	-2.3	-3.6
Romania	-0.9	-0.2	-4.0	-4.1	-21.9	-8.0	-5.4	-2.4	-2.4	0.8
Slovakia	0.5	-4.1	-0.1	-0.1	0.4	0.4	-0.1	-0.9	0.5	0.6
<b>Slovenia</b>	<b>0.4</b>	<b>1.4</b>	<b>3.2</b>	<b>3.1</b>	<b>7.1</b>	<b>9.2</b>	<b>5.6</b>	<b>-0.3</b>	<b>1.0</b>	<b>0.3</b>
Spain	1.8	9.7	14.5	14.9	17.2	9.5	3.0	1.6	1.4	-3.5
Sweden	1.3	2.7	3.0	5.6	5.9	6.0	6.7	5.3	4.8	5.4
United Kingdom	1.1	2.4	4.9	4.5	4.8	4.0	3.8	4.9	3.4	2.3

Source: Eurostat Portal Page – Population and social conditions – Demography, 2013.

Figure: International migration by citizenship, Slovenia



Source: SURS, 2013.

## 5.13 Regional variation in GDP per capita

**In 2012 economic activity declined in all regions, with Zasavska recording the lowest GDP per capita for the second year in a row.** The highest GDP per capita in 2012 was in the Osrednjeslovenska region (more than 40% higher than the national average), while the lowest was in the Zasavska region, more than a third lower than the national average. Reaching 69% of the national average, Zasavska thus replaced Pomurska as the economically least developed region for the second year in a row. The Obalno-kraška region was the only region other than Osrednjeslovenska to exceed the national average in the period analysed (by more than 2%), but had one of the largest declines in GDP (-6.3%) and therefore reduced its advantage over the national average by as much as 4.7 percentage points relative to 2011. After a slight improvement in 2011, economic activity declined again in 2012 across all statistical regions. The decline was largest in the Zasavska region (-7.8%) and smallest in the Koroška region (-1.0%).

**The years of crisis have wiped out the progress towards narrowing the gap with the European average made by Slovenian regions in the 2005–2008 period.** In 2005–2008 the statistical regions had mainly been moving closer to the average development level of the EU-28, but this came to a halt with the onset of the economic crisis. In 2012 most regions had a similar gap with the EU average as around 2002, some of them (the Notranjsko-kraška region, the Zasavska region) even similar to that in 1995 or even earlier. Compared with 2005, the gap with the EU average widened the most in the Osrednjeslovenska, Gorenjska and Zasavska regions (by 7 percentage points in each). Osrednjeslovenska is the only region to still exceed the European average, but its lead decreased from 28% in 2008 before the crisis to only 18% in 2012.<sup>2</sup> Among other regions, Obalno-kraška, Goriška and Jugovzhodna Slovenija exceed 75%<sup>3</sup> of the EU-28 average, Savinjska reaches 75% of the European average, while all other regions remain below this limit.

**The ratio between the two regions with the highest and lowest GDP per capita increased slightly in 2012, but remains relatively low; the differences in disposable income per capita are even smaller.**

GDP per capita in the Osrednjeslovenska region in 2012 was 2.2 times that of the economically weakest Zasavska region, which is a slightly higher figure than in 2011 (2.1) and roughly the same as in 2006–2010. Taking into account the differences in purchasing power across regions, the actual ratio is probably even lower. The ratio between the highest and lowest disposable incomes (1.3 in 2011) is also much lower. It has been practically unchanged since 2007. In 2011 disposable income per capita increased in all regions, most notably in Koroška (by 4.9%) and the least in Osrednjeslovenska (by 1.1%). The highest disposable income per capita was in the Osrednjeslovenska region, but it did not exceed the Slovenian average by as much as its GDP per capita (only by slightly more than 7%). The national average was also exceeded by the other three regions from the cohesion region of Zahodna Slovenija (Goriška, Obalno-kraška and Gorenjska), and the Koroška and Notranjsko-kraška regions. Pomurska was farthest below the national average (by more than 14%), while Zasavska lagged behind by only slightly more than 3%.

**In 2012 regional disparities in the relative dispersion of GDP per capita remained at the same level as in 2011, being still among the lowest in the EU.** The relative dispersion of GDP per capita,<sup>4</sup> which is one of the indicators of regional disparities, decreased by 0.8 percentage points to 21.6% in 2011, according to our calculations, and also remained at the same level in 2012. The regional disparities as measured by this indicator were thus lower than at the beginning of the implementation of SDS (2005) and comparable to the pre-crisis level (2008). The relative dispersion of GDP per capita is relatively low in Slovenia compared with other countries in the EU. In 2010 the value of this indicator for the EU-27 as a whole averaged 32.2%, with disparities being the greatest in Bulgaria (47.6%) and the lowest in Sweden (16.5%).

<sup>1</sup> Or were increasing their advantage, as was the case in the Osrednjeslovenska region.

<sup>2</sup> IMAD's calculations.

<sup>3</sup> Under the EU cohesion policy, the regions at the NUTS 2 level whose GDP per capita is less than 75% of the average GDP in the EU-27 are considered less developed.

$$RD_{Rt} = 100 \sum_r \left( \frac{P_{rt}}{P_{Rt}} \right) \left| \left( \frac{BDP_{rt}}{BDP_{Rt}} \right) - 1 \right|$$

where  $t$  = year

$P_r$  = population of the region,

$P_R$  = population of Slovenia,

$BDP_r$  = GDP per capita of the region,

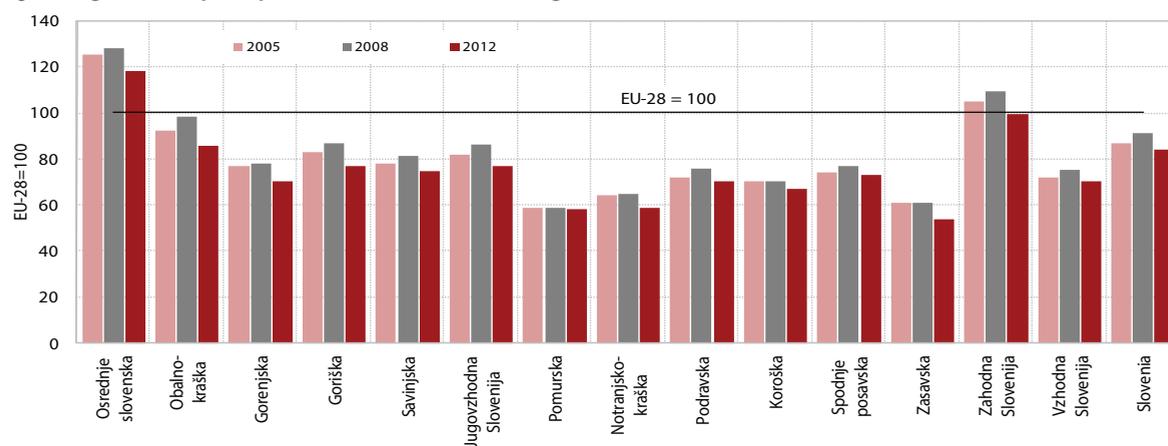
$BDP_R$  = GDP per capita of Slovenia, expressed in percent.

Table: GDP per capita and real GDP growth

Cohesion region / Statistical region	2000	2005	2008	2009	2010	2011	2012	EU-28=100		Real GDP growth, in %	
								2011	2012	2011/2010	2012/2011
<b>Slovenia</b>	<b>100.0</b>	<b>84</b>	<b>84</b>	<b>0.6</b>	<b>-2.5</b>						
<b>Zahodna Slovenija</b>	<b>118.2</b>	<b>120.3</b>	<b>119.6</b>	<b>119.8</b>	<b>119.5</b>	<b>118.4</b>	<b>118.3</b>	<b>100</b>	<b>99</b>	<b>N/A</b>	<b>N/A</b>
Obalno-kraška	107.8	105.6	107.7	108.9	109.8	106.9	102.2	90	86	-1.8	-6.3
Goriška	97.8	94.4	95.7	94.6	94.1	92.8	91.7	78	77	-1.0	-4.0
Gorenjska	88.9	87.7	85.4	82.2	82.9	83.2	83.6	70	70	1.7	-2.3
Osrednjeslovenska	137.3	142.5	140.8	142.3	141.2	140.0	140.8	118	118	0.6	-1.2
<b>Vzhodna Slovenija</b>	<b>84.6</b>	<b>82.7</b>	<b>82.9</b>	<b>82.5</b>	<b>82.7</b>	<b>83.5</b>	<b>83.5</b>	<b>71</b>	<b>70</b>	<b>N/A</b>	<b>N/A</b>
Notranjsko-kraška	80.7	72.6	72.1	72.5	71.6	70.9	69.8	60	59	-0.3	-4.5
Jugovzhodna Slovenija	93.0	93.3	94.9	92.4	92.9	92.6	91.8	78	77	-0.5	-4.3
Spodnje-posavska	87.8	84.9	84.6	85.8	85.0	85.7	87.2	73	73	0.3	-2.4
Zasavska	78.5	69.9	66.7	66.7	67.5	67.0	64.2	57	54	-1.6	-7.8
Savinjska	89.8	89.0	89.5	89.1	90.5	91.7	91.6	78	75	1.4	-3.3
Koroška	83.8	79.8	77.6	75.1	75.0	77.5	79.6	65	67	2.9	-1.0
Podravska	82.5	82.6	84.0	83.7	83.3	83.7	83.6	71	70	0.7	-2.5
Pomurska	72.7	67.0	64.7	65.8	65.6	67.8	69.1	57	58	3.4	-1.5

Source: SI-STAT Data Portal – Economy – National accounts – Regional gross domestic product, 2013, Eurostat – General and regional statistics, 2014; calculations by IMAD.  
 Note: N/A – not available.

Figure: Regional GDP per capita relative to the EU-28 average



Source: SURS, Eurostat; calculations by IMAD.

## 5.14 Regional variation in the registered unemployment rate

**In 2013 the number of unemployed increased again across all regions.** Unemployment did not decline in any region in 2013. The number of unemployed increased the least in the Pomurska region (by 0.6%) and the most in the Notranjsko-kraška region (by 17.3%), which otherwise still has a below-average registered unemployment rate. The largest increases in unemployment compared with the previous year and the year before the crisis were in the regions of Zahodna Slovenija, Osrednjeslovenska, the most heavily populated region and where unemployment has been rising since 2008, accounted for more than 23% of total unemployment in 2013.

**The registered unemployment rate<sup>1</sup> also rose in all regions in 2013, most notably in the regions of Zahodna Slovenija.** All regions with above-average registered unemployment rates are in the cohesion region of Vzhodna Slovenija, where only the Notranjsko-kraška region has a below-average rate, although unemployment is rapidly growing in that region too. The highest registered unemployment rate in 2013 was recorded in the Pomurska region (17.8%), but in recent years it has not been rising as fast as in other regions. After declining in 2011 and 2012, the registered unemployment rate in Pomurska rose the least among all regions in 2013, by 0.5 percentage points. The largest increases were recorded in the Zasavska region and the Notransko-kraška region (by 1.9 percentage points). All regions of Zahodna Slovenija had below-average registered unemployment rates in 2013; once again, Gorenjska had the lowest rate (9.8%), but in the other three regions registered unemployment is growing at an above-average pace.

**Regional disparities in registered unemployment rates declined further in 2013.** The absolute dispersion of registered unemployment rates,<sup>2</sup>

<sup>1</sup> The registered unemployment rate is the ratio of unemployed people to the active population multiplied by 100 and is therefore not dependent only on the movement of the number of unemployed.

$$AD_{Rt} = \sum_r \left( \frac{A_{rt}}{A_{Rt}} \right) |SB_{rt} - SB_{Rt}|$$

where  $t = \text{year}$ ,

$A_r = \text{the active population of the region}$ ,

$A_R = \text{the active population of Slovenia}$ ,

$SB_r = \text{the registered unemployment rate of the region}$ ,

$SB_R = \text{the registered unemployment rate of Slovenia}$ .

which is used to measure regional disparities in unemployment, was 1.8 in 2013 (down 0.2 on 2012). Except in 2009 and 2010, regional disparities have been gradually narrowing since 2003; since the beginning of the crisis this has been mostly the result of slightly faster growth in registered unemployment in regions with below-average rates. The ratio between the two regions with the highest and lowest rates has also been falling: Pomurska has a registered unemployment rate 1.8 times higher than Gorenjska. The ratio has declined slightly compared with 2012 (1.9:1 in 2012); it has been falling steadily since 2008, when it stood at 2.9:1.

**The categories where unemployment increased the most in both absolute and relative terms were unemployed persons with tertiary education, first-time jobseekers, young people and people seeking new jobs due to the termination of their fixed-term contracts.** The share of the unemployed with at least two years of higher education increased across all regions, as did the share of those who lost work due to the termination of their fixed-term contracts. The largest share of the tertiary educated unemployed was in the Osrednjeslovenska region (18.9%), while the largest increase in their number was recorded in the Notranjsko-kraška region (up 30.5%). The group of jobseekers who used to have fixed-term employment has also been growing steadily, averaging as much as 40% across regions, the largest share being in the Podravska region (47%). Their number increased the most in the Goriška and Koroška regions. A fifth of all unemployed first-time jobseekers are in Jugovzhodna Slovenija; above-average shares of this category are recorded in the Zasavska, Pomurska and Osrednjeslovenska regions. All the aforementioned categories of the unemployed mainly include young people,<sup>3</sup> who account for the largest share (12.1%) among the unemployed in the Zasavska region, while their number increased the most in the Osrednjeslovenska region (by 32.1%).

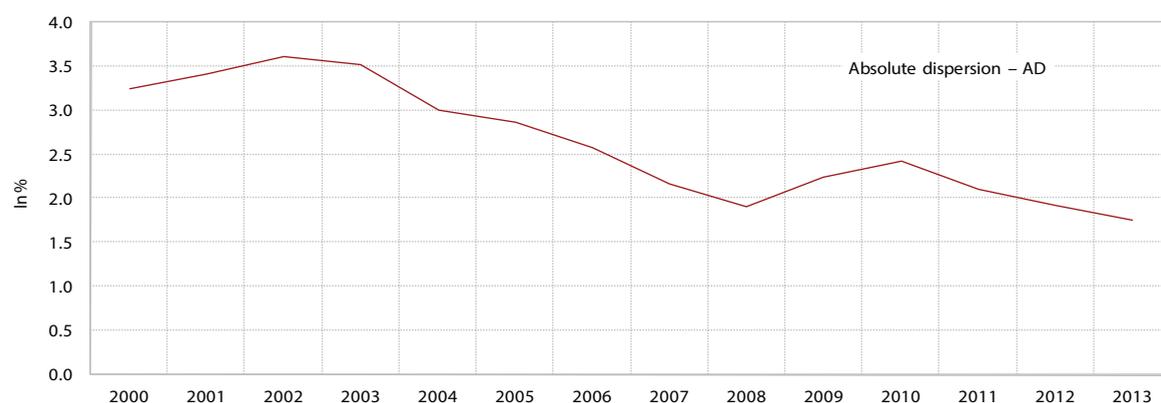
<sup>3</sup> Aged 15–24.

Table: Registered unemployment rate by region, in %

Cohesion region/Statistical region	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013
<b>Slovenia</b>	<b>11.8</b>	<b>10.2</b>	<b>9.4</b>	<b>7.7</b>	<b>6.7</b>	<b>9.1</b>	<b>10.7</b>	<b>11.8</b>	<b>12.0</b>	<b>13.1</b>
<b>Zahodna Slovenija</b>	<b>8.6</b>	<b>7.4</b>	<b>6.9</b>	<b>9.5</b>	<b>4.8</b>	<b>6.9</b>	<b>8.3</b>	<b>9.6</b>	<b>9.9</b>	<b>11.2</b>
Obalno-kraška	8.8	7.5	7.2	6.3	5.2	6.9	7.9	9.6	10.2	11.7
Goriška	5.9	6.5	6.2	4.9	4.3	7.1	8.6	10.0	10.3	11.7
Gorenjska	9.7	7.3	6.4	4.9	4.4	6.9	8.1	8.8	8.9	9.8
Osrednjeslovenska	8.8	7.6	7.2	5.9	5.0	6.8	8.5	9.9	10.1	11.5
<b>Vzhodna Slovenija</b>	<b>14.4</b>	<b>12.5</b>	<b>11.6</b>	<b>5.6</b>	<b>8.3</b>	<b>11.1</b>	<b>12.8</b>	<b>13.6</b>	<b>13.6</b>	<b>14.7</b>
Notranjsko-kraška	10.4	7.9	7.0	5.4	4.9	7.1	8.5	10.0	10.4	12.3
Jugovzhodna Slovenija	10.4	8.8	8.6	7.0	6.3	8.9	10.0	11.6	12.8	14.1
Spodnjeposavska	13.4	11.5	10.5	8.9	7.7	10.2	12.2	13.4	13.9	14.8
Zasavska	14.9	13.8	12.0	9.7	8.2	11.0	11.9	13.3	14.7	16.6
Savinjska	13.1	12.7	11.6	9.4	8.0	10.3	11.8	12.7	12.7	13.9
Koroška	9.9	10.6	10.1	8.1	7.3	10.9	13.1	13.3	12.2	13.9
Podravska	18.1	13.5	12.7	10.4	9.1	11.9	13.5	14.5	14.1	14.7
Pomurska	16.7	17.1	15.7	13.4	12.2	15.9	19.0	18.0	17.3	17.8

Source: SURS, 2014.

Figure: Dispersion of registered unemployment rate at NUTS 3 level, Slovenia



Source: SURS, 2014; calculations by IMAD.

## Bibliography

- 2012 Ageing Report. Economic and budgetary projections for the 27 EU Member States. (2012). Brussels: European Commission. Obtained at [http://ec.europa.eu/economy\\_finance/publications/european\\_economy/2012/pdf/ee-2012-2\\_en.pdf](http://ec.europa.eu/economy_finance/publications/european_economy/2012/pdf/ee-2012-2_en.pdf).
- A closer look at some drivers of the trade performance at Member State level. (2012). Quarterly report on the Euro area, Volume 11, No. 2 (2012). Brussels: European Commission.
- A. Burger and M. Rojec. (2013). *Vključenost in vključevanje slovenskih podjetij v globalne dobaviteljske verige (Inclusion and integration of Slovenian companies in global value chains)*. Ljubljana: Faculty of Social Sciences.
- A. Burger. (2012). *Učinek vladnih protikriznih ukrepov na delovanje podjetij v pogojih gospodarske recesije (The effect of government stimulus measures on company performance in an economic recession)*. CRP V5-1005. Ljubljana: Faculty of Social Sciences.
- Accounting and mapping of long-term care expenditure under SHA 2011. (2012). Paris: OECD.
- Agriculture, forestry and fishery statistics. 2013 edition. (2013). Luxembourg: Eurostat. Obtained at <http://ec.europa.eu/eurostat>.
- Akcijski načrt razvoja ekološkega kmetijstva v Sloveniji do leta 2015 (Action plan for the development of organic farming in Slovenia until 2015). (2005). Ljubljana: Ministry of Agriculture, Forestry, and Food.
- Akcijski načrt za povečanje konkurenčnosti gozdno-lesne verige v Sloveniji do leta 2020 (Action plan to increase competitiveness of forest-wood chain in Slovenia by the year 2020). (2012). Ljubljana: Ministry of agriculture and the Environment and Ministry for economic development and technology.
- Alert Mechanism Report – Report prepared in accordance with Articles 3 and 4 of the Regulation on the prevention and correction of macro-economic imbalances. (2013). COM(2013) 790 final. Brussels: European Commission.
- Amoros, J. E. et al. (2014). *Global Entrepreneurship Monitor: 2013 Global Report*. Babson College, Universidad del Desarrollo, Universiti Tun Abdul Razak and London Business School. Obtained at <http://www.gemconsortium.org/>.
- Ang, B.W. (2005). *The LMDI approach to decomposition analysis: a practical guide*. Energy Policy, 33, 867-71
- Annual Report on European SMEs 2012/2013. (2013). *Brief on Knowledge Intensive Services*. Manchester Institute of Innovation Research. [http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/briefs/knowledge-intensive-services-brief-2013-final\\_en.pdf](http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/performance-review/files/briefs/knowledge-intensive-services-brief-2013-final_en.pdf).
- Archibugi, D. et al. (2013). *Economic crisis and innovation: is destruction prevailing over accumulation?* Research Policy, Vol. 42, No. 2.
- ARSO Portals – Register of Emissions Trading Coupons – Report on the Fulfilment of Obligations 2012. (2013). Ljubljana: Environmental Agency of the Republic of Slovenia.
- Attitudes towards vocational education and training. (2011). Special Eurobarometer 369. Brussels: European Commission. Obtained at: [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_369\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_369_en.pdf).
- Better Life Index. (2013). OECD Statistics. Paris: OECD. Obtained at: <http://stats.oecd.org/Index.aspx?DataSetCode=BLLI>.
- Bevc, M., Ogorevc, M. (2013). *Dejanska in potencialna emigracija nekdanjih Erasmus študentov iz Slovenije (Real and potential emigration of former Erasmus students from Slovenia)*. Ljubljana: Institute for Economic Research.
- Monthly Bulletin of the Bank of Slovenia, various issues. (2012 and 2013). Ljubljana: Bank of Slovenia.
- Brezigar et al. (2010). *Ocena posledic dviga minimalne plače (Estimation of the Impact of the Minimum Wage Rise in Slovenia)*. Working Paper No. 3/2010. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Gross domestic product, main aggregates of national accounts and employment, 1995–2013. (2013): Ljubljana: Statistical Office of the Republic of Slovenia. Obtained at <http://www.stat.si/>.
- Bučar M., Udovič B. (2014). *ERAWATCH Country Reports 2013: Slovenia*. Brussels: Erawatch, European Commission.
- Center za podpore (Centre for RES/CHP), *Poročilo januar – december 2013 (Periodic report, 1 January 2013 to 31 December 2013)*. (2014). Ljubljana: Borzen.
- Centralna podatkovna zbirka govedo (Central cattle breeding database). (2013). Ljubljana: Agricultural Institute of Slovenia and Cattle Breeding Service of Slovenia. Obtained at <https://www.govedo.si>.
- Ciriaci, D. Montresor, S., Palma, D. (2013). *Do KIBS make manufacturing more innovative? An empirical investigation for four European countries*. IPTS Working papers on corporate R&D and innovation – No. 04/2013. Obtained at: <http://iri.jrc.ec.europa.eu/papers13.html>.
- Corruption Perception Index 2013. (2013). Berlin: Transparency International. Obtained at <http://www.transparency.org/>.
- Cultural access and participation. (2013). Special Eurobarometer 399. Brussels: European Commission.
- Cultural Statistics. (2011). Brussels: European Commission. [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-32-10-374/EN/KS-32-10-374-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-32-10-374/EN/KS-32-10-374-EN.PDF).
- Current account imbalances in the euro area: competitiveness or demand shock? (2012). Quarterly Selection of articles. Pariz: Banque de France. No. 27, Autumn 2012. Obtained at <https://www.banque-france.fr/en/publications/banque-de-france-bulletins/quarterly-selection-of-articles.html>.
- Quarterly performance of enterprises by activity, Slovenia, 2<sup>nd</sup> and 3<sup>rd</sup> quarters of 2013 – provisional data. (2013). Ljubljana: Statistical Office of the Republic of Slovenia.
- Delovna skupina za oblikovanje načina povezovanja prostorskega načrtovanja z razvojnim načrtovanjem na regionalni ravni – zaključno poročilo. (Working group for finding a way of integrating spatial and development planning at regional level – final report). (2013). Government document no. 012-12/2011-MOP/25-00101326 dated 9.1.2013. Ljubljana: Government of the Republic of Slovenia.

- Denarni prejemki prebivalstva v letu 2012 (Cash benefits of households in 2012)*. In Slovenian Economic Mirror, December 2013, No. 12, Vol. XIX. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Developing and indicator of innovation output*. (2013). Commission staff working document, SWD (2013) 325 final. Brussels: European Commission.
- Dodatno pokojninsko zavarovanje (Supplementary pension insurance)*. (2014). Ljubljana: Ministry of Labour, Family, Social Affairs and Equal Opportunities. Obtained at [http://www.mdds.gov.si/si/uveljavljanje\\_pravic/statistika/dodatno\\_pokojninsko\\_zavarovanje/](http://www.mdds.gov.si/si/uveljavljanje_pravic/statistika/dodatno_pokojninsko_zavarovanje/).
- Doing Business 2014*. (2013). Washington: The International Bank for Reconstruction and Development, The World Bank. Obtained at <http://www.doingbusiness.org>.
- Slovenian Association of Landscape Architects*. (2013). Zaključki posveta Podeželska krajina kot razvojni potencial (Conclusions of the conference Rural landscape as a development potential). Available at: <http://www.dkas.si/?id=3,9>.
- Government budget appropriations or outlays on R&D, final budget 2012 and provisional budget 2013, Slovenia*. (2013). First Release, September 23, 2013. Ljubljana: Statistical Office of the Republic of Slovenia. Obtained at <http://www.stat.si>.
- Education at a glance*, various issues (2005–2013). OECD Indicators. Paris: OECD.
- EIO - Annual Report 2012. Europe in transition. Paving the way to a green economy through eco-innovation. Eco-Innovation Observatory*. (2013). Brussels: European Commission.
- Economic Issues 2012*. Box 2: Effects of the rise in minimum wage in 2010 on the loss of jobs – Updated estimation of the labour demand function and estimation of the effects of the rise in minimum wage and labour costs on employment. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Slovenian Economic Mirror*. (2009). Volume XV, No. 2, February 2009. Ljubljana: Institute of Macroeconomic Analysis and Development.
- E-news. Uspešen zaključek programa spodbujanja samozaposlovanja*. (2014). Ljubljana: Employment Service of Slovenia. Obtained at <http://www.ess.gov.si>.
- Energy Efficiency, Reporting targets*. (2013). Brussels: European Commission.
- Enotni dokument za zagotovitev boljšega zakonodajnega in poslovnega okolja ter dvig konkurenčnosti (Single Document for Ensuring Better Regulatory and Business Environment and Increasing Competitiveness)*. (2013). Ljubljana: Ministry of Internal Affairs Obtained at [http://www.mnz.gov.si/si/o\\_ministrstvu/kakovost\\_v\\_javni\\_upravi/boljsi\\_predpisi\\_in\\_odprava\\_administrativnih\\_ovir/stop\\_birokraciji/](http://www.mnz.gov.si/si/o_ministrstvu/kakovost_v_javni_upravi/boljsi_predpisi_in_odprava_administrativnih_ovir/stop_birokraciji/).
- EPISIS – European public sector innovation scoreboard 2013 – A pilot exercise*. (2013). Brussels: European Commission.
- EPO Annual Report – statistics 2013*. (2014). Munich: European Patent Office. Obtained at <http://www.epo.org>.
- ESS NET-CULTURE. European Statistical System Network on Culture*. (2012). Brussels: European Commission.
- EU Anti-Corruption Report 2014*. (2014). Brussels: European Commission.
- EU Competitiveness Report 2013*. (2013). Brussels: European Commission.
- Eurobarometer 80 – First results*. (2013). Brussels: European Commission. Obtained at [http://ec.europa.eu/public\\_opinion](http://ec.europa.eu/public_opinion).
- European cultural values*. (2007). Special Eurobarometer 278. Brussels: European Commission.
- European Economic Forecast Winter 2014*. (2014). European economy 2/2014. Brussels: European Commission.
- Eurostat Portal Page*. (2013 in 2014). Luxembourg: Eurostat. Obtained at <http://epp.eurostat.ec.europa.eu>.
- Eurostat regional yearbook 2013*. (2013). Luxembourg: Eurostat. Obtained at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-HA-13-001/EN/KS-HA-13-001-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-HA-13-001/EN/KS-HA-13-001-EN.PDF).
- Evidentirana tovorna vozila v obdobju od 19. 4. 2008 do 26. 4. 2008 in od 4. 5. 2008 do 11. 5. 2008 skozi cestninske postaje na območju celotne Slovenije (Freight vehicles registered at toll stations in the entire territory of Slovenia between 19 April 2008 and 26 April 2008 and between 4 May 2008 and 11 May 2008)*. (2009). Celje: DARS.
- European Social Survey, 2012*. (2013): Ljubljana: University of Ljubljana, Faculty of Social Sciences – Public Opinion and Mass Communication Research Centre.
- Faostat Portal page*. (2014). Obtained at <http://faostat.fao.org>.
- Financial Accounts*. (several years). Ljubljana: Bank of Slovenia. Obtained at: <https://www.bsi.si/publikacije-in-raziskave.asp?Mapald=922>.
- Foster, N., Pöschl, J., and Robert Stehrer. (2012). *Manufacturing Productivity: Effects of Service Sector Innovations and Institutions*. Working Papers No. 89, Vienna Institute for International Economic Studies (WIIW).
- Global Information Technology Report 2013*. (2013). Growth and Jobs in a Hyperconnected World. Geneva: World Economic Forum.
- GreenTech made in Germany 3.0*. (2012). Berlin: BMU.
- Growth and CO2 Emissions: How do Different Countries Fare?* (2007). Washington, D.C.: World Bank.
- Health at a glance 2011*. (2011). Paris: OECD. Obtained at: <http://www.oecd.org/els/health-systems/49105858.pdf>.
- Health at a glance 2013*. (2013). Paris: OECD. Obtained at <http://www.oecd.org/els/health-systems/Health-at-a-Glance-2013.pdf>.
- Health for all database 2013*. (2013). Geneva: World Health Organization. Obtained at <http://www.google.si/webhp?nord=1#nord=1&q=health+for+all+database>.
- Healthy life years (from 2004 onwards)*. (2014). Luxembourg: Eurostat. Obtained at: [http://epp.eurostat.ec.europa.eu/cache/ITY\\_SDDS/en/hlth\\_hlye\\_esms.htm](http://epp.eurostat.ec.europa.eu/cache/ITY_SDDS/en/hlth_hlye_esms.htm)

- Human Development Report 2013. (2013). New York: United Nations Development Programme (UNDP).
- Informacijski portal energetika, Statistika, Subvencije v energetiki.* (2013). Ljubljana: Ministry of Infrastructure and Spatial Planning.
- Intellectual property rights intensive industries: contribution to economic performance and employment in the European Union.* (2013). Munich and Alicante: EPO and OHIM. Obtained at <http://www.epo.org>.
- Interni podatki o neto položaju državnega proračuna RS do proračuna EU v letu 2013 (Internal data on Slovenia's net budgetary position against the EU in 2013).* (2014). Ljubljana: Ministry of Finance – Budget Directorate.
- Interni podatki o prodanih količinah motornih goriv (Internal data on the quantities of automotive fuels sold).* (2013). Ljubljana: Ministry of Finance.
- Interni podatki o vračilih trošarine (Internal data on excise duty refunds).* (2013). Ljubljana: Customs Administration of the Republic of Slovenia
- Health expenditures and sources of funding.* (2013). Ljubljana: Statistical Office of the Republic of Slovenia. Obtained at [http://www.stat.si/novica\\_prikazi.aspx?id=5561](http://www.stat.si/novica_prikazi.aspx?id=5561).
- Social protection expenditure 2011.* (2013). In Slovenian Economic Mirror, July–August 2013, Nos. 7–8, Vol. XIX. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Izhodišča normativnih sprememb na področju urejanja prostora in graditve objektov – predlog za obravnavo – Novo gradivo št. 2.* (2013). Government paper from 13. 11. 2013. Ljubljana: Ministry of Infrastructure and Spatial Planning.
- Autumn Forecast of Economic Trends 2013.* (2013). Ljubljana: Institute of Macroeconomic Analysis and Development.
- Judicial performance and its determinants: a cross-country perspective.* (2013). OECD Economic Policy Papers No. 5. Paris: OECD.
- Kako lahko raziskave programa ESPON podprejo razvojno načrtovanje Sloveniji?, Program ESPON, 2013. (How can the ESPON programme research support spatial planning in Slovenia?, ESPON Programme, 2013)* (2011). Ljubljana: Ministry of Infrastructure and Spatial Planning, [http://www.cilj3.mzip.gov.si/uploads/file/859\\_sl\\_821\\_sl\\_espon.pdf](http://www.cilj3.mzip.gov.si/uploads/file/859_sl_821_sl_espon.pdf).
- Kazalniki blaginje v Sloveniji. Interno gradivo (Well-being indicators in Slovenia. Internal papers).* (2014). Ljubljana: IMAD, SURS, ARSO, NIJZ.
- Kmetijsko okoljski kazalci v Sloveniji (Agri-environmental indicators in Slovenia).* (2014). Projekt Priprava kazalcev s področja kmetijstva in okolja (Agri-Environmental Project). Ljubljana: Ministry of the Environment and Spatial Planning, Environmental Agency of the Republic of Slovenia. Obtained at <http://kazalci.arslo.gov.si>.
- Komljenovič, J.; Ahčan, M.; Vidovič, A.; Turk, G.; Pejovnik, R. S. (2013). *Zaposlenost diplomantov Univerze v Ljubljani (Employment of higher education institutions' graduates)*. Ljubljana: University of Ljubljana.
- KPK Vestnik.* Various issues. (2014). Ljubljana: Commission for the Prevention of Corruption. Obtained at <http://www.kpk-rs.si>.
- Kraigher T., Ferk B. (2013). *Delovna projekcija prebivalstva Slovenije (Working Projection of the Population for Slovenia)*. IMAD Working Paper No. 3/2013. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Krajnc, N., Piškur, M. (2006). *Tokovi okroglega lesa in lesnih ostankov v Sloveniji (Roundwood and wood waste flow analysis for Slovenia)*. Ljubljana: Zbornik gozdarstva in lesarstva, No. 80.
- Labour market developments in Europe 2013.* (2013). European economy 6/2013. Brussels: European Commission.
- Lee, K. and Oh, W. (2006). *Analysis of CO2 emissions in APEC countries: a time-series and a cross-sectional decomposition using the log mean Divisia method.* Energy Policy, 34, 2779-87.
- Annual Report 2011.* (2013). Ljubljana: The Slovenian Intellectual Property Office. Obtained at: <http://www.uil-sipo.si>.
- Liu, N. and Ang, B.W. (2007). *Factors shaping aggregate energy intensity trend for industry: Energy intensity versus product mix.* Energy Economics, 29, 609-35.
- M. Rojec and A. Jaklič. (2012). *Slovenija kot lokacija za neposredne tuje investicije v očeh tujih investitorjev – 2013 (Foreign investors' perception of Slovenia as a suitable location for FDI)*. Faculty of Social Sciences.
- McAteer, N.; Mozuraltayte, N.; McDonald, N. (2012). *Ex-post Evaluation of 2012 European Capitals of Culture, Final report for the European Commission.* Birmingham: Ecorys UK Ltd.
- Measuring the Information Society.* (2013). Geneva: International Telecommunication Union.
- Medved, M. (2003). *Posestne razmere in pridobivanje lesa v zasebnih gozdovih (Property conditions and forest operations in private forests)*. Scientific treatise. Gozdarski vestnik: Slovenian professional journal for forestry, Vol. 61. Ljubljana: Association of Slovenian Forest Societies.
- Mesečne informacije.* December 2013. (2014). Ljubljana: Employment Service of Slovenia. Obtained at <http://www.ess.gov.si/>.
- Monthly Bulletin, November 2013.* (2013). Frankfurt: European Central Bank.
- Modernisation of the pension system.* (2014). Ljubljana: ZPIZ – Pension and Disability Insurance Institute of Slovenia. Obtained at <http://www.mddsz.gov.si/>.
- Ministry of Agriculture and the Environment – Press releases (2014). Obtained at: [http://www.mko.gov.si/si/medijsko\\_sredisce/sporocila\\_za\\_javnost/](http://www.mko.gov.si/si/medijsko_sredisce/sporocila_za_javnost/)
- Nastav, B. (2009). *Siva ekonomija v Sloveniji. Merjenje, vzroki in posledice (Shadow economy in Slovenia: Measurements, causes and consequences)*. Doctoral dissertation. Ljubljana: Faculty of Economics.
- Direct investments 2012. (2013). Ljubljana: Bank of Slovenia.

- Obseg škode in sanacija posledic žledoloma v slovenskih gozdovih (Extent and repair of ice damage in Slovenian forrests).* (2014). Press release – 19. 2. 2014. Ljubljana: Slovenia Forest Service. Obtained at <http://www.zgs.si/>.
- Ocena stanja korupcije 2013 (Assessment of the state of corruption 2013).* (2013). Ljubljana: Commission for the Prevention of Corruption. Obtained at <http://www.kpk-rs.si>.
- Decision No. 406/2009/EC on the effort of Member States to reduce their greenhouse gas emissions. (2013). Official Journal of the European Union, 140/136. The European Parliament and the Council.
- OECD Frascati Manual. Proposed Standard Practice for Surveys on Research and Experimental Development.* (2002). Paris: OECD.
- OECD Health Data 2013.* (2013). Paris: OECD. Obtained at <http://www.oecd.org/health/health-systems/oecdhealthdata.htm>.
- OECD Patent Patent Databases.* (2013). Paris: OECD. Obtained at <http://www.oecd.org>
- OECD Patent Statistics Manual.* (2009). Paris: OECD.
- OECD Product Market Regulation Database.* (2013). Paris: OECD. Obtained at <http://www.oecd.org/economy/pmr>.
- OECD Science, Technology and Industry Scoreboard 2013.* (2013). Paris: OECD.
- OECD Towards Green Growth: Monitoring Progress.* (2011). Paris: OECD.
- OHIM Web Page.* (2014). Alicante: OHIM. Obtained at <http://oami.europa.eu>.
- Oil bulletin. European Commission – Energy – Market observatory.* (2014). Obtained at <http://www.ec.europa.eu>.
- Opravljenno prometno delo 2002–2012 na državnih cestah v RS.* (2013). Ljubljana: DRSC.
- Outlon, N. (2012). *Long term implications of the ICT revolution: Applying the lessons of growth theory and growth accounting. Economic Modelling*, let. 29, str. 1722 – 1736.
- Instructional and professional support staff at higher education institutions and vocational colleges, Slovenia, 2012.* (2013). First Release, November 6, 2013, Ljubljana: Statistical Office of the Republic of Slovenia.
- Fifteenth Annual Survey on State Aid in Slovenia for 2010, 2011 and 2012* (2014). Ljubljana: Ministry of Finance.
- Philip R. Lane and Gian Maria Milesi – Ferretti. (2011). *External Adjustment and the Global Crisis*. Washington: International Monetary Fund. IMF Working Paper (WP/11/197).
- PISA 2009 Results: What students know and can do – Student performance in Reading, Mathematics and Science.* (2010). Paris: OECD.
- PISA 2012 Results: What students know and can do – Student performance in Reading, Mathematics and Science.* (2013). Paris: OECD.
- Podatki o številu zaposlenih zdravnikov in medicinskih sester za leto 2012 ter čakalnih dobah v letu 2013 (Data on the number of employed doctors and nurses for 2012 and waiting times in 2013). (2013). Ljubljana: National Institute of Public Health.
- Podatki o tokovih in stanju na trgu dela. Interni podatki (Data on flows and conditions on the labour market. Internal data).* (2014). Ljubljana: Employment Service of Slovenia.
- Politbarometer 9/2012.* (2012). Ljubljana: University of Ljubljana, Faculty of Social Sciences – Public Opinion and Mass Communication Research Centre. Obtained at: [http://www.cjm.si/?q=PB\\_rezultati](http://www.cjm.si/?q=PB_rezultati).
- Politbarometer 11/2013.* (2013). Ljubljana: University of Ljubljana, Faculty of Social Sciences – Public Opinion and Mass Communication Research Centre. Obtained at: [http://www.cjm.si/?q=PB\\_rezultati](http://www.cjm.si/?q=PB_rezultati).
- Data on drawing on the EU Cohesion Policy Funds 2007–2013.* (2013). Ljubljana: Ministry of Economic Development and Technology.
- Poročilo o emisijah TGP (Report on GHG emissions).* (2014). Ljubljana: Environmental Agency of the Republic of Slovenia.
- Poročilo o opravljenem delu Ministrstva za zdravje v mandatu 2008–2011. Internal papers.* (2012). Ljubljana: Ministry of Health.
- Poročilo o problematiki in dinamiki priprave državnih prostorskih načrtov s predlogi ukrepov za pospešitev postopkov njihove priprave.* (2013). Government paper No. 35007-1/2012-MOP/101-01011341 from 20.12. 2013. Ljubljana: Ministry of Infrastructure and Spatial Planning.
- Development Report 2013.* (2013). Ljubljana: Institute of Macroeconomic Analysis and Development.
- Poročilo o stanju na področju energetike v Sloveniji v letu 2012. (Report on the Energy Sector in Slovenia for 2012).* (2012). Ljubljana: AGEN-RS.
- Poročilo zavoda za gozdove Slovenije o gozdovih za leto 2012 (Report of the Forest Service of Slovenia for 2012).* (2013).
- Special release: GDP exhaustiveness adjustments and shadow economy, Slovenia 2010.* (2013). Ljubljana: Statistical Office of the Republic of Slovenia.
- Annual report of the Slovenian Intellectual Property Office.* (2014). Ljubljana: Institute of Macroeconomic Analysis and Development. Obtained at <http://www.uil-sipo.si>.
- Business Report for 2013* (2014). Delovno gradivo za sejo skupščine ZZS 25. 3. 2014 (Working material for the HII assembly meeting). Ljubljana: Health Insurance Institute of Slovenia.
- Predlog Zakona o visokem šolstvu (Draft Amendments to the Higher Education Act).* (2013). Ljubljana: Ministry of Education, Science and Sport.
- Predlogi nove cenovne politike na področju cestninjenja, Obrazložitev k predlogu novega cenika cestnine (Proposals of new price policy in the area of toll collection, Explanation of the proposal of the new toll price list).* (2013). Celje: DARS.

- Kindergartens, Slovenia, school year 2013/14 – final data.* (2009). (2014). Ljubljana: Statistical Office of the Republic of Slovenia.
- Program razvoja gozdom v Sloveniji (National Forest Development Programme).* (1996). Official Gazette of the Republic of Slovenia, No. 14/1996.
- Prva informacija o poslovanju javnih zdravstvenih zavodov, katerih ustanovitelj je RS, v letu 2013.* (2014). Ljubljana: Ministry of Health.
- Prvo poročilo o realizaciji ukrepov Enotnega dokumenta za boljše zakonodajno in poslovno okolje ter dvig konkurenčnosti (First report on the realisation of measures in the Single document to ensure better regulatory and business environment and increase competitiveness).* (2014). Ljubljana: Ministry of Internal Affairs
- Public opinion in the European Union.* (2013). Standard Eurobarometer 80. Brussels: European Commission. Obtained at: [http://ec.europa.eu/public\\_opinion/index\\_en.htm](http://ec.europa.eu/public_opinion/index_en.htm).
- Ravnotežni kazalnik konkurenčnosti za Slovenijo (Equilibrium competitiveness indicator for Slovenia).* (2013). Surveys and analyses 3/2013. Ljubljana: Bank of Slovenia.
- Rebernik, M. et al. (2011). *Podjetniška aktivnost, aspiracije in odnos do podjetništva: GEM Slovenija 2010.* Maribor: University of Maribor, Faculty of Economics and Business.
- Rebernik, M. et al. (2012). *Usihanje podjetništva v Sloveniji: GEM Slovenija 2011.* Maribor: University of Maribor, Faculty of Economics and Business.
- Rebernik, M. et al. (2013). *Nezaznane priložnosti: GEM Slovenija 2012.* Maribor: University of Maribor, Faculty of Economics and Business.
- Report on Public Finances in EMU 2013.* (2013). Brussels: European Commission.
- Report on Public Finances in EMU 2013.* (2013). Report on public finances in EMU 4/2013. Brussels: European Commission.
- Report on public finances in EMU 2013.* (2013.) European Economy 4/2013. Brussels: European Commission. Obtained at [http://ec.europa.eu/economy\\_finance/publications/european\\_economy/2013/pdf/ee-2013-4.pdf](http://ec.europa.eu/economy_finance/publications/european_economy/2013/pdf/ee-2013-4.pdf).
- Resolucija o nacionalnem gozdnem programu (Resolution on the National Forest Programme).* (2007). Official Gazette of the Republic of Slovenia, No. 111/2007.
- Resolucija o Nacionalnem programu izobraževanja odraslih v Republiki Sloveniji za obdobje 2013–2020 (Resolution on the Master Plan for Adult Education in the Republic of Slovenia from 2013 to 2020).* (2013). Ljubljana: Official Gazette of the Republic of Slovenia, No. 90/2013.
- Resolution on National Plan of Health Care 2014–2017 (Resolution on the 2014–2017 National Programme for Culture).* (2013). Official Gazette of the Republic of Slovenia, No. 99/2013.
- Rojec, M. (2013). *A note on the ownership structure and related trends of Slovenian corporate sector.* Ljubljana: Faculty of Social Sciences.
- Schwan A., Sail E. (2013). *Assessing the economic and budgetary impact of retirement ages and pension benefits to increases in longevity.* European Economy. Economic Papers 512. Brussels: European Commission.
- SI-STAT Data Portal.* (2014 and 2014). Ljubljana: Statistical Office of the Republic of Slovenia. Obtained at: <http://www.stat.si/>.
- Social Climate.* (2013). Special Eurobarometer 391. Brussels: European Commission.
- Socio-economic Characteristics of International Migrants, detailed data, Slovenia, 2012 – final data.* (2013). Ljubljana: Statistical Office of the Republic of Slovenia. Obtained at: [http://www.stat.si/novica\\_prikazi.aspx?id=5226](http://www.stat.si/novica_prikazi.aspx?id=5226).
- Sodna statistika 1 – 9 2012 (Judicial Statistics).* (2013). Ljubljana: Ministry of Justice and Public Administration.
- Sofinanciranje šolnin odraslim* (2013). Ljubljana: Slovene Human Resources Development and Scholarship Fund. Obtained at: <http://www.sklad-kadri.si/si/razvoj-kadrov/sofinanciranje-solnin-odraslim-zip/>.
- State Aid Scoreboard.* (2013). Brussels: European Commission. Obtained at [http://ec.europa.eu/competition/state\\_aid/studies\\_reports/studies\\_reports.html](http://ec.europa.eu/competition/state_aid/studies_reports/studies_reports.html).
- Rapid reports: Expenditure for formal education, Slovenia, 2005–2008 – final data.* (2011). Ljubljana: Statistical Office of the Republic of Slovenia.
- Rapid Reports: Expenditure for formal education, Slovenia, 2007–2010 – final data.* (2012). Ljubljana: Statistical Office of the Republic of Slovenia.
- Rapid Reports: Expenditure for formal education, Slovenia, 2011 – final data.* (2013). Ljubljana: Statistical Office of the Republic of Slovenia.
- Rapid Reports: Expenditure for formal education.* (2009). Ljubljana: Statistical Office of the Republic of Slovenia.
- Statistical Yearbook of the Republic of Slovenia* (various volumes 2009–2013). (2009–2013). Ljubljana: Statistical Office of the Republic of Slovenia.
- Statistical data from the balance sheets and profit and loss statements for 1995–2012.* (1996–2013). Ljubljana: Agency of the Republic of Slovenia for Public Legal Records and Related Services.
- Statistical Insurance Bulletin 2013.* (2013). Ljubljana: Slovenian Insurance Association.
- At-risk-of-poverty and material deprivations rates in 2012.* Slovenian Economic Mirror, September 2013, No. 9, Vol. XIX. Ljubljana: Institute of Macroeconomic Analysis and Development.
- Strategija pametne specializacije 2014–2020 (Smart specialisation strategy 2014–2020).* (2013). Ljubljana: Ministry of

- Economic Development and Technology. Obtained at [http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/svlr/KOHEZIJA/Strategija\\_pametne\\_spezializacije/](http://www.mgrt.gov.si/fileadmin/mgrt.gov.si/pageuploads/svlr/KOHEZIJA/Strategija_pametne_spezializacije/).
- Statistical Office of the Republic of Slovenia. Household Budget Survey, detailed data, Slovenia, 2012 – final data. (2013). Ljubljana: Statistical Office of the Republic of Slovenia. Obtained at: [http://www.stat.si/novica\\_prikazi.aspx?id=5979](http://www.stat.si/novica_prikazi.aspx?id=5979).
- The 2013 update of the OECD product market regulation indicators: policy insights for OECD and non-OECD countries.* (2013). Paris: OECD, Working Party No. 1 on macroeconomic and structural policy analysis.
- The Global Competitiveness Report.* (Various volumes). Geneva: World Economic Forum.
- The Shadow Economy in Europe, 2013.* (2013). AT Kearney, VISA and Johannes Kepler Institute Linz.
- The Unesco 2009 framework for cultural statistics.* (2009). Montreal: Unesco. Obtained at [http://www.uis.unesco.org/Library/Documents/FCS09\\_EN.pdf](http://www.uis.unesco.org/Library/Documents/FCS09_EN.pdf).
- The World Competitiveness Yearbook.* (Various issues). Lausanne: Institute for Management Development.
- Trends and projections in Europe 2013 – Tracking progress towards Europe's climate and energy targets until 2020.* (2013). Copenhagen: EEA.
- UNCTAD World Investment Report. Annex Tables.* (2013). Ženeva: UNCTAD. Obtained at: <http://unctad.org/en/pages/DIAE/World%20Investment%20Report/Annex-Tables.aspx>.
- United Nations Framework Convention on Climate Change – GHG data.* (2013). Bonn: United Nations. Obtained at <http://unfccc.int>.
- Uredba o izvajanju ukrepov endogene regionalne politike (Decree on implementation of endogeneous regional policy).* (2013). Official Gazette of the Republic of Slovenia, Nos. 24/16 and 16/2013.
- Uredba o spremembah in dopolnitvah Uredbe o javnem financiranju visokošolskih in drugih zavodov, od leta 2004 do leta 2008 (Amendments and Supplements on Decree on the Public Financing of Higher Education and Other Institutions, University Members, 2004–2008.* (2009). Ljubljana: Official Gazette of the Republic of Slovenia, No. 132/2006.
- Uspešnost varovanja kmetijskih zemljišč kot pogoj za samooskrbo. Revizijsko poročilo (Successful protection of agricultural land as a condition for self-sufficiency. Audit report).* (2013). Ljubljana: Court of Audit of the RS.
- Vrščaj, B. (2013). *Kaj pove preteklost?* Published in: *Podeželska krajina kot razvojni potencial. Zbornik prispevkov posveta Društva krajinskih arhitektov Slovenije.* Ljubljana: Slovenian Association of Landscape Architects.
- World Bank Governance Indicators.* (2012). Washington: World Bank. Obtained at <http://info.worldbank.org/governance/wgi/index.asp>.
- Zakon o davku na nepremičnine (Real Property Tax Act).* (ZDavNepr). (2013). Ljubljana: Official Gazette of the Republic of Slovenia, No. 101/2013..
- Zakon o finančnem poslovanju, postopkih zaradi insolventnosti in prisilnem prenehanju (Financial Operations, Insolvency Proceedings and Compulsory Dissolution Act).* (2014). Ljubljana: Official Gazette of the Republic of Slovenia, No. 13/2014.
- Zakon o izvrševanju proračunov RS za leti 2014 in 2015 (Implementation of the Republic of Slovenia Budget for 2014 and 2015 Act).* (2013). Ljubljana: Official Gazette of the Republic of Slovenia, No. 101/2013.
- Zakon o kmetijskih zemljiščih (Agricultural Land Act).* (2011). Official Gazette of the Republic of Slovenia, No. 71/2011.
- Zakon o pokojninskem in invalidskem zavarovanju (Pension and Disability Insurance Act).* (2012). Ljubljana: Official Gazette of the Republic of Slovenia, No. 96/2012.
- Zakon o spodbujanju skladnega regionalnega razvoja (Promotion of Balanced Regional Development Act).* (2011). Official Gazette of the Republic of Slovenia, No. 20/2004.
- Zakon o spremembah in dopolnitvah Zakona o višjem strokovnem izobraževanju (Act Amending the Post-Secondary Vocational Education Act).* (ZVSI-A). Ljubljana: Official Gazette of the Republic of Slovenia, No. 100/2013.
- Zakon o spremembah in dopolnitvah Zakona o vrtcih (Act Amending the Pre-School Institutions Act).* (2008). Ljubljana: Official Gazette of the Republic of Slovenia, No. 25/2008.
- Zakon o spremembah in dopolnitvi zakona o kmetijskih zemljiščih (Act Amending the Agricultural Land Act).* (2012). Official Gazette of the Republic of Slovenia, No. 58/2012.
- Zakon o šolski prehrani (School Meals Act).* (2010). Ljubljana: Official Gazette of the Republic of Slovenia, No. 43/2010.
- Zakon o štipendiranju (Scholarship Act).* (2013). Ljubljana: Official Gazette of the Republic of Slovenia, No. 56/2013.
- Zakon o uveljavljanju pravic iz javnih sredstev (Exercise of Rights to Public Funds Act).* (2010). Ljubljana: Official Gazette of the Republic of Slovenia, No. 62/2010.
- Zakon o vrtcih (Pre-School Institutions Act).* (1996). Ljubljana: Official Gazette of the Republic of Slovenia, No. 12/1996.
- Zakon za uravnoteženje javnih financ (Fiscal Balance Act).* (2012). Ljubljana: Official Gazette of the Republic of Slovenia, No. 40/2012.
- Zalc, Julien. (2012). *European Public Opinion: Is this the end of pessimism?* European Issues N0290. Policy Paper. Foundation Robert Shuman.
- Zdravstveni statistični letopis (Health Statistics Yearbook).* (Various volumes). Ljubljana: National Institute of Public Health. Obtained at <http://www.ivz.si/Mp.aspx?ni=202>.
- Zhong Xiang Zhang. (2001). *The Relative Importance of Structural Change and Intensity Change. Why Did the Energy Intensity Fall in China's Industrial Sector in the 1990?* (2000). Joint Meeting of the Energy Modeling Forum and the International Energy Workshop, Stanford University.



# **III. appendix**



## Calculation of a synthetic estimate of development according to SDS priorities

***The synthetic estimate of Slovenia's development based on selected indicators complements the Development Report's expert approach with a quantitative analysis.*** The calculation of a synthetic estimate enables an international time-series comparison of a country's development based on selected indicators without subjective evaluation. The two main difficulties of this approach relate to the selection of indicators, which is significantly limited by data availability, and even more by the fact that numerically measurable indicators cannot capture all the important dimensions and factors of development. A synthetic estimate thus arrived at should therefore only be used to complement other development estimation methods.

***The purpose of calculating a synthetic development estimate is to quantify development according to the priorities of SDS with regard to selected indicators.*** Several indicators are available for each priority, with different measures that are not directly comparable. There are generally no predetermined optimum indicator values to enable evaluation of Slovenia's divergence in terms of development. Slovenia's development is therefore assessed in relative terms as compared to other countries. In practice, evaluation with regard to the deviation of a specific indicator from the average and a (weighted) aggregate of points attained by indicators are often used for this purpose.

***The synthetic estimate of development according to individual SDS priorities and problem sets has been calculated by employing a standardised continuous scoring system.***<sup>1</sup> This means that the value of the considered indicator is standardised by the mean<sup>2</sup> and standardised deviation and multiplied by ten. To reduce the influence of extreme values, points are limited to three standard deviations ( $\pm 30$ ). Zero points in a particular indicator mean that its value equals the EU average, and 10 points that it exceeds the average by one standard deviation. To ensure that SDS policy areas are evenly covered, in adding

<sup>1</sup> Expressed as an equation:  $((\text{indicator value} - \text{EU average}) / \text{standard deviation}) * 10$ . This is a slightly adapted version of the methodology developed by the Lisbon Methodology Working Group (LIME) operating within the Economic Policy Committee (EPC).

<sup>2</sup> Unweighted average of indicator values for selected countries.

the points some indicators were first merged by averaging the point values for individual indicators. Using selected indicators, the synthetic development estimate was calculated at two levels: first, at the level of specific problem sets within each priority, and second, at the level of development priorities. The synthetic estimate of development within a particular priority is the sum of points of all development indicators of that priority. Our estimate covers the period 2007–2012 and is presented in comparison with other European Union Member States.<sup>3</sup> The selection of indicators (see Table 1), which at the same time defines development by particular priorities and problem sets, complies with the required model criteria regarding data completeness for the analysed period and the countries compared. For some indicators, data for the last year were unavailable, and therefore the values of the previous year were used.

***The calculated synthetic estimate of development has a number of constraints which must be taken into account in its interpretation.*** Advantages of the methodology used to calculate the synthetic estimate of development mainly lie in the reduction of subjective evaluation. Its chief disadvantage, however, is on the side of data: although trying to select maximally suitable indicators for each priority,<sup>4</sup> we are limited by data (un)availability, as some SDS areas are not covered by adequate internationally comparable indicators; furthermore, the development estimate is influenced by the selection of indicators and countries compared. Hence, the calculated estimate does not necessarily fully reflect development in a particular priority or its problem set. Caution should also be exercised in interpreting the results due to the varied number of indicators for individual priorities, and in some cases also due to their quality and explanatory value. We should also bear in mind that because of the nature of the method applied, the development estimate may also vary due to changes in the other countries observed and not just because of better or poorer results for Slovenia. Since the definition of development, which may differ according to country, is determined by the selection of indicators which partly depends on data availability, the rankings of other countries must be seen exclusively from the perspective of Slovenia's own development goals. The use of the synthetic development estimate is thus only appropriate taking into account all the above constraints, i.e. only as a complement to the expert approach assessing Slovenia's realisation of SDS goals.

<sup>3</sup> For a number of indicators, data for 2012 are not available for all EU countries. Bulgaria, Cyprus, Malta and Romania were excluded from the analysis due to incomplete data, while Luxembourg was excluded due to its specificity.

<sup>4</sup> To cover as broad a dimension of development as possible, we also used some indicators that may not necessarily show a priority's development, but come closest to this from among the available sets of data.

Table: Synthetic estimate of development according to priorities and problem sets within each priority, and the number of points assigned to individual indicators, Slovenia, 2007–2012 (10 points in an individual indicator means one standard deviation from the EU average)

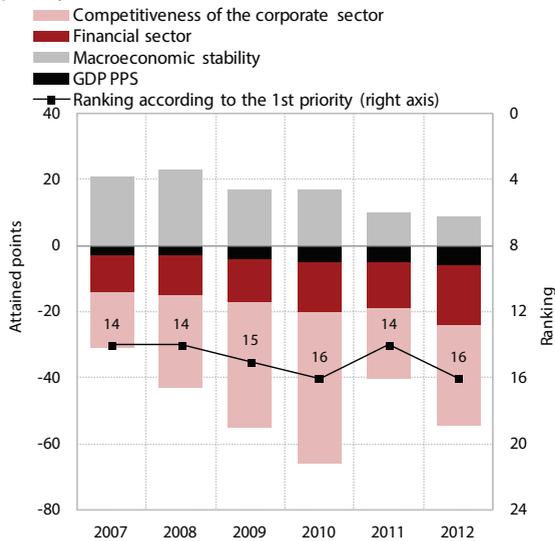
Indicator	2007	2008	2009	2010	2011	2012
<b>1<sup>st</sup> priority</b>	<b>-10</b>	<b>-20</b>	<b>-38</b>	<b>-49</b>	<b>-30</b>	<b>-45</b>
GDP PPS	-3	-3	-4	-5	-5	-6
GDP per capita in PPS	-3	-3	-4	-5	-5	-6
<b>Macroeconomic stability</b>	<b>21</b>	<b>23</b>	<b>17</b>	<b>17</b>	<b>10</b>	<b>9</b>
Real GDP growth	8	11	-4	-2	-4	-9
Inflation	-2	-1	2	-2	13	1
General government balance, % of GDP	2	1	2	2	-6	1
General government debt, % of GDP	8	10	9	9	7	6
Balance of payments, % of GDP	0	-2	-1	0	2	7
Gross external debt, % of GDP	5	5	5	5	5	5
Cyclically adjusted general government balance, % of GDP	-1	-3	1	1	-8	0
Government bond yields (Eurostat)	1	2	3	4	1	-2
<b>Financial sector</b>	<b>-11</b>	<b>-12</b>	<b>-13</b>	<b>-15</b>	<b>-14</b>	<b>-18</b>
Total assets of banks, % of GDP	-7	-7	-7	-7	-8	-8
Loan-to-deposit ratio	1	0	1	0	1	0
Insurance premiums, % of GDP	-3	-2	-2	-2	-1	-3
Market capitalisation, % of GDP**	-2	-3	-5	-6	-6	-7
<b>Competitiveness and entrepreneurial development</b>	<b>-17</b>	<b>-28</b>	<b>-38</b>	<b>-46</b>	<b>-21</b>	<b>-30</b>
Labour productivity	-5	-5	-7	-7	-7	-7
Market share	8	-4	-1	-7	-2	-8
Unit labour costs	8	1	-9	-14	3	-3
Share of high-tech products in total goods exports	-5	-4	-3	-4	-3	-2
Exports and imports as a share of GDP	9	8	6	6	6	6
Outward foreign direct investment, % of GDP (a)	-6	-6	-6	-6	-6	-7
Inward foreign direct investment, % of GDP (b)	-7	-6	-7	-7	-6	-6
Knowledge-intensive non-financial market services as a share of GDP	2	3	1	5	5	5
Share of other services in exports of goods and services	-7	-6	-7	-7	-7	-6
Market shares in network industries – mobile telephony (a)	-30	-30	-23	-21	-19	-16
Market shares in network industries – electricity (b)	-10	1	0	-2	-1	-1*
<b>2<sup>nd</sup> priority</b>	<b>-44</b>	<b>-36</b>	<b>-27</b>	<b>-18</b>	<b>-12</b>	<b>-9</b>
<b>Education and training</b>	<b>-17</b>	<b>-18</b>	<b>-9</b>	<b>-8</b>	<b>-11</b>	<b>-11</b>
Share of population with a tertiary education	-5	-5	-4	-3	-4	-4
Public expenditure on education, % of GDP	0	-1	0	0	0*	0*
Expenditure on educational institutions per pupil/student, compared to GDP per capita	-12	-11	-3	-3	-3*	-3*
Participation in education, population aged 25–64	0	-1	-2	-2	-4	-4*
<b>Research and development, innovation and use of ICT</b>	<b>-27</b>	<b>-18</b>	<b>-18</b>	<b>-10</b>	<b>-1</b>	<b>2</b>
Gross domestic expenditure on R&D, % of GDP	-2	0	1	3	6	8
Number of researchers in FTE per 1,000 inhabitants	0	0	1	1	4	4
Science and technology graduates per 1,000 inhabitants	-9	-8	-8	-1	4	4*
Number of patent applications to the EPO, per million inhabitants	-4	-3	-4	-3	-4	-5
Internet use, share of internet users aged 16–74	-6	-4	-2	-6	-6	-4
Number of Community trademark applications with the OHIM, per 1,000 inhabitants	-6	-1	-5	-3	-8	-5
Number of registered Community designs with the OHIM per 1,000 inhabitants	-6	-5	-6	-4	-2	-5
<b>3<sup>rd</sup> priority</b>	<b>15</b>	<b>-11</b>	<b>-15</b>	<b>-33</b>	<b>-25</b>	<b>-29</b>
<b>Quality of public finance</b>	<b>-2</b>	<b>-1</b>	<b>-9</b>	<b>-16</b>	<b>-5</b>	<b>-12</b>
General government expenditure according to economic classification – general government, % of GDP (a)	1	1	1	1	-4	-1
General government expenditure according to economic classification – capital transfers and investment, % of GDP (b)	6	6	6	-1	8	-5
Economic structure of taxes and contributions – total burden of taxes and contributions, % of GDP (a)	1	1	0	-1	0	0
Economic structure of taxes and contributions – tax burden on labour, % of GDP (b)	-2	-1	-1	-3	-2	-2*
General government subsidies, % of GDP	-6	-5	-9	-11	0	0*
State aid – total, % of GDP	2	1	-6	-5	-11	-15
<b>Institutional competitiveness</b>	<b>-7</b>	<b>-5</b>	<b>-3</b>	<b>-13</b>	<b>-16</b>	<b>-13</b>
Institutional competitiveness (IMD)	-7	-5	-3	-13	-16	-13
<b>Efficiency of the judiciary</b>	<b>-6</b>	<b>-5</b>	<b>-3</b>	<b>-4</b>	<b>-4</b>	<b>-4</b>
Rule of law (World Bank)	-6	-5	-3	-4	-4	-4
<b>4<sup>th</sup> priority</b>	<b>13</b>	<b>8</b>	<b>19</b>	<b>4</b>	<b>-6</b>	<b>-6</b>
<b>Labour market</b>	<b>11</b>	<b>12</b>	<b>19</b>	<b>16</b>	<b>8</b>	<b>6</b>
Employment rate	2	2	4	4	0	0
Unemployment rate	8	10	10	8	5	4
Long-term unemployment rate	3	3	7	5	4	4
Part-time employment (a)	-6	-6	-6	-5	-7	-8
Temporary employment (b)	7	6	7	8	7	7
Share of self-employed people (c)	-7	-8	-6	-5	-2	-5
<b>Modernisation of social protection systems</b>	<b>-6</b>	<b>-8</b>	<b>-7</b>	<b>-16</b>	<b>-14</b>	<b>-16</b>
Social protection expenditure, % of GDP	-2	-4	-4	-3	-2	-2*
At-risk-of-poverty rate of the population older than 65	0	-1	-1	-10	-11	-12
Public and private expenditure on health, % of GDP	-4	-3	-2	-3	-1	-2
<b>Material living conditions</b>	<b>8</b>	<b>4</b>	<b>7</b>	<b>4</b>	<b>0</b>	<b>4</b>
Material deprivation rate	3	0	1	2	2	3
Number of doctors and nurses, per 1,000 inhabitants	-11	-11	-11	-12	-12	-12*
Life satisfaction	7	6	6	5	4	5
Population in jobless households	9	9	11	9	6	8
<b>5<sup>th</sup> priority</b>	<b>-5</b>	<b>9</b>	<b>12</b>	<b>6</b>	<b>5</b>	<b>7</b>
<b>Environmental criteria</b>	<b>-14</b>	<b>-18</b>	<b>-9</b>	<b>-10</b>	<b>-14</b>	<b>-11</b>
Implicit tax rate on energy consumption	0	0	5	4	2	4
Emission intensive industries, share in total manufacturing	-8	-7	-7	-6	-6	-6*
Energy intensity	-1	-2	-2	-2	-4	-4
Renewable energy sources in primary energy consumption	2	1	2	2	2	2
Share of road freight transport in total freight transport	-3	-4	-4	-4	-4	-4*
Agricultural intensity – use of NPK fertilisers per hectare of cultivated agricultural area (a)	-3	-8	-2	-2	-3	-3*
Agricultural intensity – share of controlled areas with organic farming (b)	1	0	-1	-2	-1	-1
Agricultural intensity – average yield of wheat (c)	4	5	5	1	-1	-2
Share of municipal waste that is not landfilled	-5	-5	-4	-3	-2	-1
<b>Sustained population growth</b>	<b>4</b>	<b>17</b>	<b>12</b>	<b>5</b>	<b>9</b>	<b>8</b>
Old-age dependency ratio	4	3	3	4	5	5
Life expectancy (M) (a)	0	1	1	2	2	2
Life expectancy (F) (b)	3	4	4	4	4	4
Fertility rate	-8	-4	-3	-2	-1	0
Migration coefficient	6	15	9	0	2	0
<b>Culture</b>	<b>5</b>	<b>10</b>	<b>9</b>	<b>11</b>	<b>10</b>	<b>10</b>
Household expenditure on culture, % of GDP (a)	7	6	2	2	1	0
Household expenditure on culture, % of GDP (b)	3	14	16	19	19	19*

Source: Calculations by IMAD.

Note: Values marked with an asterisk are calculations according to IMAD estimates based on data from previous years, while letters designate indicators that are combined into a new indicator in the calculation.

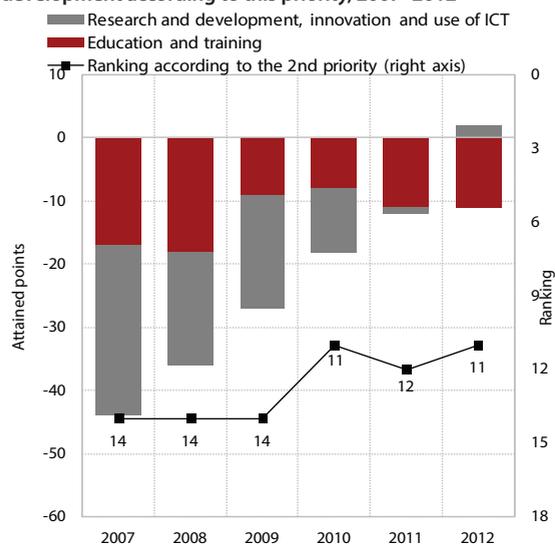
\*\* Due to the limited availability of data, the "market capitalisation" indicator covers fewer countries. Because of its importance for the "Financial market" component, it has been taken into account in the calculations even though it does not reach the required standards for the completeness of data.

**Figure 1: Synthetic estimate of Slovenia's development in the 1st priority (A competitive economy and faster economic growth) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2007–2012**



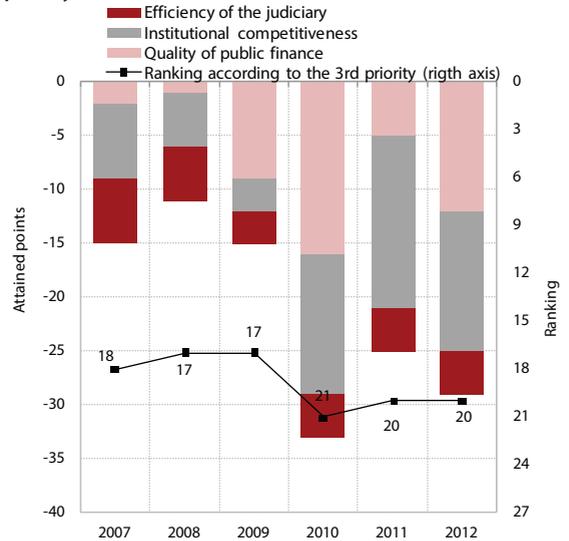
Source: Calculations by IMAD.  
Note: The columns show the points (development estimate) attained according to individual components, where a positive value means above-average development relative to the EU countries included in the analysis. Zero points for a component would therefore mean that in terms of development in this component Slovenia is equal to the average of countries included in the analysis, and a negative value that Slovenia lags behind the average in a certain year.

**Figure 2: Synthetic estimate of Slovenia's development in the 2nd priority (Efficient use of knowledge for economic development and high-quality jobs) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2007–2012**



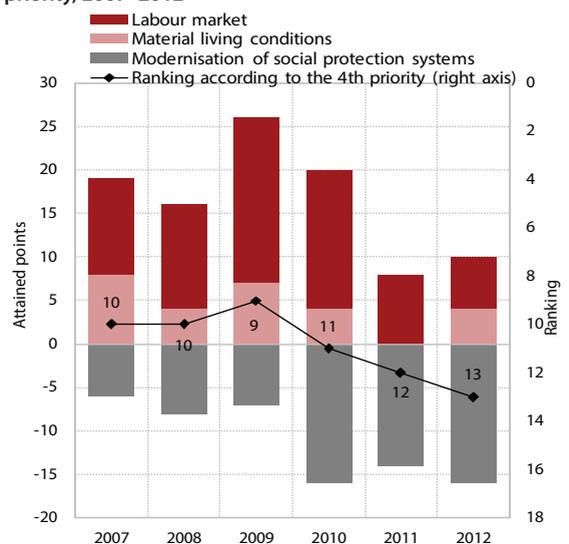
Source: Calculations by IMAD.  
Note: See Figure 1.

**Figure 3: Synthetic estimate of Slovenia's development in the 3rd priority (An efficient and more economical state) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2007–2012**



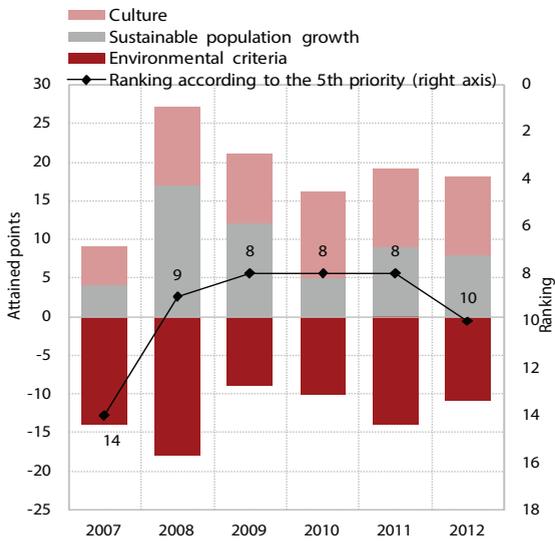
Source: Calculations by IMAD.  
Note: See Figure 1.

**Figure 4: Synthetic estimate of Slovenia's development in the 4th priority (A modern welfare state and higher employment) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2007–2012**



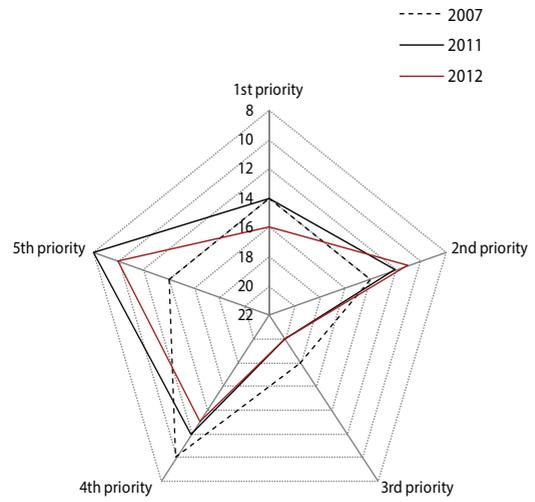
Source: Calculations by IMAD.  
Note: See Figure 1.

Figure 5: Synthetic estimate of Slovenia's development in the 5th priority (Integration of measures to achieve sustainable development) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2007–2012



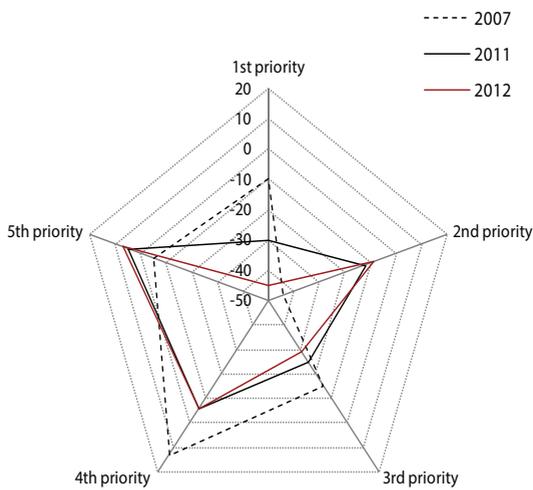
Source: Calculations by IMAD.  
Note: See Figure 1.

Figure 7: Slovenia's ranking among 22 EU Member States according to the five priorities of Slovenia's Development Strategy, 2007, 2011, 2012



Source: Calculations by IMAD.

Figure 6: Synthetic development estimate according to SDS priorities, 2007, 2011, 2012



Source: Calculations by IMAD.

# development report 2014