IMAD

development report 2012

Development Report 2012 (Poročilo o razvoju 2012)
ISSN 1581-6907
Ljubljana, november 2012

Published by: IMAD, Ljubljana, Gregorčičeva 27
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Contents

Introductory remarks

The Development Report is a document, in which we monitor the realisation of Slovenia's Development Strategy (SDS 2005–2013) *and comment on the implementation of current international strategic goals, which are also binding for Slovenia.* SDS, adopted by the Slovenian Government in June 2005, sets out the vision and objectives of Slovenia's development until 2013, classifying them into five development priorities. This year's report presents an overview and an assessment of the implementation of the strategy from its adoption up to 2011, except in cases where the latest data are only available for earlier years (2010, and rarely, 2009). It also comments on the implementation of the Europe 2020 goals (A European Strategy for Smart, Sustainable, and Inclusive Growth), to which Slovenia committed itself at the national level. In interpreting the findings of the Development Report, we take into account that the starting points for some of these goals have changed substantially both in the EU and in Slovenia because of the economic crisis, which broke out at the end of 2008. In certain areas SDS goals can therefore no longer be achieved. Our analyses and findings are therefore primarily focussed on movements in the period from the beginning of the crisis in comparison with other countries and the most recent guidelines at the level of the EU. The analysis therefore also includes a set of indicators for detection of excessive imbalances at the EU level, the results of which were first released at the beginning of 2012. The Slovenian Government took note of the Development Report 2012 at its 11th regular session of 19 April 2012 and accepted it as an analytical basis for its economic and development policies.

The Development Report is divided into two parts: Part I presents an overview of the implementation of SDS across the five development priorities; Part II documents progress by means of development indicators. The findings in the report are mostly based on results obtained through the set of indicators that were designed to monitor development. We have also consulted other sources (national and international research, reports on the implementation of sectoral strategies and programmes), particularly in areas where no relevant indicators were available due to a shortage of data. The appendix contains a quantitative aggregate assessment of development, which supplements the expert approach of the Report, although it cannot replace a comprehensive assessment of progress in individual areas due to the time and geographical limitations in the availability of data necessary for calculation.

In a period of economic crisis, some development indicators should be interpreted with caution, as their values were significantly affected by the contraction of gross domestic product. These are indicators that are expressed in terms of gross domestic product (as a share of GDP) for the purposes of benchmarking between countries and over time. However, in a period of strong short-term fluctuations of economic activity, they are under a significant impact of changes in gross domestic product, which must be taken into account in analysing changes in their value over time and in comparison with other countries that did not experience such fluctuations in the analysed period. In this year's report, we therefore also highlight changes in absolute values of these indicators for the year.

The Report is based on official statistical data of domestic and foreign institutions available by the beginning of April 2012. In the analysis, Slovenia was mostly compared with the 27 EU Member States, and only as a matter of exception with the EU-25 average, whenever data for the newest EU Member States, Bulgaria and Romania, were not yet available. The terms "European average" or "EU average" thus refer to the group of EU-27 countries; the term "old Member States" means the EU-15 group, whereas the EU-12 countries that joined the European Union after the latest enlargement rounds in 2004 and 2007 are referred to as the "new Member States".

Main findings

In recent years Slovenia has been moving away from its strategic targets related to economic development and the welfare of the population and there have been no substantive shifts towards a sustainable reduction of the environmental burden. The decline of economic activity in Slovenia since the beginning of the economic crisis was among the largest in the EU, so that Slovenia dropped from 91% to 85% of the EU average in terms of economic development in 2010 (measured as GDP per capita in purchasing power standards). The widening of the development gap also continued in 2011, according to our estimate. Despite the measures aimed at mitigating the impact of the economic crisis on the social situation of the population, the deterioration of economic conditions led to a decline in disposable income and hence the material welfare of the population. Environmental burden has been temporarily alleviated particularly due to the decline in economic activity and a consequent reduction of energy consumption, but the indicators of greenhouse gas emissions and energy consumption per unit of GDP show no major improvement.

The setback in development is a result of structural weaknesses of the economy and a significant deterioration in access to finance. The economic crisis exposed the structural weaknesses of Slovenia's economy, which are reflected in a relatively low level of technology intensity and added value of goods and services. Insufficient emphasis on technological restructuring and innovation activities in the previous decade, ineffective corporate governance as a result of the state still playing a predominant role in the economy, and a sluggish improvement of the business environment (administrative burden, labour market rigidity, high tax burden on labour) reduced the competitive edge of Slovenia's economy. Consequently, Slovenia's share on the global market has declined since the beginning of the crisis. Meanwhile, the ineffectiveness of the financial sector, especially the predominantly state-owned banks, has become a major issue, which is largely related to the inadequate allocation of funds in the past. Along with the high level of corporate sector indebtedness, this has significantly limited the access of Slovenian enterprises to banks' sources of finance, which are, given the poorly developed capital market and insufficient volume of foreign investment practically the sole source of corporate financing. In the last year, the strongly deteriorated fiscal situation has, through its impact on interest rates, also become an increasingly important inhibitory factor in economic recovery. The aggravated labour market conditions and emergency measures adopted to solve public finance problems led to a decline in all main groups of household income and hence a drop in real disposable income. In the medium term, the welfare of the population is also jeopardised by the absence of measures that would adjust social protection systems to the ageing population.

Economic and social conditions call for sustainable fiscal consolidation and laying sound foundations for a rebound of economic activity that will be more resilient to shocks and will facilitate job creation. Without structural adjustments the development gap will deepen and labour market conditions will remain tight, which will affect the quality of life. The measures should therefore focus on:

- **Fiscal consolidation**, which will lay the foundations for economic recovery by improving access to finance. It should be carried out in a way that will least impede economic growth and will be geared towards improving competitiveness. The redistribution of tax burdens should also pursue the guidelines for sustainable development.
- **Sorting out the situation in the financial sector** by increasing the capital position of the banking system through strategic private investors. It is also necessary to create an environment, in which equity capital will play a greater role in financing the corporate sector.
- **Adjustment of social protection systems** (pension and health-care, and long-term care systems) **and the modes of public service provision**, which will, in the circumstances of financial and demographic changes, preserve at least the present levels of access to public services, material standard and quality of life.
- **Increasing value added** by boosting the drivers of innovative capacity and human capital and creating an environment conducive to business operations. Amid sufficient investment in R&D and innovation activities and education, we should focus on increasing their effectiveness. Another important aspect of increasing value added is introduction of technologies for improving energy and material efficiency and reducing the emission intensity of the economy.
- **Improvement of the labour market situation**: In addition to measures boosting economic activity, changes in labour market regulations and measures encouraging transition to employment by active labour market policies are necessary to facilitate a more pronounced increase in employment during the recovery.

Summary

SDS guidelines: Slovenia's Development Strategy (SDS) defines four key development goals: (i) the economic development goal – to reach the average level of economic development in the EU in 10 years[1] ; (ii) the social development goal – to improve the quality of life and welfare; (iii) the intergenerational and sustainable development goal – to apply the principles of sustainability across all areas of development, including sustained population growth; and (iv) Slovenia's development goal in the international environment – to become an internationally distinctive and renowned country.

[1] As at the time of the adoption of SDS (2005), the most recent figures for GDP per capita in purchasing-power parity were available for 2003, Slovenia's objective to achieve the average level of economic development in the EU in 10 years thus refers to 2013.

Slovenia has been moving further away from the EU average in terms of economic development ever since 2008, and in 2010 its gap to the EU average was even wider than at the beginning of the implementation of SDS in 2005. In recent years Slovenia has moved away from the realisation of the principal economic goal of SDS (to reach the average level of GDP per capita in PPS in the EU by 2013), and this shift is not just temporary. The economic slowdown is largely a consequence of structural weaknesses, which are reducing the competitive position of Slovenia's economy and are a result of postponing the privatisation of the economy and the implementation of key structural reforms in the past. After a substantial contraction of GDP in 2009, Slovenia thus continued to move away from the average level of economic development in the EU in 2010 and 2011. According to the most recent Eurostat data, Slovenia's GDP per capita (in purchasing power standards) dropped to 85% of the EU average in 2010, and we estimate that, taking into account the stagnation of economic activity in Slovenia, the gap widened further in 2011. Between 2008 and 2010, the development gap increased (by 6 p.p.) more than it decreased in the period from the beginning of the implementation of SDS to 2008 (by 4 p.p.), so that Slovenia will not even be able to meet the set goal in the medium-term.

The reasons why after the significant decline of GDP at the beginning of the crisis there has been no serious economic recovery mainly stem from the domestic environment. Domestic demand has been shrinking ever since the onset of the economic crisis. In 2010 and 2011 economic activity thus relied only on the growth of exports, but this lagged behind growth in Slovenia's main trading partners due to deteriorating competitiveness. Besides the low level of technology intensity of products and services as a result of delayed implementation of key structural reforms that would increase the productivity of the economy, the possibilities for faster economic growth are also hampered by the inefficiency of the financial sector and high corporate indebtedness. The access of the corporate sector to finance is therefore still highly limited. In 2011 it was aggravated further due to the deterioration of the quality of domestic banks' assets (increase in the share of bad claims), expiration of guarantee schemes for banks' borrowing abroad, modest inflows of domestic resources to banks and further tensions on international financial markets. Slovenia's fiscal position has also worsened dramatically since the beginning of the economic crisis. In 2009 the deterioration was largely related to the economic crisis, but in the absence of adequate systemic fiscal consolidation measures, the general government deficit also remained high in 2010 and 2011, which is becoming a more and more important obstacle to economic recovery due to the impact on interest rates.

The economic crisis exposed the impact of factors that reduce the competitive edge of Slovenia's economy and exports. The decline in Slovenia's share on foreign markets, which is one of the indicators of export competitiveness, was among the largest in the EU in 2008–2010. This period was also characterised by a strong increase in cost pressures on competitiveness, which, except in 2009 (a drop in productivity), mainly resulted from wage growth. In 2011 positive moves were seen in both export and cost competitiveness, but given the strong initial deterioration, the competitive position of Slovenia's economy has not improved much yet. The main weakness of the competitiveness of Slovenia's economy is relatively low productivity (in none of the sectors value added per employee exceeds the EU average), which can only be improved by strong structural changes. The level of technology intensity of exported products continues to remain below both the EU average and the average of the new EU Member States. In comparison with the EU as a whole, Slovenia also has much lower material productivity, meaning that its economy is more dependent on activities with high (or less efficient) use of material resources. On the other hand, the service activities, particularly knowledge-intensive services, which could, with their role in production processes of other sectors, help improve the competitiveness of the whole economy, have difficulty catching up with the fast development in more advanced economies.

In terms of factors that enhance the competitive position of the economy in the long term, Slovenia has made some positive changes in the area of innovative capacity and human capital in recent years (though certain weaknesses still exist), but they have yet to yield visible results. The drivers of innovative capacity continued to strengthen in 2010 and 2011, which was reflected in increased investment in research and development, higher numbers of researchers in the corporate sector and science and technology graduates, and a higher level of investment in information and communication technologies. These factors are expected to have a positive influence on the competitiveness of the economy in the long term, especially if accompanied by improved effectiveness of investment in R&D. Human capital has also continued to improve over the last years (increase in the share of the population with a tertiary education). The SDS target regarding the percentage of young people (at enrolment age) enrolled in tertiary education has already been exceeded since 2009. However, from the perspective of the impact of education on the growth and competitiveness of the economy, the structural imbalances between supply and demand on the labour market and the shortage of students graduating from science and technology are problematic. The low efficiency of studies and investment in tertiary education also remain a problem. In other areas that hinder a more rapid improvement of Slovenia's competitiveness no particular headway has been made in recent years, with the exception of the simplification of procedures for starting a business. Certain obstacles to doing business remain high, particularly the above-mentioned access to financing, which has declined further since the beginning the economic crisis, the rigidity of the labour market, administrative barriers in acquiring permits for business operations, lengthy court proceedings, etc. Moreover, little has been done with regard to the withdrawal of the state from ownership of companies and the inflows of foreign direct investment, which otherwise started to increase after the decline at the beginning of the crisis, but are still too low to improve the competitiveness of the economy.

In recent years Slovenia has also been gradually drifting away from the principal social goal of SDS, a sustainable increase in welfare. The impact of the economic crisis shows in deteriorating material living conditions, though most quality-of-life indicators still show improvement. The deterioration of material living conditions is a consequence of the labour market situation, as in 2011 employment declined further, while unemployment continued to grow and wage growth was more modest than in previous years. As a result of only partial annual adjustments for inflation (due to emergency measures), real income from pensions and social transfers also declined further. Disposable income has therefore been shrinking ever since 2009 in real terms, although in 2010 and 2011 more slowly than in 2009. The labour market situation and a concurrent increase in the number of pensioners are also changing the structure of household disposable income, as more and more of income from labour is being replaced by benefits from public sources. The first period of the crisis increased the otherwise still low inequalities in Slovenia (in wages, income, poverty risk, material deprivation, consumption), but in 2010 wage inequality (which usually also impacts other types of income-related inequalities) was already reduced by the increase in the minimum wage. The falling of disposable income is significantly mitigated by higher expenditure (in real terms) on education and some other public services. As a result of this (and previous) investment, Slovenia recorded a further improvement in the availability of public services and indicators of education and health, as well as relatively favourable subjective perceptions of the living environment. The systems of social protection and public services thus beneficially contribute to the current level of welfare, but are at the same time more and more financially unsustainable, even in the short term, amid the tightening of the economic situation, a significant deterioration of the fiscal position, the expected demographic movements and because they have not yet undergone any serious adjustments in the whole period of the crisis.

The movements in most areas that burden the environment still fluctuate mainly with regard to economic activity and the impact of one-off factors, and again there have been no major shifts towards a sustainable reduction of environmental pressures in the recent period. In 2010, greenhouse gas emissions remained at the level of the previous year, when they dropped sharply due to the economic crisis. This brought Slovenia closer to the Kyoto target; however, with unchanged environmental policies and a rebound in economic growth it will be hard to reach the EU commitments by 2020. Energy consumption, which is the largest source of overall greenhouse gas emissions, grew in 2010, but most of the increase was covered by non-fossil, renewable energy sources, which limited emission growth. The increase in the share of renewable energy sources (RES) in 2010 was also due to certain one-off factors, but in 2011, the share declined again, according to our estimate. Reaching EU commitments by 2020 will thus require further measures for promoting the use of renewable sources of energy and its more efficient use. Since 2007, Slovenia has witnessed unfavourable movements in the area of energy intensity, which is especially problematic in view of its high energy consumption per unit of GDP relative to other

EU countries (particularly due to extensive use of fuels in road traffic). However, it is encouraging that in the most export-oriented part of the economy, i.e. the manufacturing sector, where energy costs have a significant impact on competitiveness, energy intensity is decreasing. In 2009 and 2010 positive moves were made in the assessment of taxes relating to the ownership and use of motor vehicles, as greater importance was given to environmental criteria, but in the largest category of environmental taxes, taxes on energy, tax rates are still inadequate from the environmental aspect, and there are many tax exemptions. Municipal waste management improved in 2010, but Slovenia still lags considerably behind the EU in this area. The relatively favourable movements in industrial waste and waste from services also continued in 2010, which is of particular importance as Slovenia's economy is, in comparison with other EU countries, strongly dependent on the use of raw materials, which is also reflected in its low material productivity.

The current economic and social conditions call for immediate sustainable consolidation of public finances, revival of economic activity and improvement of the labour market situation. With a decline in GDP and increase in public debt, Slovenia's economic position has deteriorated considerably since the beginning of the economic crisis. The measures taken since the onset of the crisis eased somewhat its impact on the social situation of the population and the influence of the credit crunch on economic activity, but did not have any significant short-term effect on the economy's ability to grow. In the area of fiscal consolidation there have been no major shifts, except for the adoption of emergency measures to contain growth in expenditure on wages and social transfers, and linear reductions in other expenditure (particularly investment). At the beginning of the crisis, such policies first helped to mitigate the worsening of the social position of the population, but with the deepening of the crisis, they lead to a further worsening of the material standard of the population and the quality of life due to the deterioration of competitiveness and contraction of the economy. So far the policies have not been sufficiently oriented towards sustainable development, and environmental pressures have declined since the beginning of the crisis mainly as a result of lower economic activity. In these circumstances, sustainable consolidation of public finances is a must, as it will lay the foundations for economic recovery by improving access to finance. The consolidation should however be carried out in a way that will least impede economic growth and will be geared towards improving Slovenia's competitiveness, while the redistribution of the tax burden should also heed the guidelines for sustainable development. As the present social protection systems (pension and health-care, and long-term care systems) and the modes of public service provision have become financially unsustainable, even in the short term, they should be reformed. If this is not the case, it will, in the circumstances of financial and demographic changes, not be possible to preserve even the present levels of access to public services, the material standard and the quality of life. In view of the relatively low level of technology intensity of goods and services, inefficient use of materials and consequently low value added, it will be necessary to boost the factors of innovative capacity and human capital also in the future. To increase value added more rapidly, it is necessary, amid sufficient investment in R&R, to focus on increasing the co-operation between the R&D sector and businesses and improving the commercialisation of inventions by promoting non-technological aspects of innovation and innovation in services. Increasing innovation capacity is also of crucial importance for improving the efficiency, quality and availability of public services, while social innovation is vital for solving the pressing problems of the society (population ageing, environmental problems, energy efficiency, transport etc.). Another important aspect of improving competitiveness is introduction of advanced environmentally friendly technologies, which would help improve the energy and material efficiency and reduce the emission intensity of the economy. Meanwhile, it is also necessary to bring down the high unemployment rate. To improve the labour market situation, it is crucial to create new jobs and encourage transition to employment by active employment policies and changes in labour market regulations that will work towards increasing employment.

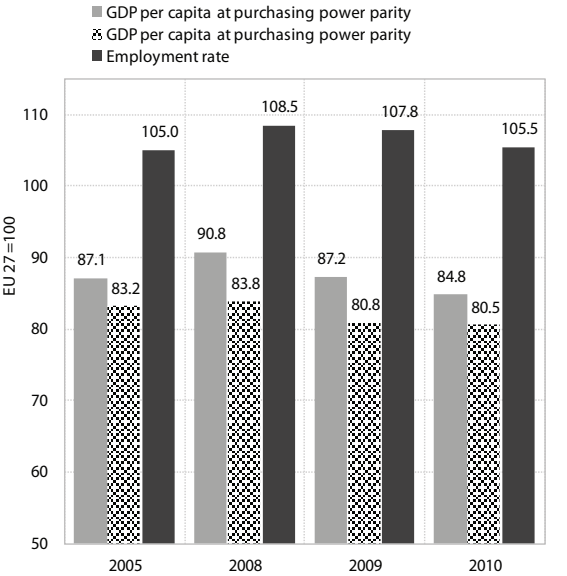
Part I
Development by the priorities of Slovenia's Development Strategy

1. A competitive economy and faster economic growth

SDS guidelines: A competitive economy and faster economic growth is one of the five development priorities of SDS, and encompasses the following objectives: ensuring macroeconomic stability[1], promoting entrepreneurial development and increasing competitiveness, and increasing the competitiveness of services. The first objective, ensuring macroeconomic stability, focuses on three core tasks: increasing the adaptability of fiscal and income policies, ensuring the long-term sustainability of public finances, and maintaining price stability. The second objective, increasing competitiveness and promoting entrepreneurial development, focuses on the development of areas in which Slovenia has a competitive advantage, encouraging entrepreneurship and development of SMEs, promoting and developing an innovative environment and a culture of innovation, and supporting internationalisation and competition in the network-industries market. The third objective, increasing the competitiveness of services, prioritises boosting the factors of effectiveness in services and simplifying the administrative framework for their provision. Special emphasis is placed on those services most closely linked to business operations (business, financial, distributive and infrastructural services) because these have the greatest impact on the economy's productivity and competitiveness.

Since 2008, Slovenia has been moving away from the EU average in terms of economic development measured by GDP per capita in PPS. According to Eurostat's most recent data, Slovenian GDP per capita in PPS reached 85% of the EU average in 2010. During the two years following the onset of the economic crisis (2009 and 2010), Slovenia's lag behind the European average increased by six percentage points. The widening of the development gap during this two-year period exceeded its decrease in the period from the beginning of the implementation of Slovenia's Development Strategy (in 2005) until 2008 (by 4 percentage points). A breakdown of GDP per capita to productivity and employment rate reveals that the steeper drop in GDP per capita in comparison with the European average in 2009 was mostly due to a larger fall in productivity than was the case in the rest of the EU. In 2010, when employment was more closely in line with the economic situation, this resulted in a relatively significant decrease in the employment rate. In view of the fact that domestic economic growth came to a halt last year, while the EU's GDP increased, the development gap is also estimated to have risen in 2011 (official Eurostat data for this year are not yet available).

Figure 1: **Breakdown of GDP per capita (purchasing power standards), Slovenia**



Source: Eurostat Portal Page – National Accounts, 2012. Calculations by IMAD.

The reasons for the weaker economic activity experienced during the period 2010–2011, when compared to EU, are mainly attributable to the domestic environment. The two years of economic growth that followed the significant fall in GDP in 2009 were based on an increase in exports, which in the conditions of boosting foreign demand reached 2008 levels, but following the deterioration in competitiveness, lagged behind the growth recorded in Slovenia's most important trading partners[2]. Domestic demand has not yet started to recover. Apart from structural weaknesses, which have had an adverse effect on the competitiveness of the Slovenian economy, the ability to expedite growth is limited, in particular, by the inefficiency of the financial sector and the high debts of companies. Since the beginning of the economic crisis, the fiscal situation has deteriorated considerably; as a result of its impact on interest rates, the fiscal situation is becoming an increasingly significant obstacle to economic recovery. All this is also reflected in the decline in export competitiveness. The decline in Slovenia's foreign market share between 2008 and 2010 was among the largest in the EU. This period was additionally characterised by strongly increased cost pressures on competitiveness which, with the exception of 2009 (a drop in productivity), were a result of a growth in wages. Positive developments were reported in 2011 in terms of competitiveness relating to exports and costs. However, Slovenia's exports and total economic competitiveness have for several years been subject to a number of structural factors which inhibit quicker improvements in productivity. The technological intensity of exports continues to be unfavourable,

[1] Concrete SDS objectives in this area are successful participation in ERM II and adoption of the euro, which was achieved by Slovenia in 2007. Since Slovenia's entry to EMU, it has therefore been more sensible to set the preservation of macroeconomic stability as the primary goal.

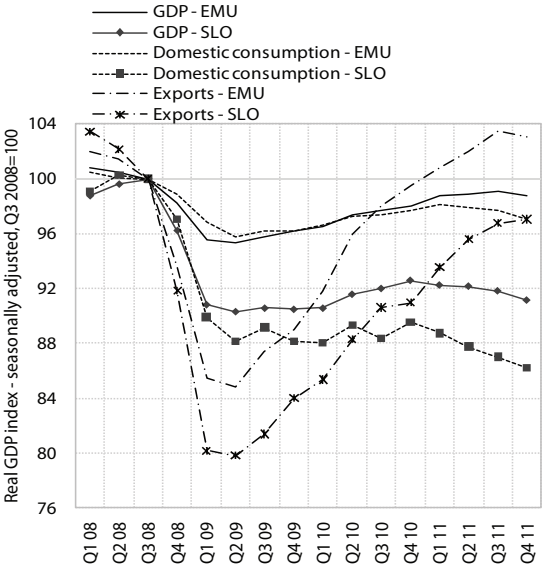
[2] See indicator Real growth of GDP.

together with a considerable lag in terms of material productivity. Services, particularly knowledge-intensive services, which enhance the competitiveness of the entire economy through their roles in the production processes of other sectors, have difficulty following the rapid development of more advanced economies. The factors contributing to this situation with regard to the promotion of innovation activities and human capital particularly include the following: inefficiency of investments in R&D activities, insufficient orientation toward innovation with regard to non-technological innovations and the marketing of inventions, the inadequate efficiency of tertiary education, and a lack of educational programme coordination with regard to the needs of the entrepreneurial sector. In addition, there are other factors inhibiting faster improvements in productivity and, as a result, competitiveness which are relatively significant obstacles to entrepreneurial development. These obstacles concern, in particular, access to sources of financing, which has become even more difficult since the beginning of the crisis, labour market flexibility, bureaucratic obstacles to obtaining authorisation(s) for operations, time-consuming judicial proceedings, etc. Over the years, no progress has been made on the issue of the withdrawal of state ownership from companies; foreign direct investment inflows are also too low to boost Slovenia's economic competitiveness.

1.1. Macroeconomic stability

In 2011, economic recovery was interrupted. In 2010, a sharp fall from 2009 was followed by modest economic growth (1.4%), while GDP fell again (-0.2%) in 2011. Exports remained the main driver of the economic recovery; however, this impetus diminished throughout the year, in parallel with an economic slowdown in trading partners. After a sharp fall in 2009, the export of goods and services last year reached the 2008 average. On the other hand, a decrease in domestic consumption deepened throughout last year, especially so towards the end of the year. With regard to international environment incentives, only domestic investments in equipment and machinery increased over the last two years; however, this growth slowed down last year; investments in the construction sector remain well below pre-crisis levels. The strong downturn in the construction sector from 2009, which followed the investment cycle from the preceding years, has deepened further in the last two years; as a result, the volume of investments in 2011 accounted for only 50% of the volume prior to the crisis. Over a three-year period, activity continued to decrease in all segments of the construction industry; in addition to the completion of several infrastructural facilities already before the crisis, this was mainly due to the financial crisis and the seriously deteriorated fiscal situation and/or the method of reducing the deficit[3]. The fiscal situation is also reflected in cuts in other public spending, which has not been intended for investments. Last year, government consumption decreased for the first time since the onset of the crisis. Household consumption dropped further. Given the modest real growth in wages and a further reduction in the number of the persons employed, real disposable household income fell for the third consecutive year[4](see also chapter 4.1.).

Figure 2: **GDP, exports and domestic consumption in Slovenia and the euro area, 3rd quarter 2008=100**



Source: Eurostat Portal Page – National Accounts, 2012.

In 2011, economic growth in the euro area decreased; Slovenia, in addition to Greece and Portugal, was the only country to have recorded a decrease in economic activity. Last year, GDP in the euro area was up 1.4% on the previous year, when the growth rate was at 2%. Following a more significant drop in 2009, the recovery in Slovenia after 2009 was slower than the EMU average, and the level of economic activity was lower than in Slovenia (compared to 2008) only in Latvia and Greece. The factors inhibiting recovery mainly stem from the domestic environment, particularly the situation in the construction industry and related activities, the accessibility of sources of financing, the fiscal situation and the labour market trends which do not contribute to creating the conditions required for private consumption to recover. In contrast to a continuing decline in domestic consumption in 2010 and 2011, domestic consumption in the euro area has gradually started to grow over the last two years. The lag in Slovenia's economic recovery was also partly due to the growth in exports. A comparison with our most important trading partners (Germany, Italy and EU Member States in Eastern Europe) shows that their exports are growing at a somewhat quicker pace. The reasons for this lie in a

[3] The restrictions on fiscal spending were mostly achieved through cutting planned costs for investments, which were associated with the construction sector prior to the economic crisis.

[4] See also Chapter 4.3. Living conditions, diminishing social exclusion and social deprivation.

different geographical orientation of these countries in terms of exports, higher technological intensity, or cost advantageous production, which enables them to take better advantage than Slovenia of the global growth in demand, which is actually reflected in Slovenia's export market share on the global market[5].

The potential for economic growth in the medium-term remains low. Adverse fiscal conditions, the deteriorated financial environment, which affects company operations, and gaps in competitiveness, are the factors which are expected to have a prevailing influence on the relatively slow recovery predicted for the Slovenian economy in the years ahead. Additionally, growth in foreign demand, which was a key factor in the growth of economic activity in recent years, has slowed down. In light of these circumstances, estimations of potential GDP growth point to a diminishing potential for growth; if compared to the period preceding the crisis, this amounted to approximately 4% against 1% on average with regard to the next medium-term period[6]. This shows a need for urgent structural changes and reforms in order to enhance the potential for growth, and to prevent the situation deteriorating to an extent which would inhibit the provision of the financial resources required for development. This would help us avoid a longer period of weak economic growth or stagnation, which was characteristic of some countries during the past decade (e.g. Portugal).

Weaker economic activity in recent years is reflected in lower inflationary pressures. Last year, annual growth was at 2%, which is similar to the values from the previous three years. The growth in consumer prices resulted mainly from the increase in energy prices and items of food, which was linked to the increase in commodity prices on the international markets. The prices of other goods continued to fall, while the increase in prices for services remained subdued. Such developments have been observed since the beginning of the crisis, as well as the related fall in demand and the absence of pressure on the prices of goods whose purchase can be deferred. The impact of the fiscal changes, in contrast to the previous two years, has been neutral, while the growth of prices under direct control of the government exceeded the level for the previous year (1.6% against 0.8%); however, it complied with the course of not exceeding 2%. The increase in prices relating to industrial products sold by domestic producers on the domestic market, which points to eventual changes in consumer/retail prices and would explain them, decreased in comparison with the previous year (from 3.5 to 2.6%). The total growth of these prices last year was mainly a result of an increase in food producers' prices, while the highest price growth occurred in the production of textiles and clothing (by 8.9%). An international comparison based on the harmonised index of consumer prices has shown that inflation in Slovenia is more than half a percentage point below the value in the euro area (2.7%). Given the presence of the same key inflation factors as in the euro area, it is estimated that lower inflation in Slovenia was mainly a result of its weaker economic activities.

The growth in wages over the past two years has been strongly affected by the economic crisis, a rise in the minimum wage, and the austerity measures in the public sector. Owing to the austerity measures in the public sector, a rise in the gross wage per employee in 2010 (3.9% nominal) and 2011 (2.0%) was solely a consequence of growth in the private sector. Following a prompt reaction to the crisis in 2009[7], under the conditions of low economic activity and a changed structure of the employed[8], the growth of wages in the private sector was influenced mainly by the rise in the minimum wage in the past two years[9]. We estimate that it contributed approximately 3 percentage points to the rise in the gross wage in the private sector in 2010 (5.1%). Accordingly, wages this year rose above the average, mainly in manufacturing, where growth was also partly the result of strengthening industrial production volumes and labour productivity, changes in the employment structure, and of low comparative basis, since the growth of wages in this sector came close to stagnation in 2009. In 2011, the incremental rise in the minimum wage had less influence on (in our estimation, below one percentage point) average wage growth in the private sector (2.6%). Moreover, growing unemployment, relatively low inflation, only a slight recovery in economic activity, and the aspiration of companies to maintain their competitive positions, did not allow for any visible growth in wages. In the second half of the past year, this slowed down even further also on account of lower Christmas bonus and 13th month payments, which were at their lowest for the past six years. During the crisis, these payments were most affected in the financial and insurance activities, which have the highest average wage despite the lowest rise

[5] See also Chapter 1.2 Enhancing competitiveness and incentives to entrepreneurial development.

[6] The calculation based on the production function method with Spring Forecast of Economic Trends 2012 considered for the period from 2012 onwards. The bivariate Kalman filter was applied for the exctraction of the total factor productivity cyclical component.

[7] The private sector had already responded to the crisis at the end of 2008 by reducing the volume of overtime work, and introducing shorter working hours and lower extraordinary payments. In 2009, this approach continued and resulted in a considerable slow down in nominal wage growth (from 7.8% in 2008 to 1.8%).

[8] This was the result of dismissals of employees with mostly low wages, which in statistical terms increased the average wage level. According to our estimates, the 0.9 percentage point of the average wage growth in the private sector in 2009 was a result of the aforementioned effect; during the next two years, the figure was much lower (0.5 or 0.3 percentage point).

[9] The average wage in the private sector increased through higher basic payments; the increase was also partly due to higher payments for overtime work, and overdue and extraordinary payments to employees.

*Box*1: **Survey of wage policies or policy measures relating to wages and employment in selected EU Member States during the crisis**

As a result of the global financial and economic crisis, which has also exerted huge pressures on the public finances, the number of employees and the level of wages in the private and public sectors are shrinking in EU Member States; this is also partly due to wage-trend imbalances in the Member States prior to the crisis. The data and analyses (Glassner, O'Farrell, 2010) summarised below reveal that in the decade preceding the crisis, wages in Western Europe mostly stagnated in real terms, i.e. they grew very modestly, while the growth of wages in Eastern European countries was higher also on account of catching up in terms of development. Public sector wages in both groups of countries increased somewhat faster than wages in the private sector[1]. When it comes to restrictiveness with respect to wage policy and cuts in labour costs, prior to the crisis, Germany stood out among Western European countries. At that time, many economies in the process of catching up from a development perspective, particularly those in the south of Europe, experienced higher economic growth based on relatively strong credit expansion and, accordingly, attained higher wage growth than they would otherwise have achieved. Given the onset of the crisis, the private and the public sectors in these countries had to react promptly by taking anti-crisis measures, including cuts in the costs of labour. The private sector responded mainly through relevant adjustments on the employment side, while the public sector applied a combination of both measures.

The private sector mainly responded to the crisis by reducing working hours and the number of employees and by partially adjusting wages, which had showed only a modest rise in real terms at the EU level just prior to the crisis. Owing to the shrinking of economies in real terms in the majority of EU Member States, employment fell in each. Most jobs were lost in those countries experiencing a major decline in economic activities, such as the Baltic states, Ireland and Spain; the employment of workers on fixed-term contracts took the brunt of the cuts. The reduction in employment had a statistical effect on average wage trends. The losses in low-wage jobs increased average wage values in purely statistical terms; nonetheless, owing to a decline in labour productivity in several countries and private sector activities, wages in fact even decreased.

In the past three-year period, the fiscal consolidation carried out in nearly all EU Member States required a restrictive policy with regard to wages and employment in the public sector; however, given the different critical situations regarding the public finances and the differences in the approaches taken, the severity and choice of the relevant measures implemented reveal a considerable differences between the countries. The impact of the crisis on the public finances of the EU Member States manifested itself at varying paces, whereby these countries attempted to resolve their fiscal problems by containing/reducing labour costs in the public sector. In some countries, these were contained or even reduced as early as in 2009; however, most of the countries adopted these measures during the period 2010–2011, for which statistical data on wage trends and employment figures have not yet been published. As a result, their effects on the growth of wages and on employment in several countries with very different wage systems are not yet known. The analyses available reveal (see table) that, in 2009, the first labour cost cutting measures were applied in those countries which were the first hit and most affected by the crisis or received financial assistance from international financial organisations, which put further pressure on them to cut their public spending. In 2010, twelve Member States intervened with the public sector expenditure on wages and mostly continued their restrictive wage and employment policies in 2011. Since the beginning of the crisis, the mildest austerity measures have been introduced by France, Italy, Denmark and the United Kingdom, where, in conjunction with reductions in the number of public employees, wages were merely frozen[2]. The most severe measures were taken in Greece, Latvia and Romania, where, in addition to a considerable reduction in the wages of public servants, the number of employees was significantly reduced. There are some exceptions in those EU Member States where the fiscal situation has not yet required intervention in terms of the costs of labour in the public sector, or where the fiscal problems were addressed by some other combination of economic policy measures. As a result, in 2010 and 2011, the wages of public servants rose slightly in Austria, Germany, Finland, Slovakia, the Netherlands and Sweden, while the number of employees was mainly regulated through softer measures.

In view of the forecasts announcing a standstill in Europe's economic recovery and only slow improvements in fiscal indicators, the austerity measures in the public sectors of a number of Member States are expected to continue in 2012. Under the influence of reducing fiscal deficits to which the countries have committed themselves within the framework of excessive deficit procedure, in 2012 and 2013, the majority of EU Member States will be obliged to remain committed to restrictive public sector wage and employment policies – in addition to other measures aimed at fiscal consolidation. In the conditions of weak economic activity and given the persistence of worsening labour market conditions, this seems to be far from creating pressures on wage growth in the private sector.

[1] In Western Europe the pace of increase was only slightly faster, while in Eastern Europe this pace was considerably faster, particularly during the period 2001–2003.

[2] Sources do not reveal whether the freeze in wages concerns only their non-adjustment to inflation or whether other possibilities for an increase in wages (e.g. performance at work, promotions, increased workload) were also frozen.

Box 1: **Survey of wage policies or policy measures relating to wages and employment in selected EU Member States during the crisis** – *continue*

Table: **Survey of measures taken regarding wages and employment in the public sector, EU Member States, 2009–2012**

Country	Wages	Employment
2009		
Latvia	wage reduction by 15–30%	reduction in the number of public sector employees
Estonia	wage reduction by 8–10%	reduction in the number of public sector employees by 5%
Lithuania	wage reduction by 8–10%	reduction in the number of public sector employees
Ireland	reduction of net wages by 5–7%	reduction in the number of public sector employees by 12% (2008–2015)
Hungary	wage freeze, abolition of the 13th monthly payment	N/A
France	–	reduction in the number of public sector employees by 150,000 (2008–2012)
Belgium, Bulgaria, Greece, Romania	wage freeze	reduction in the number of public sector employees
2010		
Romania	wage reduction by 25% and further reduction of bonuses	reduction in the number of public sector employees, replacing only 15% of outgoing personnel
Greece	wage reduction by 12–20%	reduction in the number of public sector employees by 150,000 (2011–2015), replacing only 20% of outgoing personnel
Ireland	wage reduction by 5–8%	reduction in the number of public sector employees by 12% (2008–2015)
Spain	wage reduction by 5%	only 10% replacement of outgoing personnel
Czech Republic	wage reduction for officials by 4%	reduction in the number of public sector employees
Italy	wage freeze, reduction of only highest wages (5–10%)	reduction in the number of public sector employees, replacing only 20% of outgoing personnel
Portugal	wage freeze, reduction of wages for officials (by 5%)	N/A
Hungary	wage freeze	reduction in the number of public sector employees by 25% (2010–2012)
France	wage freeze	reduction in the number of public sector employees by 150,000 (2008–2012)
Bulgaria, Estonia	wage freeze	reduction in the number of public sector employees
Germany	–	reduction in the number of public sector employees
2011		
Czech Republic	wage reduction by 10% (except teachers), reduction in bonuses for officials by 10%	reduction in the number of public sector employees
Greece	reduction in bonuses by 20–25%	reduction in the number of public sector employees by 150,000 (2011–2015)
Portugal	wage freeze, 3.5%–10% reduction in wages higher than EUR 1,500	N/A
Germany	abolition of 13th monthly payment	reduction in the number of public sector employees by 10,000 (by 2014)
Denmark	wage freeze, 5% reduction of wages for ministers	reduction in the number of public sector employees
Slovakia	–	reduction in the number of public sector employees
United Kingdom	wage freeze above GBP 21,000	reduction in the number of public sector employees by 330,000 (by 2014)
Hungary, Italy, Estonia, France, Spain, Bulgaria, Ireland, Poland	wage freeze	reduction in the number of public sector employees
2012		
Belgium	5% wage reduction for ministers	–
Portugal	wage freeze, abolition of 13th and 14th monthly payments	N/A
Germany	–	reduction in the number of public sector employees by 10,000 (by 2014)
United Kingdom	wage freeze above GBP 21,000	reduction in the number of public sector employees by 330,000 (by 2014)
Luxembourg	only partial wage adjustment	restrictions on employment in the public administration
Finland	–	reduction in the number of public sector employees
Hungary, Denmark, Italy, France, Ireland, Greece, Cyprus	wage freeze	reduction in the number of public sector employees

Source: A cuts watch brief (2011), Bashing public sector wages and public sector jobs (2010), Budget goes further than agreement (2011), EU Austerity: Country by country (2011), Giordano (2011), Glassner (2010), Industrial Relations in Europe (2011), O'Farrell (2010), Parry (2011), Survey of measures and reforms to tackle the financial and economic crisis – by country (2012).

in the past three years. The austerity measures[10] in the public sector, which have continued to be adopted with amendments ever since 2009[11] due to the general economic and fiscal situation, have put a stop to wage growth over the past two years (-0.1%, 0.0%, nominally) .

From a short-term perspective, the private and public sectors will be subject to circumstances which will not facilitate a tangible growth of wages. The urgent need for fiscal consolidation requires the continued implementation of the restrictive wage policy in the public sector. However, the measures in place, which are currently mainly concentrated on maintaining wage stagnation, should be substituted by more encouraging equivalents (for employees), which will, as is the case in the private sector, adjust wages in line with labour productivity trends. Pressures on the growth of personnel expenditure will need be reduced further through measures which do not form part of wage policy; this would be achieved, for example, by reducing the number of employees and controlling other employee expenditure. The recent decline in the cost competitiveness of our companies[12] and economic trends prospectives[13] will not enable a more noticeable short-term growth of wages in the private sector.

Following a significant increase in the general government deficit in 2009, which was mainly the result of the economic crisis and partly a result of structural elements, no positive developments have occurred over the past two years in the field of fiscal consolidation, while the fiscal situation further deteriorated last year. In 2009, the deficit amounted to 6.1% of GDP; it stood at a similar level during the following year, since the revised national budget for 2010 adjusted expenditure to lower revenues than planned initially. Last year, despite the revised budget, the deficit increased further and reached 6.4% of GDP. In view of these facts, Slovenia has moved away from the target set by the Stability Programme – Update 2011 by 0.9 percentage point, and from the target set by the Stability Programme – Update 2009, in which Slovenia for the first time presented the planned course of consolidation in the context of the excessive deficit procedure, by 2.4 percentage points. The persistence of a high deficit over the past two years was influenced by an increase in interest payments, social benefits, allowances and other expenses occurring in the absence of systemic measures aimed at reducing and restructuring the rest of the expenditure. Last year, the fiscal situation further deteriorated through the inclusion of recapitalisation funds concerning our largest national bank, NLB d.d., and several state-owned companies amounting to a 1.3 percentage point value of GDP. Despite an increase in revenue and a rise in its share of GDP (by 1.3 percentage point during the period 2009–2011), last year's deficit in the general government sector was the highest in the past sixteen years. We estimate that the structural component of the deficit also increased further in 2011. The cyclically adjusted fiscal balance used in assessing the component stated has thus remained high for the fourth successive year. Although interpretation of the calculations calls for a certain degree of caution, these developments show that no fiscal effort has been made in the past few years towards reducing the deficit through systemic changes, which would bring more durable results. In terms of restrictions concerning compensation for public sector employees, the implemented measures were more or less interventionist in nature and no systemic changes were introduced with regard to the wage and employment policies in order to put in place more lasting solutions and create a more stimulating environment for employees. Moreover, no changes were made to social security systems, in particular, the pension reform. Although the adopted pension reform would presumably have had a minimal effect on the deficit reduction in 2011, the systemic changes in this area, already this year and even more in the coming years, would have a greater impact on alleviating pressure on fiscal spending. The current combination of economic policies has therefore led to an adverse fiscal situation where, by way of urgent fiscal adjustments, solutions will be sought primarily in the segment of more flexible development-oriented expenditure and through either decreasing or restricting expenditure on wages, pensions and social transfers.

Relative general government debt has been growing faster than the euro area average over the past three years and higher bond yield expectations imply an increase of the cost of new borrowing. The debt accounted for 47.6% of GDP at the end of 2011 and was far below the euro area average; however, over the past three years it increased more in relative terms (by 25.7 percentage points of GDP against the euro area average, which was at 17.9 percentage points of GDP[14]). In the event of a new potential economic crisis, rapid debt growth increases the risk of exceeding the threshold of 60% of GDP[15]; another important risk

[10] During the period 2009-2011, the government and the social partners signed four agreements with annexes which were implemented by way of the Public Sector Collective Agreement and the adoption of three intervention laws. This provided the basis for deferring the payments of the third and fourth quarter tranches intended for the salary disparity elimination (to a period when 2.5% economic growth is exceeded). This was followed by a freeze on promotions to higher salary grades (in 2011), the tightening of the mechanism for the adjustment of wages to inflation, maintaining the amount for annual leave pay at 2008 level, temporary suspension of payment of the regular work performance-related bonus, and limitation of the work performance-related bonus for increased workload.

[11] The first austerity measures took effect the first year following the introduction of the long planned wage reform which resulted in a relatively high growth of wages (2008, 9.7%, 2009, 6.7%), i.e. in the period when wages of the private sector started to level off for reasons of the economic crisis.

[12] See Chapter 1.2 Enhancing competitiveness and incentives to entrepreneurial development.

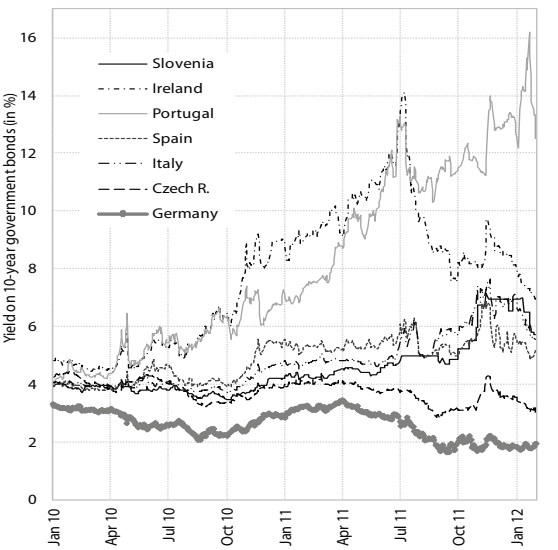
[13] See Spring Forecast of Economic Trends 2012 (IMAD, 2012).

[14] European Economic Forecast – Autumn 2011 (European Commission), 2011.

[15] Upper limit set in the Stability and Growth Pact framework.

factor is state sureties and guarantees. Over the same period, publicly guaranteed debt also grew significantly; at the end of 2011 it accounted for EUR 6.9 billion or 19.6% of GDP[16]. The significant increase in 2009 was due to guarantees totalling EUR 2 billion given by the state to domestic banks for borrowing purposes. Accordingly, the government measures to alleviate the economic crisis cover nearly a quarter of the overall publicly guaranteed debt. The volume of the sureties and guarantees exercised, which rose slightly last year, remains low (EUR 20.8 billion at the end of 2011). Despite this, the amount and probability assessment of the call-up of guarantees are important factors which can play a role in deteriorating the perception of a state on the financial markets and, as a result, can contribute to higher surcharges, thereby resulting in more expensive borrowing. Last year, the cost of state borrowing increased considerably, particularly during the autumn; on one hand, this was partly due to a deterioration in general conditions and the fall of confidence in the majority of the euro area countries and, on the other, to Slovenia-specific factors. By the end of January 2012, Slovenia's credit rating had been downgraded by all three of the main credit rating agencies. In addition to the growing uncertainty across the whole euro area, other reasons were seen in the deteriorated conditions and risk factors in Slovenia, not least the poor conditions in the banking system[17], slow fiscal consolidation and a deterioration in competitiveness[18]. Accordingly, the expected yield on 10-year Slovenian government bonds exceeded 7% for a period of time last November, which was far more than at the time the last government bond was issued in January last year, when the corresponding figure was 4.431%. This year, due to the positive impact of the ECB's[19] non-standard measures on bond yields in the majority of the euro area countries, the yield on Slovenian government bonds was lowered at least temporarily; however, it remains at a high level – approximately 5%. Such trends and the continuing adverse conditions in the financial markets make state financing difficult (financing the general government deficit and the repayment of state debt principals). In December 2011, in view of the adverse conditions on the international markets and in order to cover most of this year's repayment of state debt principals amounting to EUR 1.27 billion, the government issued an 18-month treasury bill totalling EUR 907 million on the domestic market. According to the information available, domestic banks represented an important share of buyers. In the event that the expected yield is to remain at a similar level in future, the cost of new borrowing by Slovenia on the euro market would be much higher, despite the fact that the financing of the state (expressed as a share of GDP) would be at a similar level as in the previous year. Any difficulty accessing financial resources by the state would result in negative consequences for private sector borrowing conditions, which, in turn, would affect competitiveness and the potential for further economic development. More expensive borrowing would cause a further deterioration in the public finance quality, since increasing interest payments in the consolidation process might lead to the increasing exclusion of more flexible spending where an important part belongs to development-related expenses.

Figure 3: **Yield on 10-year government bonds**



Source: Eurostat.

The current account deficit, which has been decreasing since the beginning of 2009, amounted to 1.1% of GDP in 2011. The current account balance deficit has stabilised at this level over the past three years, which is essentially lower than during the period 2007–2008, when it was close to 6%. This is directly and indirectly connected with the dynamics and structure of economic activity. Over the past two years, given the decline in domestic consumption, the deficit in the trade of goods, despite deterioration of the terms of trade, has been maintained at a considerably lower level than before the crisis. Since the onset of the crisis, net interest payments first decreased, which was due to the difficulty accessing foreign sources of financing. Since the third quarter of 2010, the outflows started to grow in the direction abroad as a result of bonds issued for the purpose of alleviating the crisis, and the maturity of coupon payments. Despite a strong reduction in debt, net interest payments by domestic business banks increased last year, what is to

[16] A significant increase in publicly guaranteed debt occurred in 2009 (by EUR 2.4 billion, mostly on account of guarantees given by the state to domestic banks for borrowing purposes). At the end of 2009, it amounted to EUR 7.1 billion; at the end of 2010 the figure was EUR 7.7 billion. The decrease of EUR 0.8 billion from last year is a consequence of the reduction in the volume of guarantees to domestic financial institutions.

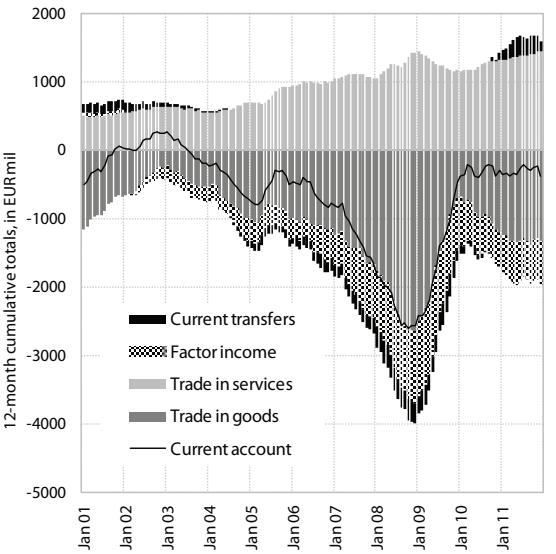
[17] See Chapter 1.3.2: Financial Services.

[18] See Chapter 1.2. Increasing competitiveness and promoting entrepreneurial activity.

[19] In December 2011, the ECB adopted a decision on carrying out two long-term refinancing operations with a maturity of 36 months through which it enabled banks in the euro area to access additional liquid assets, and thereby contributed to improving their financing.

be associated with adverse financing conditions on the international financial markets. Last year, a deficit in factor income was thus again higher than the previous year. The lower current account balance deficit is also a result of the improved absorption of EU funds and an increase in the surplus of the trade in services. The national budget, which showed a deficit in relation to the EU budget in 2007 and 2008, recorded a surplus in 2009, which has only increased over the past two years. Last year, this was influenced by a significant increase in resources from structural funds. The surplus in the trade in services, which followed a sharp fall in 2009 and an increase over the past two years that was a result of an increase in the exchange of services surplus relating to travel and transport, last year slightly exceeded the value from 2008.

Figure 4: **Current account of the balance of payments, Slovenia**



Source: BS, calculations by IMAD.

Since the onset of the financial and economic crisis, the growth of gross external debt has slowed down. After a period of fast growth following Slovenia's accession to the EU, mainly in 2007, the increase in gross external debt over the past three years started to slow down. At the end of 2011, the gross external debt reached EUR 41.4 billion and, when compared to the situation in December 2010, increased by EUR 0.7 billion after the EUR 0.4 billion increase in 2010. During the period of a rapid increase in borrowing, the average increase amounted to EUR 5.2 billion per year. The 2011 rise in debt, including the two previous years, was mostly a result of the general government sector, whose gross external debt increased by approximately the same extent as that in the previous year. Business banks, who contributed most to the rapid growth in external debt in the pre-crisis years, kept deleveraging last year for the third consecutive year; net debt repayments were highest in the year just passed. Due to adverse conditions on the international financial markets, liquidity was provided to business banks by the Bank of Slovenia to a much greater extent than before; this was reflected in the increase of its (short-term) debt which, however, decreased in the two preceding years. In 2011, in view of the credit crunch at home, the companies (i.e. other sectors where the majority of entities are companies) incurred net debts abroad, after having managed net payments of their liabilities relating to short- and long-term loans only a year previously. However, drawing funds on these loans began to diminish towards the end of the year; this may be the result of Slovenia's credit rating downgrade and, consequently, the expression of reduced trust by foreign creditors in Slovenian companies. These developments are reflected in the debt structure by sector with respect to debt guarantees, where the public debt further increased last year, publicly guaranteed debt remained at approximately the level of the previous year, while non-secured private debt decreased. At the end of 2011, in the structure of the gross external debt, the public and the publicly guaranteed debt taken together represented a share of 43.7% (public 23.7%, publicly guaranteed 20.0%), which is 20.4 percentage points above the value in 2008.

Slovenia's gross external debt is almost 50% lower than the euro area's average debt; however, this does not exclude its exposure to risks regarding repayment in the event of major shocks in the economy. At the end of 2011, the gross external debt reached 115.8% of GDP, while in the euro area this already amounted to 209.2% of GDP in 2010. Since the currency structure of Slovenian external debt is strongly dominated by the euro, and given the prevailing presence of the euro in relevant trade and capital flows, the exchange rate fluctuations do not present risks for a potential increase in the gross external debt share of GDP or for its repayment. Potential risks could be caused by major shocks capable of reducing economic growth, and by a significant deterioration in the conditions of financing, where the situation is worsening this year.

Box 2: **Excessive Imbalance Procedure at EU level**

In autumn 2011, the European Commission put in place a mechanism in order to provide an early warning system against excessive imbalances in EU Member States and to take action against such imbalances. In times of economic crisis, numerous EU Member States are faced with deterioration in competitiveness and various macroeconomic imbalances. With a view to detecting such imbalances in the early stages, the European Commission prepared a new mechanism called the Excessive Imbalance Procedure. This mechanism relies on three main elements: (i) an early warning system alerting to potential imbalances, (ii) preventive and corrective action; and (iii) the enforcement of sanctions. The early warning system is based on several indicators used for the assessment of potential imbalances (macroeconomic imbalance procedure scoreboard). In cases of minor imbalances, the Commission issues preventive recommendations to the Member States, while in serious cases the country concerned has to prepare a corrective action plan. In the event that a country fails to respond adequately, it may ultimately be imposed financial sanctions reaching up to 0.1% of GDP. The excessive imbalance procedure will start to apply in 2012 within the framework of the European semester, expected to strengthen the economic governance by way of ex ante coordination of budgetary and economic policies at EU level.

In order to provide for the early detection of potential imbalances, the Commission has currently defined 10 indicators as the most suitable for detecting macroeconomic imbalances or gaps in competitiveness. They are divided into two groups: external imbalance indicators *(current account balance, net international investment position, export market shares, nominal unit labour costs and real effective exchange rate),* and internal imbalance indicators *(house prices, private sector debt, private sector credit flow, public sector debt and the unemployment rate).* Alert thresholds have been set for each indicator where breaching the threshold means that the country concerned has an imbalance in a certain area which may be problematic. Indicator results show the first warning; the next step consists of an in-depth analysis to determine whether the imbalance identified is truly problematic. To this end, the European Commission foresaw additional indicators to be used in the economic reading of the macroeconomic imbalances procedure scoreboard. As a rule, country-specific circumstances should also be taken into consideration. Although the early warning system includes fiscal indicators, the excessive imbalance procedure has not been envisaged for the purposes of assessing fiscal sustainability, since this is to be assessed within the framework of the Stability and Growth Pact.

In the case of Slovenia, macroeconomic imbalance indicators reveal the gaps in economic competitiveness to be problematic, while in the years preceding the onset of the economic and financial crisis, such imbalances were suggested by a high growth in real estate prices and private sector borrowing. A significant gap in Slovenia's cost competitiveness was characteristic for the first half of the past decade. A cumulative increase in the nominal unit labour costs measured over three-year periods again exceeded the threshold (9%) in the past three-year period (2008–2010) when it was among the highest in EU (for more on the reasons for this, see Chapter 1.2.). The competitiveness problems became evident from IMAD calculations concerning the reduction of Slovenia's market share on the world market of goods during the period 2008–2010, while in 2010 (the most recent data provided by the Commission) Slovenia came very close to approaching the alert threshold set by the European Commission, which takes into account market share changes in goods and services over a five-year period. Apart from competitiveness problems, slight imbalances during the period 2009–2010 were observed in Slovenia's net international investment position and in the current account balance deficit for the period 2008–2009 (see Chapter 1.1.). A very different picture was seen during the pre-crisis period (2004–2008) when the growth of real estate prices was well above the alert threshold of 6% (14% on average), while during the period 2007–2008 the threshold value was considerably exceeded by the growth in the private sector borrowing (see Chapters 5.4. and 1.3.2.).

Table: **Macroeconomic imbalance procedure scoreboard for Slovenia**

	Indicator/Threshold		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
External imbalances	Current account, as % of GDP (3-year average)	+6/-4 %	-1.9	-0.5	0.1	-0.8	-1.7	-2.3	-3.0	-4.6	-4.3	-3.0
	Net international invest. position, as % of GDP	-35 %	-2	0	-6	3	-11	-17	-21	-33	-36	-36
	Real effective exchange rate (deflator HICP), 3-year change, %	+/-11 %	-2.5	0.3	5.4	4.6	1.7	-0.7	1.0	4.3	5.8	2.3
	Export market share (goods and services), 5-year change, %	-6 %	-5.9	5.6	3.3	16.2	26.6	17.4	18.8	10.7	4.8	-5.9
	Nominal unit labour cost, 3-year change, %	+9 %	22.2	24.0	20.6	14.6	9.7	6.2	5.3	10.2	18.5	15.7
Internal imbalances	Deflated house prices, y-o-y change	+6 %				9.6	13.1	14.7	18.5	-2.3	-8.7	0.7
	Private sector credit flow, as % of GDP	15 %		8.6	8.7	9.6	13.6	13.9	23.5	18.3	4.2	1.8
	Private sector debt, as % of GDP	160 %		65	67	71	76	85	91	106	117	129
	Public sector debt, as % of GDP	60 %		27	28	27	27	27	27	23	22	39
	Unemployment rate, 3-year average	10 %	6.7	6.4	6.4	6.4	6.5	6.3	5.8	5.1	5.1	5.9

Source: Alert Mechanism Report (European Commission), 2012.

Note: Grey fields indicate the breaching of the indicative threshold value subject to the excessive imbalance procedure at EU level.

Box 3: **Net international investment position as a percentage of GDP (external imbalance indicator in the excessive imbalance procedure at EU level)**

The net financial position or the situation in international investments is an indicator that facilitates analysis of balance-of-payment flows and situations, and serves as a dynamic insight in several factors behind macroeconomic (external) imbalances. The net financial position shows the situation in the total balance of claims and liabilities that the domestic economy has towards foreign countries at the end of each year, using a structure which is equal to the structure of the balance-of-payments financial account. Apart from debt instruments, which are included in the gross external claims and the gross external debt (the difference between the two shows the country's net external debt), the net financial position also includes claims and liabilities relating to ownership relations. For this reason, this constitutes a more adequate criterion for detecting external imbalances such as net external debt. A net international debt position may deteriorate due to major current account deficits and/or changes in values which, along with the ever increasing integration of countries into international capital flows, are becoming very important factors in the net international financial position.

The indicative threshold, which alerts to a potential imbalance in the economy at issue when breached, was set by the Commission at -35% of GDP. Slovenia slightly exceeded this value during the period 2009–2010. This threshold has been significantly breached above all by the countries that stand at the forefront of the debt crisis, reaching between -90% to -110% of GDP (Portugal, Ireland, Greece and Spain).

Table: **Net international investment position of Slovenia, as a percentage of GDP**

	2000	2004	2005	2006	2007	2008	2009	2010
1 Debt claims	40.4	59.6	68.1	66.6	82.3	78.1	83.4	83.9
2 Equity claims	1.0	6.1	9.7	14.3	17.9	12.8	15.3	15.5
3 Total claims (1+2)	41.4	65.7	77.8	80.9	100.2	90.9	98.6	99.4
4 Gross external debt	44.1	56.4	71.3	77.5	100.6	105.2	114.1	114.9
5 Equity liabilities	9.2	17.1	17.5	20.5	20.9	19.4	20.4	20.2
Total liabilities (4+5)	53.3	73.5	88.8	98.0	121.5	124.7	134.5	135.2
7 Net external debt/claims (1–4)	-3.7	3.2	-3.2	-10.9	-18.4	-27.1	-30.8	-31.1
Net equity debt/claims (2–5)	-8.1	-11.0	-7.8	-6.2	-3.0	-6.6	-5.1	-4.7
9 Net financial position (7+8)*	-11.8	-7.8	-11.0	-17.1	-21.3	-33.8	-35.8	-35.7

Source: BS, own calculation. Note:*-negative (positive) sign in the balance concerned indicates a net debtor's (creditor's) financial position.

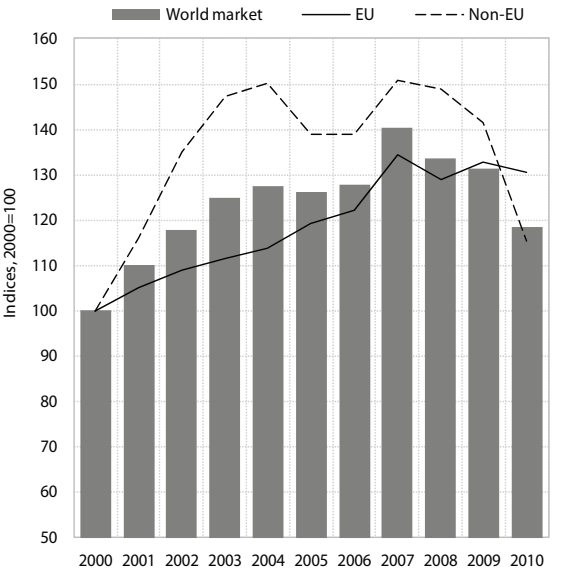
During the period 2000–2010, with the exception of 2002, Slovenia had a net international debt position which considerably deteriorated in 2008 (by EUR 5.2 billion or 12.5 percentage points). During the period 2000–2010, its net financial position exceeded the net external debt by EUR 2.1 billion on average. The above difference appeared in the segment of equity claims and liabilities, mostly on account of net capital inflows within the context of foreign direct investments in Slovenia. The share of gross external debt or non-equity liabilities during the reference period constituted approximately four fifths of the total foreign liabilities, whereas the remaining fifth consisted of equity liabilities (equity capital and reinvested profits from foreign direct investment to Slovenia, and investments in equity securities).

Given the high rate of private sector foreign borrowing during the pre-crisis period, the strong deterioration in the net financial position in 2008 also occurred as a result of losses incurred in property values by Slovenian investors abroad. On the liability side, the deterioration in the net financial position in the aforesaid period was mainly due to borrowing by domestic business banks. Otherwise, the majority of foreign borrowing consisted of loans, cash and the savings of non-residents. Since the onset of the crisis, liabilities towards foreign parties grew slower than in boom times, as a result of which the growth of the gross external debt particularly slowed down. Despite increased state borrowing abroad, this was mainly a result of the private sector's reduction of debt. Up to and including 2007, the claims side's growth consisted mainly of investments made by the private sector abroad (equity portfolio investments and outgoing foreign direct investments). Particularly visible growth occurred after 2005 when restrictions on investing in foreign securities were abolished; as a result, this gave rise to increased investments by mutual funds, the insurance sector and the public. The introduction of the euro and the liquidity release of matured Bank of Slovenia bills strongly increased the volume of investments made by Slovenian banks in euro-area bonds. In 2008, due to the financial crisis, Slovenian companies and households lost a significant part of the value of their property in the form of equity portfolio investments. That same year, this had a strong effect on Slovenia's net international investment position, also partly on account of the fact that the contribution of losses by foreign investors in Slovenian securities was relatively smaller. Over the past two years, Slovenia's net financial position has been maintained at approximately the same level, which is mainly the result of its over-indebtedness and the private sector's limited access to foreign sources of financing on the international financial markets.

1.2. Increasing competitiveness and promoting entrepreneurial development

The Slovenian economy's export competitiveness has deteriorated considerably since the onset of the economic crisis (2008). During the period between the beginning of 2008 and the third quarter of 2011, Slovenia lost approximately 15.6% of its export market share on the world market of goods and 7.5% in its largest trading partners[20]. This loss accounted for a good half of the increases made during the preceding seven-year period of incessant growth[21]. The contraction of export market shares at the beginning of the crisis was characteristic of all EU Member States. However, Slovenia was ranked in the group of countries with the largest contraction on the world market[22]. During the period 2008–2009, a drop in market shares was alleviated by the incentives for purchasing motor vehicles proposed by some EU Member States, which resulted in an increase in Slovenian exports and, consequently, an increase in the market share of motor vehicles on foreign markets (mainly in France and Germany). In 2010, when incentives for purchasing motor vehicles in the majority of its trading partners came to an end[23], the drop in Slovenia's foreign market share grew deeper (-10%). That year, Slovenia came close to approaching the threshold of the excessive imbalances detection mechanism at EU level, which concerning the market share indicator, in addition to goods, includes also services[24]. Apart from motor vehicles, the reduction of shares on the foreign markets in 2010, as was the case in 2008–2009, also existed with the majority of other important Slovenian export product groups[25]. The data available for the first nine months of 2011 point to a stagnation in market shares on the world market and to slight growth recorded with its key trading partners. What is encouraging, however, is the high growth recorded in two of its most important trading partners: Germany and Croatia.

Figure 5: **Slovenia's market share of exports on the global, EU and non-EU markets**



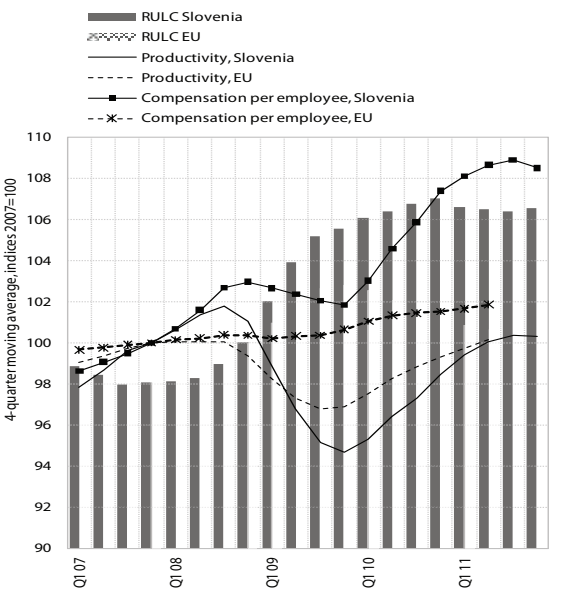
Source: United Nations Commodity Trade Statistics Database, 2011; calculations by IMAD.
Note: The export market share on the global market is calculated as Slovenia's share of exports among global exports, while on the EU and non-EU markets, this share is calculated as Slovenia's share of exports within EU and/or non-EU imports.

Over the past few years, the decline in Slovenia's export market share on the world market, which was accompanied by a fall in competitiveness, largely occurred under the influence of structural effects in association with the geographical orientation of Slovenia's exports. After 2008, Slovenia's export market share was reduced to the largest extent on non-EU markets, where major structural changes have recently occurred. The main characteristic was extremely strong market growth in countries with a relatively low level of Slovenian exports (China, India and Brazil), which further increased the decline in our share in world exports. Besides that, outside the EU, most of Slovenia's exports go to the countries of the former Yugoslavia and to Russia, where we have recently witnessed a decline in our export market share. The biggest fall by far was recorded on the Russian market, which is very large and growing rapidly; for Slovenia – a small country with low export capacity – maintaining its export share in this fast growing market represents a significant challenge. A downturn in the export market share also occurred on the markets of the countries of the former Yugoslavia, which have experienced a relatively slow recovery since the onset of the crisis; however, they have a relatively more important place in our export structure than in that of other EU Member States or in our Eastern European competitors. Recently, our region-oriented export activities have also proved to be less favourable from the perspective of our indirect links with fast growing global markets, since the share of Germany as our indirect link to these markets seems to be smaller in our exports than in the exports of the majority of our Eastern Europe competitors (Czech Republic, Hungary and Poland).

[20] These comprise thirteen countries: Germany, Italy, Austria, France, United Kingdom, Poland, Hungary, Czech Republic, Croatia, Bosnia and Herzegovina, Russia, the United States and Macedonia.
[21] The loss in its largest trade partners accounted for a quarter of the increase for the period 2000–2007.
[22] During the period 2008–2009, a drop in its export market share meant Slovenia ranked eighth among 17 EU Member States; in 2010, a deterioration in its export competitiveness meant Slovenia ranked fourth among EU Member States. .
[23] In France, incentives for purchasing motor vehicles gradually stopped (through reducing financial compensation) by the end of 2010. Some larger Member States, although less important importers of motor vehicles from Slovenia, offered these incentives throughout the whole year (the Netherlands) or part of 2010 (United Kingdom, Spain).
[24] For more details, see Box 2: Excessive Imbalance Procedure at EU level.
[25] See indicator Market share.

During the economic crisis, Slovenia experienced a relatively huge deterioration of cost competitiveness; cost pressures stopped only in 2011, but this has not fundamentally improved the economic situation in terms of competitiveness. An increase in real unit labour costs was characteristic of the three-year period 2008–2010 when these grew by 9.1% in total. Owing to their growth, the real effective exchange rate[26] was subject to appreciation in the years 2008–2009. In addition, the cost competitiveness deterioration in a three-year period was much more pronounced than in the EU, where the cumulative increase of real unit labour costs over the same period amounted to 2.2%. During this three-year period, Slovenia also considerably exceeded the threshold relating to the value of nominal unit labour costs set within the macroeconomic imbalances procedure at the EU level[27]. With the exception of 2009, when the main factor in the deterioration was identified as a drop in economic productivity on account of a decline in economic activity, the two remaining years (2008 and 2010) passed mainly in the context of pressures from the labour costs side. Their 2008 growth was a result of the adjustment of wages to high inflation and economic activity in the past, and of the elimination of some of the wage disparities in the public sector. In 2010, this was followed by a rise in the minimum wage which accelerated public sector wage growth[28]. Cost-related pressures on competitiveness during the crisis were felt more in the manufacturing sector, where the unit labour costs from 2008 to 2010 increased cumulatively by 11.6% despite the fall in 2010 which, given the rise in the minimum wage, was rather modest (by 0.6%). In 2011, along with a further increase in productivity[29] and with a slowdown in wages occurring for the first time after their three-year increase, unit labour costs were down (by 0.4%). However, these costs were still far above the figures for 2007 (by approx. 8 percentage points).

Figure 6: **Real unit labour costs and main components (productivity and compensation of employees per employee), Slovenia and the EU**

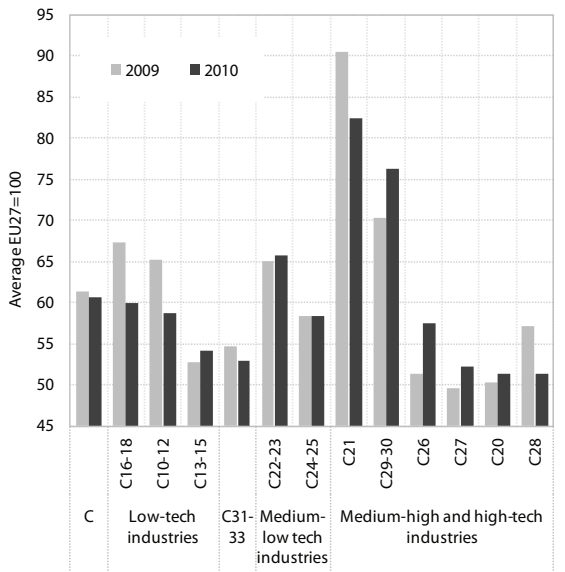


Source: Eurostat Portal Page – National Accounts, 2012. Calculations by IMAD.
Note: Real growth in labour productivity and compensation of employees per employee (GDP deflator).

From a technological intensity perspective, the structure of manufacturing does not show a significant deviation from the EU average; more evident is a lag in terms of productivity, which is crucial for improving competitiveness. Since the onset of the economic crisis, an intensive contraction of less competitive manufacturing industries led to an increase in the share of technologically intensive industries in the total manufacturing value added. In 2009, the Slovenian share of high and medium-high technology intensive industries[30] in the manufacturing value added exceeded the average EU share. The relatively high share of these industries in Slovenia is mainly due to the relatively large scope of the pharmaceutical and electrical industries, while the shares of other technologically intensive industries are lower than those at EU level. The share of technologically less intensive industries (medium-low and low technology intensity)[31] in 2009 fell below the EU average, which is for the most part due to the extensive contraction of the metal industry during the crisis and to a further decline in the textile industry. Despite the moves made towards more technologically intensive and, as a rule, more productive activities, there has been a recent slowdown in reducing the gap in manufacturing productivity. In 2010, the value added per employee reached 60.6% of the EU average, which is approximately the same level as in 2008. Among the industries having the lowest productivity level with regard to the EU, there are three technologically intensive branches (the chemical, electrical and mechanical engineering industries) accompanied by those with low technological intensities such as the textile, leather and furniture industries[32]. Since the onset of the crisis, manufacturing

[26] Deflated by way of nominal unit labour costs.
[27] For more details, see Excessive Imbalance Procedure at EU level.
[28] The year 2010 was also characterised by the effect of changes on employment structure.
[29] The increase in productivity over 2010 and 2011, in contrast with the EU, resulted to a greater extent from the reduction of employment; economic growth was lower than in the EU.
[30] Medium-high technology intensive branches are as follows: chemical industry (C20), electrical equipment industry (C27), manufacture of other machinery and equipment, manufacture of vehicles and vessels (C29-30). High-technology branches are as follows: pharmaceutical industry (C21) and production of ICT equipment (C26).
[31] Medium-high technology branches are as follows: production of coke and petroleum products (C19), manufacture of rubber and plastic products (C22), manufacture of non-metallic mineral products (C23), metal industry (C24-25), repair and assembly of machinery and equipment (C33). Low-technology branches are: food industry (C10-11), tobacco industry (C12), textile industry (C13-14), leather industry (C15), paper industry and printing (C17-18), furniture industry and various other manufacturing activities (C31-32).
[32] In these, the gap in the electrical, mechanical engineering and furniture industries during the period 2008-2010 increased further with respect to the EU.

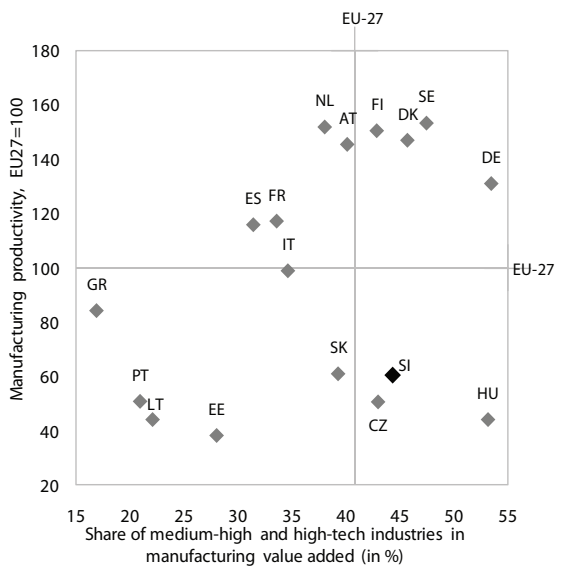
Figure 7: **Manufacturing productivity (measured by value added per employee) by industry, in comparison with the EU average**



Source: Eurostat Portal Page – National Accounts, 2012.

Legend: C21 – pharmaceutical ind., C20 – chemical ind., C29-30 – vehicles and vessels, C27 – el. equipment, C28 – machinery and equipment, C26 – ICT equipment (medium-high and high-tech industries); C22-23 – rubber and plastic products, other non-metallic mineral products; C24-25 – metal ind. (medium-low technology industries); C10-12 – food and tobacco ind., C16-18 – wood and paper ind., printing, C13-15 – textile and leather ind. (low-tech industries); C31-33 – furniture ind., various other manufacturing activities (low-tech industries), repair and assembly of machinery and equipment (medium-low technology industries). C19 – production of coke and petroleum products not included on account of its small share in the manufacturing structure.

Figure 8: **Share of medium- and high-tech industries in manufacturing and the manufacturing productivity, 2010[1]**



Source: Eurostat Portal Page – National Accounts, 2012.

Notes: [1] The data relating to the EU average, Denmark, Germany, Spain, Italy, Lithuania, Portugal, Romania and Sweden apply to 2009. The horizontal and the vertical axes intersect at the EU average.

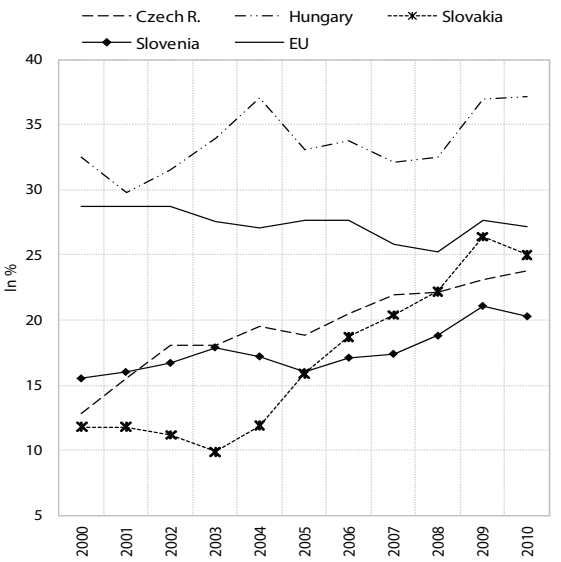
productivity, which is an important determinant of its competitiveness, unlike in other new EU Member States, only slowly moved towards that of more developed countries. As a consequence, in 2010, in addition to Malta, the Slovenian level of productivity was slightly exceeded also by Slovakia.

Slovenia's lag in the field of high-tech exports remains high. In the early stage of the economic crisis (in 2008 and 2009), a significant increase in the share of high-tech products in the total export of goods was recorded; however, this was a result of the increase in the share of pharmaceutical products, which were less affected by the decline in demand at the time of the crisis. In 2010, it slightly declined along with a gradual recovery of exports in other product lines, but remained at a higher level than was the case during the period before the economic crisis. As similar changes in the structure of exports were also observed in the EU as a whole, the relatively large gap in technologically intensive exports compared to the EU average shrunk during this period only in 2008. In the next two years it widened again and has remained large ever since, totalling almost seven percentage points. The gap to the average of the new EU Member States rose by three percentage points in 2010 – the highest level in the past ten years. Exports of five of the new Member States, which are also Slovenia's main competitors on the international markets, are on average more technology-intensive than Slovenia's and the technological intensity of the exports of three new Member States (Cyprus, Slovakia and Hungary) has risen more than Slovenia's since 2007. It means that, despite a relatively high share of high-tech manufacturing industries, Slovenia is characterised by a considerable lag in terms of high-tech export products[33]. Moreover, the productivity level of some high-tech manufacturing industries (compared to the EU level) is relatively low. All this points to the fact that high-tech industry products are, on average, classified into lower-level segments. A higher technological intensity and the promotion of product innovation thus remain a major challenge for improving the productivity and competitiveness of Slovenia's industry. The increase in foreign market penetration for these products also requires the integration of design, advanced information technologies and marketing into business processes[34]. Improvement in this area can also be encouraged by a more active participation in international product chains and cooperation with foreign partners.

[33] In this respect it should be noted that the technological intensity of exports (measured in terms of the share of such products in exports) itself offers no guarantee for the achievement of high levels of labour productivity (measured in terms of value added per employee) since exports are based on a gross value concept, which means that it provides no information on the value added per exported product actually generated (e.g. in the case of the assembly of high-tech products from imported components, the value added is usually relatively low). It also explains, perhaps, the relatively low manufacturing productivity in some new EU Member States despite a significant share of high-tech exports.

[34] Slovenia lags behind developed countries in terms of the share of knowledge-based services in the business processes in manufacturing (see Chapter 1.3.1 Non-Financial Market Services).

Figure 9: **The share of high-tech products[1] in goods exports**



Source: Handbook of Statistics 2007–2008 (United Nations), 2007; United Nations Commodity Trade Statistics Database, 2011; Calculations by IMAD.

Note: [1]Product classification by technological intensity is based on the UN methodology (Trade and Development Report, 2002).

After a decline in the early stages of the economic crisis (2010 and 2011), the level of internationalisation of Slovenia's economy again increased; however, foreign direct investment has remained at a level that is too low to accelerate economic restructuring and increase productivity. In the circumstances of a considerable decline in domestic consumption, the average share of international trade, in comparison with GDP, following the decline in 2009 rose for the second consecutive year last year[35]. It was a result of the recovery in foreign demand and the growth of foreign trade prices and, at the same time, a further decline in domestic demand. In the past two years and in comparison with 2008, the intensity of Slovenia's foreign trade relations grew above the EU average and more than in the majority of small EU economies. However, this was not due to an increase in Slovenia's export competitiveness since the country's foreign market shares shrunk during this period, but instead due to the fact that exports are gaining importance as domestic demand slumps. As regards foreign direct investment (FDI), in 2010, we witnessed the first signs its recovery as inward FDI began to rise after a decline in the previous year and outward FDI continued to decline. FDI flows and changes in FDI stock show a continued increase in inward FDI for 2011, while disinvestment on the side of inward FDI has practically come to a halt[36]. The increase in FDI inflows, in the form of both equity capital and intracompany lending to Slovenian branches, and particularly the positive flow of reinvested profits could represent a gradual return of confidence for foreign parent companies in their Slovenian branches. This is also indicated by the results of surveys conducted in foreign branches in Slovenia (Burger, Jaklič, Rojec, 2011).[37] Despite the positive signals, however, FDI stock in Slovenia is too low to significantly contribute to restructuring and improving the competitiveness of the Slovenian economy. Slovenia thus continues to be ranked among the EU Member States with the lowest FDI stock when compared to its GDP. FDI inflows also remain way below the highest 2007 and 2008 levels.

The share of the population engaged in entrepreneurial activity has been on the decline ever since the onset of the economic crisis. After the growth in the period of favourable economic trends (2005–2008), early-stage entrepreneurial activity[38], which measures the share of the population entering in entrepreneurial activity, dropped to an all-time low during the period 2008–2011 (from 6.4% to 3.7% of the population aged 18–64). During this three-year period, the share of nascent entrepreneurs, i.e. those setting up a business or owning a business for less than three months, declined. In 2011, this has already resulted in the decline in the share of new entrepreneurs (running their businesses from 3 to 42 months) which was at a relatively high level until 2010. A decline in early-stage entrepreneurial activity is closely connected with the economic crisis, as the data point to a significant decline in entrepreneurial activity driven by business opportunities. Business opportunities were the main growth factor in entrepreneurial activity in the time of favourable economic conditions. After an increase in 2010, the share of necessity-driven nascent and new entrepreneurs, which is relatively stable in the long term and fluctuates from year to year, recorded a sharp decline last year, which could be partly explained by a lower number of persons eligible for self-employment subsidies in 2011 (4,502 compared to 5,148 in 2010) even though there was great interest in this self-employment measure (Employment Service of the Republic of Slovenia, 2011). However, it continues to represent a relatively small part of early entrepreneurial activity. The decline in early-stage entrepreneurial activity is accompanied by a decline in overall entrepreneurial activity, which combines early-stage and established entrepreneurship. The share of established entrepreneurs (operating for more than 42 months) declined for the first time since the onset of the economic crisis in 2010 and remained almost stable in 2011. In 2008 and 2009, early-stage entrepreneurial activity in Slovenia was above the average for those EU Member States where data are available, and was below the EU average for the second consecutive year in 2011. In the majority of the EU Member States covered by the survey, entrepreneurial activity has already recovered (as a result of business opportunities identified) in the

[35] See indicator Share of exports and imports in relation to GDP.
[36] See FDI indicator.
[37] It should also be noted that the survey was conducted in September and October 2011, when economic forecasts for the following year were more optimistic than at the beginning of 2012.
[38] The data are taken from a research by the Global Entrepreneurship Monitor (GEM). For more details see the Entrepreneurial Activity indicator.

past two years. Slovenia's deviation from EU trends can be associated with its slower economic recovery and the problems in the national banking system[39] which further restricted the already limited access to funding. At the same time, other obstacles to entrepreneurship remained relatively high.

The results of various international competitiveness surveys continue to point to entrepreneurs' great dissatisfaction with business environment in Slovenia. Despite the fact that significant progress has been made over the past few years in the efforts made to simplify business incorporation procedures and reduce administrative burdens (e.g. through the introduction of electronic commerce), Slovenia has not done enough to provide support to businesses in their operations. In 2011, entrepreneurs quoted particularly poor access to funding, which has deteriorated substantially since the onset of the economic crisis, as the main obstacle to business. According to a World Bank survey on the ease of doing business, Slovenia is also ranked low in terms of obtaining funds for business operations (loans and debt capital). Businesses are also inhibited by more restrictive labour legislation than in most similar EU Member States. World Economic Forum (WEF) research indicates that the biggest problem is caused by the provisions concerning the recruitment and dismissal of employees, and the rigidity of permanent employment and wage setting flexibility. State bureaucracy is also a hindrance to doing business and, like the judicial branch of power, lacks effectiveness. The remaining problems are the lengthy procedures required to obtain various documents, permits and authorisations, and unreasonably lengthy contract enforcement procedures. The period since the onset of the crisis has also revealed a lack of good practices in Slovenia's business environment as it is ranked the lowest in competitiveness surveys in terms of the effectiveness (responsibility) of supervisory boards, the enforcement of accounting standards, and management credibility. Moreover, the IMD mentions the ineffectiveness of the state ownership of enterprises, which ranks Slovenia the lowest among all the states covered by the survey.

1.3. Increasing the competitiveness of services

The share of the service sector in the Slovenian economy has risen considerably since the onset of the economic crisis, as the volume of non-service activities has shrunk. The relative volume of services (G-T activities) in terms of gross value added was almost unchanged during the period 2005–2008, and in 2008–2010 it grew to 67.6% as the construction and manufacturing sectors experienced a severe contraction. The highest increase was recorded in public services (2.4 percentage points) and financial services (0.9 percentage point) where no decline in value added was recorded in the year of an overall economic decline (2009). The share of non-financial market services increased at a lower rate (0.4 percentage point) as the value added of that part of services recorded an average decline, which was, however, lower than in non-service activities. The share of the service sector as a whole thus slightly exceeded the SDS target value for 2013 (67%). Intense structural changes in favour of service industries also resulted in a decrease of Slovenia's lag behind the EU in terms of the share of services in the structure of the economy after 2008. Nevertheless, Slovenia deviates from the EU average in terms of a considerably smaller share of market services. The share of public services is

Table 1: **The shares of services in the structure of gross value added of Slovenia's economy**

%	2000	2005	2006	2007	2008	2009	2010
Services (G–P)	61.9	63.6	63.6	62.9	63.9	66.5	67.6
Market services (G–T, without O,P,Q)	45.8	47.1	47.6	47.7	48.4	49	49.7
Non-financial market services (G–T, without O, P, Q, K)	41	42.5	42.5	42.9	43.7	43.9	44.1
Public services (O,P,Q)	-1.9	-2.4	-2.7	-3.7	-3.7	-3.7	-2.7

Source: SI-STAT data portal – National Accounts (SURS), 2012
Legend: Service industries according to the Standard Classification of Activities (2008). G – Wholesale and retail trade, repair of motor vehicles, H – Transportation and storage, I – Accommodation and food service activities, L – Real estate services, M – Professional, scientific and technical services. N – Other various business services, O – Administration and defence, P – Education and training, Q – Health care and social assistance, R, S, T – Other services.

Table 2: **Difference between Slovenia and the EU average regarding the share of services in the structure of gross value added of the economy**

In percentage points*	2000	2005	2006	2007	2008	2009	2010
Services (G–T)	-7.8	-8.1	-7.8	-8.5	-7.8	-6.9	-5.6
Market services (G–T, without O,P,Q)	-6.2	-6.1	-5.5	-5.6	-5.0	-4.7	-4.0
Non-financial market services (G–T, without O, P, Q, K)	-6.2	-5.4	-5.2	-5.1	-4.4	-4.0	-3.8
Public services (OPQ)	-1.7	-2.0	-2.3	-2.9	-2.9	-2.2	-1.6

Source: Eurostat portal page – Economy and Finance – National Accounts by 6 branches, 2012.
*Minus means that the share in Slovenia is below the EU average. Legend: See legend under Table 1.

[39] See Chapter 1.3.2: Financial Services.

also slightly lower, particularly due to a relatively low involvement of the private sector in the provision of certain public services (primarily health care and social assistance)[40].

1.3.1. Non-financial market services

The share of non-financial market services in the structure of the economy increased throughout the period of SAS implementation; however, despite the progress already made to date, there is still considerable development potential in business services. Knowledge-intensive services (business, information and communication services and a part of transport services)[41] have contributed most to the increase in the share of non-financial market services throughout the implementation period of SDS (since 2005). On the other hand, the share of traditional services (retail and wholesale trade, transport, hotels and restaurants) also recorded a significant increase in good economic times. The growth in importance of knowledge-intensive services is a part of the catching-up process since Slovenia lags behind more developed economies in this area, mostly in the area of knowledge-intensive business services[42]. Along with the development of information, professional, scientific, technical and various other business services during the period 2005–2010, knowledge-intensive business services gained the most in terms of value added (1.4 percentage point). In 2010 they accounted for almost 11% of the value added of Slovenia's economy, which is a good percentage point below the SDS target value for 2013 (12%). The gap to the EU average decreased considerably less (by 0.3 percentage point to 1.3 percentage point before 2009, which is when the latest international data are available) given the rapid development of business services in other EU Member States in this period.

Slovenia also lags behind more developed economies in terms of the role of business services in manufacturing business processes. In addition to the role of knowledge-based services in the economy, their role in the production processes of other industries is also very important from a development perspective. High-tech manufacturers in particular increasingly market their products in a package with various services (maintenance, training, after-sales services, etc.) and thus increase the competitiveness of their products. Moreover, design, R&D, technological testing, marketing, etc. – areas in which Slovenia lags behind more developed countries – are also an important factor in competitiveness. The 5.7% share of knowledge-intensive business services in manufacturing intermediate consumption was three percentage points lower than in the EU-15 in 2005 (the latest available international data[43]) and slightly increased by 2007 (the latest available data for Slovenia[44]). If we consider only high-tech manufacturing activities, the gap to the EU-15 is even larger (6.6 percentage points in 2005), and during the period 2005–2007, the share of business services in manufacturing intermediate consumption slightly deteriorated.[45] The weak relationship between manufacturing and business services in Slovenia is also shown by the analysis prepared by the European Commission (Product Market Review 2010–2011, 2010), according to which Slovenia has one of the lowest multipliers of manufacturing demand for domestic business services[46] among the EU Member States. This may be explained by Slovenia's high level of openness to trade as a small economy; however, Slovenia also imports relatively few business services[47]. Of all the services, business services are the most strongly connected with manufacturing (in the EU and Slovenia); at the same time, they have relatively low productivity when compared to other services[48], In addition to low exposure to foreign competition, the low productivity of these services is due to their characteristics, which restrict standardisation and economies of scale (diversity, the need for a close relationship and interaction with clients, where process automation using ICT is lower). Given the high degree of connectedness with the industry sector, further development and an increase in business service productivity represent important potential for improving manufacturing competitiveness and increasing exports.

As international trade in services recovered, Slovenia's market share in the export of services to the rest of the EU slightly increased after having experienced a sharp decline in the previous year. In 2010 international trade in services recovered in Slovenia and the rest of the EU. The import and export of services increased slightly more in the EU than in Slovenia. Slovenia predominantly

[40] Public services may be performed both in the public and private sectors. For more details on access to public services, see Chapter 4 Modern Welfare State.

[41] According to Eurostat methodology, the category of knowledge-intensive services includes the following: waterway traffic (NACE 50), air transport (51), services related to films, video recordings and television programmes (59 and 60), telecommunications (61), computer programming and other information services (62 and 63), professional, scientific and technical services (M), employment services (78), security, investigation and other business services (80-82).

[42] During the economic crisis, the increase in the share of knowledge-intensive services in the structure of the economy was the result of a more intense contraction of other activities (particularly manufacturing, construction and traditional services).

[43] EU Competitiveness Report 2011 (European Commission), 2011.

[44] Calculation by IMAD based on input-output tables.

[45] From 7.4% in 2005 to 6.8% in 2007 (calculation by IMAD on the basis of input-output tables).

[46] This multiplier is calculated on the basis of the input-output tables.

[47] The average share of business services in terms of GDP in Slovenia and in the EU is 2.1% and 2.4%, respectively. In all other more developed Member States, where manufacturing demand for domestic business services is similar to or even lower than that of Slovenia, the share of imported business services is above average. It is at its highest in Ireland (21%).

[48] Business service productivity in Slovenia is also considerably below the EU average.

exports its services to the EU market. In 2010 the volume of such exports increased further and so did the share of Slovenia's five largest export markets in the EU (54%)[49]. In the same year, Slovenia's export of services to the rest of the EU rose by 9.8%, and its share of these markets increased by 2.6% on average. This made up only partly for the loss of export competitiveness on the EU market in 2009. In 2010, an increase in market share was recorded in travel services (5.9%), particularly in Hungary (18.7%) and Italy (16.7%). The export of travel services is still holding up relatively well despite the crisis. The transport services that were hit by the economic crisis as early as 2008 experienced a further slight decline in terms of EU market share. In 2010, there were no changes in the category of services that mainly includes knowledge-intensive services. In this respect it should be noted that these services recorded a 12% decline of their share in the EU market in 2009, which points to their weak competitiveness. Detailed information on other services highlight various trends as some of these services recorded a considerable increase in market share during the past year (financial services, licences, patents and copyrights, communication services and – but only on the Austrian market – construction services) and others a decline (computer and IT services, other business services). Although there is an occasional increase in the market share of some knowledge-intensive services in major markets, the number of providers of high quality services is insufficient to make a major breakthrough in foreign markets.

More intense innovation activity in the service sector is one of the main factors leading to the improvement of the quality and competitiveness of services. It is based both on investment in R&D and investment in non-technological aspects of innovation (specific skills, brand development, marketing methods and business models). In 2008, Slovenia earmarked (according to the latest data) less than 14% of funds for R&D activity in the service sector and tailed the list of EU Member States (OECD Science, Technology and Industry Scoreboard, 2011). Slovenia's lag behind the EU average regarding the share of innovative businesses in the service sector is not significant[50], however, effective investment in innovation is equally important. The results of the study based on the survey[51] and the data for 2008 show that only a small number of service enterprises are leading innovators. Most of them copy solutions already established, which points to a non-systematic approach to innovation activity. The authors of the study underline that it is particularly important to increase the share of investment in innovation marketing out of total innovation expenditure in order to achieve economic results from innovation activities in the service sector (Likar et al., 2011). The latest study of high-tech small and medium-sized enterprises[52], in which service enterprises account for more than 90% has shown that, in the past three years, these businesses mostly introduced minor gradual innovations (i.e. incremental innovations) and much less radical innovations (Raškovič et al., 2011). These weaknesses in innovation activity indicate that not even a broader innovation support environment has responded so far to the specific features of innovation processes in the service sector and non-technological innovation aspects (Stare, 2012).

A lack of competition in services has been evident in certain network industries and wholesale and retail sectors for years, but there have been some signs of improvement recently. The highly concentrated industries[53] that stand out in international comparisons in terms of mark-ups[54] include some network industries (post and telecommunications) as well as retail and wholesale trade sectors (retail trade in non-specialised, predominantly grocery stores, fuel outlets and some segments of wholesale trade). In telecommunications the concentration is on a gradual decline, and the gradual decrease in the market share of the incumbent operator and the convergence with average values in the EU are shown by a detailed analysis of the majority of telecommunications markets (see Box 4). As regards postal services, after the total liberalisation in 2011, the number of providers rose to five[55]. The largest among trade industries, for which the data indicate a lack of competition, is the non-specialised retail trade, mainly in food products. It is this activity that showed a dramatic increase in concentration as small grocery stores folded and big hypermarkets expanded. In the past few years (2007–2010), the level of industry concentration has been falling with the arrival of new foreign retail chains, but remains high[56], which is, to a certain extent, also the result of the small size of the Slovenian market[57]. The concentration of the retail trade in motor fuel is very high, but declined somewhat in 2010. On the contrary, during the last year, the concentration further increased in two wholesale trade segments (in fuels and tobacco products).

[49] Italy, Austria, Germany, Hungary and the United Kingdom.

[50] According to the latest available data for 2006–2008, innovation-active businesses comprised 46.1% and 48.5% of the service sector in Slovenia and the EU, respectively (Progress Report 2011, 2011). More recent data for 2008–2010 will be available in October 2012.

[51] The sample included 173 businesses.

[52] A sample of 160 enterprises classified as high-tech according to OECD definition.

[53] Concentration is measured in terms of the Herfindahl–Hirschman Index (HHI). According to this criterion, a high concentration is that which exceeds the index value of 1800.

[54] The mark-up has been calculated as the ratio between sales revenues and the cost of acquiring goods, services and labour.

[55] According to the data provided by the Agency of the Republic of Slovenia for Public Legal Records and Related Services (AJPES) for November 2011.

[56] The HHI value for this industry dropped from 3,387 in 2006 to 2,536 in 2010.

[57] The countries with the highest share of the three largest providers of grocery goods in the EU are predominantly small: Slovenia, Austria, Finland and Ireland (Structural Features of Distributive Trades..., 2011).

Box 4: **Competition in some network industries**

In the electronic communications market, the level of competition has come very close to the EU average for broadband Internet, and the increase in competition in electricity supply is due particularly to the large number of changes of supplier. In the *electronic communications*, the market share of the largest supplier dropped most in the past few years in fixed telephony (by 15 percentage points during the period 2007–2009, and by 3 percentage points on the EU level), where VoIP Internet telephony[1] and alternative providers partly substituted conventional fixed telephony (according to the data of the Postal and Electronic Communications Agency, the market share of fixed telephony was only 55% in 2011). Fixed telephony is simultaneously being replaced by mobile telephony; however, despite rapid improvement, market concentration in both telephony segments is still significantly higher than the EU average. The market share of the largest service provider is lowest in broadband Internet access and is already at the average EU level. Despite a slightly higher market concentration, the prices of fixed and mobile telephony services are mostly below the EU average. In 2010, mobile telephony prices were 9.2% higher in a small basket of services[2], and 11.1% and 16.1% below the EU average in the medium and large basket of services respectively. In fixed telephony[3], they were 19.9% and 38% lower for residents and the business sector respectively. In the past few years, the least changes were observed in ownership structures which maintain a high proportion of state ownership in the largest telecommunication service provider. A similar situation can be observed in *electricity supply*, where most of the industry is predominantly state owned. In the area of electricity supply, where changes in the market structure have been slower, competition is promoted by price transparency and the ease of changing supplier. According to the data provided by the Energy Agency of the Republic of Slovenia (AGEN-RS), the market share of the largest electricity producer was 65.2% in 2010 (this takes only the Slovenian part of the electricity produced by the nuclear power plant into consideration), and the internationally comparable Eurostat statistics (by taking into account the total energy produced by the nuclear power plant) was 55% in 2010, which almost equals the (arithmetic) EU average. A total of 16 suppliers were operating on the electricity retail market, and a HHI of 1646[4] pointed to a high concentration level. In the distribution customer market alone (which includes households), the concentration index of 1881 continued to indicate strong market concentration. A slightly larger difference between EU and domestic prices indicates a weakening of supplier oligopoly. In the first half of 2011, electricity prices for industry (excluding taxes) and households were below the EU average by 5% and 15.4%, respectively. A significant improvement in competition in the electricity supply market is shown by the data on the number of changes of supplier. In 2010 there were 17,782[5] such changes or almost 40% more than the year before. According to the data provided by AGEN-RS, a larger number of changes of supplier occurred in 2011 when the number of changes exceeded 33,000 in household customers alone, which is more than four times the increase on the previous year.

Table: **Market shares[1] of the largest providers in electronic communications markets expressed as a percentage**

		Slovenia					EU					EU-3[2]
	Month	**2007**	**2008**	**2009**	**2010**	**2011**	**2007**	**2008**	**2009**	**2010**	**2011**	
Fixed telephony	Dec	93	87	78			62	61	59			49
Mobile telephony	Oct	67	72	57	56		40	39	38	38		32
Broadband Internet	Jan		50	49	46	43		46	46	45	43	29

Source: Digital Agenda Scoreboard 2011, Electronic communication market indicators (European Commission), 2011.
Note: [1]In fixed telephony in terms of traffic expressed in minutes, in mobile telephony in terms of active SIM cards, and in the Internet in terms of the number of connections.
[2]The average for three EU Member States with the lowest particular market concentration.

[1] Voice over Internet Protocol.
[2] Report on Telecoms Price Developments 1998–2010 (European Commission), 2010. The mobile telephony service baskets (according to the OECD methodology) include inland calls (partly to other mobile and fixed networks), SMS, MMS, voicemail (does not include international calls – roaming) and take into consideration the cheapest package offered by individual providers. The average prices of the two Slovenian providers presented in the report is compared to average EU prices. The extent of services included depends on the size of the basket (small, medium or large).
[3] Report on Telecoms Price Developments 1998–2010 (European Commission), 2010. The two telephony service baskets include subscription, national and international calls, and calls to mobile networks, and take into account the cheapest package.
[4] The market share of the largest supplier was 25.4%.
[5] Of which 7,850 changes were recorded among households (818,000 household customers in total).

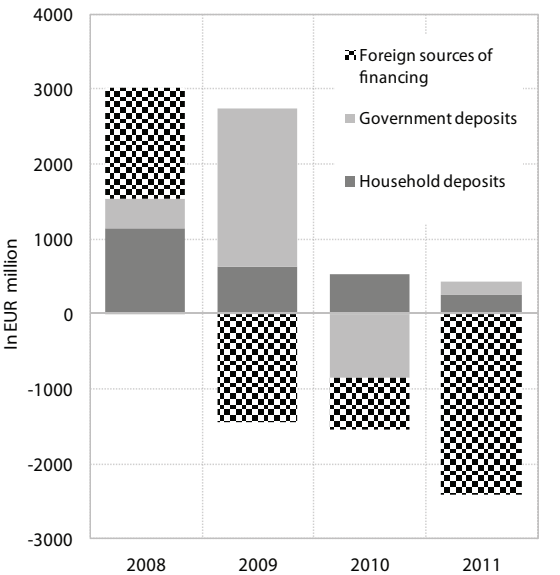
Throughout the period of SDS implementation, the main weaknesses in Slovenian market services remain underdevelopment and the low productivity of knowledge-intensive services which, due to the high degree of connectedness with other sectors, have great potential for improving the competitiveness of the entire economy. In addition to the large share of services in the structure of value added and employment, rapid technological advances, which bring new specialised services and service integrations into the business processes of other activities, have increased the importance of the direct impact of these services on economic efficiency. Services, particularly development-related and business services, support innovation processes in manufacturing by transferring knowledge and thus enhance product differentiation and quality and, consequently, also their value added and competitive market position. The lag of manufacturing behind the EU average in terms of value added per employee is significant and is decreasing only slowly[58]. On the other hand, it should not be overlooked that manufacturing companies in developed countries also increasingly provide market services they have developed in order to provide their customers with integral solutions. This expands the range of highly specialised knowledge-intensive services and brings their producers financial and marketing benefits and strategic advantages, as complementary services provide the buyers of products with value added services (European Competitiveness Report 2011, 2011). For this reason, a further strengthening of knowledge-intensive services is essential for increasing economic effectiveness and competitiveness.

1.3.2. Financial services

In 2011, the conditions in the financial sector continued to deteriorate, causing the gap in the development of Slovenia's financial sector in comparison with the EU average to increase again. The smallest development gap in financial services was recorded in the insurance industry. Like in the EU, the insurance premiums in relation to GDP remained at the previous year's level. Slovenia achieved less than two thirds of the EU average. The banks continued to reduce the volume of their investments, which was reflected in a further decline in loans to Slovenian businesses, which rank among the most highly indebted businesses in the euro area. In our opinion, the development gap in this area, measured in terms of relative total bank assets, slightly increased last year; moreover, the indicator shows that Slovenia's economic development lags behind some comparable EU Member States. The largest development gap is in capital markets, which was the least developed segment in Slovenia's financial system before the outbreak of the financial crisis. Its importance for the provision of fresh sources of financing is negligible and it has not even contributed to the transparency of ownership consolidation of businesses. The worsening of the financial crisis and low capital market liquidity have further considerably increased the development gap. The Ljubljana Stock Exchange market capitalisation decreased dramatically and there was an even stronger decline in turnover, which puts the Ljubljana Stock Exchange among the least liquid capital markets in the EU.

The problems with limited banking resources deteriorated further in 2011. The extremely unfavourable fiscal trends in some euro area countries and anticipations of another slump in the EU economy substantially increased uncertainty in the international financial markets. At the end of 2010, the guarantee schemes for bank borrowing abroad expired. All this considerably restricted the possibilities and access to foreign financing so that the banks relied heavily on domestic financing, which was rather scarce. Under unfavourable labour market conditions, inflows of household deposits halved, and the government has a very limited option to provide further financing to the Slovenian banking sector as a result of the severe deterioration in public finances. Consequently, the pressures associated with the refinancing of bank debt are rapidly mounting. The banks repay a part of their liabilities from existing reserves, by reducing their lending activity and partly through refinancing. With the situation in the international financial market worsening each day, refinancing deadlines are getting shorter, causing bank liabilities to fall due almost simultaneously. At the beginning of 2011, one fifth of the bank liabilities towards foreign banks matured within one year; at the

Figure 10: **Net inflows of government and household deposits accepted by banks, and net inflows of foreign financing***



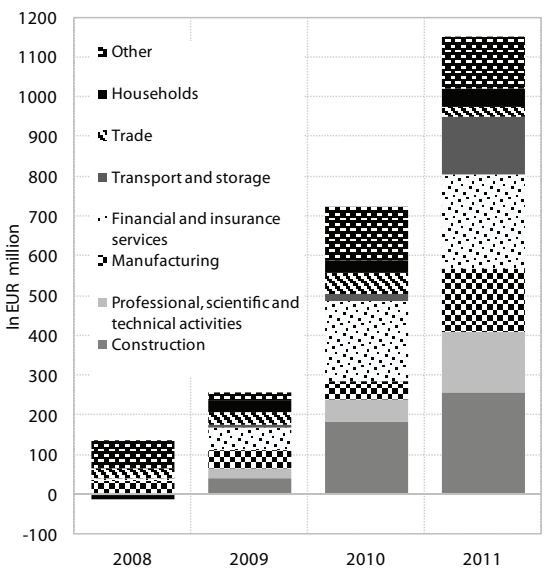
Source: Bank of Slovenia, calculations by IMAD.
Notes: * Loans, deposits and bonds.

[58] See Chapter 1.2. Increasing competitiveness and promoting entrepreneurial activity

end of the year,[59] this share rose to more than 30% and totalled approximately EUR 4 billion, or a good quarter more than at the beginning of the year. Since refinancing pressures on the banks dramatically increased last year in the euro area as a whole, and access to interbank market financing was significantly reduced, the ECB adopted additional measures to mitigate liquidity problems and stimulate lending. The most important of these were long-term refinancing operations with a maturity of 36 months in which the ECB provided almost EUR 500 billion in loans to banks in the EU at the first auction at the end of December last year. According to our estimates, Slovenian banks secured an additional EUR 900 million in long-term funds at this auction.

The quality of bank assets also rapidly deteriorated during the past year. The share of bad debts accounted for as much as 11.2% of the total banking system exposure, or EUR 5.5 billion. In the last few months of the year, the increase in C-rated loans[60] came to a halt, which was, in our opinion, primarily the result of a faster reclassification of debts into lower loan ratings; however, the increase in receivables in this rating intensified at the end of the year, which points to the fact that conditions in the Slovenian banking system will not improve so soon. The increase in non-performing loans still remains high. At the end of the year, they totalled EUR 3 billion and accounted for 6% of total bank exposure. The deterioration in the quality of claims was fastest in the construction sector and in the activities in which major corporate takeovers took place[61] and, in the past few months, also in manufacturing, particularly in metal products and mechanical industries. The volume of non-performing loans increased significantly in these activities during the past year; however, this was not so high in other activities, which represent 14.0% of the total exposure of banks during this period.

Figure 11: **Net flows of non-performing loans by activity**



Source: Bank of Slovenia, calculations by IMAD.

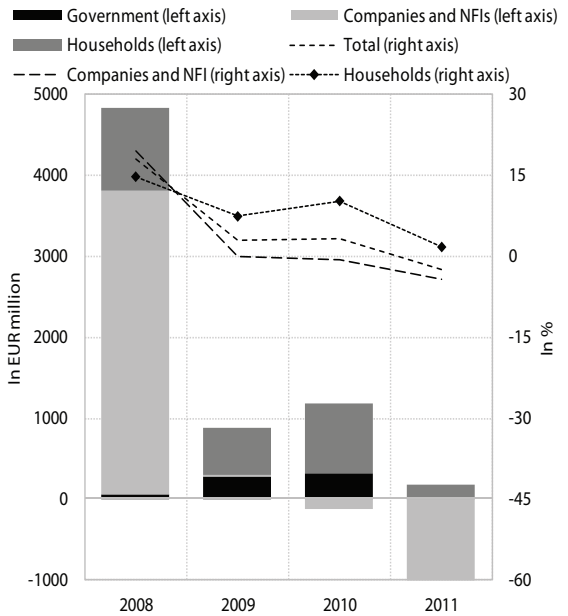
As a result of the deterioration in the quality of their assets, the banks created additional provisions and impairments, which further inhibited lending. Last year, provisions and impairments totalled EUR 1.1 billion, or 40% more than in 2010. According to our estimates, provisions totalled EUR 3.5 billion at the end of last year. Although the level of provisions was high, we believe that the banks could be even more restrictive in creating them, given the rapid deterioration in investment quality. The rate of covering the lowest quality debts with provisions declined during the past year. The inadequate coverage of non-performing loans by banks was also one of the reasons for the credit rating downgrades of banks and the state[62].

In addition to the aforementioned lack of financial resources, one of the reasons for the modest lending volumes[63] is also the weak demand for loans by both businesses and households. Slovenian businesses are among the most highly indebted in the euro area, which severely restricts their options to borrow further. In the past year, companies and NFIs repaid loans obtained from local banks totalling almost EUR 1 billion net. In 2010, net payments amounted to one tenth of the net payments made in 2011. On the other hand, the companies that were sufficiently large, successful and financially stable increased their foreign borrowing, which totalled EUR 185.1 million in the past year. Net payments of domestic and foreign loans totalled almost EUR 800 million last year – twice the amount for 2010[64]. Accordingly, we estimate that corporate debt fell in the past year but still remains among the highest in the euro area. To increase borrowing potential, companies will have to further reduce their debts or provide additional capital[65], which would bring in fresh funds, reduce their financial leverage, and facilitate the acquisition of debt finance. An important limitation regarding the corporate demand for loans is weak economic activity and the further slump anticipated in this regard. As a result, companies mostly demand loans for refinancing, but their investment activity remains low. At the beginning of the last quarter, the situation improved but credit activity nevertheless

[59] The data are for October 2011.
[60] C-rated loans include those in which the share of impairments, i.e. provisions, accounts for 15.01–40%.
[61] These activities are financial intermediation, trade, transport and storage and professional, scientific and technical activities.
[62] Credit rating agencies also indicate that the poor conditions in the banking system were one of the reasons for Slovenia's credit rating downgrade.
[63] Our net lending estimate is based on a comparison of the lending volumes in two different time periods.
[64] The decrease is partly also due impairments created during this period.
[65] We believe that this is a rather limited possibility as there is almost no alternative to bank loans as a source of financing in Slovenia, and, in a situation of weak economic activity, operating results do not provide for the sufficient capital strength of companies.

remained low[66]. In December, the repayment of loans to domestic banks strongly increased. Household borrowing also stabilised considerably in 2011. In our opinion, this was largely due to the poor labour market and real estate market conditions. According to our estimates, the decline seen in the borrowing statistics can also be attributed to the depreciation of the Swiss franc as the major denomination for foreign-currency[67] household loans. Household borrowing thus totalled EUR 171.3 million in 2011, i.e. less than one fifth of the figures for 2010.

Figure 12: **Credit activity of Slovenian banks and year-on-year increase in the volume of lending**



Source: Bank of Slovenia, calculations by IMAD. Note: Our net lending estimate is based on a comparison of the lending volumes in two different time periods.

Restricted access to financing will continue to remain a major factor inhibiting the recovery of Slovenia's economy in 2012. We consider that, despite the measures adopted by the ECB at the end of last year, the credit crunch in Slovenia will not yet be fully over in 2012. The banks will mostly save the long-term funds obtained from the ECB in order to refinance matured liabilities[68]. The capital adequacy of the Slovenian banking system also remains relatively low[69] and prevents banks from assuming additional lending risks. The continued rapid deterioration in bank assets and a weaker outlook for future economic activities represent an additional threat to the capital adequacy of Slovenia's banks, which will result in a further deterioration in the quality of bank assets. This will have a negative impact on the relatively large extent of additional provisions and impairments created and the banks' operating results. Due to the problems in Slovenia's banking system and poorly developed other forms of financing, access to fresh financing will also continue to be restricted for businesses that are not highly indebted and see opportunities in the current economic conditions, but are not able to take full advantage of these opportunities due to the restricted access to financing.

[66] In our opinion, the slightly higher volume of lending at the at the end of the year could be the result of Slovenia's credit rating downgrade at the end of last September, which restricted and raised the price of financing to Slovenian businesses which have probably resumed their borrowing with domestic banks.

[67] Foreign currency loans account for one tenth of total household loans.

[68] This is also shown by the latest data on overnight deposits lodged by banks with the ECB: the banks re-deposited much of the funds obtained during the first three-year long-term refinancing operation into their accounts with the ECB.

[69] A comparison between countries shows that Slovenia's banking system has one of the lowest capitalisation ratios in the euro area.

Box 5: **Private sector borrowing and debt (internal imbalance indicators in excessive imbalance assessment procedures in the EU)**

Two indicators are used to measure private sector borrowing within the excessive imbalance assessment procedure: The first one is private sector (households and non-financial corporations) borrowing as a ratio between the net borrowing of the private sector and GDP. The second one is used to measure private sector indebtedness and represents a relationship between total private sector debt and GDP.

In EU Member States, private sector borrowing indicators often exceeded their ceilings during the period 2004–2008. As the financial crisis worsened, borrowing flows dropped below the threshold values (15% of GDP). The stabilisation of trends in this area was the result of unfavourable financial market conditions that restricted access to financial resources and were the main reason for the credit crunch. The level of private sector debt remained above its threshold value (160% of GDP) even after 2008. In this area, a significant drop below this ceiling is not reasonable in the short term since this would further restrict access to the financing required for the entrepreneurial sector.

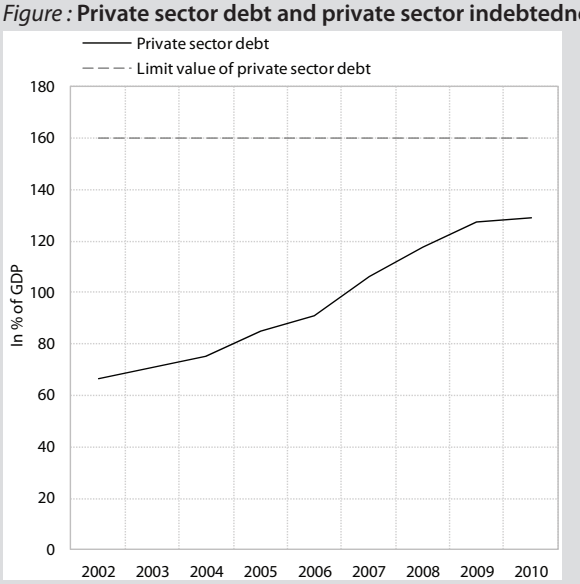
In the circumstances of the intense lending activity that took place during the period before the outbreak of the crisis in 2005 and 2006, Slovenia's private sector borrowing came very close to its ceilings and exceeded them in 2007 and 2008. This generated considerable imbalances during this period which strongly inhibited lending activity in Slovenia. It is also one of the reasons why economic activity has remained below the euro area average. However, the risk of lower economic growth due to the instability of the financial sector will continue to exist in the future. The fact that Slovenia's private sector debt (particularly corporate) is high is also highlighted in the first European Commission report on excessive imbalances (Alert Mechanism Report, 2012).

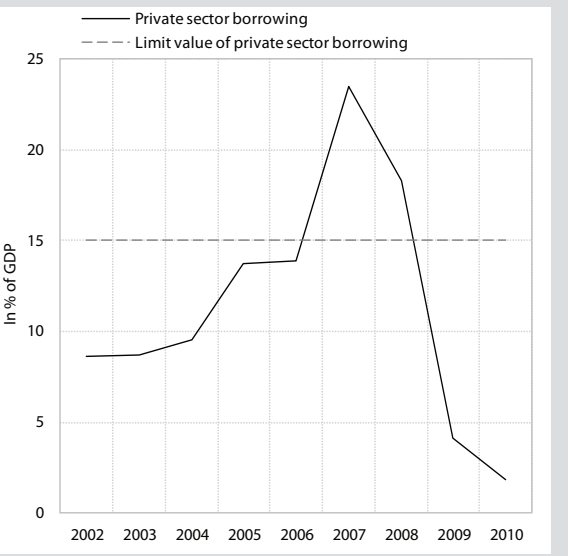
Box 5: **Private sector borrowing and debt (internal imbalance indicators in excessive imbalance assessment procedures in the EU)** - *continue*

In the years preceding the economic crisis, the high level of private sector borrowing was generated by the growth in corporate and household borrowing. Both the supply and demand for loans during this period were high, which was due to strong upward economic trends and the related strong private sector demand for loans for financing the increased production volumes, investments and even takeovers. During this period, households also borrowed heavily to purchase homes and consumer goods. Private sector net borrowing flows peaked in 2007 and accounted for slightly less than one quarter of GDP, then stabilised in 2008 but still exceeded their threshold value. As the situation in the international financial markets deteriorated, lending volumes decreased. The drop in Slovenia's lending activity was above average since the indicator value was below the EU average. In 2011, Slovenia's credit crunch worsened while the EU banks' lending activity to the private sector, on average, stabilised as the net flows still remained positive.

Private sector debt grew rapidly during the past decade but remained below its ceiling throughout this period. During the period 2001–2010, the indicator almost doubled in value (to 129% of GDP), which was one of the highest growth rates in the EU. Among the old EU Member States, a higher growth rate was recorded only by Ireland. In terms of indicator value, Slovenia's private sector ranks among the least indebted sectors, which is largely due to the fact that Slovenia's household debt is one of the lowest in the EU. At the same time, corporate debt is higher and is approximately at the EU level. A detailed study of the sources of financing of Slovenian businesses shows that loans are a considerably important source of financing for Slovenia's economy since there are practically no other sources of financing due to a poorly developed financial market. This puts Slovenian businesses among the most highly indebted businesses in the EU in terms of debt-to-equity ratio.

Figure : **Private sector debt and private sector indebtedness**





Source: Bank of Slovenia, calculations by IMAD.

2. Efficient use of knowledge for economic development and high-quality jobs

SDS guidelines: SDS priorities aimed at efficient creation, two-way flow and application of knowledge for economic development and high-quality jobs are: improving the quality of tertiary education, promoting lifelong learning, and increasing the effectiveness and level of investment in research and technological development.

2.1. Education and training

Slovenia has been gradually improving its human capital as an important factor in economic development, but the low efficiency of investment therein has thus far remained an issue. An increase in human capital, often measured by the average years of schooling and the proportion of the population with tertiary education, has a positive impact on the economy and productivity. The large proportion of Slovenia's population with completed upper secondary education ranks the country high in terms of the average number of years of schooling; in 2010, the country's average of 11.6 years of completed schooling placed it close to Scandinavian countries. Barro (2000) estimated[70] that an additional year of schooling in OECD countries raises GDP per capita growth rate by 0.44%, whereby the impact in more developed OECD countries amounts to 0.23% and in less-developed OECD countries to 0.84%. According to the most recent data, the share of the Slovenia's population aged 25–64 with tertiary education stood at 25.5% in the second quarter of 2011; given that Slovenia has a high above-average participation of young people in the tertiary education, a faster narrowing of the gap with developed countries would be expected, but only a slight move towards the EU average has been recorded during SDS's implementation. However, Slovenia is making rapid progress as regards the share of the population with tertiary education in the 30–34 age group, which is to increase to 40% by 2020 according to the Europe 2020 Strategy. In 2011, it was at 37.1% (i.e. a 12.1 p.p. increase over 2005) and exceeded the EU average of 34.2%. The education level of the population is relatively high, but there are some deficiencies associated with the quality of education. Hanushek and Kimko (2000) found that there is a clear positive correlation between economic growth and the quality of labour force, which is largely determined by the quality of education and the scientific and mathematical achievements of young people[71]. We estimate that the positive impact of education on economic growth in Slovenia is challenged mainly by the following: (i) poorer performance in the areas of science and mathematics in recent years[72]; (ii) the insufficient number of science and technology graduates; (iii) poor efficiency of investment in education; and (iv) structural imbalance in graduate demand and supply[73].

The participation of young people in upper secondary and tertiary education has remained high and is well above the EU average; it has also exceeded SDS objective for tertiary level education (55%) for the last two years. The participation of young people aged 15–19 years of age in upper secondary education was 77.7% in 2009 (the most recent data) and was well above the EU average of 58.6%. A slight decrease in the participation rate had been recorded during SDS's implementation, but the decreasing trend has stopped in recent year. The upper secondary education completion rate is also high; in 2009, it exceeded the average of the 21 European countries that are members of the OECD. Slovenia records a low percentage of early school leavers, which is attributable to a high participation of young people in secondary school education and a high secondary education completion rate[74]. The participation of young people aged 20–24 years in tertiary education has remained at approximately 47% in recent years and is high above the EU average, which stood at 29.3% in 2009. The high participation in tertiary education, which is partly attributable to the benefits offered by the status of being a student, decreases study efficiency. In the 2010/2011 academic year, the participation of young people at enrolment age in tertiary education was 57.3% and slightly exceeded SDS's target of 55%.

The structure of enrolment in upper secondary education has been moving towards increasing enrolment in technical and other professional programmes. A decreasing trend in the proportion of young people enrolled in lower and middle upper secondary vocational schools, typical of SDS's

[70] Barro (2000) considered a panel of 80 countries observed over ten-year periods (1965–1975, 1975–1985, and 1985–1995).

[71] They used the PISA science and mathematics test scores as variables.

[72] PISA 2006–2009 results showed a decline in the scientific and technological literacy of 15 year olds. (See Chapter 4.3.2. Quality of Life).

[73] The structural imbalance is indicated by a growing number of registered unemployed with tertiary education, which almost doubled in the 2005–2011 period.

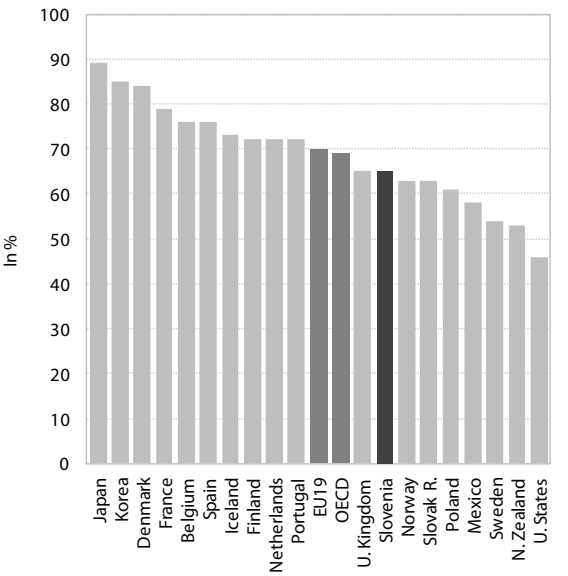
[74] Percentage of the population aged 18–24 with at most lower secondary education and not in further education or training. The Slovenian rate amounted to 5.2% in 2010. It was low throughout SDS's implementation. One of Slovenia's objectives within the EU 2020 Strategy is to maintain a low rate. The average EU drop-out rate was 15.1% in 2010 (the objective is 10% by 2020).

implementation[75], almost stopped in the past year. A continued increasing trend has been observed in the share of enrolment in four- and five-year secondary technical and other professional programmes, while the share of enrolment in general upper secondary schools has recorded a decrease for the second year in a row. Young people's lack of interest in vocational education is not surprising; according to a Eurobarometer Special Survey[76] Slovenia was ranked among those countries in which vocational education had the least favourable image[77]. In comparison to those in other EU Member States, the respondents in Slovenia assess the situation in the area of vocational education as poor and also perceive its status as low[78].

As regards the tertiary education enrolment structure, a decrease in the social sciences enrolment rate has been noted. A continued downward trend in the social studies enrolment rate was observed in the academic year 2010/2011 compared to overall enrolment in tertiary education. It dropped from 43.5% in 2005 to 34.7% in 2010. The resulting decrease in the share of social study graduates was recorded in 2010 and amounted to 44.3% (1.2 p.p. less than in 2005). During SDS's implementation, the share of science and technology graduates[79] has increased, but Slovenia still lags behind the EU average in terms of their number per 1,000 inhabitants aged from 20 to 29 years[80].

Some tertiary education quality criteria show that only a modest improvement has been achieved during SDS's implementation. The ratio between the number of students in tertiary education and the number of teaching staff, which serves as a rough international criterion of quality, has improved during SDS's implementation. In 2009 (the most recent data available) the lag behind the OECD average was considerable and has not substantially reduced during SDS's implementation. It should be pointed out that this unfavourable ratio is partly due to fictitious enrolments motivated by the benefits offered by the status of being a student. Progress made in the area of student mobility, which is one of the study quality criteria, has been modest. The share of foreign students in Slovenia has increased during SDS's implementation, but was nevertheless among the lowest in the EU[81]. There are some issues associated with both the high participation of young people in tertiary education and the low-level efficiency of studies. In 2010 the average duration of regular university undergraduate studies did not change significantly from the previous year; a slight decrease has been observed during SDS's implementation (a drop from 6.8 years to 6.2 years)[82]. This shorter study duration is partly attributed to the introduction of Bologna study programmes; the new programmes are shorter than their precursors and therefore result in a shorter average study duration. According to the most recent international data

Figure 13: **Completion rates in tertiary education[1], 2008**



Source: Education at a Glance 2010 (OECD), 2010.

Note: [1]The tertiary education completion rate is the ratio (expressed in terms of a percentage) between the number of graduates from selected tertiary education programme and the number of new entrants "n" years ago.

[75] The share of young people participating in lower and upper vocational schools amounted to 15% in the 2010/2011 academic year and decreased by 4.1 p.p. during SDS's implementation.

[76] Attitudes towards vocational education and training, Special Eurobarometer 369, 2011.

[77] In Malta and Finland, vocational education is well regarded by approximately 90% of respondents; the EU average stands at 71%, while in Slovenia only 50% of respondents say that it has a positive image.

[78] The share of respondents who believe that individuals participating in vocational education and training acquire the skills required by employers, are given access to modern equipment (computers, machines, etc.), and have confidence in teacher competence, is among the lowest in EU Member States. The share of respondents who believe that vocational education does not prepare people to set up their own business and does not provide communication and teamwork skills is among the highest in EU Member States. The share of respondents who believe that vocational education and training lead to well-paid jobs is among the lowest in the EU, while the share of those believing that vocational education and training lead to jobs which are not well regarded in society is among the highest in the EU.

[79] In 2010, the share of science and technology graduates was 21.1%, which was 2.7 p.p. over 2005 when SDS started to be implemented; it recorded a particularly strong increase in the previous year.

[80] See Chapter 2.2. and Science and technology graduates indicator.

[81] During the 2010/2011 academic year, the share of foreign students stood at 2.1%, which was a 0.9 p.p. increase over the 2005/2006 academic year. In 2009 the share was 1.7% and was significantly below the EU average of 8.1%.

[82] The average duration of studies differs depending on the field of education. In 2010 university undergraduate studies in the areas of health and welfare took the longest time to complete (6.8 years). The shortest study duration was recorded in services (5.3 years), in the sciences, mathematics, computer and social sciences, business and law (5.8 years). Shorter average study duration of social sciences, business and law, and in the field of services is linked with a high percentage of graduates following Bologna-system programmes of study.

Box 6: **The Resolution on the National Higher Education Programme 2011–2020**

The Resolution on the National Higher Education Programme 2011–2020 was adopted in 2011. It envisages an increase in public expenditure on tertiary education as a share of GDP and an increase of expenditure on educational institutions per participant (by 2020 funds for higher education per student are to exceed the OECD average), which are expected to create the conditions required for a high-quality study process. A system of funding higher education institutions that would facilitate development and consider the elements of quality is to be established. A substantial increase in the participation rate of young people in the 19–24 age group in tertiary education is envisaged (to 75% in 2020), along with an increase in the proportion of students aged over 29 years to 20% of all students. The international mobility of students and higher education lecturers is to be encouraged. As much as 20% of Slovenian graduates are expected to be mobile in 2020. By 2020, at least 10% of higher education lecturers, assistants and researchers are to be foreign citizens. The proportion of the population in the 30–34 age group with tertiary education should increase to 40% by 2020. The resolution anticipates a one-time tuition-free first and second level study for every person; the needs of society, the long-term prospects of Slovenia's development, and graduate employment opportunities are to be considered in determining the number of enrolment places for individual higher-education programmes.

The prospect of implementing the strategy in the current adverse fiscal conditions is rather poor, particularly as regards improving the quality of education. The increase envisaged in the participation of young people in tertiary education to 75%, even though it is already the highest in the EU, is potentially problematic in terms of quality and investment efficiency. An increase in the number of teaching staff is required in order to ensure and enhance high-quality study, but cannot be expected during the fiscal consolidation period. An increase in enrolment with no increase in the number of teaching staff would only worsen the already unfavourable ratio of students to teaching staff. The options available to increase the expenditure per tertiary education participant above the OECD average during the fiscal consolidation period are very limited. An envisaged high participation rate of young people in tertiary education and a substantial increase in the proportion of the population with tertiary education are also questionable from a graduate employment opportunity perspective as the number of unemployed tertiary graduates has been increasing, while a labour shortage has been observed in some lower-skilled jobs.

available (for 2006)[83], Slovenia is ranked among those countries with the longest university undergraduate study duration. It also lags behind European countries with regard to tertiary education completion rates. During the 2005–2008 period, there was no significant narrowing of the gap in the averages between Slovenia and the 19 EU Member States that are members of the OECD.

A decrease in adult participation at all levels of formal education was noted in 2009 for the third consecutive year, but has nevertheless remained above the EU average. The participation of adults in the 25–64 age group at all levels of formal education stood at 4.0% in 2009 (most recent data) and was above the EU average of 3.3%. The decrease recorded in the previous year was due to a lower participation in tertiary education. The lowest participation rate is observed at primary school level where the low share of young people participating can be attributed to the low percentage of early school leavers, while the relatively low share of adult participation is partly due to the methods of delivering primary school curricula, which are not adjusted to adults. It would be reasonable to introduce the recognition of non-formally acquired knowledge in the primary education of adults. The total number of adults[84] enrolled in upper secondary education has been decreasing for several consecutive years even though the number of unemployed increased by 81.8% during the 2009/2010 academic year. In 2011, an open invitation to co-fund tuition fees was extended in order to reduce the educational deficit during the period 2007/08 – 2012/13; it envisaged co-funding secondary education for at least 3,000 persons, which was less than in preceding years[85]. The strongest adult participation in education is recorded at the tertiary level; in the 2010/2011 academic year, this rate was below the level seen at the beginning of SDS's implementation.

Participation in lifelong learning[86] is considerably above the EU average; it dropped slightly in 2011. The participation of adults in the 25–64 age group in lifelong learning stood at 17.2% in the second quarter of 2011 (1 PP less than in the previous year) and exceeded the EU average of 9.3%. The overall participation level is above-average, but a decrease in the participation rate of old

[83] According to the Eurostudent Survey 2006, the average duration for Slovenia stands at 6.8 years and represents the longest study duration among the countries covered by the survey.

[84] The number includes unemployed adults who bear the costs of education and others.

[85] We estimate that this number is too low and should be increased.

[86] The indicator measures the inclusion of the population aged 25 to 64 in education and training during the four-week period before the Labour Force Survey is carried out. It is calculated on the basis of the second-quarter data because annual data (annual average) were not available when this report was prepared. The European Commission experts point out that the indicator is methodologically deficient. A particular problem lies in measuring participation in education and training in the last weeks prior to conducting a survey since the interviewing time influences the result. The methodology of calculating the indicator was changed in 2003 and comparable values for Slovenia have since been available.

people has been recorded for the second year in a row. In Slovenia, age-related drop in participation is much faster that in the EU, which can indicate that there is a problem of accessibility for old people. The participation rate of old people in the 55–64 age group stood at 7.5% in the second quarter of 2011; Slovenia lags behind the rate recorded in the Netherlands (8.2%), where the overall adult participation in lifelong learning (16.7%) is comparable to Slovenia. There has been no improvement in life-long learning participation rate of low-skilled adults during SDS's implementation. A discrepancy in the participation rates of low-skilled and tertiary graduates in Slovenia is the biggest in the EU and even increased in 2010 (the most recent data). Higher participation of old and low-educated people could contribute to their greater employability and longer work activity. Following the expiry of the Resolution on the Master Plan for Adult Education in the Republic of Slovenia until 2010, no strategic document to define policies and programmes in this area has been drafted.

The total public expenditure on education[87] in Slovenia, expressed as a percentage of GDP, is relatively high. Public expenditure as a share of GDP exceeded the EU average of 5.07% in 2008 (the most recent international data available), which can be attributed to a high education participation rate and the manner in which education is funded. In 2009 (the most recent data for Slovenia) it increased (by 0.51 PP) to 5.7%; this correlated with a substantial drop in GDP and was also due to a real terms increase in public expenditure on education. In response to an increased number of children in kindergartens there was a substantial increase in public expenditure on pre-school education. Significant growth was also recorded at tertiary level and was related to additional jobs, provision of funds to eliminate wage disparities and funding of development tasks and equipment. Despite a gradual decrease in the area of transfers to households or support to pupils and students observed within the structure of public expenditure at all levels of education, public expenditure remains above the EU average.

If expressed as a percentage of GDP, expenditure on education exceeds the EU average; if expressed per participant, it falls far behind. Expenditure on tertiary education amounted to 1.21% of GDP in 2008 (the most recent international data available) and was above the EU average of 1.14% GDP. A drop below the EU average[88] in expenditure per participant is attributable to a very high participation rate of young people in tertiary education. The share of public expenditure on transfers to tertiary education is well above the EU average. The proportion of private expenditure on tertiary education is below the EU average[89] and has seen a decreasing tend in recent years, caused by a falling share of part-time students and increasing enrolment in second-level programmes, which are free of charge for full-time students.

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

Investment in R&D reached the highest level to date in 2010. Despite the crisis, R&D expenditure continued an upward trend after 2007 and amounted to EUR 746 million in 2010, representing 2.11% of GDP[90]. Slovenia thus exceeded the EU average of 2.00% for the first time; last year, EU experienced a stagnating trend in R&D expenditure on GDP. Following Portugal and Estonia, Slovenia recorded the most substantial growth in R&D investment in GDP (nominally by 46.6%) among EU Member States in the 2005–2010 period. This resulted from increased investment by business and public sector and represented a solid foundation for improving long-term economic competitiveness. In 2010 business sector increased its share in total R&D investment to 58.4%, but did not reach the peak 2008 level. The extent of R&D tax relief[91] claimed by companies in 2010 grew over the previous year. As in previous years, the biggest tax relief beneficiaries were from manufacturing industries; in 2010 they were primarily pharmaceutical companies, computer and equipment manufacturers, electronic and optic equipment manufacturers and automotive industry. Service sector companies use these reliefs[92] to a much lesser extent; in 2010, most of these reliefs were granted to companies providing knowledge-based services (professional, scientific and technical services and information and communication services). According to the provisional data, government budget appropriations for R&D in Slovenia increased in nominal terms and accounted for 0.6% of GDP in 2011.

[87] The total public expenditure on education includes all budget expenditure at the state and municipality levels on formal education of young and adult people. It includes direct public expenditure on education institutions and transfers to households (scholarships, meals subsidies, travel expenses, accommodation and text book costs, etc.). Financial data for Slovenia are collected according to an internationally comparable methodology using a UOE questionnaire (a joint UNESCO, OECD, Eurostat questionnaire).

[88] See the expenditure on educational institutions per participant indicator.

[89] It amounted to 16.2% in 2008 (20.9% in EU).

[90] It should be noted that in 2008 the number of covered units from business sector in Slovenia increased and that the 2010 GDP was lower than the 2008 GDP.

[91] In 2010 general tax allowance increased from 20% to 40%; in less-developed regions, this increase depended on the development gap measured in terms of average Slovenian per capita GDP and ranged from 50% to 60% (previously 30% to 40%).

[92] Innovation activities in service sector companies are focused on strengthening specific knowledge and skills of staff rather than on R&D investments. There is a need to expand expenditure eligible for tax relief for R&D investment to broader innovation investment, e.g. to investment in the development of human resources and lifelong learning.

The Resolution on Research and Innovation Strategy of Slovenia 2011–2020 envisages the public sector to earmark 1% GDP[93] for R&D in 2012.

Favourable trends in the number of researchers[94] per 1,000 employees continued in 2010. The overall number of researchers in 2010 increased by 3.5% over the previous year. Since the beginning of SDS's implementation, their number has increased by 47%. With the exception of Portugal, Slovenia saw the strongest growth among EU Member States, recording an average growth of 14%. There have been 2,450 new researchers in Slovenia since 2005; this increase was made possible by a rise in R&D investment. It mirrors the effectiveness of state incentives devised in response to greater demand for researchers in the public and business sectors (the young researchers programme and the young researchers from the business sector programme). Progress is also evident from the fact that business sector recorded the fastest growth in the number of researchers[95] during the 2005–2010 period; their share has reached 44.0% and is only slightly below the European average (45.3% in 2010). In the future, cooperation between researchers engaged in the public sector and those engaged in the companies should be strengthened further with a view to facilitating the transfer of knowledge to business sector and boosting innovation.

The number of science and technology graduates increased by as much as 28.5% in 2010. The ever growing role of modern technology makes science and technology experts indispensable in fostering innovation in companies. During SDS's implementation, their number has increased significantly because of high enrolment; if the efficiency of studies improves, an even stronger increase can be expected. The number of science and technology graduates per 1,000 inhabitants in the 20–29 age group rose to 15; despite that, there has been a very gradual narrowing of Slovenia's gap to the EU average, which remains substantial in comparison to the more developed and some new EU Member States. A sharp rise in the number of graduates recorded in 2010 can be attributed to a higher share of Bologna study programme graduates as the new level 1 study programmes are of shorter duration than the old programmes. An imbalance in the supply of and demand for these graduates in the labour market remains a problem which can even escalate because of the expected reduction in the size of the population to be enrolled in tertiary education. Many manufacturing companies are affected by a shortage of science and technology engineers (undergraduate study), which results from a delayed response to the changing needs of the business sector and a lack of state incentives to boost enrolment in this area in the past. The data show that the number of science and technology students receiving scholarships from businesses decreased in 2010. One of the objectives of the Resolution on Research and Innovation Strategy of Slovenia 2011–2020 is to encourage students to pursue science and technology studies by providing scholarships and promoting studies in this area. Young people should be encouraged to enrol in science and technology programmes already at lower levels, in cooperation with the business sector. Science and technology expert shortage was also recorded in other EU Member States and in the last five years approximately two-thirds of EU Member States deveoped programmes to promote school partnerships with a view to increasing the interest for natural sciences. Government institutions, the research sphere and the private sector are involved in the partnerships (Science Education in Europe: National Policies, Practices and Research, 2010).

The importance of incentives for attaining favourable results in developing human resources in science and technology is evident in the area of doctorate graduates. Their number has been increasing throughout SDS's implementation – by a further 9.3% in 2010. The share of the total number of doctoral graduates in science and technology increased to 53.3% in 2010 and is higher than the EU average. The existing and envisaged incentives are expected to prompt higher enrolment in doctoral studies in science and technology area (the young researchers' programme). In 2011, a public tender for capacity building of development units in companies was issued; it pools incentives from previous tenders (the young researchers in the business sector, interdisciplinary groups and company experts) and aims at strengthening the development functions of enterprises by employing and training researchers and developers in the interdisciplinary R&D groups with a view to streamlining development and innovation capacities of companies[96]. Rather than by experts with PhDs, a number of development tasks (with the exception of high-tech companies) In micro and small companies (with the exception of high-tech companies), which are most numerous, many development tasks can be carried out by development engineers and technicians specialised in particular areas rather than by experts with PhD. A shortage of the former hinders companies' development and innovation activities.

[93] Within the Europe 2020 Strategy, Slovenia set the objective to increase total R&D expenditure to 3% GDP by 2020.
[94] Expressed as a full-time equivalent (FTE).
[95] Part of this growth can be attributed to the fact that marketing experts can be register as researchers. Marketing experts can participate in the development, particularly in connection with customers' requirements and in service companies where they play an important development role.
[96] Companies can receive co-funding for several activities (employment or training of young researchers enrolled in post-graduate studies, employment of researchers from public research organisations in a new research and development group, employment or engagement of top Slovenian or foreign researchers and experts to transfer new knowledge from specialised R&D areas and inclusion of company's researchers into a new R&D group).

The number of interdisciplinary study programmes increased in the previous years, but a comparison to the developed countries shows that there is still considerable opportunity for improvement in this area. Owing to the complexity of modern technology and its integration into all business processes in manufacturing and service sectors, innovation-active companies in Slovenia and other EU states simultaneously introduce technological and non-technological innovations, which requires the participation of experts in various disciplines and a large number of those with interdisciplinary knowledge. Even though the number of interdisciplinary study programmes increased in the previous years, Slovenia lags behind the developed countries as regards the study programmes with the participation of several faculties from various areas and in polytechnic programmes. The issue of shortage of skilled staff in this area will become more pressing in the future and the existing study programmes will not be sufficient to provide for its adequate solution.

The innovation activity is close to the European average, while the efficiency of the investment in innovation is low. In the 2006–2008 period, approximately 50% of the companies were innovation active[97], which is slightly below the EU average. This means that almost half of the companies in Slovenia fail to innovate (the proportion is even higher for small companies). A recently published analysis (Likar et al., 2011) conducted on a sample of companies[98] states that the innovativeness of companies in Slovenia is even poorer than shown by the most commonly used statistical indicators and that the effectiveness of the investments in innovation is low. The authors found that out of all companies that innovate, only a small proportion are among innovation leaders (6%), i.e. companies that generate sound income through innovation investments[99]. There was a slightly larger proportion of the innovation leaders in the manufacturing sector (7.5%), while their proportion in the service sector was very low (2.1%). The top innovation leaders in low and medium-low technology industry generate EUR 14.30 income per EUR 1 invested, while the income generated in the high and medium-high technology industry only amounts to EUR 7.7. Considering the structure of the economy, with more companies in the first group, the authors believe that innovation and creativity must be intensively promoted also in low and medium-low technology industries and in service sector industries (Likar et al., 2011).

The investments in R&D are vital to increase innovation activity, but their extent is insufficient in the service sector that generates most of the value added. In this sector, the investments in *intangible assets*, i.e. knowledge, skills, creativity in the areas of business processes and models, marketing, designing and adjustment to the customers needs, are also very important for boosting sector's innovation intensity and innovation performance. Services also contribute towards increasing innovation performance in the manufacturing industries as they enable innovation along the entire value added chain, from designing and developing a new product or patent to a new trademark and new delivery channels. To date, changes towards an increased proportion of the service sector in the structure of value added have not been adequately considered in the formulation of the innovation policy measures (Stare, 2011); this represents a substantial obstacle to Slovenia's coming closer to the lead innovation countries (*OECD Territorial Reviews: Slovenia 2011*). To a great extent, the innovation policy measures are of horizontal nature; they are accessible to service sector companies, but focus on technological innovations and thus render their utilisation in service sector more difficult. This also relates to R&D tax reliefs; it would be reasonable to expand eligible expenditure to investments in human resources. Some of the support instruments introduced in 2010 and 2011 (e.g. innovation and process voucher, development centres) could also encourage innovation in the service sector[100]. Besides the above-mentioned innovation policy gaps, note should also be made of the urgency of introducing measures to boost innovation in the public sector, which also influences economic competitiveness. Boosting innovation capacity is vital in order to improve the efficiency, quality and accessibility of the public services; technological innovation alone, without the support of the non-technological and social innovations, cannot bring long-term solutions. In the future, a significant role will be played by innovations focused on addressing grand societal challenges (population ageing, environmental problems, energy efficiency, transport, etc.)[101]; which is also underlined in a new EU Framework Programme for Research and Innovation (Horizon 2020, 2011).

The number of patent applications per million inhabitants submitted to the EPO[102] by Slovenia in 2010 exceeded the figures from the previous year, but a substantial lag behind the EU average[103] was not reduced. The fact that Slovenia has been ranked 14th among EU Member States for a few consecutive years shows that a longer period is needed to make a

[97] The most recent data made available by SORS; updated data on innovation activity for the 2008–2010 period will be available in 2012.
[98] There were 173 large and medium-sized companies included.
[99] The innovation leaders are companies that generate more than EUR 11 income per EUR 1 invested, while the innovation followers only generate EUR 1.7 (Likar et al., 2011).
[100] In 2010 innovation vouchers, which also included trademark and industrial design (besides patents), were used by 41 service sector companies (out of total 59 companies). More than two-thirds (of total 74) of applications submitted in the first tender in 2011 were by service companies (Stare, 2012).
[101] See Box 11: Government budget appropriations for R&D for environment and energy and green patents
[102] European Patent Office.
[103] A lag behind is a bit smaller if the number of patent applications is compared to GDP in PPP.

breakthrough in this area and that patent acquisition incurs high costs to companies. The experience of the lead countries shows that systematic support must be given to intellectual property protection in companies and to transfer of new knowledge generated in universities and research institutions to business sector. In Slovenia, universities and public research institutions have only recently started to set up offices for the transfer of knowledge. The reasons for poor cooperation between scientific and research sphere and companies lie with the sides involved as well as with broader institutional environment[104]; in this context we must not overlook the impact of the habilitation criteria, which favour scientific excellence and have contributed to a sharp rise in the number of scientific publications by Slovenian researchers in the recent years. But insufficient consideration of other criteria for election to academic title (e.g. cooperation with companies in the development of new products and services) does not encourage stronger co-creation and transfer of knowledge to companies.

Compared to 2010, Slovenia saw a considerable regression in other aspects of intellectual property protection in 2011. The number of applications for Community trade marks submitted to the OHIM[105] dropped by one third; there was also an 8.0% decrease in the Community designs registrations. Most EU Member States recorded poorer results in the area of Community trade marks and designs in 2011 and we believe that this trend can be partly attributed to the effects of the crisis. Even though a smaller number of applications for legal protection of the Community trade marks and designs from Slovenia were recorded in 2011, the data show that their average annual growth rate during the 2005–2011 period was among the highest in the EU.

Investments in information and communication technologies (ICTs) have reached the EU average, but are much lower than in some new EU Member States. The broad applicability of ICTs makes investments in this area vital to business and the public sector, where these technologies contribute towards innovation, increase efficiency and enable access to modern services. There was only a slight nominal increase in the ICT investments in 2010 over the year before and amounted to 5.3% GDP, which is the EU average. In the 2006–2010 period, the ICT investments as a share of GDP[106] in Slovenia increased at a much quicker pace than in the EU and Slovenia closed a gap to the EU average, which recorded a stagnating trend in that time. From 2006 onwards, some new EU Member States have made annual ICT investments amounting from 6.5% to 7.0% of GDP (Bulgaria, Estonia, Hungary). ICTs are also important to individuals because they enable fast and efficient access to a large number of private and public services, provided that the Internet access is affordable and people have adequate knowledge.

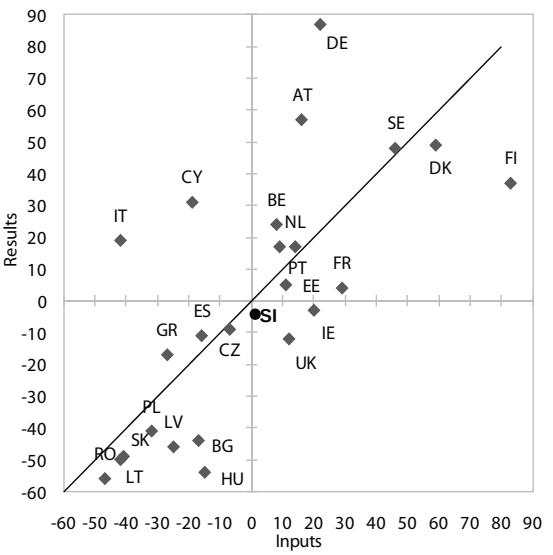
Slovenia has ranked close to the EU average in the use of the Internet since 2005, but is outrun by as much as six new EU Member States. In 2011, the proportion of the population in the 16–74 age group using the Internet stood at 67% and stagnated over the previous year. For several years a substantial lag behind the EU was observed in the low-skilled and old population (55–74 years of age) groups; the situation even worsened in 2011. In the first-mentioned group the use of the Internet decreased as much as 9 p.p.; this trend is partly a reflection of the crisis. The below-average use of the Internet by the old population group results from the lack of appropriate measures to familiarise this group with the use of the Internet. The success of the Simbioza Project,[107] which was carried out in 2011, demonstrates that this area offers many opportunities for social innovation and partnership between various actors, and for promoting Internet use with broader beneficial impacts. The proportion of households with Internet access increased in 2011 and reached 72%, which is the EU average; household Internet access and its use have some similar characteristics. A substantial lag behind the EU is only observed in the households in the first two income quartiles. Again, this shows a strong influence of the education/training level and income bracket on the access and use of the Internet in Slovenia. If no measures are taken, this gap can get wider in the future and some population segments might be excluded from the use of modern technologies, which would have a negative impact on the economic and social development. In addition to increasing the Internet affordability and providing training to the most vulnerable groups, a provision of useful and various user-adapted e-services should be strengthened. As regards the Internet affordability, it is essential to ensure competition and its effective supervision. Slovenia has many shortcomings in this area; within the individual Networked Readiness Index[108] categories, it scored lowest for the efficiency of legal institutions (ranked 66th) and the efficiency of the legal system in settling disputes (ranked 80th) and highest for infrastructure (ranked 26th) and the use

[104] Zajc (2012).
[105] Office of Harmonization for the Internal Market.
[106] It should be noted in this context that the trend was probably influenced by a sharper drop in Slovenia's GDP in 2009 compared to the EU and its slower recovery in 2010.
[107] Simbioz@ e-pismena Slovenija was the first Slovenian voluntary project to link the younger and older generations with a view to raising the computer literacy of older people through intergenerational cooperation. From 17 to 21 October 2011, young volunteers taught computer skills to older people. The training was carried out by 2,413 young volunteers and was attended by 5,721 participants at 230 locations in 125 municipalities. The project's initiator and one of the organisers, Zavod Ypsilon, mobilised volunteers throughout Slovenia and attracted sponsors, partners and donors from the business and public sector, and non-profit organisations. If supported in some way by public funds, a similar model could be used to address issues in other areas.
[108] The index is composed of 71 indicators and measures a country's capability to utilise modern technologies in order to enhance competitiveness and the welfare of its citizens.

among the population (ranked 30th). Overall, Slovenia ranked 34th out of 138 countries[109] (Global Information Technology Report 2010–2011, 2011). The proportion of the companies with fully automated data exchange links with the public administration bodies and financial institutions is higher than in the EU, but there are still ample opportunities for companies to better utilise ICTs to increase their competitiveness, as the share of the companies with fully automated data exchange with customers and suppliers is well below the EU average. In comparison to the EU (also to its new Member States), Slovenian companies use electronic invoices to a lesser extent, which can be attributed to the fact that their formal ownership is substantially less internationalised, including through foreign direct investment, which usually facilitates the introduction of new technologies in affiliated companies.

To date, stronger investment in the innovation activities has failed to adequately reflect on the results, which puts forward the issue of the investment efficiency. Since the beginning of SDS's implementation, Slovenia has recorded a significant increase in the investment in various innovation activity factors, which contributed to positive indirect effects, e.g. an increase in the income from patent export, an increase in the number of international publications in co-authorship with foreign researchers, a higher share of the knowledge-based service export and an increase in the proportion of tertiary educated employees. Overall innovation performance[110] has improved and Slovenia is now ranked among the five EU Member States with the fastest performance growth during the 2007–2011 period; it is positioned in the group of the innovation followers (Innovation Union Scoreboard 2011, 2012). Figure 14 shows that the investments in innovation activities are proportionately bigger than their outcome: in terms of results, Slovenia lags behind the EU average, while its investments are slightly above the average[111]. During the 2005–2010 period, Slovenia narrowed its gap to the EU average considerably, particularly with regard to input and indirect effects, and to a lesser extent as regards innovation activity results. In this context, account should be taken of the fact that only systematic investments in innovation activity factors in the long term enable better results as they involve the accumulation of knowledge, technological and non-technological skills, efficient links between stakeholders in the R&D, business and public sectors, and the establishment of an efficient support system in order to ensure innovation success.

Figure 14: **EU innovation activity input and results*, 2010**



Source: Innovation Union Scoreboard 2011 database, 2012; Eurostat Portal Page – Science and Technology – Research and Development, 2012; Eurostat Portal Page – Population and Social Conditions – Labour Market, 2012; Eurostat Portal Page – Industry, Trade and Services – Information Society Statistics, 2012.

Note: * Inputs are calculated as normalised average of the gross domestic expenditure for R&D activity as a percentage of GDP, the number of researchers (FTE) per 1,000 employees, the proportion of researchers in the business sector in the total number of researchers (FTE) in percentage terms, the ICT expenditure as a percentage of GDP and the expenditure on educational institutions in tertiary education as a percentage of GDP; innovation activity results are calculated as normalised average of the proportion of SMEs which introduced one or several technological innovations in all SMEs, the proportion of SMEs which introduced one or several non-technological innovations in all SMEs, patent applications with EPO per unit of GDP (in EUR PPP), Community trade marks per unit of GDP (in EUR PPP) and Community designs per unit of GDP (in EUR PPP).

Slovenia has continued to strengthen its innovation capacity factors during the economic crisis and must maintain this priority in the future while increasing the efficiency of investments in order to enhance its competitiveness and welfare. A survey of trends in important innovation capacity factors (increased R&D investment, continued increase in the number of researchers in the business sector, increased number of science and technology graduates, a solid level of ICT access and use) shows Slovenia's positive response to the crisis, as these factors enhance long-term economic competitiveness. At present, their influence on the value-added increase is weak so that the investment efficiency is low. A well-targeted use of the Structural funds to stimulate R&D and innovation activity enabled the implementation of numerous important measures, which can be expected to deliver long-term positive shifts. A point to consider at this phase is how to position this area into the planning of the subsequent phase and continue with policies that will support further strengthening of innovation capacity factors and creativity in the companies, in the public services, and in the state administration. The experience of the developed countries (e.g. the Nordic countries) shows

[109] Higher ranked new EU Member States: Estonia, Malta and Cyprus.
[110] Measured by summary innovation index (Innovation Union Scoreboard 2011, 2012).
[111] For calculation methodology see Annex Synthetic indicator calculation by individual SDS priorities.

that only constant investment in these factors and the efficient use of funds enable success in international competition and improvements of welfare state. Even though progress has been made, some gaps still exist; a delay in the implementation of the Resolution on Research and Innovation Strategy of Slovenia, adopted in 2011, would only cause a setback in addressing the problems. As was the case in the past, the implementation of the documents adopted remains a problem (Bučar et al., 2010). In the future, the focus must shift to a better transfer and use of new knowledge in industry by establishing more efficient links between the science and research sphere and companies, and resulting cooperation in the development of new products and services; the examples of good practice already exist (the centres of excellence, the competence centres, several clusters). Slovenia has made good progress in the number of R&D related scientific publications, which can largely be attributed to habilitation criteria associated with the promotion of science and research staff. The transfer of knowledge would be strengthened if criteria were more balanced and take account of researchers' cooperation with companies. The marketing of inventions and new ideas, which consists of series of activities upgrading technological novelties and paving the way to commercial success, remains the innovation activity weakness caused by too strong an emphasis on the technological aspect of the innovation process. The continuation of the crisis and the expected decrease in public expenditure call for guarantees that further investment in innovation capacity will remain a priority; the effectiveness of the use of funds must be ensured through better coordination, and a combination of policies, stakeholders' networking and participation, institutional reform, and by focusing on instruments that generate better results. Some of the new innovation policy measures, introduced in 2010 and 2011 (the centres of excellence, competence and development centres, innovation and process vouchers, capacity building of development units in companies) can contribute towards better cooperation between companies and the spheres of research and education, a stronger transfer of knowledge, and the increased innovation capacity of the economy. The evaluation of these and other measures can also contribute towards a better selection of measures and increased efficiency of the policy to promote innovation capacity.

3. An efficient and less costly state

SDS guidelines for the third priority cover three areas. First, structural reform of public finance comprising a reduction of general government expenditure as a share of GDP by at least two percentage points, restructuring expenditure in line with the priorities of the strategy and absorption of EU funds, and comprehensive tax reform aimed at removing burdens from labour, promoting competitiveness and employment, and simplifying the system. Second, increasing the institutional competitiveness and efficiency of government, which involves a reduction of state ownership in the economy, improvement of the quality of regulations and cutting red tape, introduction of public-private partnerships in infrastructural investment and public utilities, and increasing the efficiency of the civil service. And third, improving the functioning of the judiciary by making the system more effective and reducing court backlogs.

3.1. Quality of public finance

Since 2008, Slovenia has been moving away from the goals of the Slovenia's Development Strategy (SDS) in terms of the reduction of general government expenditure[112] and the developmental restructuring of expenditure, whereas the goal of achieving comprehensive tax reform has only been partially followed. During the period of high economic growth and by applying measures to reduce social transfers in 2005–2007, Slovenia recorded a substantial reduction in general government expenditure in comparison with GDP[113], which was, to a large extent, cyclical rather than structural in nature. Accelerated growth in the volume of expenditure in real terms could already be seen in 2008, which was a result of a partial wage reform following several years of wage restrictions, a change in the indexation of pensions and social transfers, and an upward trend of intermediate consumption; in the following years, expenditure increased even more on account of the economic crisis. In 2011, general government expenditure grew by 5.7 p.p. of GDP compared to 2005[114]. Following a reduction in expenditure on social transfers, wages and intermediate consumption and an increase in expenditure on gross capital formation representing the absorption of EU funds, the pursuit of the goal of the developmental restructuring of expenditure was suspended in 2008 as a result of the increased expenditure, which had been previously restricted. The economic crisis made this goal even more distant by increasing expenditure on social transfers in relative terms and, in the last two years, reducing expenditure on gross capital formation. The implementation of the envisaged tax reform, which began in 2006 and 2007, was also not completed. As a result, Slovenia still faces a high tax burden on labour, which does nothing to strengthen competitiveness and increase employment, but instead keeps the tax system complicated and a major obstacle to the development of entrepreneurship and economic competitiveness.

After a considerable increase recorded in 2009 (by 5.1 p.p. of GDP), the growth in general government expenditure continued in the next three years. General government expenditure rose by EUR 911 million in 2009 and by another EUR 394 million in 2010. With a simultaneous decrease in GDP in 2009 and a modest economic growth in 2010, expenditure rose to 50.3% of GDP. The level of expenditure was below the EU average level (50.6% of GDP), although its growth was faster[115]. On account of fiscal consolidation measures, there has been a downturn in the volume of expenditure in the EU in relative terms[116], whereas in Slovenia, expenditure increased by another EUR 352 million or by 0.6 p.p. of GDP in 2011 and with 50.9% of GDP, expenditure exceeded the 2009 EU average level.

The economic structure of expenditure reveals that the growth of expenditure on social benefits in cash and kind is the fastest, which has increased the growth of total government expenditure and at the same time ousted expenditure on gross capital formation. The share of expenditure on social benefits and transfers in cash and kind continues to rise, which has resulted in an increase of 3.8 p.p. since 2008, of this by 0.6 p.p. of GDP in 2011. Expenditure growth in 2011 was almost entirely due to a growing number of jobless and socially deprived persons since the adjustment of pensions and social transfers was restricted by an intervention law to a quarter of the inflation only. Following a considerable increase in compensation of employees in relative terms in 2008 and 2009, which was caused by a partial introduction of wage reform, and after a minimum growth in 2010[117] , which was due to growing employment, the share of this expenditure in 2011 remained at 2010 levels. This was

[112] The goal of Slovenia's Development Strategy (SDS 2005–2013) is to decrease general government expenditure by 2 percentage points of GDP in comparison with the reference year of 2005. With the onset of the crisis in 2008, the situation in this area changed substantially (a fall of GDP and an increase in expenditure in 2009–2011); as a result, this objective cannot be met.

[113] In 2007, the expenditure was lower by 2.7 p.p. compared to the initial year of SDS (2005).

[114] In comparison with 2007, the expenditure increased by 8.4 p.p. of GDP.

[115] Compared to the previous year, expenditure in Slovenia rose by 0.8 p.p. in 2010, whereas in the EU expenditure rose by 0.6 p.p. of GDP.

[116] In 2009, general government expenditure stood at 50.9% of GDP.

[117] Compensations of employees rose by 2.0 p.p. in 2008 and 2009, and by another 0.2 p.p. of GDP in 2010.

owing to a restrictive wage policy and a modest increase in the number of employees in the general government sector[118]. Restricted spending in 2011 also decreased a share of expenditure on intermediate consumption. As a result of a gradual reduction of measures to mitigate the consequences of the crisis, subsidies in 2011 decreased for the second year in a row. Expenditure on capital transfers grew dramatically in 2011, which was a result of the state rescue of mainly public enterprises and institutions[119]. The increase in general government expenditure would have been even higher had expenditure on gross capital formation not been decreased for the second consecutive year. Since 2008, the economic structure of expenditure has been focused on addressing the consequences of the economic crisis through the rehabilitation of the existing situation (social distress of the population and mainly state companies) rather than through accelerated developmental activities which could have yielded better results and, in particular, long-term development progress.

In the general government expenditure structure, the share of expenditure on development has decreased the most in recent years, while an increase was recorded in particular in the share of expenditure on social protection. In terms of SDS's development priorities, general government expenditure during the period 2005–2008 increased its shares on economic affairs, housing and community amenities, recreation, culture and religion, and decreased the shares on education, general public services and social protection. With the exception of expenditure on education, which was above the average if compared to the shares of expenditure of other EU Member States in 2005, structural changes were oriented towards ensuring conditions for faster development and the achievement of SDS's goal to gradually catch up with the EU average in terms of development. During and after the economic crisis, the structure of expenditure changed. In the period 2008–2010, the shares of expenditure on economic affairs, education, health and housing and community amenities decreased, whilst the shares of expenditure on social protection, recreation, culture and religion increased. Other groups of expenditure did not undergo major changes. These data indicate that Slovenia addressed the consequences of the crisis by decreasing expenditure earmarked for faster development. In terms of economic competitiveness, the development expenditure in Slovenia in 2009 – compared with the structure of expenditure in other EU Member States (the latest available data) – was rather favourable[120]. We estimate that in 2010 and 2011 the situation worsened since development expenditure in Slovenia recorded a downward trend because of non-adopted structural reforms; in contrast, EU Member States accelerated the implementation of their structural reforms.

Table 3: **General government expenditure by SDS's priorities as a percentage of expenditure**

SDS Priorities:	2000	2005	2006	2007	2008	2009	2010
General government expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Competitive economy and faster economic growth	10.7	8.3	8.7	9.2	10.6	10.3	9.9
Expenditure on economic affairs	10.7	8.3	8.7	9.2	10.6	10.3	9.9
Efficient use of knowledge and high-quality jobs	14.1	16.1	15.8	15.4	15.2	14.6	14.7
Expenditure on education	13.3	14.7	14.3	14.0	13.8	13.3	13.2
Expenditure on research activities	1.5	1.5	1.5	1.5	1.4	1.4	1.4
Efficient and less costly state	18.3	18.7	18.8	18.9	17.2	17.1	17.0
Expenditure on general public services	11.9	12.1	11.7	11.6	10.5	10.5	10.4
Expenditure on defence	2.4	2.9	3.3	3.6	3.2	3.1	3.0
Expenditure on public order and safety	3.9	3.7	3.8	3.7	3.6	3.5	3.6
Modern welfare state and higher employment	50.8	51.0	50.7	50.4	49.7	50.7	51.0
Expenditure on health	13.8	13.8	13.9	13.9	13.9	14.3	13.8
Expenditure on social protection	37.1	37.2	36.7	36.5	35.8	36.4	37.3
Integration of measures for sustainable development	5.4	5.8	6.1	6.1	7.3	7.2	7.4
Expenditure on environmental protection	1.3	1.8	1.8	1.7	1.7	1.9	1.5
Expenditure on housing and community amenities	1.4	1.2	1.4	1.4	1.9	1.7	1.4
Expenditure on recreation, culture and religion	2.7	2.8	2.9	2.9	3.7	3.7	4.5

Source: General government expenditure by function, Slovenia, 2011 (SORS); calculations by IMAD.
Note: Expenditure on R&D is found at a different level of classification in all ten classes (in all other classes such expenditure was deducted).

[118] The number of employees increased by 0.4% in 2011.
[119] The recapitalisation of NLB and some state companies, the assumption of receivables of Slovenian Railways, the assumption of the debt of a public company for the construction of the Sava HPPs, and the payment of guarantees that have fallen due.
[120] The shares of expenditure in GDP on economic affairs and education were well above the EU average levels (Slovenia: 11.7%, EU: 10.0% of GDP) whereas expenditure on general public services, defence, public order and safety was under the respective EU average levels (Slovenia: 9.0%, EU: 10.1% of GDP). Compared to the EU average, expenditure on social protection was down by two percentage points of GDP and expenditure on health care was down by half of a percentage point.

In 2008–2011, compensation of employees, which in terms of general government expenditure accounts for over 12% of GDP, increased despite restrictions. After several years of steady growth, compensation of employees reached its lowest level in 2007 (10.5% of GDP). Following the partial realisation of the 2008 wage reform, compensation increased by 0.5 p.p. and by another 1.5 p.p. of GDP in 2009. The increase was partly due to a fall in GDP. Despite the adoption of measures to freeze wages in 2010, compensations of employees rose by 2.3% in nominal terms (0.2% of GDP), and, at employment growth of 0.4% in 2011, it stayed at the relative level of 2010. In terms of individual functions, their growth in 2010[121] varied. The growth was very slow in defence, health and general public services; a considerable increase was recorded in research activities, recreation, culture and social protection, while the increase was slightly lower in education, public order and safety. The increase in compensation of employees was also on account of growing employment which in general government expenditure[122] rose by 1.5% in 2010 compared to 2009 and by 3% since 2008. In 2009, Slovenia's compensation of employees, expressed as a share of GDP, was substantially higher than in the EU (Slovenia: 12.5% of GDP; EU: 11.3% of GDP); before wage reform (2007), it was almost at the same level. A higher Slovenia's share of expenditure than the EU average results from a slightly higher share of employment in the general government sector.

Nearly one third of compensation of employees in 2010 is accounted for in education and a good fifth in health, and by a tenth in the areas of public administration, public order and safety. Compensation of employees in education sharply rose in nominal and real terms until 2006, while in subsequent years it gradually decreased their share in the structure of total expenditure. In 2010, the downward trend stopped; as the employment increased, their structural share again slightly increased. In health, compensation of employees diminished their structural share in the period until 2007. On account of wage reform, they increased more than with respect to other functions, which caused their dramatic increase in 2008 and 2009. In 2010, the compensations remained at the 2009 year's level, their share in the structure of total expenditure on compensation of employees decreased. Compensation for public administration employees has been particularly limited in the last two years and, as a result, their structural share has been in a severe downturn since 2007. Compensation of employees in the area of public order and safety has slightly increased in the past two years, but have decreased in the area of defence. The share of other compensation recipients is smaller and their growth varies. Structural shares rose in social protection and recreation, culture and religion, and research activities. The personnel expenditure structure in Slovenia differs substantially from that in the EU[123], which also depends on the way in which activities between the public and private sectors are financed[124].

Table 4: **General government expenditure on compensations of employees by function, structure in %**

	2000	2005	2006	2007	2008	2009	2010
General government expenditure on compensations of employees	100.0	100.0	100.0	100.0	100.0	100.0	100.0
General public services	11.5	12.2	12.4	12.5	12.3	11.7	11.6
Defence	5.3	6.3	6.4	6.5	6.7	6.7	6.4
Public order and safety	10.5	9.7	9.5	9.5	9.4	9.5	9.5
Economic affairs	3.9	3.9	3.9	3.9	3.8	3.8	3.8
Environmental protection	0.6	0.9	0.9	0.9	0.8	0.8	0.7
Housing and community amenities	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Health	23.3	20.6	20.3	20.3	20.7	21.5	21.3
Recreation, culture and religion	3.3	3.3	3.3	3.3	4.5	4.6	4.8
Education	33.6	34.9	35.1	34.8	33.4	32.6	32.7
Social protection	3.9	4.5	4.6	4.7	4.7	5.2	5.4
Research activities	3.5	3.1	3.1	3.1	3.0	3.0	3.1

Source: General government expenditure by function, Slovenia, 2011 (SORS).
Note: Expenditure on R&D is found at a different level of classification in all ten classes (in all other classes such expenditure was deducted).

[121] There are no data for 2011.

[122] According to national accounts, employment in 2010 increased the most in education and the least in public administration, defence and compulsory social security sector; compared to 2008, the highest employment rise of 4.5% was recorded in education, health care and social assistance while the lowest employment rise was recorded in the activities of public administration, defence and compulsory social security.

[123] In the European context, Slovenia stands out by higher expenditure on employees in education (by 0.6 p.p. of GDP in 2009) and health (0.7 p.p. of GDP), and by significantly lower expenditure on social protection (by 0.4 p.p. of GDP).

[124] The ratio between the general government sector and the private sector in Slovenia is changing very slowly. In 2005, the private sector accounted for 7.5% of employees providing these services; in 2010, it accounted for 8.4% According to our estimates for 19 EU Member States (excluding Bulgaria, Cyprus, Lithuania, Latvia, Luxembourg, Malta, Romania and the United Kingdom), the share of private providers accounts for 28%.

Tabela 5: **General government expenditure on social benefits by function[125], structure in % %**

Functions	2000	2005	2006	2007	2008	2009	2010
Healthcare	9.4	10.4	10.7	10.7	10.5	10.5	10.0
Medical products, appliances and equipment	5.9	6.5	6.5	6.3	6.0	5.8	5.5
Outpatient services	3.5	3.8	4.2	4.4	4.4	4.7	4.5
Education	1.3	1.6	1.4	1.5	1.7	1.7	1.7
Social protection	89.2	87.9	87.8	87.7	87.8	87.7	88.2
Sickness and disability	13.7	14.2	14.0	13.9	13.8	12.7	12.8
Old age	56.3	55.1	49.7	50.7	50.7	49.9	49.5
Survivors	2.2	2.3	9.1	9.0	9.3	8.6	8.5
Families and children	10.2	9.6	9.6	9.6	10.1	10.6	10.5
Unemployment	4.8	3.5	2.3	1.9	1.7	3.1	3.7
Social benefits	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: General government expenditure by function, Slovenia, 2011 (SORS); calculations by IMAD.

In 2010, and according to our estimates also in 2011, social benefits in cash and kind[126] maintained their considerable upward trend, which is due to a rapidly growing number of beneficiaries. This expenditure rose by 2.2 p.p. of GDP in 2009, also as a result of a fall in GDP, which was followed by another rise of 0.7 p.p. of GDP in 2010. Despite a rapid upward trend, the level of expenditure in 2009 was considerably below the EU average level (Slovenia: 18.9%; EU: 21.7%). The swift growth in expenditure on social benefits was a respond to a high increase in expenditure on unemployment, illness and disabilities and some other minor groups (e.g. in education, for housing). The accelerated growth in expenditure on unemployment had been anticipated given that the number of the unemployed significantly rose since the onset of the economic crisis. Owing to a still relatively low level of the unemployment rate in Slovenia compared to the EU, this expenditure, as a share of total benefits, is below the EU average. The increase in expenditure on sickness benefits is most likely associated with the employment uncertainty and the unfavourable situation on the labour market; this expenditure ranks Slovenia in the middle of EU Member States. As a share of total benefits, expenditure on old age accounts for the greatest share, representing half of all benefits; in recent years, its share has recorded a downward trend. In 2009, expenditure on old age increased substantially (by 9.2%) in nominal terms, which is a consequence of a growing number of beneficiaries and higher payments; its growth in 2010 (3.5%) was restricted by an intervention law and was almost entirely due to a growing number of beneficiaries. In terms of expenditure on old age relative to GDP, Slovenia is ranked in the middle of EU Member States. The rise in the number of beneficiaries and their pressure on expenditure was to be mitigated by pension reform, which was rejected in the 2011 referendum. The groups of survivors and families and children represent an important share in total expenditure on social benefits. Its growth was high mainly in 2009 because of extraordinary disbursements to mitigate the consequences of the crisis; in 2010, the growth was considerably slower and, owing to the intervention restrictions, dependent particularly on the growing number of beneficiaries. In terms of the levels of both kinds of expenditure relative to GDP, Slovenia is ranked relatively high among EU Member States. The implementation of the 2010 adopted Exercise of Rights to Public Funds Act (*Uradni list RS* [Official Gazette of the Republic of Slovenia], no. 62/2010) was postponed several times in 2011.

Expenditure and other instruments provided by the state strongly support fixed capital formation which in 2009 stood at the relatively high level of 2008 despite a slight decrease in nominal terms, but fell substantially in 2010 and 2011. In 2009, gross capital formation decreased slightly in nominal terms (by EUR 22 million), but owing to a decline in GDP, its share of GDP (4.7%) was the highest since 2005. In total expenditure, gross capital formation lost 0.6 p.p. (2009: 9.4%). In 2010, it fell in nominal terms by EUR 106 million but remained at the relatively high level of 2007 (4.3% of GDP), which is one of the highest shares recorded among EU Member States. It represented 8.6% of total expenditure, which was, however, much less than the level in 2007 (10.0%). Until 2005, gross capital formation on average ranked just above 3% of GDP annually but it then began to rise quite rapidly. Its rapid growth was mainly due to the funding obtained from EU structural funds under EU Financial Perspective 2007–2013 allowing Slovenia to draw considerable financing support. Pre-accession assistance was noticeably lower in the period until 2006. In 2011, gross capital formation dropped significantly (EUR 250 million or 0.7 p.p. of GDP). With its 3.6% share of GDP, it still exceeds the EU average level (2009); however, besides some developed EU Member States[127], almost all new Member States have left Slovenia in their wake.

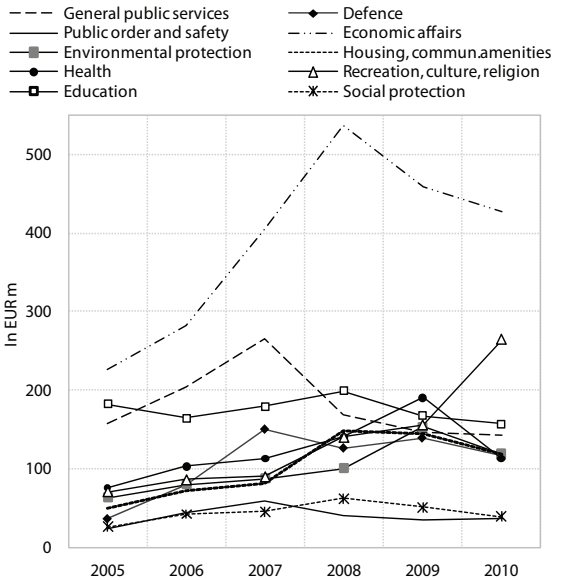
[125] The data comprise social benefits, with the exception of social transfers in kind, and those social transfers in kind that refer to expenditure on products allocated to households by market producers.

[126] The COFOG methodology has been applied. In the area of social benefits in cash and kind, there are also other methodologies.

[127] These are Ireland, Luxembourg, the Netherlands; Sweden records the same level.

Most gross capital formation was directed into transport and in 2010 there was a substantial increase in gross capital formation in sports facilities. By 2006, approximately one quarter of all gross capital formation was directed into economic affairs; in 2008 slightly less than a third, while in the past two years it decreased and again came close to a quarter (2010: 27.8%). Most gross investment in economic affairs was intended for transport (in 2010, it amounted to EUR 362.5 million or 84% of all expenditure for economic purposes), but was EUR 42.8 million lower than in 2009. Gross capital formation increased substantially in recreation and culture, which was also because of the accelerated construction of mainly sports and recreational facilities. For all other functions, gross capital formation decreased. Gross capital formation was relatively high in health, education and general public services; in 2009 it was high in the field of environmental protection where the next year decreased by almost a quarter. In the EU, there has been an upward trend in gross capital formation, however, its relative volume was considerably lower (2009: 2.9% of GDP) in comparison to Slovenia. Heavy investment in 2009 (above 4% of GDP) was recorded by eight new Member States (including Slovenia), as well as by Ireland and Spain, hence by countries that receive more substantial funding from EU structural funds.

Figure15: **General government expenditure on gross capital formation by function (EUR million)**



Source: General government expenditure by function, Slovenia, 2011 (SORS).

During the period up to and including 2009, the state also supported investment activity through state guarantees. An explicit increase in such financing has been evident since 2004, and has become even more accentuated since 2006, when Slovenia accelerated the construction of motorways and when financing thorough general government expenditure decreased and turned into borrowing with state guarantees. In 2011, the state guarantee law for drawing the loan for the construction of the Šoštanj thermal power plant was prepared, but was not adopted. On 30 September 2011, the guarantees (excluding guarantees issued to mitigate the consequences of the financial crisis) amounted to EUR 5.159 billion, and two thirds were intended for transport (Bulletin of Government Finance, 2011). Given the current level of development, Slovenia should promote capital formation by general government expenditure more than developed EU Member States and OECD member states, while the selection of projects should comply with the development priorities of the state concerned. When financing capital formation through general government expenditure, restrictions on the availability of resources are essential, since financing merely through borrowing imposes a burden on future generations in terms of the repayment of principal and interest.

Owing to the capital increase in public undertakings and the bank, as well as to the enforcement of guarantees, capital transfers increased significantly in 2011. Following a sharp increase in 2008 (by 0.3 p.p. of GDP), capital transfers in 2009 and 2010 were relatively stable. In 2009, they dropped in nominal terms by EUR 11 million, but kept a 1.2% share of GDP. They decreased substantially (by EUR 35 million) in 2010, when their share of GDP fell by one percentage point. Half of the transfers were directed into economic affairs, where the decrease in 2010 was not as considerable as for other functions. A dramatic increase of transfers was recorded in transport, i.e. up to 17.8% of total transfers. Capital transfers were lower in Slovenia than in other EU Member States (2009: 1.5% of GDP), high transfers were recorded in developed Member States – the Czech Republic (2.3% of GDP) and Slovakia (2.2%) were among the new ones. This is not surprising either since capital transfers are related to investments in public-private partnership, which in Slovenia are implemented to a very small extent, mainly at the municipal level. In 2011, Slovenia recorded a substantial increase in capital transfers (by EUR 323 million or by 0.9 p.p. of GDP), which is mainly due to the rehabilitation of the bank and public undertakings (the recapitalisation of NLB and some other state undertakings, the assumption of receivables of Slovenian Railways, the assumption of debt of a public company for the construction of the Sava HPPs and the payment of guarantees that have fallen due).

In the area of industrial policy, a relatively high share of general government subsidies remained roughly the same over the period 2005–2008 (1.6% of GDP) but recorded nominal and real increases in 2009 and 2010 (2009–2010: 2.2% of GDP). Subsidies decreased to 1.9 p.p. of GDP in 2011 as a result of the withdrawal of some anti-crisis measures. High subsidies – which were among the highest in the EU in 2009 and 2010 (Austria and Denmark were the only two with higher subsidies, Belgium stayed the same) – have not shifted in the direction of development efficiency despite warnings issued every year as to their inadequate structure, which in the period of eliminating the consequences of the economic crisis strongly affects their growth. In 2009, they were up by EUR 154 million in nominal terms, but

in 2010 they dropped by a minimum (of EUR 3 million) which, as a share of GDP, kept them at the previous year's level. Most subsidies were allocated to agriculture and transport. Subsidies in transport, which were very high throughout the years, grew by another EUR 38.2 million in 2010 and accounted for 36.5% of total subsidies. In relative terms expressed as a share of GDP, Slovenia ranks among the upper third of the most subsidised EU Member States. High subsidies to agriculture decreased dramatically (almost halved) in 2010. In 2009, subsidies to agriculture were higher only in Finland, while in 2010, subsidies to Slovenian agriculture were comparable to subsidies in other EU Member States. Given the generous subsidies to agriculture and transport, subsidies for other purposes were rather limited to a good half of the total subsidies; even worse is the picture in subsidies allocated to economic affairs (2009: 41.3%; 2010: 43.5% of total subsidies). In 2009 and 2010, a slightly higher figure was recorded only in subsidies to general economic and commercial affairs and labour affairs, introduced to mitigate the economic crisis and aimed at preserving jobs. This allocation did not support SDS's goals in the sense of promoting faster restructuring of the Slovenian economy and increasing value added per employee, which makes the economic efficiency of these subsidies rather questionable. Following the withdrawal of some anti-crisis measures, subsidies fell by EUR 81 million or 0.3 p.p. of GDP in 2011, however, compared to other EU Member States, they still stand at the above average level.

The extent of industrial measures having the nature of state aid[128] decreased in 2010 but remained at the level higher than that recorded during the economic crisis. Compared to 2009, state aid decreased nominally by 23.9% (EUR 144.6 million) in 2010 but was higher by EUR 136 million than in 2008. The reduction of aid derives from the phasing out of a special state aid scheme intended to remedy a serious disturbance in the economy, which was adopted to tackle the consequences of the financial and economic crisis. There was a slight increase in aid that was allocated according to other horizontal aid schemes as well as in special sectoral aid. The highest increase was recorded in aid to employment, R&D, which to a certain extent mitigates the consequences of the economic crisis, and aid for environmental protection. Some categories of horizontal aid (aid to SME and training) are gradually reduced since there is an increase in introducing *de minimis* measures[129] that are not classified as state aid. Meanwhile, 2010 saw a slight reduction in aid to specific sectors, but an increase in aid to transport; aid to other sectors (mainly agriculture, fisheries and coal industry) decreased. In 2010, Slovenia's state aid (excluding crisis aid and aid to railway transport) was high above the EU average (EU: 0.6% of GDP; Slovenia: 1.1%). In relative terms, state aid is recorded to be higher only in Hungary (2.3%) and Malta (1.4%); Finland records the same level of state aid.

The analysis of the allocation of state aid in the period 2009–2010 by recipients[130] indicated their concentration and direction mostly into financial activities and manufacturing. The distribution of state aids by deciles shows their extraordinary concentration. A total of 10% (979) of recipients received as much as 93.1% of total aids; of this, state aid to only twenty of them accounted for over 50%. The largest recipients are mostly state-owned enterprises engaged in banking, transport, coal mining and energy. This reveals that aid was only concentrated on few very large recipients, while 90% of all recipients were allocated aids that on average amounted to less than EUR 8,000. The allocation by activity shows that 22% of all state aids were directed into financial and insurance activities, 20.8% into the manufacturing, which is followed by transport and storage; professional, scientific and technical activities; public administration and defence, activities in the area of compulsory social security and electricity, gas and steam supply. Positive developments occurred in this regard in the manufacturing industries. If before 2009 state aid was directed towards low and medium-low technology-intensive industries, the last two years have seen stronger support to medium (low and high) intensive activities, which is most likely owing to the fact that during the harsh economic conditions a large number of yearly subsidised enterprises engaged in low-technology intensive activities went bankrupt. The preliminary results of the study on the effects of anti-crisis measures on the performance of enterprises during the economic crisis, which only covered the state aids in 2009, indicate, in statistical terms, that during the crisis state aids did not have a major influence on the performance of aid recipients in comparison with the non-recipients engaged in the same industrial branches; moreover, a higher rate of employment reduction was recorded at aid recipients than this was the case in other enterprises (Burger, 2011).

Small amounts of aid granted under the* de minimis *rule, which are not classified as state aid, have increased significantly in the last two years. In 2006, Slovenia's de minimis aid granted under this rule amounted to slightly more than EUR 10 million; in 2008, it increased to EUR 28.6 million. De minimis aid increased substantially in 2009 (EUR 84.9 million), accounting for 14% of total state aid. The increase was partly a consequence of the measures adopted to mitigate the consequences of the

[128] State aids arise from the EU's regime and represent 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. The impact on the market is defined arbitrarily, by rules adopted by the European Commission, the European Council and the European Court of Justice.

[129] The de minimis small aid amounts are an instrument by means of which EU Member States can provide quick support in a limited amount without notification to the European Commission and without entering to any administrative procedure. The total value of aid granted to the same company must not exceed EUR 200,000 within the three budget years.

[130] The analysis excluded state aid to farmers.

economic crisis and partly due to the said transition from the controlled state aids. In 2010, de minimis aid was reduced, but stood at a high level of EUR 60.7 million, accounting for 13.2% of state aid. It was allocated for different purposes, mainly for employment and SMEs. Also here, there is a high rate of concentration since in the period 2009–2010 only 1.7% of recipients (237)[131] were granted 27.5% of total de minimis aid. The remaining 98.3% (13,364) of recipients were allocated aids that on average amounted only to EUR 7,157. By degree of concentration, the *de minimis* aid does not differ from the state aid. An excessive number of recipients being allocated small de minimis aid amounts leads to high administration and transaction costs; consequently, their number should be reduced and the amount of the aid limited to a reasonable extent which brings positive effects in accordance with the objectives of their allocation.

The overall burden of taxes and contributions measured as a share of GDP during SDS's implementation remained below the EU average, but it did record an upward trend[132]. In 2010 it was by 1.3 p.p. of GDP lower than the EU average, but compared to the previous year's level it increased by 0.4 p.p. of GDP. A share of social security contributions grew by 0.2 p.p. of GDP reaching the peak value after 2000. The share of tax revenues remained steady and, compared to the previous year, it even increased. The increase was to a large extent due to a rise in the share of taxes on production and on imports, which grew as a result of reduced economic activity following the increase in excise duties and value added tax mainly on imports, which was also a response to a rise in prices of oil and raw materials. For the third year in a row, the share of taxes on income and property recorded a downward trend, where – given the poor macroeconomic picture – revenues on income tax decreased, as well as the revenues on corporate income tax following the reduction of tax rates and changes to the reliefs. Taxes on capital increased slightly in 2010 in nominal terms, however, in the structure, their share is irrelevant. The burden of taxes and contributions in Slovenia in 2009 was by 0.6 p.p. of GDP lower than in 2005, which was largely owing to the reduction of burdens in the period 2006–2008; in the last two years, however, the burden has again increased following a significant fall in GDP since the onset of the crisis.

In Slovenia, the above-average tax burden is imposed on labour and consumption, while the burden on capital is below the average. The implicit tax rate[133] on consumption in 2009 amounted to 24.2% in Slovenia, whereas the EU average was 20.9%. Only seven Member States, with a predominance of the Nordic countries, reported higher rates. After 2003, the tax rate on consumption saw a downward trend in Slovenia, while the average for European countries rose. The implicit tax rate on labour in Slovenia stood at 34.9% in 2009 and was higher than the EU average (32.9%) on account of relatively high social security contributions. Twelve Member States reported higher rates than Slovenia. The implicit tax rate on capital for Slovenia is estimated at 21.0%[134] for 2009 and is below the EU-25[135] average (24.6%). Seven Member States, including the Czech Republic, Hungary, Poland and Slovakia, reported lower rates.

3.2. Institutional competitiveness

The year 2011 did not see any withdrawal of the state from direct and indirect ownership in companies and financial institutions. The reasons remain unchanged. First and foremost, the government lacked a sound strategy and policy as to its ownership in companies and financial institutions. The 2011–2015 Strategy for the Management of the Capital Investments of the Republic of Slovenia, prepared by the Capital Assets Management Agency of the Republic of Slovenia (AUKN), was not adopted; as a result, there was no formal basis for the decision-making on the withdrawal of the state from company ownership. In this vacuum a desire to maintain and sometimes even increase the state ownership in the economy prevailed. Second, the financial and economic crisis reduces the interest of portfolio and strategic investors in acquiring ownership shares in companies. Third, compulsory settlements and bankruptcies of companies actually forced state-owned banks to swap loans for ownership shares in these companies.

With the establishment of the AUKN in 2010, this agency assumed responsibility for the management of state-owned assets and became a key decision maker on the policy on privatisation of companies. In 2011, the AUKN prepared 2011–2015 Strategy for the Management of the Capital Investments of the Republic of Slovenia, which was to provide a basis for all decisions on the withdrawal of the state from company ownership. The strategy divides state's stakes in companies into strategic and portfolio investments[136]; strategic

[131] This includes only the recipients that were granted more than EUR 100,000 in the period 2009–2010.
[132] The increase was also a result of a high fall in GDP in 2009 and its modest increase in 2010.
[133] The implicit tax rate on consumption is defined as a ratio between taxes on consumption and final household consumption in a country's territory in compliance with the national accounts methodology. The implicit tax rate on labour is defined as the ratio between taxes on labour and the compensation of employees increased by payroll tax, in compliance with the national accounts methodology.
[134] Taxes on income and on other types of capital (e.g. property) are low in Slovenia.
[135] No data for EU-27.
[136] Strategic capital investments are investments with which the Republic of Slovenia aims to achieve, in addition to economic goals, also infrastructural and other goals linked to the performance of individual public services, as well as to development and other goals. Portfolio capital investments are investments with which the Republic of Slovenia aims to achieve exclusively economic goals and with which the AUKN disposes independently.

investments were envisaged in 48 companies, portfolio investments in 31[137]. The Strategy's dynamics of selling these shares in 2011 envisaged the selling of capital investments totalling EUR 12.6 million only[138]. Even if the Strategy had been adopted, it would not have made any difference in terms of the withdrawal of the state from company ownership in 2011. Without the adoption of the strategy, the AUKN sells those state-owned assets that are listed under the assets for the disposal and other purposes in the Act (and the Act amending the Act) on the programme of sale of the state-owned financial assets for 2010 and 2011 (OG RS, nos 97/2009 and 85/2011). The list contains twenty equity holdings, of which the purchase value presents budget revenue, with a total value of equity holdings for sale amounting to EUR 78.5 million, and three investments, of which the purchase value is not regarded as the budget revenue, with a total value of equity holdings for sale amounting to EUR 2.5 million.

In the future, the state's withdrawal from company ownership will be marked by adverse fiscal conditions, concentration of bank ownership in companies undergoing bankruptcy, as well as the willingness of foreign investors to invest in the Slovenian economy. Fiscal consolidation will accelerate the privatisation process. The first step towards this direction is the adoption of the Act amending the Management of Assets Owned by the Republic of Slovenia Act. This also applies to the fact that, following bankruptcies and compulsory settlements, the equities of numerous companies have passed into bank ownership, mainly NLB. Prior to transferring the management of ownership shares in major companies to the agency, KAD and SOD were – in addition to the state – the key managers and sellers of equity in the companies. This role has now been taken over by the banks, which will be forced to, and will indeed wish to, sell such shares promptly – "forced" because those shares represent a burden and reduce the banks' capital adequacy causing a major issue, and "wish" because they do not have the capacity to manage a company, since this is not their primary role. However, it also depends on 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. In the past, the interest of foreign portfolio and strategic investors has been small. Also, they have negative experiences with the management of the procedures for sale of state-owned equity shares, which has not been credibille thus far.

[137] In addition, there were 13 investments in companies that are undergoing bankruptcy, winding up or closure, and 4 investments in companies that are to be transferred free of charge to the Slovenian Regional Development Fund.

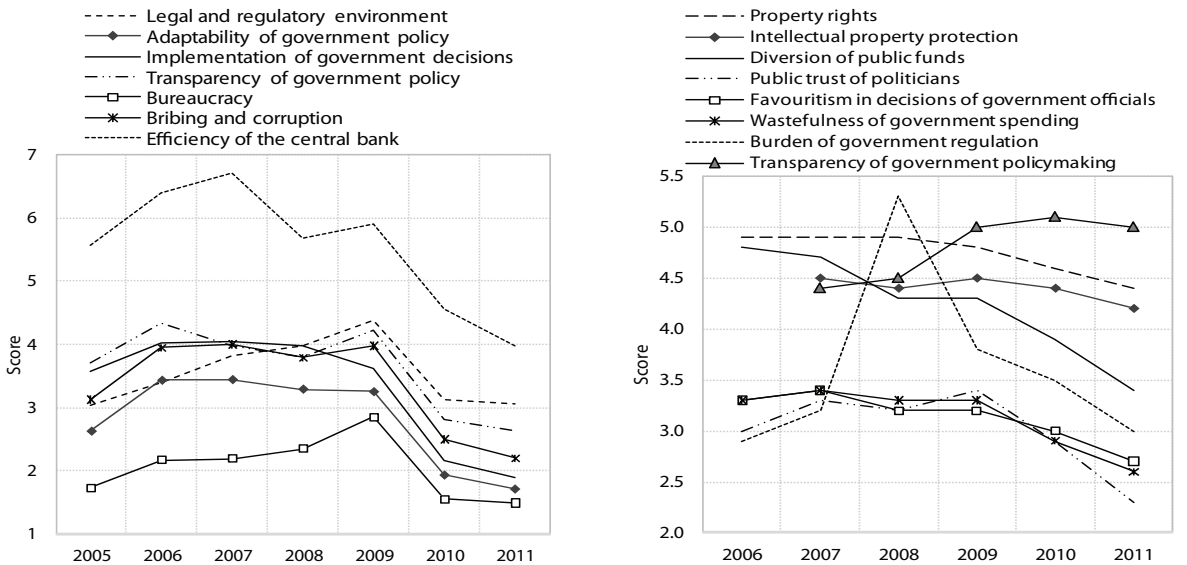
[138] Of that, EUR 6.2 million of equity holdings owned by KAD, EUR 4.6 million by SOD and only EUR 1.8 million of holdings in the direct ownership of the Republic of Slovenia. The selling of equity holdings was envisaged to be more decisive in subsequent years; in 2012, in the amount of EUR 1,082.3 million, in 2013 in the amount of EUR 60.4 million, in 2014 in the amount of EUR 2.9 million and in 2015 in the amount of EUR 3,826.1 million.

In 2011, Slovenia continued to carry out activities related to better regulation and to implement the programme to eliminate administrative barriers and reduce administrative costs. The activities for better regulations included the adoption of the Resolution on Legislative Regulation in 2010, providing for mandatory public participation in drafting regulations and assessing the impacts of regulation on the economy, the environment, and social affairs; consequently, the Rules of Procedure of the Government of the Republic of Slovenia were amended. In drafting regulations, a progress has been recorded, which is above all evident in the compliance with the provisions governing the submission of draft regulations for consideration. The programme for the elimination of *administrative barriers* consists of two parts. The first part regards the action programme aimed to reduce administrative burdens, while the second part contains specific measures to eliminate administrative barriers. The action programme to reduce administrative burden is implemented by stages[139]. Until the period of the third stage, the programme was implemented in accordance with the plan. By mid-2011, a range of measures (298) was selected by areas and sectors, of these 102 measures had already been carried out; 196 measures still remained to be implemented. The action programme slowed down considerably during the fourth stage since certain laws regulating labour legislation were rejected at referenda and the adoption of laws to be amended was almost entirely suspended in the second half of 2011. Consequently, it was necessary to postpone the deadline for the completion of the fourth and fifth stages; May 2012 was a new deadline proposed. Only after the completion of the final stage of the programme, it will be possible to establish to what extent the overall "programme minus 25" has actually been implemented. (Report on the implementation of the tasks and attainment of the objectives in the area of better regulations and Action Programme for Eliminating Administrative Barriers and Reducing Administrative Burdens by 25% by 2012, for 2011, 2012).

International competitiveness indicators show that in the past two years Slovenia strongly deteriorated in institutional competitiveness. Lower rankings and values in the post-crisis period, in particular in 2011, were recorded on most indicators of international competitiveness; compared with other EU Member States, Slovenia's competitiveness is on the decline. The results of the survey in the past year point to a great dissatisfaction of the business sector with the work of the institutions, in particular the government and the central bank, as well as with a low implementation of the

[139] The first and the second stage were implemented by 2011. The first stage involved the overview of legislation and a range of regulations; the second included the analysis of regulations following a uniform methodology. In 2011, the third stage was completed, providing for a plan of measures taken by areas/sectors. In accordance with the time schedule, the fourth stage, which covers the implementation of measures, should be completed by May 2012, and the fifth, which includes the evaluation, by December 2012.

Figure 16: **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 maximum score in IMD (left) is 10, and in WEF (right) 7.

government decisions, the increasing of the bureaucracy and corruption (IMD 2011; WEF 2011/12). The need for economic and social reforms to improve Slovenia's competitiveness was, according to the surveys, not very well accepted by the public, which resulted in the failure to adopt some key structural reforms. Compared to the previous year, there was deterioration in the ranking in the area of business legislation, especially with regard to a rigid legislation governing the labour market. A similar deterioration is shown by the World Bank Governance Indicators 2011, since Slovenia's ranking decreased in most of the fields surveyed, particularly in the area of corruption. While Slovenia being a country with a relatively low level of administrative corruption, the financial crisis revealed a long-term development of systemic corruption[140] which allows gaining benefits to the detriment of public funds and public interest. The number of reported suspicions of corruption and other irregularities in the period from 2008 to 2011 increased substantially[141]. These findings are confirmed by the corruption perception index (Transparency International, 2011), where among 183 countries assessed, Slovenia's ranking in 2011 fell by 8 positions to 35th (i.e. ranked 16th among EU Member States). According to the World Bank survey on the ease of doing business (Doing Business, 2012), Slovenia's ranking in 2011 remained the same as the previous year's ranking. Compared with other surveys on competitiveness (and the latest IMD and WEF research results), Slovenia's ranking was higher in terms of the ease of doing business, which is mainly owing to the fact that this survey ranks countries merely by the quality of the regulatory environments, while the subjective perceptions of persons surveyed do not influence the results. Slovenia's ranking was the highest in terms of the ease of establishing businesses, access to electricity and investor protection. The main obstacle to the ease of doing business are lengthy procedures for obtaining documentation and permits as well as the number and length of tax payment procedures since enterprises are to make 22 payments of taxes and contributions every year, which accounts for 260 hours per year. In terms of institutional competitiveness, Slovenia's ranking is much lower in comparison with other comparable (mainly European) countries, which is largely due to too slow institutional changes in adapting to global challenges, the inconsistency in the implementation of the adopted regulations and to a deterioration of relations and values in the society.

In 2011, public trust in institutions remained low. Public trust in political parties, the government and the National Assembly in Slovenia has substantially decreased since the onset of the crisis and is at a fairly lower level compared to other EU Member States (Eurobarometer 76, 2011). The political uncertainty and low public trust in institutions strongly influenced the results of some key structural reforms rejected by the population at referenda. The population acknowledges the urgency of the measures required to stabilise the public finances, but refuses to believe that the government could take the appropriate and fair measures. These findings are confirmed by the WEF survey, which assesses that the level of public trust in the ethical standards of politicians in Slovenia is low.

[140] Evaluation of the corruption situation, the Commission for the Prevention of Corruption, May 2011.
[141] The number of reported suspicions of corruption by years: 2005 – 270, 2008 – 661, 2009 – 1.027, 2010 – 1.271, 2011 – 1.237. There was also an increase in the number of cases which the Commission for the Prevention of Corruption referred to competent authorities (police, inspection bodies, etc) for further consideration; 2008 – 208, 2009 – 302, 2010 – 342, 2011 – 515 (Annual Report, the Commission for the Prevention of Corruption; 2005 - 2011; KPK Vestnik, December 2011 and January 2012).

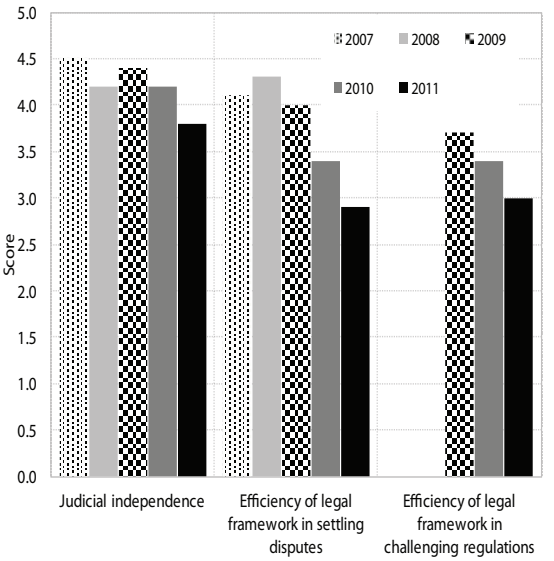
Public-private partnerships in infrastructure investments and public services have not yet been established. Despite a regulatory framework for public-private partnership, the state and municipalities only grant concessions for provision of services while there are few complex forms that would include the construction of infrastructure facilities. The extensive list of major national investment projects to be implemented in public-private partnerships is not being realised; only minor projects at regional and municipal levels are carried out. Given the high number of municipalities, their financial power to participate in municipal and regional projects is limited and, consequently, small projects do not produce the economic effects expected by the private sector. Problems also arise in granting concessions for the provision of services. Municipalities, in particular, often confer special or exclusive rights to private persons for long periods without economic reasons since private entrepreneurs do not invest funds in the construction or in the upgrading of infrastructure from which they would benefit during the contractual relation. This means that they have been unjustifiably conferred monopoly rights (Report on forms of public-private partnerships concluded in Slovenia in 2009, 2011).

3.3. Efficiency of the judiciary

Slovenia's competitiveness is severely hindered by lower trust in the rule of law. The trust in the rule of law in Slovenia decreased during the economic crisis, which is also indicated by the 2011 World Bank Governance Indicators. The WEF assessment shows that judicial independence from the influence of politics and the private sector decreased and points to the inefficiency of the legal framework in settling disputes and challenging regulations (WEF 2011/12). In all three areas, Slovenia significantly deteriorated its ranking among EU Member States while enterprises particularly draw attention to the inefficiency of the legal framework for settling disputes among enterprises (ranked 111th among 142 countries). The World Bank's data (Doing Business, 2012) reveal that the ease of doing business is severely hindered by lengthy proceedings since the procedure for the enforcement of contracts takes as many as 1,290 days, which is considerably more than in other EU Member States.

The reduction of court backlogs (excluding misdemeanour cases) also continued in 2011, although volume for major cases remained almost unchanged[142]. Compared with the previous year, the number of pending cases in the court system as a whole dropped by 5.2% in 2011, but rose by 6.7% in higher courts, by 3.1% in district courts, by 4.2% in the administrative court, and by 3.6% in labour and social courts. On 31 December 2011, pending cases accounted for 30.5% of the entire caseload[143] (Court Statistics for 2011). In cases of major importance, accounting for 21.2% of the caseload, the number of pending cases in all courts remained almost unchanged[144]. An increase was again evident in higher and district courts as well as in administrative courts and in labour and social court, while in all other courts the number of pending cases dropped. These results were again achieved amid a high increase of caseload, although the number of incoming cases decreased by 2.7% in 2011 compared with the previous year and rose by 3.5% in cases of major importance. The total number of judges decreased by 0.8%.

Figure17: **WEF indicators of efficiency of the judiciary**



Source: The Global Competitiveness report, WEF, various issues.
Note: Score is the value of the indicator. Higher score is better; the maximum score is 7. The legend of indicators represents the ranking between two extremes: (i) to what extent is the judiciary independent from politics, citizens and 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?

The court backlog (excluding misdemeanour cases) as defined by Article 50 of the Court Rules decreased by 6.1% in 2011 and increased in cases of major importance by a minimum (1.4%), which means that the duration of court proceedings shortened. Court statistics provide data on the court backlog by type of case conducted according to the deadlines specified by Article 50 of the applicable Court Rules. A considerable increase in all court backlogs and backlog in cases of major importance has been recorded in higher courts (141.7%), in the higher labour and social court (27.3%) and in the labour and social court (17.1%), while a significant reduction (in all cases, also in cases of major importance) has been recorded in higher courts (by 25.5%).

[142] Methodological changes make a comparison with the years prior to 2010 unrealistic; consequently, it is not possible to assess the implementation of SDS in the area of the reduction of backlogs and the efficiency of courts.

[143] The caseload encompasses pending cases as on 1 January 2011 and new cases.

[144] A reduction of 0.6%.

4. Modern welfare state and higher employment

SDS guidelines: Maintaining and improving the achieved level of social security and quality of living and health is an important social value endorsed by SDS. The transition from a welfare state to a welfare society requires a more efficient welfare state, greater responsibility of citizens themselves, promotion of the activities of individuals, stronger public-private partnerships, and a more diverse and partly competitive range of social services. At the same time, it also calls for stronger social cohesion, improved access to social-protection systems, healthcare, education, culture and housing, and special care for the most vulnerable groups of the population. It is necessary to adapt social-protection systems to the needs of the long-living a society and to reduce social risks, poverty and social exclusion. The sustainable increase in welfare and quality of life is strongly underpinned by a higher employment rate, to be achieved mainly through economic growth and investment in knowledge.

4.1. Improving labour market flexibility

In 2011 the labour market continued to adapt to reduced economic activity. The decline in economic activity in 2009 (by 8% when measured in terms of GDP) triggered the labour market adjustment, which was characterised in particular by reduced employment rates and increased unemployment. Following a 2.3% annual decrease in the number of people in employment in 2009 and 2010, a further 2.1% drop was recorded in 2011. While the private sector adapted to a lower level of economic activity by reducing employment, the number of employees in public services increased further in 2009 and 2010. Although similar trends were also typical of the majority of the EU Member States, some of them nevertheless considerably reduced the number of employees in the public sector during this period. Since the beginning of the economic crisis, a reduction in the number of employees in the Slovenian public administration was for the first time recorded as late as in 2011, while in other segments of the public sector, the employment growth slowed down. At the end of December 2011, the number of the registered unemployed people was by 2.5% higher than at the end of 2010, while compared to 2008 (the lowest level after 2000), it was higher by 90%. In 2011, the unemployment rate also continued to increase, but at a slower pace than in 2009 and 2010[145]. Moreover, the labour market was increasingly faced with structural problems, as the long-term unemployment rate doubled during the period 2009–2011.

In the period 2009–2011, Slovenia deviated from the employment strategic goal. In addition, the year 2011 saw a strong decrease in the labour participation rate of older people, this rate being quite low already before. The employment rate of the population aged 15 to 64 has been decreasing for the third year in a row (64.4% in the second quarter of 2011), meaning that Slovenia is deviating from the goal of a 70% employment rate in 2013 (SDS goal). The employment rate of the 20–64 age group, for which Slovenia set a goal of 75% employment by 2020 (under the Europe 2020 Strategy), is also on decrease. In the second quarter of 2011, this rate was 68.6%, which is by 4.3 p.p. less than before the crisis. The largest fall in the employment rate was over this period recorded among young people (aged 15–24), this circumstance being to a large extent a result of a reduced volume of student work. The year 2011 also saw a strong fall in the employment rate of older people (aged 55–64)[146] as a result of a reduced volume of informal activity and dismissal of a considerable number of older people at the end of 2010[147]. An increase in the employment rate of older people was also one of the goals of the pension reform rejected in the 2011 referendum. The amendments to the current pension legislation should be drafted so as to keep the elderly people among the active population for an extended period of time, given the fact that in this respect, in Slovenia their employment rate is among the lowest in the EU. However, this goal should also be supported by other employment policy measures.

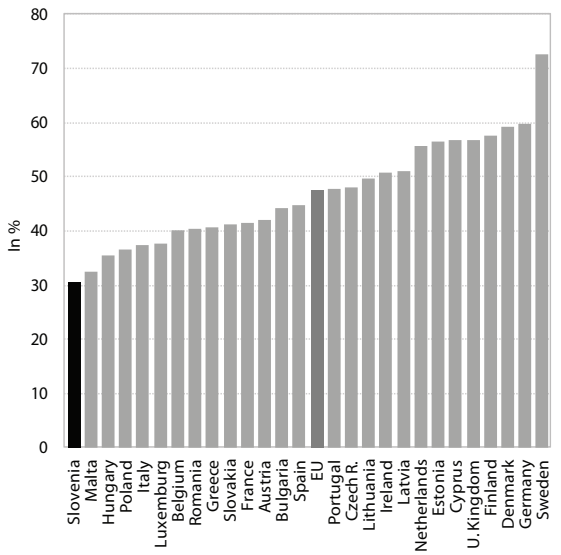
Table 6: **Changes in the number of people in employment (in %)**

	2005	2006	2007	2008	2009	2010	2011
People in employment – total	1.0	1.5	3.3	3.2	-2.3	-2.3	-2.1
– mainly private sector (A–N;R–T)	0.9	1.4	4.0	3.5	-3.3	-3.4	-2.8
– mainly public services (O–Q)	1.4	1.5	0.4	1.8	2.0	2.1	0.8

Source: Statistical Register of Employment (SORS), 2012; calculations by IMAD.

[145] The registered unemployment rate increased to 11.8% (by 1.1 p.p. more than in 2010) and the unemployment rate according to the labour force survey to 8.2% (by 0.9 p.p. more than in 2010).
[146] The employment rate of older people (aged 55-64) was 30.5% in the second quarter of 2011 and 35% in the second quarter of 2010.
[147] According to our estimates, this large increase in the unemployment rate of older people was partly a consequence of the expected pension reform and changes in the unemployment insurance.

Figure18: **Employment rates of older people (aged 55–64) – second quarter of 2011**



Source: Eurostat Portal Page – Population and social conditions, 2012.

In 2011 the share of part-time employment in total employment dropped, while the share of temporary employment remained at a level similar to the one in the preceding year. During last year, the share of part-time employment in total employment dropped to 9.1% (by 1.4 p.p. less than in the second quarter of 2010), which can be attributed to the termination of subsidisation of part-time work[148] and a smaller volume of work performed by young people through student employment services[149]. The employers very seldom use the part-time work option themselves, as according to our estimates, more than one half of part-time jobs is a result of the option provided by the social protection legislation[150]. While a modest economic growth and an unstable demand continued to be typical of 2011, the share of temporary employment in total employment remained at a level similar to the one recorded one year earlier. However, in respect of temporary employment there is an increase in providing labour by way of temporary work agencies.[151] This can mainly be attributed to a simplified procedure of hiring workers by these agencies. During last year, the share of temporary employment among young people (aged 15–24) substantially increased[152], while an even more pronounced age segmentation of the labour market in 2011 continued to be connected with the volume of work performed via student employment services. This is also the reason why the share of temporary employment among young people in Slovenia is the highest in the EU (the EU average is 42.2%, but stands at 72.5% in Slovenia).

There were some positive moves towards greater flexicurity in 2011 as regards the provision of security, but less so in the area of flexibility. Having entered into force in 2011, the Labour Market Regulation Act (*Zakon o urejanju trga dela*; hereinafter: ZUTD) aims to increase the access of young people to unemployment benefits and improving the income security of the unemployed. Two main amendments to ZUTD involved widening the eligibility criteria range for unemployment benefits and increasing the level of benefits. Since the share of young unemployed people (under 30) receiving unemployment benefits in 2011 was only 0.9 p.p[153] higher than in 2010, we estimate that the accessibility of unemployment benefits for young unemployed people has not substantially improved. The increase in the amount of the benefit had a stronger impact, meaning that in 2011 the average gross amount of the benefits paid under ZUTD was 10% higher than the one paid under the preceding Employment and Insurance Against Unemployment Act[154]. In 2010 a substantial part of the envisaged legislative changes related to the labour market was prepared. However, as many as three acts already adopted (the Pension and Disability Insurance Act, the Mini Jobs Act and the Prevention of Illegal Work and Employment Act) were subject to a referendum and rejected. The reforms enforced thus far have indeed resulted in a higher income security, while failing to produce higher labour market flexibility. Within the flexicurity concept (active employment policy and lifelong learning), the third pillar still does not play an adequate role. Although in 2011both intervention acts aimed at preserving jobs ceased to apply and the number of the unemployed still slightly increased, the number of people included in the active employment policy programmes decreased by 31.3% compared to 2010.

[148] The payment of subsidies under the Partially Subsidising of Full-Time Work Act continued until September 2010; in the second quarter of 2010, the average of subsidies paid on a monthly basis was 5,802.

[149] In the second quarter of 2011, the volume of student work was down by 23.1% compared to the volume the year before, a circumstance which is probably connected with limitations on this type of work in the public sector.

[150] This category includes part-time work applied for because of childcare under the Parental Protection and Family Benefit Act, for health reasons under the Health Insurance Act and for disability reasons in compliance with the provisions of the Pension and Disability Insurance Act.

[151] According to the data of the Ministry of Labour, Family and Social Affairs, recruitment agencies placed approximately 12,000 people into work in 2010, which accounted for 9.1% of all temporary employments, this being almost three times more than in 2006 when approximately 3,000 people were placed into work, which accounted for 2.3% of temporary employments.

[152] The share of temporary employments among young people (aged 15 to 24) in the second quarter was 72.5%, which is by 5 p.p. more than the year before.

[153] In 2010 the share of young unemployed people receiving a cash allowance was 7.5%, while in 2011 it increased to 8.4%.

[154] According to the data of the Slovenian Employment Service, the average amount of the allowance paid under ZUTD in 2011 was EUR 666.72 and EUR 601 under the previously applicable act. Owing to the fact that people entitled to an allowance under the preceding act received their allowances in the amount assessed previously, the average gross allowance (previous and new eligible people) paid in 2011 was by 4% higher compared to 2010.

Over the last year, the participation in lifelong learning dropped, with the rates of participation of the elderly and low-skilled people remaining particularly low[155]. The issue of increased labour market segmentation poses a great challenge in the labour market policy and the promotion of flexicurity. To deal with this issue, it would be necessary (i) to reduce substantial differences in the rights arising from fixed-term and permanent employment, and (ii) to regulate student work in a different manner.

4.2. Modernisation of the social protection systems

Social protection expenditure[156] is increasing, and so are the problems for funding it. In 2009 (the latest available data) this expenditure increased by 6.6%[157] in real terms, which by far exceeded the average recorded in some previous years (3%). This high increase can largely be attributed to the growth of pension expenditure (by 7.2%) and the expenditure on various social transfers that in 2009 began to increase rapidly due to the economic crisis, as well as to expenditure growth in health care as a result of the public sector wage reform. Expressed as a share of GDP, the increase in the social protection expenditure was also quite substantial (to 24.2% of GDP, which is almost 3 p.p. more than the year before). Alongside expenditure growth, this situation was also the result of a substantial GDP decline in 2009. Since similar trends were also typical of other EU Member States, the share of the social protection expenditure continues to remain substantially below the EU average (29.5%). Despite the applicability of intervention measures in 2010 and 2011 that restricted the growth of expenditure for cash allowances under the social protection programmes[158], these allowances continued to increase in real terms owing to further rise in the number of pensioners and the beneficiaries of certain social transfers (mostly because of increased unemployment). Given a modest economic growth, this trend is expected to result in a further increase in its share against the GDP. The problems of providing public resources to cover this expenditure have been escalating year by year. The volume of transfers from the state budget to the pension fund to cover pension expenditure is increasing, while the revenues of the healthcare fund in 2011 did not suffice to cover current liabilities for the third year in a row. Out of many systemic changes expected to be implemented for quite a while, the reform of the system of means-tested social transfers was the only one that Slovenia began to implement in 2012. This reform aims at achieving more target-oriented transfers which under the new regulation do not only depend on the income but also on the property of potential beneficiaries.

Further problems in ensuring stable funding of social protection expenditure are also indicated by new long-term economic and budgetary projections related to population ageing. The European Commission, in cooperation with the EU Member States, updates the relevant projections every three years[159]. The most recent projections of March 2012 do not substantially differ from the previous ones. They show that without

Table 7: **Long-term projections of ageing-related public expenditure, Slovenia and the EU (as % of GDP)**

	Share of GDP (%)		AWG reference scenario*				Risk scenario			
			Change in p.p. of GDP				Change in p.p. of GDP			
	2010		2010–2020		2010–2060		2010–2020		2010–2060	
	SI	EU	SI	EU	SI	EU	SI	EU	SI	EU
Total	23.5	25	1.7	0.2	10.3	4.1	1.9	0.4	10.8	4.9
Pensions	11.2	11.3	1.0	-0.1	7.1	1.5	NP	NP	NP	NP
Healthcare**	6.1	7.1	0.3	0.3	1.1	1.1	0.5	0.5	1.7	1.7
Long-term care***	1.4	1.8	0.3	0.2	1.6	1.5	0.3	0.3	1.6	1.8
Education	4.7	4.6	0.1	-0.3	0.5	-0.1	NP	NP	NP	NP
Unemployment benefits	0.3	1.1	0.1	-0.1	0.0	-0.3	NP	NP	NP	NP

Source: European Commission and Economic Policy Committee: Draft 2012 Ageing Report: Economic and budgetary projections for the EU Member States (2010–2060); Ministry of Finance: Country Fiche on Pension Projections for Slovenia.
Note: *AWG – Ageing Working Group at the Economic Policy Committee. The reference scenario related to healthcare expenditure and long-term care only takes into account the effects of ageing and the assumption that one half of the remaining years of life we live without disability. **Public expenditure for healthcare according to SHA methodology, however, without expenditure for long-term care. ***In addition to long-term care public expenditure according to SHA methodology (0.9% of GDP in 2009), AWG projections also include certain cash benefits according to ESPROSS methodology (disability allowances). NP – no projection.

[155] For more details on this topic, see Chapter 2.1. – Education and Training.
[156] According to ESSPROS methodology. All social protection expenditure covered by public funds and complementary health insurance funds is included.
[157] The latest data made available by SORS.
[158] In 2010 the statutory level of indexation of population's pensions and cash benefits from public sources was cut by half by way of intervention measures, and in 2011 to one quarter. Expenditure for pensions and social transfers has at the same time been increasing in real terms by a solid 2% p. a.
[159] The drafting of these projections is coordinated at the EC level within the Ageing Working Group at the Economic Policy Committee.

Table 8: **Long-term projections of pension public expenditure and contributions (as % of GDP), 2011–2020**

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Pension public expenditure (as % of GDP)	11.2	11.2	11.5	11.5	11.8	11.8	12.0	12.1	12.2	12.2
Contributions of employers and employees for pensions from public funds (as % of GDP)	9.2	9.3	9.3	9.4	9.5	9.5	9.6	9.6	9.6	9.7

Source: European Commission and Economic Policy Committee: Draft 2012 Ageing Report: Economic and budgetary projections for the EU Member States (2010–2060); Ministry of Finance: Country Fiche on Pension Projections for Slovenia.

changes to the relevant policies and without considering other factors, the impact of ageing (reference scenario) on public expenditure in Slovenia would be particularly strong (and also substantially higher than in the EU in average terms), whereas an even greater pressure on a long-term fiscal sustainability would be caused by a potentially higher public expenditure growth, which largely takes into account also other, non-demographic factors (risk scenario).

In 2011 pension expenditure from the compulsory insurance that covers all types of pensions[160] exceeded, in terms of its share of GDP, the share registered at the beginning of the implementation of the 2000 pension reform. This expenditure amounted to 11.6% of GDP, which is by 0.6 p.p. more than in 2000 (11.0%) when the pension system reform was implemented. The pension expenditure from the compulsory insurance that grew faster than the GDP has been typical of the period after 2008. At the beginning, the 2000 pension reform slowed down the growth of pension expenditure and its share in relation to GDP[161]. As from 2008, the expenditure started to grow faster, primarily due to a faster increase in the number of pensioners[162], while since 2009, its relative volume (in relation to GDP) also continued to increase because of a decline in GDP. The effects of the 2000 pension reform on the extension of working life can still be seen in women[163], while the effect of the decline in the accrual rate will be present until 2024. However, in the absence of changes to the relevant policies and owing to the demographic situation, the long-term projections show a further rapid expenditure growth. This expenditure is expected to rise to 12.2% of GDP already by 2020, while the funds gathered from the pension insurance contributions would in 2020 amount to 9.7% of GDP, which would mean a further increase in the volume of the budget transfer for pensions.

Under conditions, in which the number of employees has been decreasing for the third year in a row[164] and the number of retired persons is on increase, the share of pension expenditure which cannot be covered by contributions and through other sources (at the disposal of the Pension and Disability Insurance Institute) is increasing. Therefore, the volume of budget transfers for settling the obligations arising from the pension insurance which covers the difference between the revenue of the Pension and Disability Insurance Institute (PDII) and its pension expenditure is increasing[165]. In order to reduce expenditure growth, two intervention acts were adopted for 2010 and 2011 that provisionally stipulated only a partial adjustment of pensions with wage trends[166], whereas through the adoption of an intervention act applicable to one half of the year 2012, the pension adjustment in the aforementioned period was frozen. Following the failure of the pension reform in 2011, it is now vital to draft a new one as soon as possible. This reform should in terms of expenditure-related fiscal sustainability ensure a better balance between expenditure trends of the compulsory pension insurance and the revenue from relevant contributions, and stabilise the budget transfer for pensions. In order to make the new pension reform more acceptable and effective, it would also be reasonable to design a strategy of active ageing, which would, among other things, include the adjustment of jobs to older people requirements, since according to a survey on working conditions[167] in our country, only approximately one

[160] According to general rules of the pension and disability insurance (PDI), with insurance period plus bonuses, early retirement under the preceding act on PDI, and according to special acts (the Police Act, the Enforcement of Criminal Sanctions Act, the Act Prohibiting Production and Trade in Asbestos Products and Restructuring the Asbestos Industry – asbestosis, and the Victims of War Violence Act – victims of war violence).

[161] In the period 2000–2007, it dropped from 11.08% to 9.70% of GDP, while in 2008 it rose to 9.87%, in 2009 to 10.91%, in 2010 to 11.3% and in 2011 to 11.6% of GDP.

[162] In 2000 the number of pension recipients increased by 1.6%, while in 2009 the annual growth was already 2%, in 2010 2.6% and in 2011 3.2%. The number of the old-age pension recipients was growing even more: in 2000 the annual growth was 2.1%, while in 2009 it rose to 3.4%, in 2010 to 4.1% and in 2011 to 4.8%.

[163] For women, the average age of the newly retired has increased by two years and four months since 2000. For women, the transitory period for reaching the minimum age of 58 will end in 2013 and for 38 years of pensionable service in 2012. There is no longer any transitory period for men.

[164] In 2009 the number of wage recipients decreased by 2.8%, in 2010 by 2.6% and in 2011 by 2.4%.

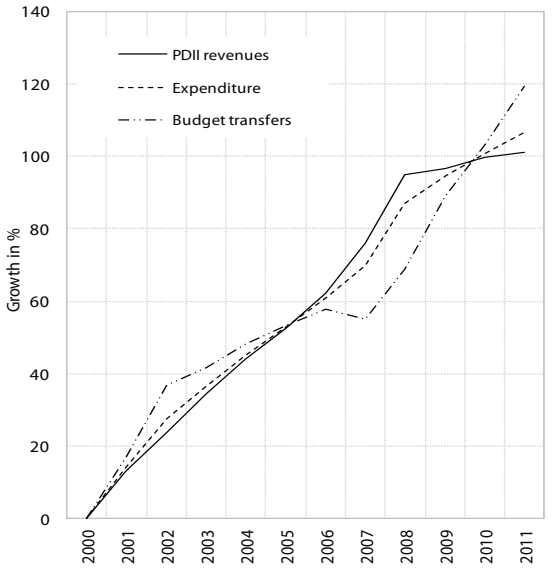
[165] In 2000 the share of fiscal transfers in the PDII total revenue was 29.6% and rose to 31.7% by 2002. By 2008 it had then dropped to 26.7% and, during the crisis, rose to 31.4% in 2011. Alongside funds for covering the difference between the revenue and expenditure of the pension budget, the calculation of this share also includes funds for settling the obligations of the state towards certain groups of beneficiaries.

[166] In 2010 only one half of the established percentage of the statutory adjustment was taken into account, while in 2011 this adjustment percentage thus established was 25%.

[167] These are preliminary results of the 5th European Working Conditions Survey carried out by the European Foundation for the Improvement of Living and Working Conditions.

[168] The EU average indicates some 60% of such employees.

Figure19: **Revenue and expenditure of the Pension and Disability Insurance Institute of the Republic of Slovenia, 2000=100**



Source: Bulletin of the Ministry of Finance.

quarter of the relevant respondents think that when they are 60, they would be able to do the same job as they do currently (Parent-Thirion, A. 2010)[168].

The payments of first supplementary pensions from the voluntary supplementary pension scheme began in 2011. In 2011[169] approximately 537,000 people were included in the voluntary supplementary pension scheme, which is slightly less than the 62% of persons insured under the compulsory pension scheme. However, only approximately 4% of these people were included on the basis of individual insurance schemes. The number gradually increased until 2010 and then decreased slightly in 2011[170]. This was, in fact, the first year that supplementary pensions were paid. However, due to low[171] insurance premiums, which have a tendency to decrease in value, a low yield on the funds saved and, as a result, low pension annuities, and owing to continued uncertainties in financial markets, most insured persons, instead of opting for a pension annuity, decide for a one-off withdrawal of the funds saved despite the income tax provision which imposed a considerably higher tax on such withdrawals.

Box 7: **Factors of public health care expenditure growth in the EU and Slovenia**

The impact of non-demographic drivers on the growth of public health care expenditure in Slovenia is on average considerably smaller than in the EU. According to the econometric study produced by the European Commission (Alternative Scenarios for Assessing the Impact of Non-Demographic Factors on Health Care Expenditure, 2011), population ageing (change in the demographic structure) in the EU Member States contributed in the period 1960–2009 to the growth of the public health care expenditure on average only 10%, the increase in GDP per capita slightly more than 60%, while the remaining solid 25% were contributed by the effects of other, non-demographic factors such as the introduction of new (costly) technologies, the institutional characteristics of health-care systems (e.g. increased number of people covered by compulsory health insurance), employment and wage growth in the health care system, Baumol effect on the increase in relative prices[1] and other factors on the supply side. During the period 1995–2008, Slovenia's public health care expenditure per capita grew in real terms on average by 4.4% annually, whereby population ageing contributed 0.8 p.p. and the GDP growth per capita 4.2 p.p., whereas the contribution of non-demographic factors was negative (-0.6 p.p.). In EU Member States, the contribution of non-demographic factors was +0.8 p.p. on average; the only country alongside Slovenia that featured a negative effect was Hungary. The coefficient of income elasticity of public health care expenditure for EU Member States in the aforementioned period thus on average amounted to no less that 1.3–1.5, while, for Slovenia, this coefficient was only 0.8–1.0. A negative contribution of non-demographic factors in Slovenia can be partly attributed to effective control of the growth of public expenditure for health care (especially the increase in wages and the prices of medical products). However, this can also be a result of a slow introduction of new technologies, poorer facilities, and insufficient number of doctors in the public health care system, a circumstance which has an impact on the health status of the population. According to life expectancy indicators, Slovenia still lags behind the EU average, while the healthy life years indicator shows that we are catching up with the EU average[2] (basic indicators of the population's health status that also positively correlate with health care expenditures). The OECD points out (Health Care Systems: Efficiency and Policy Settings, 2010) that life expectancy could be raised by more than two years on average, holding health care spending constant and improving the performance of health systems, while further improvement in the population's health condition would require increased investments in health care.

[1] In health care, like in other labour intensive sectors, new technologies do not reduce the quantity of work required, but increase costs. In respect of other activities, the labour productivity therefore relatively declines with the result that prices in health care grow faster compared to the level of general price growth.
[2] See Life Expectancy and Healthy Life Years indicator.

[169] The data provided by the Ministry of Labour, Family and Social Affairs (MLFSA) refer to September 2011.
[170] According to the data of the Ministry of Labour, Family and Social Affairs there were 536,922 people insured under the supplementary pension scheme in September 2011, while in December 2010 this scheme included 541,464 persons.
[171] According to the MLFSA data for September 2011, their average monthly amount was between EUR 30 and 40 per insured person.
[172] Measured by SHA methodology (System of Health Accounts).

Health care expenditure[172] has been characterised in recent years by a reduction in public expenditure and an increase in private expenditure from voluntary insurance schemes and, directly, from household budgets. According to the first estimate of the Health Insurance Institute of Slovenia (HIIS)[173], the total expenditure for health care in 2011 amounted to 9.0% of GDP (9.1% of GDP in 2010). Public expenditure for health care declined in real terms for two consecutive years: in 2010 by 2.2% and in 2011 by 1.7%[174]. Accordingly, its share of GDP dropped to 6.5% in 2011. On the other hand, the share of private expenditure rose in 2010 to 28.1% and in 2011 to 28.6%. The reason for this increase in public expenditure was the transfer of the amount for covering certain health services from the compulsory health insurance to complementary insurance, and an increase in out-of-pocket health expenditure. According to the first estimate for 2011, the share of voluntary health insurances in total health-care expenditure amounted to no less than 13.7% (13.4% in 2010), which was the same as the share of direct out-of-pocket expenditure paid by households. The latest internationally comparable data for 2009 indeed show that the share of total private expenditure in Slovenia (26.6%) was slightly above the EU average (25.5%). However, the share of out-of-pocket payments is still substantially below the EU average (12.9% in 2009 in Slovenia and approximately 17–18% of total expenditure for health care in EU Member States on average)[175].

In order to maintain stable public financing of health care, a series of short-term measures aimed at reducing expenditure from the compulsory health insurance was adopted over the last three years. However, no systemic changes were adopted. Since 2009, the Slovenian health care system has been faced with a low growth of revenues from the compulsory health insurance contributions and with increasing expenditure. Among measures to maintain stable public financing of health sector (without borrowing or raising contribution rates), the following have over the last three years been vital: (i) saving funds in public sector wages[176], (ii) reducing funds for depreciation, material costs and tertiary activities[177]; (iii) decreasing expenditure for medicaments by reducing prices and promoting interchangeable medicinal products; (iv) transferring a certain share of expenditure to complementary health insurance schemes[178] ; (v) streamlining business operations and making changes to the organisation of work (stand-by hours). Despite savings measures, the Health Insurance Institute of Slovenia (HIIS) still earmarked certain additional funds for improving accessibility and quality, but to a lesser extent than in the past. In 2009 and 2010, the HIIS recorded a deficit which, however, could still be covered by the surplus from the pre-crisis years. It would have also continued to operate at a deficit in 2011 if the payment of a part of the obligations that was due in December had not been transferred to 2012 (approx. EUR 40.6 million[179]). Complying with the Stability Programme policy, under which the HIIS may not incur debts in its further operations, became in such circumstances even more difficult in 2012. It will therefore be necessary to adopt new measures in order to facilitate the adoption of a balanced 2012 Financial Plan, while ensuring stable business operations in the long-term will undoubtedly also require changes to statutory regulations regarding the scope and method of financing relevant rights.

In all EU Member States, the economic and financial crisis accelerated the process of seeking measures to improve cost-effectiveness of the health-care systems. How to slow down the growth of health expenditure and, at the same time, meet increasing health needs is among the key challenges also faced by Slovenia. In the years ahead, the growth of public funds for health care will remain strongly restricted owing to a weak economic activity, high unemployment rate and the necessary fiscal consolidation. Restricting investments in health care will become even more questionable because of increasing health-care needs as a result of population ageing, as well as owing to a growing number of chronic diseases, increasing expectations of the population and a rapid development of new medical technologies. Long-term projections (see above) show that Slovenia's public health expenditure, as a share of GDP, is already by 2020 expected to increase by 0.3 p.p. of GDP when only taking into account population ageing, or by 0.5 p.p. of GDP when non-demographic factors are also considered. However, according to various scenarios, public health-care expenditure is expected to increase by 0.5–2.6 p.p. of GDP by 2060. In order to ensure stable financing of health care and to maintain the level of quality achieved, the new legislation will have to consider broadening the bases for contributions, amending the rights arising

[173] HIIS 2011 Financial Report (proposal, March 2010). The data according to SHA methodology were evaluated in cooperation with SORS.

[174] Pursuant to international recommendations (OECD, 2011), the implicit GDP deflator was used to calculate the real growth instead of consumer price index.

[175] See Expenditure on Health Care indicator.

[176] See Chapter 1.1. Macroeconomic Stability.

[177] At the service level, the activities of clinics and clinical institutes or departments include scientific and research and educational work for the Faculty of Medicine and other higher education institutions, and the provision of the most demanding health care services at the outpatient or hospital level, the performance of which is neither possible nor reasonable at lower levels, owing to their professional, personnel, technological and organisational requirements.

[178] The reduction of the percentage of the value covered by the compulsory health insurance for health-resort treatment services; ambulance transport services which are not urgent; prosthetic dentistry treatment of adults: medical and food products on the intermediate list; vision aids. As of recently, only 10% of the price of the aforementioned services are covered by the compulsory health insurance (previously between 25 and 40%).

[179] Compulsory health insurance data (Health Insurance Institute of Slovenia), March 2012.

from the compulsory health insurance, upgrading the models of paying health service providers and further optimising the provision of health services. In view of the expected further transfer of financing certain health services to private funding, the new legislation should, in case of the abolition of the complementary health insurance, provide for a new model of a private health insurance, either compulsory or voluntary, that would ensure the preservation of the achieved level of financial accessibility of health services. Alongside changes to the healthcare system, the integration of all the policies and stakeholders which may significantly influence the socio-economic determinants of health and thereby the reduction of costs related to inequalities in health remains the key challenge in improving health condition of the population.

According to recent data, the increase in the long-term care expenditure[180] in 2009 was in particular the result of payments from private sources. Expressed as a percentage of GDP, the total long-term care expenditure in Slovenia in 2009 was 1.22% of GDP, which approximately equals the average of twenty EU Member States for which data are available (1.26% of GDP); however, Slovenia lags behind in terms of public expenditure. The year 2009 saw a strong increase in private expenditure (no less than by 12% in real terms), in particular for the services of long-term social care. This expenditure is mostly related to additional payments for accommodation in the residential homes for the elderly, the amounts of these payments having increased owing to extended capacities and a higher (more expensive) standard of care in new residential homes. The total expenditure in 2009 thus shows the following picture: in the structure of expenditure by sources of financing, the share of private expenditure rose to 25.8% and in the structure of expenditure by function, the share of expenditure for services of the long-term social care increased to 38.0%. During the period 2005–2009, the total expenditure for long-term care in Slovenia increased in real terms by 18.2%, with health care spending exceeding the social care expenditure[181]. Despite their rapid growth, a large part of the needs, expected to increase even further in the coming years, still remains uncovered. Long-term projections show that in Slovenia, public expenditure for long-term care, as a share of GDP, will already by 2020 increase by 0.3–0.8 p.p. of GDP and by 1.4–4.2 p.p. of GDP by 2060. Therefore, the provision of stable sources of financing long-term care urgently requires systemic changes that would, among other things, speed up the development and the performance of home care services, the inclusion of informal service providers and other forms of elderly care by introducing a new model of the compulsory social insurance.

In 2009, expenditure for pre-school education continued to grow. In 2009 it accounted for 0.71% of GDP (0.63% in 2008), of which 0.56% of GDP was public and 0.15% of GDP private expenditure[182]. This increase was particularly typical of public expenditure (by 0.07 p.p.), while the increase relative to GDP was connected with a major GDP decrease in 2009 as a result of the impact of the economic crisis, and with the increase in this expenditure. Moreover, expenditure continued to grow throughout SDS's implementation (since 2005). The expenditure growth was the consequence of increasing number of kindergartens and class units, and the employment of additional staff because of a higher demand for kindergarten enrolments. Given the increasing birth rate in recent years, the requirements for extended kindergarten capacities and additional employment of the relevant personnel, and thus pressure on expenditure for pre-school education, can also be expected in the coming years. Expressed as a percentage of GDP, the total expenditure for pre-school education in 2008 (the last comparable data) exceeded the average of twenty one European countries, members of the OECD. However, according to the share of public expenditure relative to GDP, Slovenia lagged behind the EU average in 2008.

Although the structure of public service providers is gradually changing, the share of non-government providers remains low. SDS policy, under which the state should increasingly relinquish its operational role in providing educational, healthcare and other public services to a public-private network of organisations, is being implemented, albeit rather slowly. The development after the year 2005 shows that the share of private providers in the relevant structure is indeed increasing. However, public institutes still remain the predominant organisational form of performing public services. Private entities mostly operate within the public service networks on the basis of the awarded concessions, while outside the public service there are few private providers, except in tertiary education. In education and social care, involvement of private providers (with or without concession) is the way of increasing the volume of capacities and improving regional accessibility, while also influencing changes in the structure of financing public services (the share of private expenditure). On the other hand, increasing the accessibility of health-care services was not the basic reason for awarding concessions in the health sector. Therefore, given an undefined network, only the structure of service providers changed. In previous years, the employment in public services was characterised by rapid growth (due to adverse fiscal conditions, it somewhat slowed down only in 2011). However, compared to the EU, the employment in these services was still low. This growth was mostly a result of the expansion of employment in public institutes. Since this growth is to a large extent associated with demographic trends (higher birth rates and population ageing), the linear measures of reducing employment could have an impact on access to and the

[180] Measured by SHA methodology (System of Health Accounts).
[181] See Long-term Care Expenditure indicator.
[182] According to UOE methodology (UNESCO, OECD, and Eurostat).

Box 8: **Networks of public service providers**

In education at lower levels, the public network, which mostly consists of public institutes, strongly prevails, whereas at the tertiary level, almost half of educational establishments are privately operated, with the majority having no concession. In pre-school education, the relevant services are mostly provided by kindergartens, which are an integral part of the public network.[1] There are very few private kindergartens that are not part of the public network, but their number is slowly increasing. Unlike kindergartens, the network of establishments in primary education has, owing to decreasing registration, been falling since 2005, while the proportion of private schools is negligible. In this respect, the number of public primary schools decreased, while the number of private primary schools rose, but not to a significant degree.[2] During SDS's implementation, the network of schools in upper secondary education also fell, with all but one being part of the public network. Over the same period, the number of public upper secondary schools decreased, while the number of private schools with or without a concession remained unchanged. During SDS's implementation, the number of post-secondary vocational schools increased as a result of promoting enrolment in tertiary education. Approximately one half of post-secondary vocational schools are public, while privately operated establishments in this area comprise the other half.[3] During the aforementioned implementation period, the number of higher education institutions also increased substantially for the same reason. The expansion of the network of higher education institutions was, above all, the result of the establishment of private equivalents where the number of institutions with or without a concession increased.

In the health sector, the award of new concessions in recent years almost stopped. Within the public health service network, however, the share of funds received by private entities for healthcare services is nevertheless increasing. The decrease in the number of concessions awarded within the public health service network in recent years is, above all, the result of the systemic changes expected. According to HIIS data, the number of contracts entered into with private service providers in 2011 even fell by six for the first time (after rapid growth in 2006 and 2007, it gradually decreased in the following years), while the employment growth rate recorded by concessionaires stabilised (in 2010 the share of employees recruited by concessionaires to perform healthcare services accounted for 14.2%; during the period 2001–2010, this share increased from 9.4% to 14.4%). The number of private practice doctors has remained almost unchanged since 2008. Since 2009, private practice doctors/specialists have also been able to participate in the HIIS national calls for tenders related to the implementation of the priority programmes selected, the purpose of which is to increase accessibility and quality, and to contribute to a reduction in waiting times for certain surgeries and other treatments. This is probably the main reason why, with respect to the total amount of HIIS funds earmarked for health programmes, the share received by private service providers has, for the first time since 2009, been increasing again (13.1% in 2010 and 13.3% in 2011). In addition to service providers included in the public healthcare network, healthcare activities are also carried out by doctors working in full-time private practice. According to Medical Chamber data, there were 216 such doctors in 2011 (210 in 2010), the majority of whom worked in dentistry (154). On the other hand there were only three general practitioners and two paediatricians, while in recent years a substantial increase can be observed especially in the number of specialists working in outpatient clinics (57).

Social care is characterised by a significant extension of capacities and programmes, the main reasons being an increased scope of private entities, and NGO programmes. The number of public institutes has remained more or less the same[4] throughout SDS's implementation, while the number of private service providers having the status of concessionaire is increasing. Private providers are developing in the area of care for elderly and disabled people. In residential homes for the elderly and occupational activity centres, approximately one fifth of all capacities[5] are held by private providers included in the public network (in 2005 slightly more than one tenth). There are practically no private service providers outside the public network. Within the public network, approximately one tenth of private home-care service providers have a concession; there are also some private providers who work outside the public network without a concession. In other parts of this sector, service providers are mostly public institutes. Unlike other activities, this area is characterised by the increased presence of non-governmental organisations that perform various social assistance programmes co-financed from public funds.[6] These programmes employ almost one tenth of all social care employees who perform a significant volume of activity-related work on a voluntary basis[7].

[1] In the 2010–2011 academic year, there were 869 (out of 891) kindergartens which were part of the public network (including 856 public kindergartens and 13 private kindergartens with concession), and 22 private kindergartens without concession that are not part of the public network.
[2] Upon the beginning of the implementation of SDS there was one private primary school, whereas during 2020 Strategy implementation, one primary school began operating in 2008/2009 and one in 2010/2011 (Ministry of Education and Sport, 2011).
[3] Since private vocational higher schools with concession also launch programmes without concession and receive most of the relevant funds from private sources, private higher schools with concession are since 2011/2012 considered private schools according to the methodology adopted within the Ministry of Education and Sport.
[4] It only changes due to reorganisations.
[5] In 2010 all residential homes for the elderly accommodated 16,666 users, while concessionaires offered 3,378 concessionary places. In 2011 occupational activity centres, for which more recent data are available, accommodated 3,098 users, while concessionaires offered 594 places.
[6] These are programmes intended for various vulnerable groups of people, e.g. victims of violence, the homeless, drug addicts, people with mental disorders, etc.
[7] In 2010 the social assistance programs included 1,445 employees, 958 providers who were paid under other arrangements, and 10,861 volunteers.

Table 9: **Work-incentive indicators (in %)**

	Tax wedge on labour costs		Unemployment trap		Low-wage trap			
					Single person, no children		Couple, one spouse in employment, two children	
	SLO	EU	SLO	EU	SLO	EU	SLO	EU
2001	43.2	40.7	82.6	74.37	39.1	45.83	99.4	54.42
2005	41.6	39.9	82.6	74.78	50.8	44.83	76.4	57.07
2006	41.2	40.0	82.2	75.54	51.6	47.33	72.6	59.30
2007	40.9	39.9	80.7	75.08	51.0	47.47	67.4	58.24
2008	40.3	39.5	83.4	74.73	53.1	46.89	68.0	57.41
2009	39.7	39.3	83.4	75.39	52.7	48.01	68.4	59.82
2010	38.6	N/A	83.2	75.42	47.8	47.42	63.8	57.58

Source: for Slovenia – SORS, Work-incentive indicators, Slovenia, 2010 – final data, 20 May 2011, first release; for EU – Eurostat Portal Page – Population and Social Conditions, 2012.
Notes: No data available for 2000, except for tax wedge on labour costs (in Slovenia 41.0%, in EU-27 also 41.0%); N/A – not available.

quality of services, given a poor level of private provision of the services in question.

In 2010 work-incentive indicators somewhat improved. These indicators[183] were influenced by the tax system, social security contributions, social benfits and wage levels. The most significant changes manifested themselves in low-wage traps. In 2010 the transition from a lower to a higher wage was thus more favourable than the year before. By reducing the low-wage trap by almost 5 p.p., Slovenia came very close to the EU average in respect of single persons, while in four-member households (a couple with two children), it still lags behind the EU average by just over 6 p.p. The low-wage trap reduction is a result of legislative changes to the income tax relief scale, which became more favourable for people receiving 67% of the average wage than for people receiving 33% of the average wage. While very close to the EU average in the tax wedge on labour costs, the data on the transition from unemployment to employment are still quite unfavourable for Slovenia, meaning that in 2010 the unemployment trap still stood at 83.2%, while in the EU, it was almost 8 p.p. lower. This significant difference can probably also be attributed to the relatively low wages in Slovenia.

4.3. Living conditions, reduction of social exclusion and social risks

Despite a certain level of deterioration, composite and aggregate well-being indicators still cast Slovenia in a relatively favourable light. In addition to GDP, also other, above all, composite indicators of the development level of individual countries have increasingly been taken into account in monitoring development recently. The purpose of these indicators is to focus attention on the well-being of the population. Considering the items that comprise each indicator, the rankings differ slightly, but nevertheless show that the level of development in Slovenia is relatively balanced. A specific feature of Slovenia is that it usually ranks lower in opinion survey indicators than it does in objective statistical data. The greatest impact of the crisis is therefore reflected in *life satisfaction*, which decreased in 2011. This negative trend has been characteristic of the country ever since the beginning of the recession. With 83% of people ranked as satisfied (combining "satisfied" and "very satisfied"), Slovenia fell from 10th to 12th[184] in the European rankings. In the *Human Development Index (HDI)* for 2011, Slovenia remains in the group of countries which enjoy very high levels of human development; in 2011, Slovenia ranked 21st out of 187 countries, with a slightly improved score (owing to favourable results in education) and a similar ranking to the previous year[185]. According to the *OECD wellbeing indicators*, first published in 2010, Slovenia ranks 21st out of 36 countries. In the *Happy Planet Index (HPI)* and according to the latest data for 2009, Slovenia ranks 66th out of 143 countries: the best results have

[183] Work incentive indicators: tax wedge on labour costs, unemployment trap, and low-wage trap. **The tax wedge on labour costs** 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 employee's gross earnings. **The unemployment trap indicator** shows the ratio of net to gross earnings of a single person without children upon transition from unemployment to employment, taking into account unemployment benefit in the amount of 70% of gross earnings of an employed person receiving 67% of the average employee's gross earnings. **The low-wage trap for a single person** shows the ratio of net to 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 couple with two children**, with only one being employed, 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).

[184] See Life Satisfaction indicator.

[185] See Human Development Index indicator.

been achieved in the following categories: ecological footprint (ranked 30th), life expectancy (ranked 34th) and happiness indicator (ranked 37th). According to the *Sustainable Society Index (SSI)*[186], Slovenia ranked 8th out of 151 countries in 2010 – the same ranking as two years earlier – mostly due to its high score in terms of economic and human well-being dimensions[187]. The attainment of the same or similar rankings by Slovenia in the aforementioned scales does not mean that the Slovenian population's level of well-being remained unchanged during the economic crisis; the indicators stated above either (i) generally only reflect Slovenia's position in relation to other countries also affected by the crisis; (ii) are, to a certain extent, based on pre-crisis data; or (iii) also include components which, in the short term, cannot reveal fundamental changes (e.g. years of schooling, education level, life expectancy, etc.). Therefore, in order to facilitate a more detailed insight into the situation in the area of well-being (taking into account the as yet undefined way in which it is to be monitored in Slovenia), certain indicators, often used for this purpose by international organisations and other countries in their practice, are described below (for sustainable development indicators, see Chapter 5).

4.3.1. Material living conditions

Household disposable income has decreased for the third year in a row. In 2010 it fell by 0.2% in real terms[188] and slightly more in 2011, according to our estimates. Compensation of employees, which includes income from work and represents the largest category of disposable income, was lower in 2010, while business and other household income also decreased. Due to a more restrictive policy of adjustments[189], social benefits (together with pensions, except social transfers in kind) grew only moderately (2.9% in real terms, i.e. slightly less than the average during the period 2000–2010). However, their share of disposable income nevertheless increased by slightly less than 1 percentage point (to 28.1%). Social transfers in kind were increasing at a slower rate (1.2% in real terms). For the most part (84% in 2010), they are earmarked for health care and education, and the rest for recreation, culture, religion, and social protection. Following a 0.5% reduction in 2009, the adjusted disposable income for social transfers in kind[190] thus in real terms remained at the same level in 2010. Following a 4.3% reduction in 2009, the adjusted disposable income per capita increased in 2010 by 2.7% in purchasing power parity terms and reached 83.4% of the income per capita in the EU. This equals the average percentage for 2004 and 2005 (85.4% in 2008).

The net wage bill, the major source of a population's disposable income has, in real terms, been decreasing since 2009, while public expenditure on cash benefits has been growing. Considering the low economic activity, the net wage per employee significantly rose in 2010, owing to the increase in the minimum wage (by 2.1% in real terms). However, given that the number of wage recipients declined (-2.6%), the net wage bill shrank by 0.6% in real terms. In 2011 these trends were similar. The number of wage recipients continued to decline for the third year in a row (-2.4%). The net wage per employee increased, yet substantially less than in previous years (2.1% in nominal terms and 0.3% in real terms). The result was the greatest reduction in the net wage bill measured thus far (-2.1% in real terms and 0.4% in nominal terms). In 2011 the gross wage per employee increased by 2.0% (in real terms by 0.2%) and like in 2010, only because of wage growth in the private sector (2.6%), since in the public sector, it stagnated. Conversely, social transfers from public funds[191] increased by 2.6% in real terms in 2010 (by 5.5% in 2009). The structure of funds reveals an increase in the share earmarked for unemployed people and, to a lesser extent, for poor people and people participating in education, for whom the funds in real terms mostly increased (by 17.2% for people participating in education, and by 14.1% for poor people). As was the case for the year before, the largest share was earmarked for retired people (52.1%), people with disabilities (13.2%) and parents (11.2%).

[186] The Sustainable Society Index (SSI) was developed in 2006 by the Sustainable Society Foundation. It is based on three dimensions of sustainability: human, environmental and economic wellbeing. This index thus comprises 24 indicators divided in eight categories and covering three dimensions of wellness consisting of: human well-being, environmental well-being and economic well-being. Most important for ensuring sustainability are human well-being and environmental well-being.

[187] The data for a particular index are 2 to 5 years older than the index itself; The 2010 index is composed of data obtained between 2005 and 2008, while the 2008 index includes data covering the period from 2003 to 2007.

[188] SORS publishes non-financial accounts by sector once a year (last publication 30 September 2011). However, certain components of the disposable income, such as compensations of employees, are published more frequently, which enables us to update the disposable income estimate. By taking into account the data on the compensation of employees last published, the disposable income fell by 0.5% in real terms according to our estimate.

[189] Intervention Measures Act (OG RS, no. 94/2010).

[190] The adjusted disposable income is derived from the disposable income by adding the value of the social transfers in kind received and given. For households, these transfers represent sources, while for not-profit institutions serving households and the state, they mean expenditure. This aspect facilitates time comparisons of differences or changes in economic and social conditions, and allows for an analysis of the role of the state in the re-distribution of income (European System of National and Regional Accounts 1995, 2005, par. 8.33–8.35).

[191] These are benefits financed by the government budget, municipal budgets and social insurance funds. Source of data: IMAD's Database of Cash Benefits (ZDPU); the relevant data have been gathered by IMAD since 1992 and include cash benefits for 14 target groups.

Owing to a gradual adjustment to the new statutory level, the minimum wage increased again in 2011, yet to a lesser extent than in the previous year. In 2011 the minimum wage increased by 5.7% on average (by 3.8% in real terms). This increase was smaller than in the previous year (14.6% in nominal terms or 12.6% in real terms) when the new Minimum Wage Act took effect in March 2010. The same as indicated by the average for the period following the year 2000[192], the minimum wage growth last year was higher than the growth of the average wage per employee. Therefore, the ratio of the average minimum gross wage to the average gross wage last year increased further (by 1.7 p.p. to 47.1%, according to our calculations), which places Slovenia in the upper third of EU Member States. Last year, the minimum wage averaged EUR 718 and reached a solid 94% of that amount, which applies uniformly to all employers since 1 January 2012 (EUR 763). In 2011 a smaller proportion of employers still took advantage of the option for a progressive transition to a statutory amount. In general, however, approximately 80% of the minimum wage recipients received this wage within the highest bracket[193]. Compared to 2009, the number of minimum wage recipients and their share of the total number of employed persons (7.1%) more than doubled in 2011. A high increase in the minimum wage and the resulting deterioration in competitiveness[194] in 2010 and 2011 also had an impact on the loss of jobs.[195]

In 2011 pensions decreased in real terms for the second year in a row. Due to fiscal consolidation measures, pensions were adjusted by only one quarter of the average wage growth in 2011 (by 50% in the preceding year). In 2011 the average net old-age pension with supplementary allowance therefore increased in nominal terms by only 0.1%, while in real terms, it decreased by 1.7%. The other two types of pensions (invalidity and survivor's together with widow(er)'s) decreased (by 0.2% and 0.4% respectively in nominal terms, and by 1.9% and 2.1% respectively in real terms). Over the last two years, all three types of pensions decreased in real terms[196]. Correspondingly, the ratio to the net wage also decreased for all three types of pensions over the last two years[197]. The number of pension beneficiaries (old-age, invalidity and survivor's together with widow(er)'s) increased by 3.2% in 2011, which was more than the year before (2.6%). The number of old-age pension beneficiaries increased most (4.8%), this increase being particularly obvious over the last two years as a response to the preparation of a new pension reform. In invalidity pensions, the number of beneficiaries fell by 0.9%, with the trend of a decreasing number of invalidity pension beneficiaries being characteristic of the entire period. A strongly decelerated growth in the number of the survivor's together with the widow(er)'s pensions is also typical (0.5% in 2011). Ever since 2003, the increase in the number of beneficiaries has been lower than 1%, or has even decreased (2006 and 2007). Owing to such trends, the structure of pension beneficiaries changed during the period 2000–2011. The share of old-age pensions rose (in 2011 approx. 68%; in 2000 approx. 60%), whereas the share of invalidity pension beneficiaries (in 2011 approx. 16%; in 2000 approx. 21%) and survivor's together with widow(er)'s pensions (in 2011 approx. 16%; in 2000 approx. 19%) decreased. The average invalidity pension reaches approximately 80% of the level of the average old-age pension, and the survivor's together with the widow(er)'s pension slightly less than 70%.

The share of privately-owned dwellings remains high, but it is increasingly difficult for households to maintain them. Despite the crisis, the housing fund continued to increase in 2010, which is also true of the average dwelling size. Out of the total housing fund, only 80% of dwellings are occupied[198]. While the overcrowding of dwellings[199] is decreasing every year, it still higher than the EU average (in 2010, 34.9% of persons lived in overcrowded homes in Slovenia, with the EU average being 17.7%; on average there is 1.1 rooms per person in Slovenia and 1.6 rooms per person in the EU). The share of occupied dwellings without basic hygienic conditions is low (approx. 3% without a bathroom and an indoor flushing toilet). There is an increasing share of households whose dwellings are in a bad condition[200]. In addition, households find it increasingly hard to pay their housing costs[201]. Both circumstances can be attributed to the fact that there is still a relatively high percentage of the Slovenian population that lives in their private-owned dwellings, without being entitled to housing subsidies, while the occupied dwellings are, on average, 38 years old. Out of all occupied dwellings in 2011, 77% were occupied by their owners and 14% by the so-called

[192] During the period 2000–2011, the minimum wage increased faster in real terms (3.5% per year, on average) than the average gross wage per employee (1.9%).
[193] From EUR 699 to EUR 748, and the remaining recipients in the EUR 685–698 bracket.
[194] See Chapter 1.2. Increasing competitiveness and promoting entrepreneurial activity.
[195] See Minimum wage indicator.
[196] Due to lower growth rates over the last two years, the average real growth rate of old-age pensions over the entire period 2000-2011 was only 0.7%, while for invalidity pensions and survivor's and widow(er)'s pensions, this growth amounted to 0.5% and 0.4% respectively.
[197] From 75.3% in 2000 to 63.4% in 2011 for old-age pensions, from 61.1% to 50.6% for invalidity pensions and from 53% to 43.4% for survivor's pensions.
[198] According to SORS data as at 1 January 2011, 670,085 dwellings were occupied.
[199] The overcrowding rate is defined as the percentage of persons living in dwellings without a minimum number of rooms relative to the number of household members. Data source: EU SILC Survey.
[200] The share of households with dwellings in a bad condition (e.g. leaking roof, damp walls/foundations/floor, rotten window frames or rotten floors) has increased from 20% in 2005 to 33% in 2010.
[201] In 2005 and 2010 housing costs represented a great burden for 32% and 37% of households respectively.

Box 9: **EU 2020 target in the area of poverty and social exclusion**

In 2010 Slovenia failed to meet the EU common target of reducing the risk of poverty and social exclusion. Although not including numerical goals, SDS policy on the reduction of poverty and social exclusion is in line with the fifth target of the Europe 2020 Strategy, which sets out that at least 20 million fewer people should be at risk of poverty or social exclusion by 2020. For Slovenia, this means a reduction in the number of people living at risk of poverty or social exclusion from 361,000 in 2008 to 320,000 people in 2020.[1] This target is being monitored by a common indicator of the population at risk of poverty or social exclusion. This common indicator is composed of three sub-indicators: i) the at-risk-of-poverty rate; ii) the severe material deprivation rate (defined as deprivation in at least four out of a total nine items of deprivation[2]); and iii) the share of persons living in households with very low labour intensity (less than 20% of total labour potential). Due to the economic crisis, the common indicator of the number of the population at risk of poverty or social exclusion in Slovenia deteriorated in 2010, with this number having risen to 366,000 (339,000 in 2009). In two sub-indicators, the number increased, while in one, it slightly decreased. The number of people living below the at-risk-of-poverty line in Slovenia thus increased (to 254,000), the number of people affected by severe material deprivation dropped slightly (119,000), while the number of people living in households with very low labour intensity also increased (111,000 people). The total number of persons belonging to at least one of the aforementioned groups (persons belonging to several groups are taken into account only once in the total number)[3] is 366,000 or 18.3% of the population (17.1% in 2009). In the EU, the number of people living at-risk-of-poverty or social exclusion accounted for 23.5% of the population in 2010.

[1] In Slovenia, this target was adopted under the National Reform Programme, November 2010.
[2] See items of material deprivation in Material Deprivation indicator.
[3] This is the sum of the following: a) the number of people in the population living below the at-risk-of-poverty threshold; b) the number of materially deprived people not living below the at-risk-of-poverty threshold; and c) the number of persons in households with low labour intensity who, however, are neither below the risk-of-poverty threshold nor materially deprived.

"users"[202]. Only 9% of occupied dwellings were for rent, while approximately 6% had a non-profit rent.

Private consumption[203] was lower in 2010 in real terms than the year before for the second time in a row, the main reason being the adverse conditions in the labour market and the associated uncertainties. According to the National Accounts methodology, private consumption dropped by 0.7%[204]. Compared to the year the crisis began (2008), households cut back on those expenditures which, in a weaker economic environment, they find easier to give up, such as recreation and culture (holiday packages being at the top with 15.3%), transport (approx. 17% for cars), clothing and footwear, alcoholic beverages and tobacco products, and hotels, coffee shops, and restaurants. According to quarterly data, private consumption decreased again in 2011 (by 0.3% in real terms, whereas the consumption of durable goods slumped by a solid 3.0% in real terms). Owing to general uncertainty, persistent adverse conditions in the labour market, and the need for fiscal consolidation, a further decrease in consumption may also be expected in 2012.

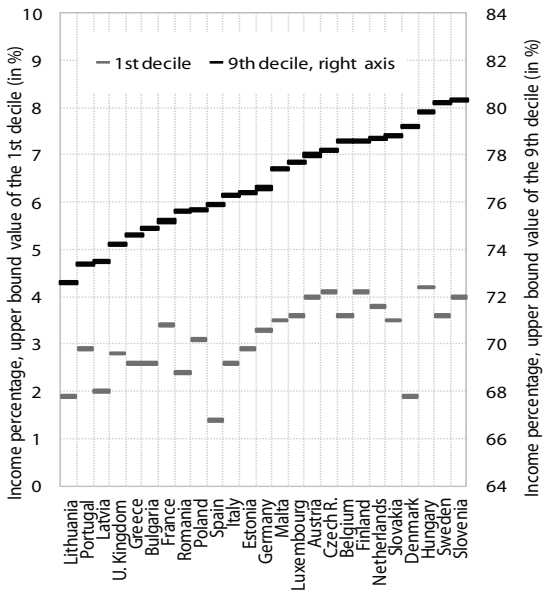
Although low, inequality in Slovenian society increased during the early stages of the crisis. According to the calculation for 2010, based on 2009 household income, the at-risk-of-poverty rate increased by 1.4 p.p. to 12.7%, meaning that approximately 254,000 people lived below the poverty line – or 31,000 more than the year before. The at-risk-of-poverty rate rose in almost all groups of the population, mostly again in the traditionally most vulnerable groups. Moreover, in 2010, the income inequality increased in Slovenia. The Gini coefficient was 23.8% (22.7% in 2009), while the value of the income quintile share ratio rose from 3.2 to 3.4, meaning that the one fifth of persons with the highest income had a level of income 3.4 times higher than the one fifth of people with the lowest income. This increase in income inequality and relative poverty is the result of decreased income of a considerable part of households in 2009[205] due to the economic crisis and a loss of income from work (a considerable share of the population replaced their income from work with social benefits). Moreover, in people living below the at-risk-of-poverty threshold, material deprivation increased by 1.4 p.p. (from 41.2% to 42.6%), while in people living above the poverty threshold, it dropped. Despite this deterioration, the at-risk-of-poverty and material deprivation rates are still below the EU average[206].

[202] According to the SORS methodology, user dwellings are housing units in which none of the residents using the dwelling is its owner, while the dwelling is also not for rent. The users of such dwellings can be relatives, friends or other persons.
[203] Deflated by private consumption deflator; disposable income deflated by CPI.
[204] Together with the value of own production, the funds used in 2009 by an average household amounted to EUR 20,870, which was by 2.7% less in real terms than the year before.

[205] In calculating indicators for 2010, income for 2009 is taken into account.
[206] See The Risk of Poverty and Material Deprivation indicators.

Despite growing income inequalities, these are still the lowest compared to other EU Member States. Income inequality measured by the income quintile share ratio and the Gini coefficient also remained the lowest among all EU Member States in 2010. Moreover, the value of the inter-decile ratio in Slovenia is among the lowest in the EU[207]. Together with Sweden, Slovenia ranks among the countries where 90% of the population receives the highest percentage of equivalent income by purchasing power. Up to the upper bound value of the ninth decile separating the 10% richest, the percentage of income in Slovenia is 80.3 (0.1 p.p. less in Sweden). The richest 10% of the population receives most in Lithuania, as the remaining 90% receive only 72.6%. Moreover, Slovenia differs from other countries in terms of income distribution stability, since the aforementioned percentage of equivalent income by decile is quite stable and has in fact not substantially changed since 2005. The decile coefficient also maintains its value, ranging from 2.9 to 3.0 (with the exception of 2009, when it dropped to 2.8).

Figure 20: **Percentage of equivalent income, in EUR by purchasing power, 2010**



Source: Eurostat Portal Page – Population and Social Conditions, 2012; calculations by IMAD.
Note: Countries are ranked by the percentage of the upper bound value of the ninth decile.

After 2009, income inequality decreased as a result of changes in the employment structure, an increase in the minimum wage, and wage stagnation in certain activities with the highest wages. Following a slight increase in 2009, income inequality[208] was reduced in 2010, i.e. in the year for which the latest data on wage distribution are available. The ratio between the gross wage of the ninth and the first deciles was considerably reduced and reached the lowest value since 1999. As expected, the Gini coefficient and the share of employees with low wages[209] , which had until then been increasing ever since 2005[210], also considerably decreased. Until the crisis broke, the highest/lowest average gross wage ratio continued to increase, but then started to fall (2.19 in 2011). Throughout this period, the highest average gross wage was recorded in financial and insurance activities, and the lowest in miscellaneous business activities[211]. A decrease in the aforementioned ratio in recent years has been attributed to the coincidence of two occurrences. A rise in the minimum wage and the relatively swift transition by most employers to its statutory amount increased the lowest wages, while with the onset of the crisis, wage growth in financial activities stabilised

Table 10: **Wage inequality indicators, gross wages, 2000–2010**

	2000	2005	2007	2008	2009	2010
9th decile/1st decile ratio	3.46	3.47	3.61	3.62	3.67	3.45
Median/1st decile ratio	1.70	1.67	1.73	1.74	1.74	1.68
9th decile/median ratio	2.04	2.08	2.08	2.08	2.11	2.06
Gini coefficient	0.294	0.290	0.292	0.279	0.283	0.271
Share of low-wage employees, in %	17.4	17.0	18.5	19.0	19.3	17.9
Highest/lowest gross wage ratio by sector	1.85	2.32	2.46	2.38	2.32	2.25
Gap between women's and men's average gross wage, in %	12.2	6.9	7.8	7.6	3.0	3.5

Source: SORS, calculations by IMAD.
Note: Calculations for the period 2008–2010 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 current year.

[207] In Slovenia, a person at the upper bound value of the first decile receives EUR 7,755 of equivalent income by purchasing power, whereas a person at the upper bound value of the ninth decile receives EUR 23,053. In Slovenia, the decile coefficient is 3.0, meaning that income at the boundary value that divides the 10% richest persons and the remaining 90% is three times higher than income at the boundary value representing the 10% poorest.
[208] Measured by decile coefficients, the Gini coefficient and the percentage of low wages.
[209] According to the OECD methodology, these are employees earning an amount equal to or less than two thirds of the median income (EUR 864 in 2010).
[210] According to the last comparable data, Slovenia was roughly ranked in the middle on the scale of the EU Member States by the decile coefficient (value 3.3); by the low-wage percentage (16.4%), it was slightly below the EU average.
[211] Since 2005, i.e. since comparable data according to the Standard Classification of Activities (SCA) from 2008 are at our disposal. According to the 2002 SCA, the lowest gross wage was recorded in the hotel, restaurant and catering sector.

Table 11: **Household expenditure – the difference between the fifth and first income quintiles by groups of allocated assets**

	2000	2005	2006	2007	2008	2009
Total allocated assets	3.9	4.2	4.4	4.2	4.4	4.2
Consumption expenditure	3.6	3.9	4.0	3.8	3.9	3.8
Food and non-alcoholic beverages	2.4	2.3	2.4	2.2	2.2	2.2
Alcoholic beverages and tobacco	2.7	2.1	2.1	1.7	1.8	1.8
Clothing and footwear	6.0	7.3	7.9	8.0	7.7	7.2
Housing, water, electricity, gas and other fuels	1.9	1.9	1.8	1.7	1.8	1.7
Furniture, household equipment and routine household maintenance	3.3	4.6	4.6	4.1	4.3	4.2
Health	2.4	3.9	3.4	2.5	2.4	2.5
Transport	9.4	7.8	9.2	9.1	10.8	10.4
Communications	3.1	3.0	3.0	2.9	3.0	2.8
Recreation and culture	4.5	5.5	5.4	6.0	6.0	5.8
Education	10.6	20.2	23.6	13.9	13.2	13.1
Hotels, cafes and restaurants	6.1	6.6	6.2	5.1	6.5	7.3
Miscellaneous goods and services	3.3	3.7	3.8	3.7	3.8	3.8
Expenditure on dwellings, house	10.6	9.5	10.0	10.2	12.3	12.5
Other expenditure	5.9	3.7	6.4	6.6	7.6	6.5

Source: SI-STAT database portal – Demographic and social areas – Standard of living – Household consumption survey, 2011.

considerably. In addition, the period following the beginning of the crisis has been characterised by a statistical increase in the level of the average gross wage across activities, due to the loss of low-wage jobs[212]. In addition, wage inequality was also reduced by austerity measures in the public sector where the average wages are among the highest, as their growth was stopped completely. Wage inequality also declined in relation to the education level. Owing to the rise in the minimum wage in 2010, the wages of low-skilled employees increased the most (7.6%), particularly in activities with a large number of minimum-wage recipients, while the wages of highly qualified people increased the least (0.9%). In 2010, the wage gap between men and women was 3.5%, a slight increase on the previous year[213], but still substantially smaller than indicated by the average during the period 2000–2008 (8.4%). Compared to other EU Member States, Slovenia is considered an example of good practice according to this indicator, as the average gap between women's and men's earnings in the EU Member States is 17.6% in favour of men (2007)[214].

The differences in consumption expenditure between the richest and poorest households remain approximately the same, whereas in terms of investments in dwellings, they are increasing. In 2009 consumption expenditure was reduced most by the richest households. The one fifth of households with the highest income (5th quintile) reduced this type of expenditure by 3.5% in real terms in 2009, and spent 4.2 times more (EUR 36,318) than the one fifth with the lowest income (1st quintile, EUR 8,572) who in real terms maintained this type of expenditure at the level of the preceding year. In real terms, the households in the first quintile mostly reduced their expenditure on hotels, coffee shops and restaurants (-16.1%) and, in the fifth quintile, for alcoholic beverages and tobacco products (-12.1%). The first quintile mostly increased the expenditure on communications (8.8%), and the fifth quintile on health (5.8%).

4.3.2. Quality of life

The inclusion of children in organised forms of preschool education has been rising. In the 2010/2011 academic year, 55.7% of children aged 1–2 attended kindergarten, along with 92.0% of children aged 3–5. This year, the level of inclusion has increased in both age groups, even more so in the latter. Throughout SDS's implementation, the inclusion of children has been on the increase in both age groups, but even more so in the younger age group. In 2009 (the latest international data available), the percentage of children aged 3–5 who attended organised forms of pre-school education was higher than the EU average, and even rose in comparison with the preceding year. Although the number of

[212] Since the beginning of the crisis, most jobs were lost in the processing industry, building sector and trade, i.e. in activities with relatively low wages.

[213] The gap widened in the building industry, water supply, education and real-estate services, whereas in other activities, it narrowed.

[214] The last calculation available for the entire EU area refers to the year 2007; more recent data on the wage gap between men and women across countries are also at our disposal (Pirklbauer, 2011). In Slovenia, the gender wage gap is by far the smallest. Close to our country are Italy, Malta, Romania, Poland and Portugal, all recording a less than 10% gap. The biggest differences (over 20%) were in 2009 typical of Hungary, the Netherlands, Finland, the United Kingdom, Cyprus, Slovakia, Germany, Austria and the Czech Republic (over 25% in the last two countries).

kindergartens and class units has been rapidly increasing in recent years, the problem of providing sufficient capacities has persisted during this time owing to the rising number of births. Given the rising number of births, even in 2010, and the continued and increasing need for improved kindergarten capacities in the future, on the one hand, and the current adverse fiscal conditions on the other, it is expected that the problem of providing sufficient kindergarten capacities will persist in the coming years. At the same time, there are considerable reserves in the area of pre-school education in terms of human resources. The ratio between the number of teaching staff[215]and the number of children is among the lowest in the EU and considerably below the EU average. In the past, the Kindergarten Act already allowed the municipalities to resolve the lack of kindergarten capacities by increasing the statute-determined number of children in a unit by up to two children. The lack of kindergarten capacities may present a major problem to families in terms of coordinating their working and family lives. Consequently, one of the alternatives for the next few years would be to temporarily relax the norms in the area of pre-school education (i.e. by increasing the number of children in a unit), in addition to opening new kindergartens.

The share of the population with at least upper secondary school education is high and has been increasing throughout SDS's implementation. According to Labour Force Survey data for the second quarter of 2011, the percentage of the population aged 25–64 with at least upper secondary school education was 84.8% in 2011, and grossly exceeded the EU average (73.2%); it even rose in comparison with the preceding year. It had also increased in comparison with the first year of SDS's implementation. The share of young people aged 20–24 with at least upper secondary school education is also high and amounted to 90.8% in 2011, thereby greatly exceeding the EU average (78.6%); it was maintained at approximately the same level as in the first year of SDS's implementation. The high share of young people with at least upper secondary school education is due to the high participation of young people in secondary school education, a high secondary education completion rate, and a low percentage of early school leavers. The participation of young people in tertiary education is also high[216].

The results of the 2009 international education study PISA[217] revealed that the average scores of Slovenian 15 year olds dropped in reading, and scientific and mathematical literacy. In terms of reading literacy, Slovenia lagged behind the OECD average, despite exceeding this level in 2006. However, the scores in mathematical and scientific literacy were still higher than the OECD average. A target has been set at the EU level; thus the European education benchmark for 2020 is that the share of students with insufficient abilities[218] in reading, mathematics and science should be less than 15%. In 2009, Slovenia's share of 15 year olds with insufficient abilities in reading was 21.2% and so quite far away from the EU benchmark; moreover, this share was also higher than the EU-25 average (19.6%)[219]. Slovenia also lagged behind the EU benchmark in its share of 15 year olds with insufficient abilities in mathematics (20.3%), and the share was below the EU-25 average (22.2%). On the contrary, Slovenia's scientific literacy score was 14.8%, which means that the EU benchmark set was already attained in 2009, and that was even above the EU-25 average (17.7%).

Health indicators continue to improve and so does satisfaction with the functioning of the healthcare system Life expectancy in Slovenia has been increasing. In 2010, it was 79.8 years, which is still below the EU average (80.8 years). Slovenia is approximately at the average European level for expected healthy life years, which is slightly above 60 years. The infant mortality rate has remained at a similarly low level (2.5 deaths per 1,000 newborns), and was also among the lowest in the EU in 2010. The accessibility of medical services in terms of waiting times has greatly improved in the last year. Within a year, the number of waiting patients has been reduced from almost 84,000 to less than 40,000 patients, i.e. by more than a half. Only 8% of patients have been waiting longer than the maximum waiting period permitted (the figure was 20% just a year ago)[220].

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[215] In Slovenia, teaching staff includes educators and assistant educators.

[216] See Chapter 2.1 Education and Training.

[217] PISA (Programme for International Student Assessment) is an international research on capabilities in reading literacy, mathematics literacy, and science literacy, carried out under the auspices of 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, data are available for 2006 and 2009. The scale of reading literacy measures an individual's capacity to: understand, use, reflect on and engage with written texts, in order to achieve one's goals, to develop one's knowledge and potential, and to participate in society. Mathematical literacy is defined as the capacity to analyse, reason and communicate ideas effectively as they pose, formulate, solve, and interpret solutions to mathematical problems in a variety of situations. Scientific literacy covers an individual's scientific knowledge and use of this knowledge to identify scientific questions, to acquire new knowledge, to explain scientific phenomena, and to draw evidence-based conclusions on science-related issues based on data and verifiable facts.

[218] The scale of scores is divided into 6 difficulty levels: The basic level of literacy in PISA survey is the 2nd level.

[219] Progress towards the common European objectives in education and training – Indicators and benchmarks, 2011.

[220] The new Rules on the management of waiting lists and the maximum permissible waiting times for individual health services (adopted in August 2010) contributed greatly to shortening the waiting times, whereas at the same time, in 2011 HIIS earmarked additional funds for operations and treatments with maximum waiting times.

People are increasingly satisfied with the functioning of the healthcare system: between 2008 and 2010, the share of dissatisfied patients decreased, the share of satisfied patients increased and the average rating rose from 4.83 to 5.7[221]. The self-evaluation of health is also on the rise[222].

An increasing number of older people are included in the formal implementation of long-term care, but its accessibility still remains below the targets set. Despite the increasing share of older people in the population, the percentage of users of long-term care services has been rising. Through the accelerated expansion of capacities of old people's homes, we have come closer to the goal of providing institutional care for 5% of the senior population in recent years, whereas the progress made in providing home care has been rather modest[223]. The share of users aged 80 and over has been increasing rapidly[224]. The accessibility of long-term care remains a problem, mainly owing to the poor development of home care and the great discrepancies that exist between regions and municipalities. The increasing needs of the elderly are clearly indicated by the data on a rising share of senior people with self-perceived limitations in daily activities[225].

However, certain social climate indicators reveal negative trends. Trust between people decreased between 2008 and 2010[226]; the prevailing opinion is also that people usually look out for themselves.[227] Trust in institutions[228] decreased and was low in Slovenia if compared with other EU countries. The expectations of a better life in the next year are low as well — Slovenia is ranged 21st below the EU average (Eurobarometer, 2011). A similar trend of worsening conditions was demonstrated by satisfaction with democracy in Slovenia, because the share of those who are dissatisfied has increased from 69% to 84% in the last year, although the trend of discontent with democracy had already started earlier (in 2006). On the other side, certain feelings unrelated to events in society are more stable or are even improving, which may be a consequence of an increasing alienation from the public life. The average score of happiness has been slowly but steadily rising for almost a decade. People also feel safe in their environment (over 9 tenths), half of people never worry that they might be victims of a burglary and 63% of those interviewed never worry that they might be the victims of an assault (a decade ago, the figure was 54%).

[221] Between 2008 and 2010, the number of unsatisfied patients decreased from 31.6% to 17.1% and the number of satisfied patients increased from 28.1% to 39.2%.

[222] Within the same period, the share of people evaluating their health as very good has risen from 13.8% to 19.0% and the share of people evaluating their health as very good and good has risen from 54.9% to 57.7%.

[223] In 2010, the share of institutional care users was 4.9% of population aged 65 or more (the National Social Assistance Programme goal is 5%) and the share of home assistance users remained below 2% (the goal is 3%).

[224] In 2010, 64% of users in seniors' homes were aged 80 or more, whereas 56% of this age group were home assistance users.

[225] Based on the data obtained by the EU-SILC survey, 29.2% of older people aged 75 or more believed in 2009 that their handicaps in performing everyday activities are of major nature, which is considerably more than in 2005 (25.4%) and more than the EU average (27.6%).

[226] Pursuant to the data of the European Social Survey – ESS 2010, which indicate the answer to the question: Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people? On a score of 0 to 10, the average fell from 4.32 to 3.94 and the share of those saying that you can't be too careful increased from 36.8% to 45.9%.

[227] Answer to the question: Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves, the average score fell from 4.82 to 4.41, and the share of those who are convinced of the prevailing egoism rose from 30.6% to 37.6%.

[228] According to Politbarometer data, the average scores for the majority of institutions (on the scale from 1 to 5) decreased in the last year (from October 2010 to October 2011). The lowest scores were given to political parties (dropping from 2.32 to 1.95), followed by the government (dropping from 2.38 to 2.01), the National Assembly (dropping from 2.50 to 2.13) and the Prime Minister (dropping from 2.47 to 2.23). The highest score of trust was given to the military (dropping from 3.60 to 3.54), the school system (dropping from 3.35 to 3.30), health care system (dropping from 3.27 to 3.17) and the President of the Republic (dropping from 3.36 to 3.09)

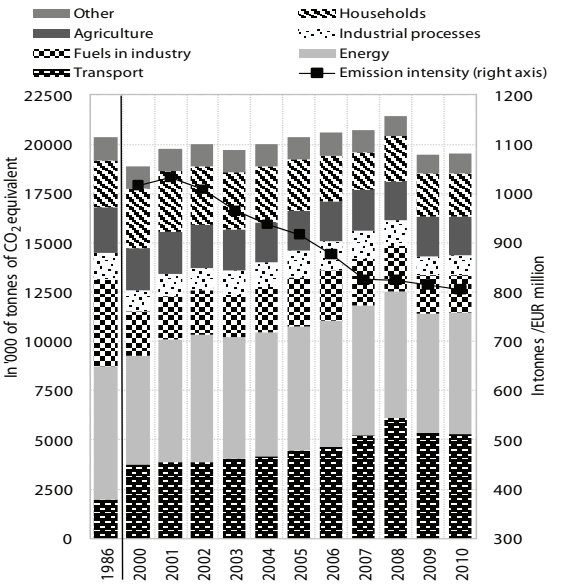
5. Integration of measures to achieve sustainable development

SDS guidelines: The priority Integration of measures to achieve sustainable development covers development in the areas of the environment, sustained population growth, regional and spatial development, and culture. The environmental objectives of SDS involve reducing energy intensity and increasing the use of renewable energy resources, decreasing resource intensity and promoting waste recycling. Promoting development and environmental technologies will contribute to the achievement of these objectives. In the area of transport, the aim is to promote sustainable modes of mobility and boost the use of public passenger transport. Another goal is to protect nature. The objective of sustained population growth involves ensuring better conditions for greater inclusion of the working-age population, creating suitable working and societal conditions for elderly active citizens, and providing appropriate conditions for starting families. More balanced regional development extends to a wide range of activities – from establishing regions, making the system more polycentric and planning for regional development to preserving population density, maintaining transport networks and boosting local economies. The measures planned are mostly aimed at strengthening local economies, the higher-education network, development aid and local self-government, which would enable municipalities and regions to develop endogenously. The key priorities in the area of better spatial management focus on improving spatial management, with an emphasis on providing building plots and creating the conditions for improved operation of the housing market. The development of the national identity and culture calls for supporting the ethical, social, economic and political aspects of culture.

5.1. Integrating environmental criteria with sectoral policies

In 2010, greenhouse gas emissions (GHG emissions) in Slovenia remained at the level of the previous year, and with the relatively low growth of GDP there was no considerable reduction in the emission intensity of the economy.[229] In 2009, GHG emissions in Slovenia decreased considerably on account of low economic activity, and remained almost unchanged in 2010 (0.2% increase). The emission intensity of the economy decreased by only 1.1%, which is relatively little in light of pre-2008 trends and EU trends.[230] Slovenia ranks among those countries where more emissions are generated per unit of value added. In 2009 the emission intensity of the Slovenian economy was as much as 18.7% higher than the EU average.

Figure 21: **Greenhouse gas emissions by sector and emission intensity, Slovenia**



Source: ARSO, calculations by IMAD.

The increase in the share of renewable energy sources (RES) in 2010 was, similar to the preceding year, mostly the consequence of certain one-time factors. The two most important RES in Slovenia are wood and hydropower; the share of hydropower is even the highest in the EU. The use of RES is, to a large extent, the result of natural conditions and is relatively high in Slovenia in comparison with other EU Member States. With a slowdown in the construction of larger capacities for RES generation[231], the use of RES in Slovenia fluctuates over the years, depending on hydrological conditions. In 2009, these conditions were very favourable, and remained relatively so in 2010[232]. In addition, the improved collection of data on the use of biomass and the inclusion of geothermal and solar energy use in statistical monitoring contributed to a higher share of RES out of total energy consumption. As a result, the use of RES in Slovenia increased by 6.4% in 2010. With a lower increase in total energy consumption (by 2.2%),

[229] GHG emissions per unit of real GDP.

[230] The trends were also unfavourable in 2008 and 2009 because the emission intensity was reduced by only 0.1% or 1.2%, respectively. See also the indicator Greenhouse Gas Emissions.

[231] The use of geothermal energy and certain other RES increased greatly in 2010, but it still represents a small share of renewable sources.

[232] In 2009 and 2010, the use of hydro-energy was by more than a quarter higher than the average of the period 2000—2008.

the share of RES rose to 14.7% in 2010[233], exceeding the target value of 12%[234]. It is estimated that, along with the relatively slow economic recovery, energy consumption in Slovenia increased slightly in 2011, while the use of hydropower decreased considerably (by approx. one fifth). We estimate that this led to a drop in the share of RES to below 14% of total energy consumption. The share of RES in electricity consumption fluctuates even more, depending on the level of hydropower generation. In 2010, despite persistent favourable hydrological conditions, this share fell to 34.4% owing to increased economic activity and the resulting rise in power consumption, but still exceeded the target percentage of 33.6%. As a consequence of the major reduction in the generation of hydropower plants and increased electricity consumption, we estimate that this share was greatly reduced in 2011, falling to approximately 26%. The EU target for Slovenia is to achieve at least a 25% share of RES in terms of gross final energy consumption by 2020 (19.9% in 2010[235]). In order to achieve this target, increasing the capacities and use of RES will be crucial, as well as greater energy efficiency or a reduction of the energy intensity of the economy.

In 2010, the energy intensity of the economy deteriorated. It has otherwise always been higher in Slovenia than in the majority of other EU Member States, mainly due to the use of energy in road transport. In Slovenia, energy consumption per unit of GDP decreased by an average of 2.6% annually during the period 2000–2007, while post-2007 trends were mostly unfavourable in terms of energy intensity[236]. In 2010, energy consumption (2.2%) exceeded GDP growth (1.4%), resulting in a 0.8% increase in the energy intensity of the economy; the same is estimated for 2011. In 2010[237], Slovenia consumed 19.2% more energy per unit of GDP than the EU average (in 2005, the figure was 12.7%). High fuel consumption in road transport[238] boosts Slovenia's energy intensity considerably; in 2010 only one EU Member State had a higher contribution than Slovenia in this respect. The pressure exerted on increasing energy intensity in the years before the crisis was produced primarily by road transport, when EU enlargement and the strengthening of international trade flows through Slovenia considerably stepped up the consumption of fuels in the transport of goods (also transit), which was additionally boosted by low fuel prices which encouraged the purchase of fuels in Slovenia[239]. In addition to the above-average use of transport energy as a share of total energy use in Slovenia, (energy intensive) industry also has a relatively high share.

The decrease in energy intensity in manufacturing continued in 2010, although the share of energy-intensive and emission-intensive industries increased. In 2010, Slovenian manufacturing industries consumed 2.6% less energy per unit of value added than in the year before. Considering the trends in the 2006–2008 period, the 2010 decline in energy intensity was modest, but considerably better than in the preceding year and when compared with the energy intensity trend for the whole economy. A decomposition analysis[240] of the decline in energy consumption in manufacturing industries shows that its decline was due to *greater energy efficiency within industries*. In 2010, energy costs on average represented 12.8% of the value added in the manufacturing sector, the most in the manufacture of basic metals and fabricated metal products (48.9%)[241]. Better energy efficiency can thus significantly boost the competitiveness of this most export-oriented part of the Slovenian economy. The factor that prompted increased energy use in manufacturing industries in 2010[242] was *the effect of the changed structure*. This means that the share of energy-intensive industries in manufacturing value added increased, mostly as a result of the over 25% increase in value added generated by the metal industry. The share of emission-intensive industries[243] also increased to 24.1% in 2010 and is much greater in Slovenia than in most other EU Member States, especially bearing in mind that the share of manufacturing industries is relatively high in Slovenia.

In 2010, the share of freight transport by road declined, thereby interrupting a trend of rapid rises in previous years. As a result of an increase in foreign trade flows in 2010, the volume of freight transport by rail and road rose again. In 2010, rail freight transport volumes in Slovenia increased more (by 21.4%) than road freight

[233] From 14.2% in 2009.
[234] The target set by the Resolution on the National Energy programme (2004) is to achieve at 12% share of RES in primary energy consumption and 33.6% in electrical energy consumption by 2010.
[235] The methodology of calculation in this indicator varies from the calculation for the target set by the Resolution on the National Energy Programme.
[236] 2009 is an exception, whereas in 2008, 2010 and 2011 (estimate), the energy intensity of the Slovenian economy was increasing.
[237] Latest internationally comparable data.
[238] Statistical calculation of transport energy consumption takes into account the fuel quantities sold.
[239] Lower diesel fuel prices in comparison with neighbouring countries stimulate the purchase of fuels in Slovenia, affecting the statistical calculation of energy intensity as a result.
[240] See also Emission-intensive industries indicator.
[241] Data by AJPES, calculations by IMAD.
[242] At the level of manufacturing, the effect of the structure boosting the consumption of energy was lower than the negative effect of energy intensity within the industries which contributed to its decline. Together, the two before mentioned effects led to decreased energy consumption. Taking into account also the effect of increased production, energy consumption in manufacturing increased but less than the value added. Consequently, energy intensity of manufacturing declined in 2010.
[243] The World Bank's methodology includes a wider range of industries among the emission-intensive industries that among the energy-intensive industries. In manufacturing approximately 70% of GHG emissions are generated due to energy consumption, while the remainder is made up of process emissions.

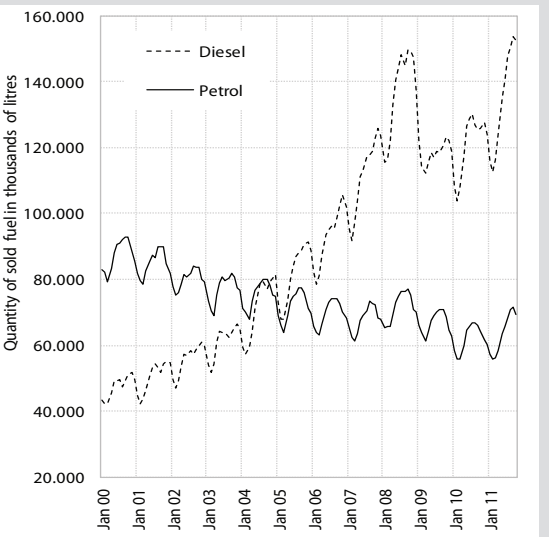
transport volumes (by 7.9%), which resulted in a drop in the share of road freight transport to 82.3%[244]. Based on data for the first three quarters of 2011, we estimate that the share of road freight transport in 2011 continued to decline (to 81.3%)[245]. Before 2010, the share of road transport continued to increase steadily, an unfavourable development in terms of sustainable transportation. In 2010, the share of road freight transport in EU Member States decreased on average (to 76.5%), but the increase in freight volumes was less than in Slovenia. The modal split of freight transport in Slovenia is less favourable than the EU average, and freight transport volumes are extremely high due to Slovenia's transit position. In 2010, Slovenian road transport operators transported 98% more tonne-kilometres[246] per inhabitant than the EU average, and the volume of rail transport per inhabitant was similarly above the EU average (114% higher). The growth in freight transport volumes was particularly high after Slovenia's accession to the EU and the latter's subsequent enlargement, while the unfavourable structure was stimulated by low prices for motor fuels and tolls for cargo vehicles before the onset of the crisis, and more modern road infrastructure than railway infrastructure.

In public passenger transport, the trend of reduced bus transportation continued in 2010 and 2011. In 2008, public passenger traffic in Slovenia constituted only 13.8% of the total passenger transport, which is much less than in the majority of EU Member States[247]. The high level of individualised forms of transport in Slovenia is corroborated by a higher share of passenger vehicles per inhabitant (Slovenia: 521 cars per 1,000 inhabitants, EU: 473 cars per 1,000 inhabitants), despite below

Box 10: **Elasticity of motor fuel demand**

Using an instrumental variables regression method, we estimated the impact of the changed ratio between Slovenian and foreign fuel prices, and the impact of industrial production on motor fuel demand in Slovenia. The analysis of demand for motor fuels is based on monthly data for the period 2000–2011[1]. The quantities of petrol sold declined constantly until 2010, due, amongst other factors, to the changing structure of passenger vehicles in favour of diesel fuelled vehicles. The growing quantities of diesel fuel sold were also boosted by increasing road freight transport. At the end of 2008, diesel fuel quantities were considerably reduced, which coincided with the onset of the economic crisis and a fall in industrial production, which resulted in a decrease in foreign trade flows. Due to Slovenia's small size, we expect that fuel prices in neighbouring countries affect the sale of fuel in our country. Using an instrumental variables regression method, we estimated the impact of the changed ratio between Slovenian and foreign fuel prices, and the impact of industrial production on motor fuel demand in Slovenia. Time lags and seasonal components are also variables in the function. Foreign fuel price consists of the price of fuel in neighbouring countries, and is weighted by the share of transport through border crossings. The majority of (freight and passenger) vehicles cross the Italian border, followed by the Croatian and Austrian borders, and the lowest share is through the Hungarian border[2]. For Slovenia, we took account of the excise duty refund scheme for diesel fuel for commercial purposes, which reduces the price paid by (domestic and foreign) beneficiaries for fuel from July 2009 onwards[3].

Figure: **Quantities of diesel fuel and petrol sold in Slovenia, 2000–2011**



Source: Ministry of Finance, 2011.

[1] The data used for the analysis are: Quantities of fuels sold (source: Ministry of Finance), fuel prices in Slovenia and neighbouring countries (sources: SORS, Eurostat, European Commission - Oil bulletin, Automobile Association of Slovenia (AMZS)), industrial production index (source: SORS), EUR exchange rate (source: BoS), consumer price index (source: SORS), border crossing traffic (source: Ministry of Transport – Slovenian Roads Agency.
[2] In case of cargo vehicles, Italian–Slovenian crossings constituted a good third of all border crossings, Croatian–Slovenian crossings and Austrian–Slovenian approx. a quarter and Hungarian–Slovenian crossings less than a fifth. For passenger cars, the share of Italian– Slovenian crossings constituted around 40%, Croatian–Slovenian 30%, Austrian – Slovenian 25%, and the rest was Hungarian– Slovenian.
[3] Based on the data of the Ministry of Finance, we calculated the effective price of diesel fuel by taking into account the quantity of diesel fuel eligible for excise duty refund.

[244] The trend of 2009 was reversed, meaning that rail freight transport volumes decreased by 20% and road freight transport volumes by 9.2%. The growth of transported freight volume in 2010 was comparable to its decline in 2009. The volume of both types of freight transport thus came close to the pre-crisis level (in 2008), and the share of road freight transport returned to the comparable level as well.
[245] While the volume of transported freight in both modes of transportation increased.
[246] The majority of transports (86%) were carried out abroad.
[247] See Development Report 2011, 2011.

Box 10: **Elasticity of motor fuel demand** - *continue*

The results indicate a statistically significant change in the price ratio and industrial production on diesel and petrol sold in Slovenia. If the ratio between the domestic and foreign prices of diesel fuel, expressed as a percentage, is increased by 1%[4], the quantity of diesel fuel sold is reduced by 0.56% in the short term. A 1% growth in industrial production, however, prompts a 0.66% rise in diesel fuel sold. As expected, both estimates of elasticity are lower for petrol. If the ratio between the domestic and foreign prices of petrol, expressed as a percentage, is increased by 1%, the quantity of petrol sold is reduced by 0.20% in the short term. A 1% growth in industrial production, however, prompts a 0.12% rise in petrol sold.

Table: **Elasticity of motor fuel demand**

	Dizel	Bencin
Industrial production	0.659* (0.045)	0.124** (0.041)
Fuel price ratio	0.557* (0.052)	0.201* (0.031)
Adjusted R^2	0.773	0.841
T	136	136

Source: IMAD estimate.
Notes: Standard deviations in brackets. Statistically significant at the risk level: * 1%, ** 5%.

Relative price elasticities of fuel quantities should be taken in consideration in determining excise duty policy. A change in excise duty (and the resulting change in the ratio between prices in Slovenia and prices in neighbouring countries) is followed by a change in the quantities of fuel sold; both affect the level of revenues from fuel taxation. In 2010 excise duties for commercial diesel totalling EUR 46.6 million were refunded to road transport operators. If road transport operators could not claim excise duty refunds, it is estimated that, due to a higher effective price for diesel[5], this would reduce the quantity of fuel sold and, as a result, reduce revenues from the taxation of diesel, but only by approximately one third of the total excise duty refund amount.

[4] Because the ratio between the prices is close to 100, this means that a price increase of 1% in Slovenia (at unchanged prices in the neighbouring countries) increases the ratio by approx. 1%.
[5] Taking into consideration our estimated effective price and flexibility. Comparable international study estimates of price flexibility of motor fuel demand are within the range of our estimates

average economic development. This situation is partly caused by dispersed settlement[248], and partly due to the fact that public passenger transport is neither efficient nor competitive. According to data from SORS, long-distance bus transport, despite increasing daily migration flows, declined by 50% between 2001 and 2010, while the number of passengers using urban transport fell by more than a fifth. The trend of long-distance bus transport decline also continued in 2011[249]. Slightly more favourable trends in rail passenger transport were interrupted during the period from 2010 to the third quarter of 2011, but the number of passenger-kilometres was 10% higher than in 2001. During the period analysed (2001–2010), transport with passenger cars increased the most[250] (by 23.2%). However, in 2010, the volume of passenger transport by car did not increase for the first time in this period, which might be due to higher fuel prices and the poor economic situation.

Revenues from environmental taxes in Slovenia are relatively high but tax rates often do not reflect the negative impacts on the environment. We estimate that the revenues from environmental taxes in 2010 were nominally increased by 2.3%, i.e. to EUR 1.3 billion. With a simultaneous increase in economic activity, this meant that their share with respect to GDP remained unchanged (3.6% of GDP). In comparison to the EU average, the revenues from environmental taxes in Slovenia are relatively high[251]; the difference to the EU Member States results from higher revenue collected from *energy taxes* (Slovenia: 3.0% of GDP, EU: 1.8% of GDP). It should be noted that above-average revenues from energy taxes in Slovenia are not boosted by higher tax rates, but by greater energy consumption. The latter largely reflects the above-average fuel consumption in transport, which is, on the one hand, a consequence of Slovenia's transit position and relatively well-developed road infrastructure, and, on the other, stimulated by low excise duties on fuels, especially before 2009. In 2010, the revenues from energy taxes were further increased, which was mostly contributed to by higher revenues from electricity taxation[252]. However, relatively high

[248] Among 38 analysed OECD countries, only Slovakia had a lower population concentration than Slovenia (OECD Factbook 2010, 2010).
[249] Data on the volume of urban bus transport are not comparable due to the changed methodology in 2011.
[250] Measured in passenger kilometres.

[251] According to Eurostat data, environmental taxes in the EU in 2009 amounted to an average of 2.4% of GDP.
[252] In 2010, a contribution for energy efficiency was introduced and, in August 2010, excise duties on electricity were increased. In addition to higher electricity taxation, a rise in electricity consumption recorded in 2010 contributed to the increased revenues. Excise duty on petrol was also slightly increased in 2010, but due to the equally lower consumption,

revenues do not necessarily reflect the efficiency and effectiveness of the existing taxes as an environmental policy instrument. A more detailed analysis shows that the tax rates imposed on particular sources of pollution do not correspond to the damage inflicted by them on the environment and people's health. For example, the excise duty[253] on petrol was over 10% higher than the excise duty payable on diesel fuel, although diesel fuel consumption has higher emissions which are damaging to health and the environment[254]; moreover, the difference in the taxation between the two fuel types even increased in 2011 (to over 20%). The discrepancy in taxation is even higher if we consider the excise duty refund scheme for commercial diesel fuel, which provides the beneficiaries with the possibility of excise duty refunds up to the minimum amount determined at the EU level. In 2010, EUR 46.6 million were refunded to those beneficiaries who used fuel for the transport of goods and passengers. The OECD considers such refunds to number among environmentally harmful subsidies; moreover, taking into consideration other budgetary support and tax expenditures for fossil fuels, this amount totalled

Box 11: **Government budget appropriations for environment and energy R&D and green patents**

Green innovations and the development and dissemination of the use of more efficient and cleaner technologies are vital in order to exploit the synergies that exist between economic growth and the environment. It is important that the state's measures are aimed at the elimination of and/or mitigation of existing market failures such as, for example, externalities related to pollution, the social benefits of knowledge spillovers, and the related sub-optimal levels of investment in R&D at company level, the removal of entry barriers, incomplete information, etc. In order to promote green innovations, clear and stable price signals (which are also affected by environmental taxes), an appropriate regulatory framework[1], standards, and the like, as well as direct support for R&D investments, are important.

Government budget appropriations for environment and energy-related R&D[2] increased in the 2005–2010 period; however, we still lag behind the EU average in terms of energy investment. During the period 2005–2010, government budget appropriations earmarked for R&D in the area of *the environment* increased in real terms by almost a fifth, and those in the area of *energy* almost quadrupled. Notwithstanding the above, there were still more government budget funds earmarked for environmental research in Slovenia in 2010 (EUR 7.1 million, or 3.27% of the total government budget funds earmarked for R&D) than for energy research (EUR 4.3 million or 1.99% of the total budget funds earmarked for R&D)[3]. Quite the opposite is true of the EU average, which is considerably affected by the high share of government budget appropriations for energy research in some EU Member States, particularly the old Member States. Although in 2010 Slovenia exceeded the European average share of funds earmarked for the environment, and further remedied its setback in the area of funds earmarked for energy, the total share of funds earmarked on average for these purposes in EU Member States (6.8%) remained higher than in Slovenia (5.3%). During the period analysed, in Slovenia the majority of environmental research financed by the government budget was carried out by the government sector and the majority of energy research was conducted by the higher education sector. It should be stressed that the business sector's participation has been increasing considerably in both research areas. R&D investments in energy and the environment are an important factor for the development of eco-innovations and green patents, but an important role is also played by general-purpose technologies, particularly ICTs, biotechnology, nanotechnology, etc.

Table: **Government budget appropriations for environment and energy R&D as a percentage of total government R%D, Slovenia and the EU**

	Slovenia				EU-27			
	2007	2008	2009	2010	2007	2008	2009	2010
Environment	1,36	3,51	2,27	3,27	2,68	2,89	2,80	2,66
Energy	1,07	1,11	1,58	1,99	3,14	3,69	3,70	4,16

Source: Eurostat Portal Page – Science and Technology – Research and Development, 2012.

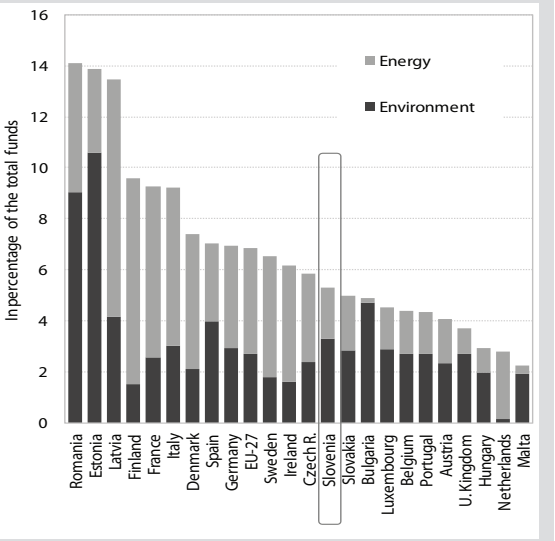
[1] Pursuant to innovation survey data (Community Innovation Survey, 2010), environmental regulation and environmental taxes are the most important motivation factor for eco-innovations among innovation-active companies.
[2] In accordance with Frascati international methodology, this involves all appropriations earmarked by the state for the implementation of R&D within the state and abroad, regardless of the implementing sector (OECD, 2000).
[3] The business sector, contrary to the state, assigned a considerably larger share of funds to energy research.

[252 continue] the revenues from this source were not considerably changed. With unchanged excise duty on diesel fuel (annual average), we conclude that the total revenues from excise duties on motor fuels were slightly increased (by 1.2%) due to higher diesel fuel consumption.
[253] Motor fuel excise duties constitute approx. three quarters of revenues from environmental taxes, but in fact they mostly pursue other macroeconomic goals (inflation, public finance revenues, etc.)
[254] Particulate matter (PM) and nitrogen oxides (NOx).

Box 11: **Government budget appropriations for environment and energy R&D and green patents** *- continue*

Green patents represent untapped potential for Slovenian development and research activities and thus also sustainable economic growth According to OECD data, during the period 2005–2008[4] Slovenia filed only 11 first green patent[5] applications with the EPO, the majority of which were related to obtaining energy from renewable and non-fossil energy sources. In Slovenia, the share of green patent applications represented 2.2% of all first patent applications at the EPO, whereas the average EU share was much higher (7.3%); moreover, the total number of patent applications in Slovenia was relatively low in comparison with the EU average.[6] Almost three quarters of the green patent applications in the EU covered three major areas: general environmental governance (26.4%), reducing emissions in transport and fuel efficiency in transport (26.4%), and obtaining energy from renewable and non-fossil energy sources (22.1%). The increasing prices of raw materials, more stringent environmental standards, and a greater level of public awareness are contributing to the growth of (global) demand for environmental technologies and services, which is why the sector of clean technologies represents an important potential for economic development (OECD Environmental Performance Review, Slovenia, 2012).

Figure: **Government budget appropriations for environment and energy R&D as a percentage of total government budget appropriations for R&D, Slovenia and the EU, 2010**



Source: Eurostat Portal Page – Science and Technology – Research and Development, 2012.
Note: Data for Austria, Belgium, Estonia, Finland, Ireland, Hungary, Malta, Germany, Netherlands, Poland, Slovakia, Sweden and United Kingdom are not final, whereas Eurostat estimates are given for EU-27.

[4] The latest available data from the OECD Patent Databases. These data are always associated with legal procedures and take a few years in the event of an application filed with the EPO. The patent application goes public within 18 months from the date when the first application was submitted (more in Ekonomsko ogledalo — Economic Mirror 2/2009).
[5] The following environment-related technologies are ranged 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 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, hybrid cars), energy efficiency in buildings and lightning (OECD Towards Green Growth, 2011).
[6] See intellectual property indicator.

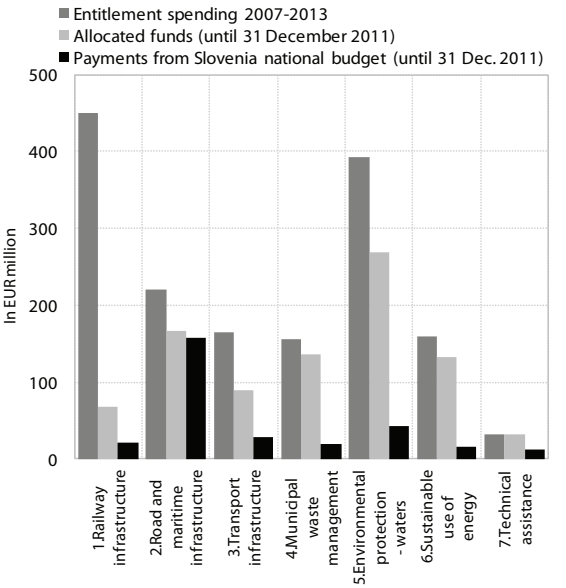
EUR 140.5 million in 2010[255]. The planned introduction of a CO2 tax[256] and the revision of the Energy Taxation Directive (ETD) at the EU level would probably contribute to better alignment of environmental externalities and the taxation of energy products[257] . In recent years, a positive shift in this direction was achieved in the area of *transport taxes*, i.e. taxes on the ownership and use of transport means. Since 2009, EURO emission standards have thus been considered in the registration of cargo vehicles[258] and, since 2010, environmental criteria[259] have been included in taxes imposed on new motor vehicles. The first data indicate that the latter measure was effective, because the share of more emission (and energy) efficient vehicles in the passenger vehicle structure in 2010 increased more rapidly than in previous years, and after a long period of decline, the share of vehicles running on petrol also increased. Along with the above-mentioned positive changes, the revenues from transport taxes decreased by 0.7% (to 0.41% of GDP) in 2010. In comparison with the EU average, the percentage of transport taxes in Slovenia is lower, which probably means that the tax burden, given the large volume of road operators' activities and the number of passenger vehicles, is lower than in other countries.

[255] Source: Ministry of Finance, 2012.
[256] The introduction of the CO2 tax on motor fuels was initially planned for March 2011, but its introduction is being delayed. This tax will replace part of the excise duty, but the excise duty refund for this part will no longer be possible. Moreover, CO2 tax foresees a slightly higher rate for diesel fuel.
[257] In April 2011, the European Commission tabled a draft proposal for the overhaul of energy products and electricity taxation (ETD) for the purpose of removing unsuitable incentives and inefficient energy use of the currently applicable ETD. Under the new proposal, minimum excise duties for the majority of energy products should be increased. Higher excise duties on diesel fuel (in comparison with petrol) are proposed, and a considerable increase to the minimum rate is also planned in the taxation of coal and coke. In Slovenia, the taxation of the latter is four times lower than, for example, the taxation of heating gas, despite the higher GHG emissions of the former.
[258] More precisely, in annual road user charges: passenger cars, cargo vehicles and buses. Annual charge for passenger cars and mobile home vehicles, which constitutes the most important revenue among transport taxes, does not directly include environmental criteria.
[259] CO_2, PM and NOx emissions.

The modest absorption of EU funds within the cohesion policy for transport and environmental infrastructure further declined in 2011. In 2011, less than EUR 70.3 million (EUR 60.2 million from the Cohesion Fund and EUR 10.2 million from the European Regional Development Fund) were received for the purpose of the Operational Programme of Environmental and Transport Infrastructure Development (OP ROPI), which is 47% less than in 2010. For the entire period of the second financial perspective (2007–2013), EUR 1.577 billion of cohesion funds have been earmarked in the EU budget for OP ROPI programmes.[260] According to data from the Government Office for Local Self-Government and Regional Development (now the Ministry for Economic Development and Technology), EUR 953.7 million was allocated by the end of 2011, which represents 60.4% of the entitlement spending available for OP ROPI; however, only EUR 299.4 million has been paid so far, which is 19% of the entitlement spending for the entire 2007–2013 period. Among the development priorities, the absorption is the lowest in the largest area of railway infrastructure (4.8%[261]), but is also low (11.0%) in the second largest area – water management. The preparation of investment documentation and the implementation of projects is relatively demanding because major environmental and infrastructural projects are financed by cohesion funds. Better absorption is hindered by poorly prepared project documentation[262], numerous complaints, the related lengthy court proceedings, and the annulment of public procurements. In the project implementation stage, bankruptcy and liquidity problems experienced by companies, particularly those in the construction sector, have been rather frequent since the onset of the economic crisis, and often there are no substitute contractors to continue the implementation of the project. Modest absorption of these funds means that the modifications introduced at the end of 2009 for the purpose of simplifying the procedures for obtaining EU funds were not sufficiently efficient in the OP ROPI area, which, however, is not true for the absorption of EU funds in general[263]. In order to improve the use of cohesion funds, the assets available for OP ROPI development priorities were re-allocated from where there were less opportunities for their use to development projects, priorities and programmes with more opportunities for the use of funds in 2011.

In the area of waste management, gradual improvements continued in 2010, whereas Slovenia still lags far behind the EU average in terms of household waste management. In 2010, approximately 6.6 million tonnes of waste[264] were generated in Slovenia, 86.5% of which was industrial, and the rest was municipal waste. In comparison with the year before, the quantity of waste generated fell (by 2.5%) and their management has also been improving[265]. In the *municipal waste* segment, the share of landfilled waste reduced to 64.5% in 2010, but is still high and considerably larger than the EU average (37.0%)[266]. The quantity of municipal waste produced, which also depends on the general level of economic development, is lower in Slovenia than in the rest of the EU (Slovenia: 422 kg/inhabitant; EU: 503 kg/inhabitant annually[267]), but in 2010, the share of inadequately managed waste was almost 50% higher per inhabitant than the EU average. In recent years, an increased number of locations for the separate collection of waste[268] has contributed to an improved

Figure 22: **EU funds within the cohesion policy for the Operational Programme of Environmental and Transport Infrastructure (OP ETID) according to development priorities**



Source: Office of the Republic of Slovenia for Local Self-Government and Regional Policy, 2011.

[260] Funds from the Cohesion Fund and European Regional Development Fund.

[261] The share of funds paid from the budget of the Republic of Slovenia out of the total of funds earmarked for this area for the entire 2007–2013 period.

[262] Such is the case of rejected investment documentation for the construction of the second track of the Divača-Koper railway.

[263] Thus, for example, the absorption of funds for the Operational Programme for Strengthening Regional Development Potentials (OP DP) and Operational Programme for Human Resources Development (OP HRD) increased by 41.5% in comparison with 2010.

[264] In 2009, 6.8 million tonnes of waste were generated (including stocks) (data by SORS). The growing trend of generated waste ended in 2009 and 2010, which was considerably contributed to by the slowing down of economic activity.

[265] Sustainable waste management is based on hierarchical principles: most efforts should go to the prevention of waste generation, followed by reuse, recycling, energy processing, including incineration, and only at the end the landfilling.

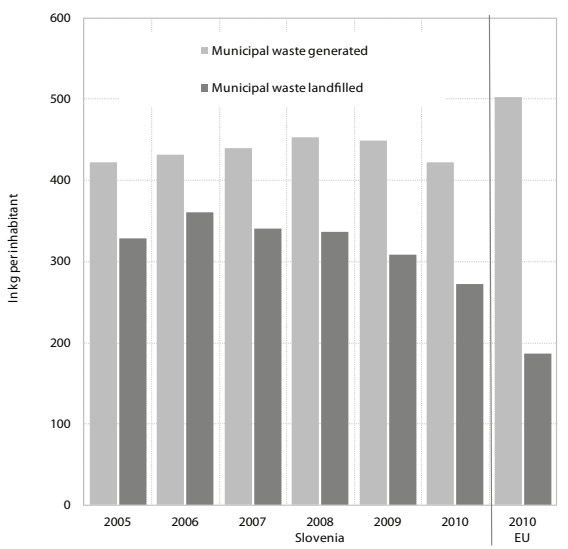
[266] The differences in waste management between the EU Member States are substantial. In Germany, Belgium, Austria, Netherlands, Sweden and Denmark, less than 5% of municipal waste generated was landfilled in 2010.

[267] In 2009, the quantity of waste generated in Slovenia was 448 kg/inhabitant, while in Europe 510 kg/inhabitant (source: Eurostat).

[268] The condition for a reduced quantity of landfilled waste is a larger share of separately collected fractions.

municipal waste management, but Slovenia is still far from achieving the targets set for 2012[269]. In managing *waste from production and service activities,* relatively favourable trends continued in 2010, since most of this waste (approx. 80%)[270] was recovered. After a longer period of increased quantities of waste generated by these activities, their volumes decreased under the impact of the economic crisis in 2009 and 2010. In 2010 almost 90% of the waste generated by production and service activities was in three sectors: the construction sector (31.3%), electricity, gas and steam supply (28.1%), and manufacturing industries (28.0%). During the period 2005–2010, the pressure increasing the quantities of industrial waste was produced particularly by construction and demolition waste. During the period under analysis, such waste increased by almost 40%. Despite a considerable reduction in construction activities, the waste from these activities also rose in 2010. Although construction waste has high recycling potential, less than half of the waste generated was recovered in this manner[271]. Reused, not-landfilled, waste reduces the pressures on the environment by providing space for landfill. Waste is also an important source of secondary raw materials and their recovery also reduces the pressure on the use of these natural resources. The increasing prices of raw materials on the world markets serve as an incentive for better use of secondary raw materials from waste, and tax instruments may also have a significant impact on the reduction of environmental burdens. In Slovenia, the landfill tax is among the lowest in the EU[272]; moreover, certain states use additional tax instruments to encourage the reuse of raw materials[273].

Figure 23: **Municipal waste per inhabitant in Slovenia and the EU**



Source: SI-STAT data portal – Environment, 2012; Eurostat Portal page – Environment, 2012.

The Slovenian economy's material productivity is low, but increased considerably on account of lower activity in the construction sector in recent years. Material productivity is one of the key indicators of sustainable development and represents the relationship between GDP and materials used in a particular country[274]. In Slovenia, material productivity in 2009[275] was at 75% of the EU average, and in comparison with 2005, the gap to the EU average was not reduced (this difference is even higher than for labour productivity). Slovenia's low material productivity at the economy-wide level was also confirmed by an analysis based on supply and use tables, which indicates that Slovenia has an above-average share of raw material costs[276]. This is partly a consequence of its economic structure, which is more based on activities involving a large use of materials than in other EU Member States; moreover, the share of costs is also above the average in the majority of comparable industries, which indicates a less efficient use of raw materials. The inefficient use of raw materials causes pressure on the aforementioned natural resources and may have a significant impact on competitiveness, particularly on export-oriented manufacturing industries; the difference to the EU is at its greatest in certain more high-tech manufacturing industries. Large use of raw materials is also recorded in those industries that are mainly oriented towards the domestic market (e.g. agriculture, the construction industry), whereas the common indicator of material productivity oscillates greatly, depending on the use of non-metal minerals[277]. 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

[269] At least 65% of the generated municipal waste should be included in pre-disposal procedures and at least 42% should be recycled (the goal of the Resolution on National Environmental Action Plan 2005–2012).

[270] Source: ARSO, 2012. In waste generated by production and service activities, Slovenia has already achieved 65% of the goal set by the Resolution on the National Environment Protection Programme 2005–2012.

[271] Source: SORS, 2012.

[272] Among 16 analysed EU Member States, only three had lower tax rate than Slovenia (in EUR per tonne of landfilled waste). The highest was in Netherlands and was almost by ten times higher than in Slovenia (data from the OECD Environmental Performance Review: Slovenia, 2012).

[273] Such case is »duty on raw materials« in Denmark and »levy on aggregate production« in the United Kingdom (adapted from the OECD Environmental Performance Review: Slovenia, 2012).

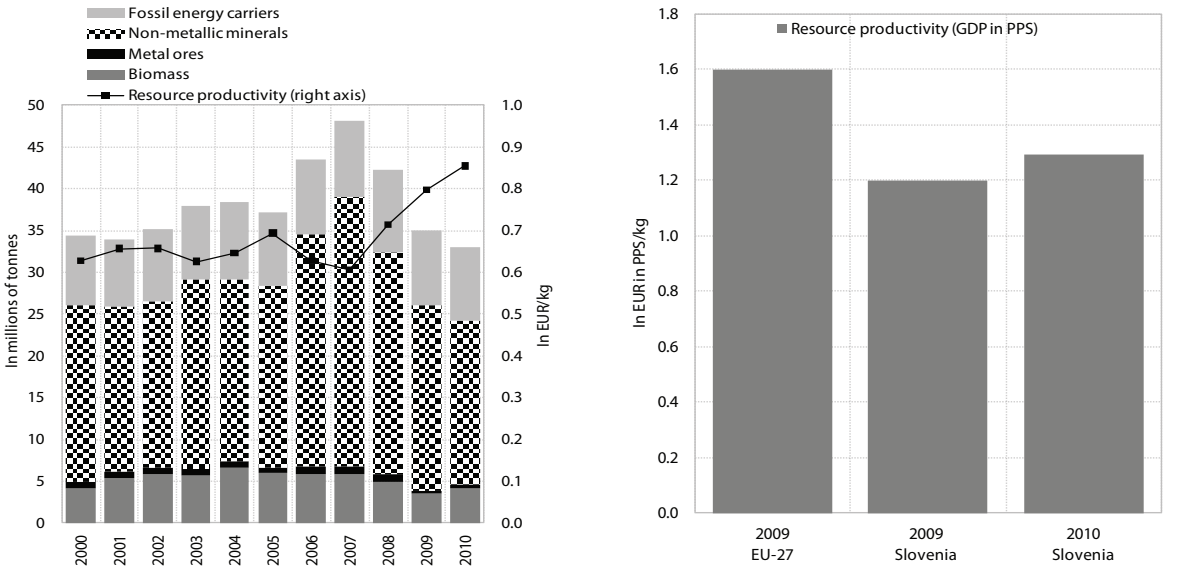
[274] GDP/DMC. Domestic material consumption (DMC) is defined as exploitation of domestic raw materials, plus net import of materials (import – export of materials).

[275] The latest internationally comparable data where the GDP is expressed in purchasing power standards (Source: Eurostat).

[276] According to Eurostat latest internationally comparable data, in 2007 the share of raw materials in relation to the value of production was estimated at 11.5% in Slovenia and at 6.7% in the EU. Above average was also the share of the use of materials according to the wider definition, which also includes semi-products and final products for the purpose of intermediate consumption (Slovenia: 34.4%, EU: 22.3%).

[277] This mainly applies to the use of sand and gravel.

Figure 24: **Domestic material consumption and resource productivity**



SI-STAT data portal – Environment, 2012; SI-STAT data portal – National Accounts, 2012; Eurostat Portal Page – Environment, 2012. 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.

motorway network[278]. According to SORS data, material productivity in 2010 improved for the third year in a row by 7.2% and was thus 23.2% higher than in 2005. In contrast to before the advent of the crisis, the lower use of materials was mostly contributed to by a lower use of construction materials. Data on annual changes in the scope and structure of the cost of the materials used during the economic crisis also point to the rationalisation of the use of raw materials in the majority of industries.

By devoting more attention to environmental issues in agricultural policy, the negative impact of agriculture on the environment is being reduced in the long run, and was also reduced in 2010, but not according to all indicators. Slovenian agriculture, which is not ranked among the more intensive according to international comparisons[279], has gradually reduced the environmental burden in recent years. This is mainly due to the direction of agricultural policy, according to which the producers' eligibility for subsidies is conditional upon the compliance with the prescribed environmental standards. In 2010, fertilisation with mineral fertilisers increased, but was still almost a third lower than at the beginning of this decade, while the overall use of pesticides continued to decrease. Together with nitrates, residual pesticides constitute the major source of pollution in agriculture which affects groundwater and consequently also drinking water. The monitoring of drinking water quality in Slovenia shows that at some monitoring stations located near the most intensive agricultural regions the permissible values of individual active substances[280] are still being occasionally exceeded, however, in general, the situation is relatively positive and is gradually improving. Agricultural production intensity, measured by the average yield of the two most important crops, significantly lags behind the EU average; it however, increased in 2010. This reveals a slightly improved exploitation of natural resources, whereby the scope of agricultural production also strongly depends on the changing weather conditions and in the long run also on the climate change. The low level of national self-sufficiency in basic food products requires an even more intensive production orientation which would comply with the adopted adjustment programme[281], although its time limit is relatively short. However, the average milk yield per animal – which is one of the main indicators in animal exploitation – has dropped the third year in a row. In Slovenia, the value of this indicator is also below the EU average, while from the aspect of environmental pollution per unit of production, at least a slightly higher level of intensity would be desirable[282]. In sustainable farming, progress was made in 2010; however, this progress will not be sufficient to achieve the set objective. The proportion of land devoted to organic farming, which is one of the most effective methods of sustainable use of natural resources in agriculture and exceeds the EU average due

[278] According to the tables of use, the use of non-metallic materials in civil engineering (e.g. the construction of roads) is above average in comparison with other construction activities.

[279] Source: Agriculture and fishery statistics, 2011.

[280] The regions of the Dravsko and Mursko polje and the Savinjska kotlina are particularly overburdened. Adapted from: Simončič A. and Sušin J.: Spremljanje in preprečevanje negativnih vplivov kmetijstva na onesnaževanje voda s fitofarmacevtskimi sredstvi in nitrati. Celje, 2011.

[281] Akcijski načrt strategije prilagajanja slovenskega kmetijstva in gozdarstva podnebnim spremembam za leti 2010 in 2011 (Action Plan for the Strategy for Adaptation of Slovenian Agriculture and Forestry to Climate Change in 2010 and 2011). Government of the Republic of Slovenia, 2008.

[282] Source: Verbič J., 2008.

to its extreme increase in the initial phase, dropped last year, but has slightly increased again and now amounts to approximately 6.4% of utilised agricultural land. As this proportion lags considerably behind the target value set in the plan of organic farming development[283], producers will receive additional financial incentives in the conversion period from 2012 onwards. Along with an increased demand which is likely to be accelerated by the share of organic food required in public procurement[284], there remain many unexploited opportunities for the further development of this production method, which is most desirable from the environmental aspect.

The environmental role of forests became increasingly important due to a more rapid increase in wood increment and supply, while the relatively low economic utilisation of forests did not improve in 2010. Large forest areas in Slovenia have without doubt a positive impact on the environment, although from the economic aspect, this impact is difficult to measure. Forests prevent soil erosion, provide protection against negative weather influences, improve water supplies, increase biodiversity and are important 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 and energy, and are still not sufficiently exploited in Slovenia. The removal of trees and the production of raw-wood categories are increasing in the long term; however, due to a more rapid increase in wood increment, the intensity of tree felling is relatively low. In 2010, it dropped further and felling volumes therefore amounted to 41.6% of the annual volume of increment (in 2009, it was 42.3%). The total volume of felling remained at approximately the same level as in the previous year, which represented only 63% of the possible volume of felling according to the forest management plans (in 2009, it amounted to 66% of the possible volume of felling)[285]. Tree-tending removal, which is vital for forest development and therefore the most extensive, increased by 8.8%. As there were no major natural catastrophes or problems with forest pests in 2010, the share of tree-tending removal in the total tree removal has increased, but has still remained at a relatively low level (it amounted to approximately 71%, while in 2009 it was 65%). A lower felling volume does not necessarily mean sustainable forest management, as it can cause problems being reflected by a too low tending of forest stands, which results in their stronger susceptibility to various harmful impacts. Increased felling of the growing forest stock also provides for higher (economic) utilisation of the available natural resource at the first link in the chain and at all further links in the forestry wood processing chain.

[283] Action Plan for the Development of Organic Agriculture in Slovenia by 2015, 2005.
[284] Decree on Green Public Procurement, OG RS no. 102/2011.
[285] Source: The Slovenian Forest Service Report on Slovenian Forests for 2010 and 2011.

5.2. Sustained population growth

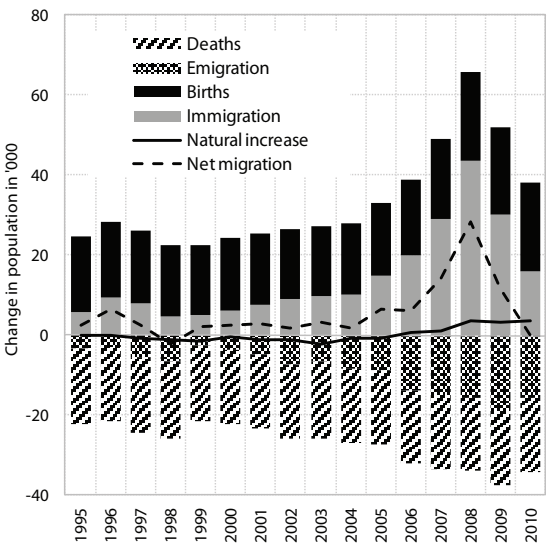
The population in Slovenia increased further in 2011, while net migration, which was the main reason for population growth during the period 2005–2009, has dropped significantly in the past two years. By 1 July 2011, the population had increased to 2,052,496 (an increase of 3,235 on the previous year). The population in Slovenia exceeded 2 million in 2005, and, since then, the main reason for the increase has been high net migration from abroad related to accelerated economic growth and Slovenia's accession to the EU. Enterprises began to experience shortages in certain domestic occupational profiles, especially in construction, and therefore hired foreign workers more frequently. In 2008 alone, 30,693 new permanent residents immigrated to Slovenia from abroad and only 12,109 people emigrated from Slovenia; the net migration rate thus reached 9.2 per 1,000 inhabitants, which was among the highest in the EU. Among the reasons for the increased immigration rate in 2008 was Slovenia's accession to the Schengen Agreement. This also involved fictitious immigration to Slovenia, as foreigners, having obtained residence permits in the Republic of Slovenia, sought employment or the opportunity to live in other countries being parties to this Agreement. In 2009, Slovenia's net migration rate decreased to 5.6 per 1,000 inhabitants, which was still among the highest rates in the EU, whereas, in 2010, the rate fell to almost zero. The reason for the almost zero net migration figure was a significant decline in immigration to Slovenia (48% less than the previous year); however, the emigration rate also dropped (by 16%). In the first half of 2011, the immigration rate slightly exceeded the emigration rate in Slovenia, which resulted in a slightly positive migration coefficient, i.e. 0.6 per 1,000 inhabitants, whereby the immigration and emigration rates were lower than for the same period in 2010.

Since 2006, the population has also been increasing due to the positive natural increase rate. After more than 20 years of decline, the number of births reached the lowest level in 2003 (17,321); at that time, the total fertility rate was 1.20. Since 2004, the number of births has been growing; in 2010, a total of 22,343 children were born in Slovenia (487 more than the previous year) and the total fertility rate increased to 1.57, approaching the EU average. The average age at which women give birth continues to increase. In 2010, the average childbearing age was 30.3 years, while the age at birth of the first child was 28.7. In 2006 – for the first time in ten years – the number of births exceeded the number of deaths, which is a negligible increase. Positive trends in the field of infant mortality continue; in 2010 – with 2.5 deaths per 1,000 live born infants – it remained among the lowest in the EU[286].

[286] A lower infant mortality rate in 2010 was only recorded in Finland and Portugal.

The fertility rate also depends on the conditions for starting a family. The easiest way for the state to exert positive influence on fertility is to create appropriate conditions for starting and raising a family. The set of measures for improving the conditions for starting a family and increasing the quality of family life undoubtedly includes a parental compensation system[287], family benefits and the organised care of preschool children. Slovenia has one of the most parent- and child-friendly parental protection systems in the EU as it provides 12-months off work at the birth of a child and 100% wage compensation. In 2010, 22,493 beneficiaries took advantage of parental compensation, which was almost identical to the year before (a 0.5% increase). In the 2010/2011 academic year, 87.3% of children aged 3–5 were enrolled in nurseries, which – considering the latest internationally comparable data – exceeds the EU average[288]. In the field of labour, the quality of family life significantly depends on measures easing parents' reconciliation of work and family life[289]. One such measure is the Family-Friendly Enterprise Certificates project which also promotes the principle of corporate social responsibility. From 2007 (when they were awarded for the first time) to December 2011, these certificates were received by 81 companies with over 48,000 employees (slightly less than 7% of all employees).

Figure 25: **Components of population growth, Slovenia**



Source: SI-STAT – Demography and social statistics, 2010.

[287] The most important element is paid parental leave.

[288] In the academic year 2008/2009, 84.1% of pre-school children enrolled in nurseries, while the EU average was 80.3%. For further information on the integration of children in nurseries, see Chapter 4.3.2. Quality of Life.

[289] Reconciliation of work and family life is also an important element in the flexicurity concept.

Longer life expectancy leads to a higher share of older people and a high old-age dependency ratio. Following a brief standstill at the beginning of the transition period, life expectancy, which has been increasing permanently in Slovenia since 1994, reached 76.3 years for men and 82.7 years for women in 2010. It can also be observed that the gender gap has been gradually shrinking. Moreover, the gender gap has also been shrinking with respect to healthy life years at birth; in 2009 it reached 61.5 years for women and 60.6 years for men[290], which is close to the EU average. Longer life expectancy has also led to changes in the age structure of the population. In 2011, there were already 23.9 persons aged 65 and over per 100 people of working-age[291] (3.9 more than in 2000), while the share of older persons in the total population was 16.5%. Both these age-structure indicators are still below the EU average, but the gap is decreasing. In view of Eurostat's demographic projections[292], the share of older people should grow to one fifth by 2020 and to one third by 2060. The old-age dependency ratio is expected to increase to more than 30% by 2020 and should be close to 60% by 2060. Such demographic development will significantly increase the burden on the income of the active working population and the government. The expected trends and the given conditions therefore demand systematic and harmonised measures in demographic, social, employment and fiscal policies in order to provide fiscal sustainability and the social sustainability of social protection systems[293].

5.3. More balanced regional development

Despite an increase in 2009, regional differences in terms of GDP per capita have remained relatively low. Owing to reduced economic activity in all the regions in 2009, the gap between economically weaker areas and the Slovenian average has increased. The gap between the economically most developed Osrednjeslovenska region and other regions has also widened, because the Osrednjeslovenska region faced the lowest decrease in economic activity. The trend of catching up with the

[290] Life expectancy for women (men) exceeded the healthy life years at birth by 21.6 years (15.8 years). In this respect, the difference between life expectancy and the healthy life years at birth for men has been decreasing.

[291] Old-age dependency ratio.

[292] EUROPOP 2010.

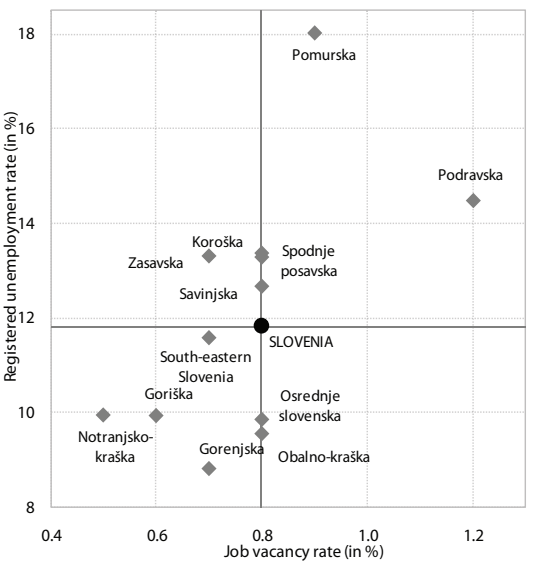
[293] In 2010, the at-risk-of-poverty rate for people over 65 was 20.2%, which is higher than the EU average (15.9%) and much higher than the average at-risk-of-poverty rate in the country (12.7%). Older women have a particularly high at-risk-of-poverty rate (27.1%). The life of older people is revealed by the material-deprivation rate, which was 18.4% in 2009 in Slovenia. It indicates the share of persons aged 65 and over who were deprived of certain living sources (such as adequate heating in their homes, appropriate meals, etc.).

European average [294] also stopped in all Slovenian regions. Despite their increase, regional differences have still remained among the smallest in comparison to other EU Member States. The GDP per capita is the highest in the Osrednjeslovenska region, which exceeds the Slovenian average by more than 40%, while its contribution within the GVA structure also amounts to almost 37%. It is important, however, that other regions also strengthen their development potentials as these have a positive impact on the entire state. This is of utmost importance for the Pomurska and Zasavska regions as they have the lowest GDP per capita in comparison to other statistical regions.

In 2011, the regional differences in the registered unemployment rate decreased, while the unemployment rate rose in almost all regions. The registered unemployment rate increased more in regions with a below average rate, which led to a reduction in regional differences. The only region that reduced the registered unemployment rate in 2011 and, at the same time, the gap with regard to the Slovenian average was the Pomurska region. Nevertheless, the unemployment rate in that region is still the highest and twice exceeds the unemployment rate of the region with the lowest unemployment rate (the Gorenjska region) and is 1.5 times higher than the Slovenian average. In the Pomurska region, the unemployment structure is also still very unfavourable, as this region has one of the highest shares of long-term unemployed persons, particularly those who have been unemployed for more than two years, unemployed persons with low levels of education and unemployed persons who lost their jobs as a result of company bankruptcies. Unfavourable trends in the labour market in the regions have had an expected impact on the number of *beneficiaries of unemployment cash benefits*. In 2011, the number of beneficiaries of unemployment cash benefits dropped only in the Pomurska and Koroška regions, despite increasing nationally. Most of the beneficiaries, i.e. 20 per 1,000 inhabitants receive unemployment cash benefits in the Spodnjeposavska region. The number of beneficiaries of *financial social assistance* (per 1,000 inhabitants), which increased after 2008 due to the economic crisis, dropped in 2011 in all regions, most notably in the Savinjska and Pomurska regions. However, the reduction was not the result of an increase in revenues, but of the fact that fewer beneficiaries took advantage of this right. Financial social assistance is a refundable amount, which means that during his life time the recipient does not need to refund it, but it will, however, affect entitlement to inheritance. The number of beneficiaries is still the highest in the Pomurska region (63.1 per 1,000 inhabitants) and the lowest in the Goriška region (16.8 per 1,000 inhabitants).

Structural imbalances in the labour market are particularly high in the Podravska region and further increased in 2010. For a number of years, there have been significant differences between regions in terms of structural imbalances in the labour market, which are measured by the relationship between the registered unemployment rate and the job vacancy rate (*Beveridge curve*). The Podravska region has recorded the highest imbalances since the beginning of SDS's implementation, whereas the Nontranjsko-Kraška, Goriška and Gorenjska regions have recorded the lowest imbalances over the same period. In some regions (the Obalno-Kraška, Goriška, Gorenjska, Notranjsko-Kraška, Spodnjeposavska and Zasavska regions) the process, which started in 2009, and could actually be expected at a time of unfavourable economic conditions, continued in 2010 – the registered unemployment rate increased, while at the same time the job vacancy rate dropped. In 2010, structural imbalances in the labour market became especially evident in the Podravska and Koroška regions, where the unemployment rate continued to increase despite the increase in the job vacancy rate. In other regions, the unemployment rate increased in comparison to 2009, while the job vacancy rate remained unchanged. In 2011, the imbalances in the labour market further increased due to the increase in the unemployment rate (with the exception of the Pomurska region), in parallel with the increase in the job vacancy rate in all regions. Labour market inefficiency may be caused by the imbalance between job vacancies and the number of unemployed due to inadequate education, the immobility of the labour force, etc.

Figure 26: **Registered unemployment rate and job vacancy rate by region, 2011**



Source: Si-Stat data portal - Labour market, 2012.

[294] or narrowing the gap with the EU average in the case of Osrednjeslovenska and Obalno-kraška regions.

In the Osredjeslovenska region, the population and the number of jobs continue to increase gradually. The Osredjeslovenska region can be considered a very labour-oriented region[295], because the share of persons in employment by a region of workplace exceeds the share of persons in employment by a region of residence by more than a fifth. The larger supply of jobs in that region[296] is also confirmed by migration flows. In 2010, the Osrednjeslovenska region recorded the highest net migration rate[397] (the number of immigrants to that region exceeded the number of emigrants to other regions by 1,378 inhabitants), although the number of immigrants from other regions has been declining since 2008[298]. In the Zasavje region, the number of emigrants exceeded the number of immigrants; this region also has the lowest (negative) net migration rate per 1,000 inhabitants (-8.5). The concentration[299] of jobs not only increases short-distance and long-distance labour mobility, but also the volume of motor vehicle transport, which also has a negative impact on the environment. It also increases suburbanisation, which puts pressure on agricultural land and the existing local utility and social infrastructure in areas that receive immigrants and are usually not adapted to the population increase.

Regional differences with regard to gross wages are also decreasing, but this process is the result of the crisis. In 2010, the Gini coefficient in Slovenia was 0.271[300], but the differences are even higher in certain regions. In 2010, the Gini coefficient was the lowest in the Koroška region (0.244) and the highest in the Osrednjeslovenska region (0.285). In the Osrednjeslovenska region, the gross wages of the 9th decile were four times higher than the gross wages of the 1st decile, while these values were three times higher in the Koroška region. Gross wage inequalities have decreased in all regions in comparison to the previous year. This was mostly due to the minimum wage increase, which resulted in the increase in the minimum wage level. In addition, the wage increase was halted in activities with the highest wages (financial and insurance activities, public administration etc.). The minimum wage increase had a major impact on reducing inequality in economically weaker regions, as these regions have more employees with lower wages. In 2010, the largest wage decrease was recorded in the Koroška region, while the lowest decrease was recorded in the Pomurska region. In addition to the aforementioned facts, the number of unemployed persons who lost their jobs as a result of company bankruptcies also strongly increased, which had a further impact on the decrease in the differences between gross wages[301]. In the Pomurska region, the number of unemployed persons who lost their jobs due to company bankruptcies increased most in 2009, which has already resulted in wage inequalities at that time[302].

The government responded to the economic and social consequences of the economic crisis in economically weaker regions by undertaking regional policy measures. Since the *Pomurska region* was the first to face increased unemployment caused by the crisis, regional policy measures were first introduced in that region. After the adoption of the Act on Development Support to the Pomurska Region for the Period 2010–2015, the actual implementation of measures started in February 2010 with the Programme for fostering the competitiveness of the Pomurska region for the period 2010–2015[303] (hereinafter: Programme Pomurje 2015). The Act defines four measures providing development support to the Pomurska region, of which the first three represent intervention measures in the form of financial and fiscal relief, while the fourth measure is horizontal and oriented towards priority consideration of the Pomurska region in some key EU cohesion policy programmes being carried out in Slovenia. The total value of the programme is EUR 33 million and is being carried out by five instruments. Approximately 70% of the funds are envisaged for the first instrument, which is focused on the developmental restructuring of the region; by the end of 2011, 68% of the (non-refundable) funds tendered were paid out. It is still too early to evaluate the effectiveness of the implementation of the Act in its entirety; however, on the basis of the activities carried out to date, 643 new jobs[304] are planned to be created by the end of 2015.

[295] Methodology interpretation is available on the SORS web page: http://www.stat.si/doc/metod_pojasnila/07-234-MP.htm.
[296] The Osrednjeslovenska region provides one third of all jobs and a quarter of Slovenia's population lives there.
[297] and the migration coefficient
[298] Comparable data are available from 2008 onwards.
[299] The job concentration index ($[\sum_{i=1}^{N} | y_i - a_i | /2] * 100$ whereby yi represents the job share in region i in the country, ai represents the share of the land surface of the region i in the country, while N represents the number of regions) has been increasing since 2000 and amounted to 25.5 in 2011 (in 2000 it amounted to 22.3). The population concentration index has also increased to 20.5 (from 19.5 in 2000 and from 19.9 in 2008, since comparable data have been available). In a similar way, the concentration of the population also increased up to 2008 (in the period when the population was monitored according to the previous definition). Although the concentration of the population has increased, it still remains among the lowest in the European Union.
[300] The comparison between the 9th and 1st 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 by individual countries).
[301] On the condition that, in these companies, the wages were below the average prior to bankruptcy.
[302] In 2009, wage inequality was the highest in the Pomurska region.
[303] At the end of 2009, the Act on Development Support to the Pomurska Region in the Period 2010–2015 (ZRPPR1015; Ur. l. RS, no. 87/2009) was adopted; on its basis, the Programme to Foster the Competitiveness of the Pomurska Region in the Period 2010–2015 was adopted. In 2011, the Promotion of Balanced Regional Development Act (ZSRR-2; Ur. l. RS, no. 20/2011) was also adopted.
[304] A total of 443 jobs on the basis of the three published tenders for promoting initial investments (EUR 6,743,282 was paid, which is 68% of the envisaged sum) to be opened during the 3-5 year

Moreover, in 2010, 36 taxpayers took advantage of tax reliefs for employment expenses[305] and 307 taxpayers took advantage of tax reliefs for investments[306]. Statistical data show that the registered unemployment rate in the Pomurska region has decreased; however, on the basis of the data available, it is difficult to assess to what extent the implementation of the Programme Pomurje 2015 contributed to this. In 2010, the *Pokolpje region* (a statistical region of south-western Slovenia) also faced increased unemployment due to enterprise bankruptcies. The new Promotion of Balanced Regional Development Act has also systematically regulated the adoption and implementation of measures supporting development in areas with high unemployment rates. In 2011, the government also adopted the Programme to foster the competitiveness of the Pokolpje region for the period 2011–2016 (hereinafter: Programme Pokolpje 2016) and focused its measures and support on developmental restructuring and the elimination of infrastructure barriers in that region. Programme Pokolpje 2016 consists of four instruments; its value amounts to almost EUR 290 million and 400 new jobs are planned to be created within a five-year period. As the programme has only been implemented for a short time, the results cannot be evaluated yet. On the basis of the first tender for promoting initial investments, 166 new jobs should be created within a period of three to five years after the completion of the investments. The PIK Kočevje enterprise incubator attracted an investor to that region and the investor created 35 new jobs in 2011. However, the registered unemployment rate keeps increasing. In 2011, bankruptcies, liquidations and the closing of industrial plants continued in that region, as well as in the broader region of South-eastern Slovenia. In addition, unemployment has also increased due to the inflow of younger people after completing their education; therefore, any eventual positive effects are not yet evident from the statistical data.

In tight economic conditions, not only are the financial resources available through the country's own regional policy important, but cohesion policy funds also play a significant role.[307] The accelerated draw down of cohesion policy funds[308] continued in 2011, but mainly from structural funds (the ERDF and the ESF) where the highest realisation rate was recorded (approx. 64% of all inflows from the EU budget to the budget of the Republic of Slovenia). By the end of December 2011, Slovenia had submitted to the European Commission authorised claims for reimbursement totalling EUR 1.312 billion for all three operational programmes, which is less than a third of the eligible use for the entire 2007–2013 programme period.[309] Most of the amount (approximately 60%) was earmarked for the Operational Programme for Strengthening Regional Development Potentials (OP SRDP). The realisation of this operational programme (measured by the authorised reimbursement claims submitted to the European Commission) amounted to 45% with regard to the eligible use for the entire period and 63% with regard to the period 2007–2011. In comparison to other EU Member States, Slovenia ranked tenth by the amount of funds received with regard to the eligible use during the period 2007–2013[310] among all EU Member States (26.8% as at 1 December 2011) and third among the countries that joined the European Union after 2004.

5.4. Improvement of spatial management

The current system for spatial planning and the construction of buildings has remained too development-restrictive and complex. In 2011, no legislative changes were enacted in the area of spatial planning; the last change entered into force in 2010.[311] However, additional documents are available for the evaluation of the current spatial planning system, among others, the results of a research project[312] and an OECD study[313]. The findings of these studies refer to the excessively slow adoption of municipal planning documents and the fragmentation of municipal initiatives, which has resulted in a lack of efficiency in the spatial planning system and has given rise to the need for

period after the completion of the investment, 150 jobs in the area of attracting foreign investments to be opened by 2013, while in 2010 and 2011, 13 enterprises that took advantage of the employment incentives (reimbursement of the employers' contributions) employed 50 unemployed persons.

[305] Totalling EUR 504,587.

[306] Totalling EUR 8,581,909.16.

[307] During the period 2007–2013, Slovenia is elegible for EUR 4.2 billion of European funds within the convergence objective, which need to be spent by no later than the end of 2015. The programme basis for their drawing is the National Strategic Reference Framework (NSRF), which is divided into three operational programmes (OP). The Operational Programme for Strengthening Regional Development Potentials (OP SRDP), which is most directly focused on the promotion of balanced regional development and is most extensive in scope (43% of the eligible use), the Operational Programme for Human Resources Development (OP HRD) and the Operational Programme of Environmental and Transport Infrastructure Development (OP ETID).

[308] Funding from Structural Funds and the Cohesion Fund.

[309] During the same period, for all three operational programmes EUR 1.573 billion was paid from the Budget of the Republic of Slovenia, which is 38.4% of the eligible use in the entire period and 58.8% of the eligible use during the 2007–2011 period.

[310] During the period 2007–2011, it ranked 7th.

[311] Act Amending the Spatial Planning Act (ZPNačrt-A), OG RS, no. 108/2009.

[312] Analiza stanja, razvojnih teženj ter usmeritev za strateški prostorski razvoj Slovenije (Analysis of the Situation, Trends and Directions for Slovenia's Strategic Spatial Development), Target Research Programme no. V5-1092,« Konkurenčnost Slovenije 2006-2013« (Slovenian Competitiveness 2006–2013), in 2010, Final Report, Faculty of Civil and Geodetic Engineering Ljubljana, October 2011.

[313] OECD Territorial Reviews: Slovenia, Paris, 2011.

its better horizontal and vertical coordination. Moreover, research shows that the tendencies of municipalities to acquire new building land for residential and commercial purposes could also reflect their speculative motives for holding land and social institutions were often built without considering demographic development and the financial capability of the economy. Several public services became too expensive and small-scale, i.e. they cover a too small population (schools, cultural centres etc.).[314] The OECD emphasises that the lack of initiatives for regional spatial and strategic development-oriented planning is made even more difficult by fiscal stimuli for municipal fragmentation.[315] Municipal fragmentation also restricts progress in the preparation of municipal planning documents; therefore, the progress made was rather modest in 2011. The number of municipalities that have already adopted planning documents has increased from 22 to only 32[316]. According to the OECD findings related to Slovenia[317], the preparation of a municipal spatial plan is an extremely complex process from the time perspective (one municipality quoted an average of five to eight years) and the perspective of the need for professional expertise and financial resources, while it also requires cooperation with the public. The large number of regulations applicable in the area of spatial planning (approximately 700)[318] also significantly contributes to the extremely slow adoption of spatial plans. According to the applicable legislation, the authority of the ministry responsible for spatial planning is relatively limited with regard to the coordination of spatial interests and the adoption of municipal documents, while the role of other ministries and approving authorities supervising municipalities' compliance with the relevant environmental protection legislation is more important. In this respect, the impact of environmental protection legislation is crucial because 36% of Slovenian territory is subject to EU Natura 2000 environmental legislation, which is the highest share in Europe, and, in some municipalities, the aforementioned territory covers the entire area. These areas represent long-term development potential[319] which has yet to be sufficiently exploited. Better exploitation of this potential requires, in particular, cooperation between municipalities at the regional level by creating strategic spatial objectives and connecting spatial and regional development planning.

Apart from spatial planning, according to the research "Doing Business" conducted by the World Bank, there are two other major obstacles to the ease of doing business in Slovenia: the registration of property and the obtaining of construction permits. The World Bank has established that, in the past two years, Slovenia undertook important changes in both areas; by introducing electronic commerce, the procedures were simplified and tariffs reduced. The main obstacle is still the lengthiness of procedures required to obtain various documentation and permits. Slovenia has improved its ranking mainly with regard to the *registration of property* (by 20 positions, currently it is placed 79th among 183 countries); in recent years it has established a real estate register and accelerated the computerisation of the land registry. By way of these measures, it has simplified land registration and increased the legal certainty of individuals and companies trading in real estate. In order to improve real estate records, amendments to the Land Register Act and the Mass Valuation of Property Act and their appropriate implementing regulations were adopted and a mass property valuation was carried out in 2011. Despite the aforementioned progress made in the land registration and the property registration systems, numerous deficiencies still exist with regard to the completeness, update and utilisation of these records. As regards the procedure for *obtaining construction permits*[320], Slovenia's ranking has dropped in recent years (it dropped by 7 places and Slovenia now ranks 81st). Within the survey of *administrative barriers regarding environmental and spatial planning issues*[321] it has been

[314] Analiza stanja, razvojnih teženj ter usmeritev za strateški prostorski razvoj Slovenije (Analysis of the Situation, Trends and Directions for Slovenia's Strategic Spatial Development), Target Research Programme no. V5-1092, »Konkurenčnost Slovenije 2006–2013« (Slovenian Competitiveness 2006–2013), 2010, Final Report, Faculty of Civil and Geodetic Engineering Ljubljana, October 2011, p. 233.

[315] OECD Territorial Reviews, Slovenia, Paris, p. 172.

[316] The number of municipalities that have not yet begun to prepare their municipal spatial plans has dropped from 55 to 34; in 108 municipalities, the spatial plans are currently in the draft phase, while in 37 municipalities they are in the proposal phase (source: Ministry of the Environment and Spatial Planning: Faze občinskih prostorskih načrtov (Phases of municipal spatial plans), internal documents, 5 January 2012). According to the estimate of Mreža za prostor (Informator 8, 2011) there are still approximately 25 different forms of spatial planning documents in force which refer to the previous spatial planning legislation.

[317] OECD Territorial Reviews, Slovenia, Paris, p. 101.

[318] Mreža za prostor, Informator 8, 2011.

[319] Unspoiled nature represents a competitive advantage, particularly in tourism, while it also offers business opportunities, mainly in organic farming, supplementary activities on farms and the use of innovative solutions for sustainable energy and mobility. The OECD also recommends a better connection between the management of Natura 2000 areas and regional development objectives.

[320] The ease of obtaining permits is evaluated by way of the model of building a standardised warehouse. The evaluation includes the following: (i) the acquisition of the project documentation required by official authorities (e.g. building plans, planning maps); (ii) the acquisition of the permits, licences and certificates required; (iii) the filling out of all the required application forms; and (iv) the acquisition of inspection certificates. These procedures also include (v) procedures for obtaining all public utility connections and (iv) procedures for entry into the register.

[321] Report on the implementation of the tasks and the attainment of the objectives of the 2nd stage of the Action Programme for Eliminating Administrative Barriers and Reducing Administrative Burdens by 25% by 2012 and on the implementation of the Programme of Measures to Eliminate Administrative Barriers, Ministry of Public Administration, 2011.

established that several laws need to be amended in this area, particularly the Construction Act and the related laws and implementing regulations. Due to complex and unclear procedures, the applications are very often incomplete and the procedures last too long. According to the data obtained by the World Bank, 110 days are needed to register real estate (or a property), while the acquisition of a building permit requires as many as 199 days, which is much more than in other EU Member States.[322]

An overall assessment of legislative amendments in the public infrastructure of national importance cannot yet be made. On the basis of the Location of Spatial Arrangements of National Importance Act (ZUPUDPP), which was adopted in 2010, endeavours were made to at least partially accelerate and simplify the processes for siting projects and obtaining building permits in the field of this infrastructure. However, this partial solution has caused additional problems to the spatial planning system, and no comprehensive analysis of the implementation of this Act has yet been made, because the implementing regulation on the spatial conference was only adopted at the end of 2011. Moreover, some key instruments of the Act[323] (e.g. the purchase of land according to the market value assessed in the process of mass valuation and stated in the real estate register) only entered into force this year.

In 2011, compensation for changing the use of land from agricultural to building purposes was re-introduced. The adoption of the amendments to the Agricultural Land Act has brought important changes to the taxation instruments which have an impact on spatial planning. In order to better protect agricultural land, the aforementioned Act reintroduces[324] compensation (now, reimbursement) for changes to the use of land from agricultural to building purposes, and is determined with regard to the agricultural land rating. The compensation is a step forward towards the taxation of high capital gains from the land use change and, in this respect, will also increase the costs to be borne by investors. The income from the compensation introduced represents funds earmarked for the recovery of new agricultural areas for the purpose of slowing down the further shrinking of agricultural land in use, which is, however, also shrinking for many other reasons.

In 2011, the number of dwellings sold dropped, while their prices increased. In 2011, the sale of new dwellings dropped by 28%[325] , while the sale of existing dwellings dropped by 6%[326] . This means that, in 2011, the sale of existing dwellings increased by 24% in comparison to the trough of the crisis in 2009, and dropped by 37% in comparison to the peak of the economic boom in 2007; while the number of new dwellings sold was at its lowest in 2011 if compared to the entire period since these data have been available, i.e. since 2007, and was almost lower by a half compared to the peak of the economic boom. The current situation in the market shows that this trend will continue. This is also confirmed by the trend in the floor area planned for residential buildings evident from the building permits issued. These areas have reached their lowest level ever since these data have been monitored (since 1999), while the decline in construction activities is among the highest in the EU. The prices for new and existing dwellings slightly increased in 2010 and 2011[327], but they are still below pre-crisis levels. During the period 2004–2009, the movement of residential property prices in Slovenia was similar to the movement of the average residential property prices in the entire euro area (and also in the rest of the EU)[328]. However, in 2009, the prices in Slovenia dropped more than the euro area average; however, they started to rapidly increase again.[329] The reasons for the large fluctuations in the number of transactions and the dwelling prices not adjusting to lower demand in 2010 and 2011 can be linked to the fact that no adjustments have been made in Slovenia that would substantially reduce the stock of unsold dwellings, which is related to the slow cleaning up of bank balance sheets.[330] Residential property prices are also included in the set of indicators establishing excessive imbalances between EU Member States as one of the indicators of internal imbalances[331]. This is an annual change in the relative[332] prices of residential property, for which a threshold value of 6% was set. In 2010, the value of this indicator in Slovenia amounted to 0.74%; in 2008 and 2009 the country faced a drop in the relative prices of real estate, while the upper limit

[322] In comparison to Slovenia, the procedures for property registration are only longer in Poland, while the procedure for obtaining a building permit is longer in Italy, Slovakia, Portugal and Poland.

[323] Also the most controversial.

[324] The compensation was introduced with the Agricultural Land Act, which was adopted in 1996, and the compensation was abolished with the Spatial Planning Act adopted in 2002, which, however, has not proved sufficiently effective with regard to agricultural land protection.

[325] Calculated on the basis of residential property price indices; SORS, 2012.

[326] Calculated on the basis of transactions recorded from the Report on average real estate prices on the Slovenian market, GURS 2012.

[327] The prices of new dwellings increased by 0.3% in 2010 and by 7.6% in 2011, while the prices of existing dwellings increased by 3.3% in 2010 and by 1.0% in 2011 (SORS, 2012, calculations by IMAD).

[328] ECFIN: Scoreboard for the surveillance of macroeconomic imbalances. Suggestions for the choice of indicators and indicative thresholds – revised, Brussels 2011.

[329] Experimental house price indices in the euro area and the European Union in the third quarter 2011, Eurostat 2012.

[330] By the end of 2011 (31 December 2011) the exposure of banks to real-estate sectors (real estate activity and construction) was EUR 4.8 billion, which is a level comparable to the end of 2010 (Source: Bank of Slovenia, calculations IMAD).

[331] For more details, see Box 2, Excessive Imbalance Procedure.

[332] The Eurostat experimental harmonised residential property price index (dwellings and houses (new and existing together)) relative to the private consumption deflator.

was exceeded during the period 2004–2007, and at the most in 2007 (18.5%), when only five EU Member States recorded a higher value for this indicator.

5.5. Culture

In 2010, general government expenditure on culture[333] remained at a relatively high level. The share of general government expenditure on culture as a percentage of GDP amounted to 1.38% (0.93% of GDP on cultural services and 0.44% of GDP on broadcasting and publishing). In 2009, both shares (according to the latest international data) were among the highest in comparison to other EU Member States.[334] During the period 2005–2010, the expenditure on culture and its share of GDP strongly increased, which was mainly the result of a strong increase in expenditure on broadcasting and publishing.[335] During the same period, expenditure on cultural services also increased strongly in real terms.[336] The expenditure growth is also connected to some investments in cultural facilities carried out in recent years and to the financing of major international events that enhance the international recognition of Slovenian culture. In 2011, the international project Ljubljana – the World Book Capital was completed, and the preparations for the European Capital of Culture Maribor 2012 began. Moreover, the new Museum of Contemporary Art opened, the Centre for Contemporary Dance Art was established and the renovation of the Slovenian National Theatre Opera and Ballet Ljubljana was completed. In recent years, some other major investments in cultural facilities have been made (the Slovenian National Theatre Nova Gorica, the Cankarjev Dom Cultural and Congress Centre, the Metelkova City Autonomous Cultural Centre, the Museum of Modern Art in Ljubljana), the Franja Partisan Hospital was reopened and the Pivka Park of Military History was upgraded. The renovation of the existing facilities and the opening of new facilities will contribute to a wider range of cultural events on offer and the strengthening of Slovenian cultural identity.

Relatively high general government expenditure in culture in recent years have also been reflected in visits made to cultural events, where the trends have been mostly positive during SDS's implementation. In 2010, the number of visitors to *museums and exhibitions grounds* continued to increase (by 10.8%, reaching 2,882,400), as did the number of visitors to *theatre performances* (by 2.3%, reaching 743,700).[337] In the same year, the number of people going to see *long films* also increased (by 4.2%, reaching 2,888,400), mostly on account of the higher number of cinemagoers interested in Slovenian film productions (to 193,500), while the number of cinemagoers who went to see foreign feature films slightly dropped during that period (to 2,694,900)[338]. In 2010, the total number of visitors of all (foreign and Slovenian) feature films was the highest during the implementation of SDS. In *book production* the trends were less favourable in 2010. The total number of publications (books and brochures) dropped for the second year in succession.[339] In the area of literature, an increase was recorded in the number of foreign titles published, while in Slovenian literature the favourable trends from previous years did not continue, which had an impact on the reduction in the total number of literary works published. Nevertheless, the number of literary works published as well as the total number of publications (books and brochures) was higher than at the beginning of SDS's implementation. In *public libraries*, the number of members continued to drop and reached its lowest level during the period of SDS's implementation (24.8%). In this respect, the number of units of library material borrowed per person also dropped (to 11.7). Such trends do not necessarily mean that people are reading less frequently; they can be the result of a more extensive application of new technologies that enable the reading of e-books. These technologies also provide wider access to literature. The Slovenian digital library (dLib.si) also has a significant impact on the accessibility of cultural content and the preservation of cultural heritage; in 2010, the number of

[333] According to the COFOG methodology. This covers expenditure on cultural services and broadcasting and publishing services. 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, film productions and other productions), scholarships, loans and subsidies granted to artists, writers, designers, composers and other employees in the area of culture.

[334] In 2009, only Estonia's total government expenditure on culture as a percentage of GDP was higher than Slovenia.

[335] During the period 2005–2010, the share of general government expenditure on culture increased by 0.52 percentage point, of which 0.14 percentage point is on cultural services and 0.38 percentage point on broadcasting and publishing. This expenditure particularly strongly increased in 2008, when – according to the COFOG methodology – expenditure also included expenditure on RTV SLO; the share of expenditure also increased during the period after the data acquisition change.

[336] Expenditure on cultural services increased by 25.7% (in real terms).

[337] Visitors to puppet theatres were not taken into consideration because the 2009 statistical survey did not cover one of the main reporting units. If puppet theatres were also considered, the number of visitors would have been much higher in 2010.

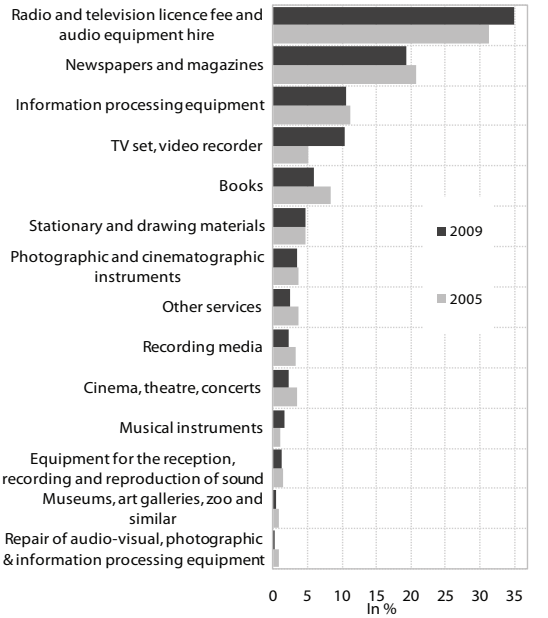
[338] In 2009, the number of people who watched Slovenian films amounted to 51,800, while the number of foreign film viewers amounted to 2,720,200. The high increase in the number of Slovenian film viewers was mainly the result of viewing one particular film.

[339] According to the data available from SORS, experts in literature and researchers from the field of publishing have highlighted the problem of a rapid increase in the number of titles of works published in recent years as a problem concerning hyper-production accompanied by a fall in the quality of publishing standards (Analysis of the situation in culture, 2011).

units in the digital library collection and the number of visitors to this portal continued to grow.

In 2009 (according to the most recent data from the Household Budget Survey), the expenditure on culture per household member increased in real terms (by 2.2%). Like in previous years, technical products (TV sets, photographic and cinematographic equipment, computers etc.) contributed most to this increase; these products are not necessarily cultural property, but can be related to culture. However, specific types of expenditure which are more directly associated with cultural contents[340] dropped significantly in 2009, such as expenditure in the groups covering cinema, theatre and concerts (-23.7%), museums and galleries etc. (-43.7%). The highest expenditure increase recorded ever since these data became available was the increase in expenditure on books (by 8.1%); however, in the structure of cultural goods, this type of expenditure still represents a 2.5 percentage point lower share in comparison to 2005. In an international comparison, which can only be made for expenditure on culture together with expenditure on recreation[341], the share of this expenditure in Slovenia in 2010 was – at 9.2% – still slightly above the EU average (9.0%)[342]. The financial accessibility of culture and recreation to various socioeconomic groups of the population is evident from the data on expenditure by income quintiles. In 2009, the ratio between expenditure on recreation and culture in the fifth and first income quintile, which is one of the highest of the consumption expenditure groups, dropped slightly and amounted to 5.8. Households in the upper three quintiles (which, on average, spend approx. EUR 2,000 per household, reduced their consumption for recreation and culture much more than households in the lower two quintiles (which spend less than EUR 1,000 on average). We assess that this is due to the fact that the upper quintiles can easier adjust this type of expenditure (in an adverse economic situation), as they spend more money on items that are more dispensable (this group also includes television and radio taxes, which increased during that period, school supplies etc.).

Figure 27: **Structure of household expenditure on culture, 2005 and 2009 (in %)**



Source: (SORS – Household Consumption Survey (HCS) 2011); calculations by IMAD.
Notes: Culture includes the following sub-classes of the COICOP category "Recreation and Culture": .09111 Equipment for the reception, recording and reproduction of sound; .09112 TV set, video recorder; .09121 Photographic and cinematographic equipment; .09130 Information processing equipment (typewriter, calculator, personal computer); .09140 Recording media; .09150 Repair of audio-visual, photographic and information processing equipment; .09211 Musical instruments; .09421 Cinema, theatre, concerts; .09422 Museums, art galleries, zoo and similar; .09423 radio and television licence fee and audio-video equipment hire; .09424 Other services; .09510 Books; .09520 Newspapers and magazines; .09540 Stationery and drawing materials.

[340] According to the UNESCO definition.
[341] According to the National Accounts methodology. According to this methodology, the data for the culture and recreation group represent a single amount of expenditure. The shares in consumption are calculated with regard to consumption in the domestic market, which covers consumption by residents and foreigners in Slovenia.
[342] The domestic market's almost one percentage point higher share, if compared to the EU, is mainly intended for package holidays.

Part II
Indicators of Slovenia's development

THE FIRST PRIORITY:

A competitive economy and faster economic growth

- Gross domestic product per inhabitant in purchasing power standards
- Real GDP growth
- Inflation
- General government balance
- General government debt
- Balance of payments
- Gross external debt
- Labour productivity
- Market share
- Unit labour costs
- Structure of merchandise exports by factor intensity
- Exports and imports as a share of GDP
- Foreign direct investment
- Entrepreneurial activity
- Share of non-financial market services
- Total assets of banks
- Insurance premiums
- Market capitalisation of shares

Gross domestic product per inhabitant in purchasing power standards

Slovenia is widening its gap with the EU average in terms of economic development measured as GDP per capita. According to Eurostat's figures,[1] Slovenia's GDP per capita in purchasing power standards totalled PPS 20,700[2] in 2010, being 15% lower than the EU average. While Slovenia had still reached 91% of the EU average in 2008, its development level dropped to 87% in 2009 and to 85% in 2010. In 2011 Slovenia's economic development continued to decline in comparison with that in the EU, according to our estimate, as economic activity in Slovenia was again weaker than on average in the EU.[3] As during the crisis Slovenia recorded one of the largest declines of economic activity in the EU in the whole period from the last quarter of 2008 to the year 2011, in 2008–2011 its position against the EU average deteriorated more than it had improved in 2005–2008. In 2010, it was thus at the level of the relative economic development before 2004. The widening of Slovenia's development gap since the beginning of the crisis is mainly attributable to the fact that in 2009 Slovenia recorded a far larger decline in GDP than the EU[4] as a whole (by 3.7 p.p.), and to a lesser extent to differences in general price levels. In 2010, Slovenia recorded a 0.5 p.p. lag behind the average growth of GDP in the EU and a consequent further widening of the gap, which was otherwise mitigated by a decline in the general price level in Slovenia that year. Specifically, amid moderate price dynamics in the time of low economic activity, the general price level at the GDP level dropped to 83% of the EU average in 2010, 2 p.p. lower than in 2009. Decomposition of per capita GDP to productivity and employment rate shows that in 2009 the decline in Slovenia's GDP per capita relative to the EU average mainly arose from the relatively larger decline in productivity than in the EU. With the labour market adjusting to weaker economic conditions in 2010, the employment rate in Slovenia declined relatively more strongly than that in the EU as a whole, while productivity in purchasing power standards remained at approximately the same level relative to the EU as in 2009.

Besides Slovenia, only six EU countries widened their gaps to the EU average in terms of economic development in 2010. In 2005, Slovenia was at a similar development level (87% of the EU average) as Cyprus (90%) and Greece (91%). While Cyprus almost caught up with the EU-27 average at the end of 2010 (99%), Greece and Slovenia widened their gaps. Malta thus came close to Slovenia in GDP per capita in purchasing power standards, while it had still lagged 9 p.p. behind in 2005. In 2010, Slovenia was closest to Greece, the Czech Republic and Portugal (5 p.p. behind Greece, and 5 p.p. ahead of the Czech Republic and Portugal). The gap in GDP per capita in purchasing power standards between EU countries, which had been in the ratio of one to nine at the beginning of the preceding decade (Romania 5,000 PPS/Luxembourg 46,700 PPS), decreased to one to six in 2010 (Bulgaria 10,700 PPS/Luxembourg 66,300 PPS).

[1] In December 2011, Eurostat released data on gross domestic product per capita expressed in purchasing power standards (GDP in PPS) for 2008–2010. Based on revised purchasing power standards for 2008–2010 and the latest, revised, data on GDP in national currencies and on the latest data on population size.

[2] GDP per capita in purchasing power standards enables comparison between countries by eliminating the effect of the differences in price levels. Purchasing power standards (PPS) – the selection of the currency in which the results are expressed is a convention. In the Eurostat comparison the results are expressed in 'currency' called PPS. PPS is an artificial, fictitious, currency, which at the level of the EU equals to one euro. PPS or 'EU-27 euro' is a 'currency' that reflects the average price level in the EU-27.

[3] GDP dropped by 0.2% in real terms in Slovenia in 2011; in the EU it increased by 1.5%.

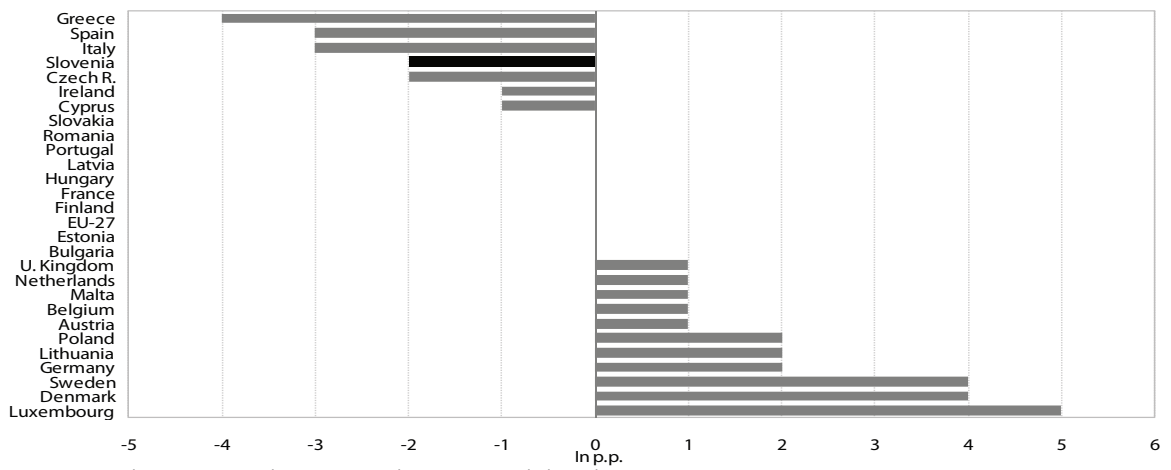
[4] See also the indicator Real growth

Table: **GDP per inhabitant in PPS, volume indices, 1995–2010, EU-27=100**

	1995	2000	2005	2007	2008	2009	2010
EU-25	**105**	**105**	**104**	**104**	**103**	**103**	**103**
EU-15	**116**	**115**	**113**	**111**	**111**	**110**	**110**
Austria	135	132	125	124	124	125	126
Belgium	129	126	120	116	116	118	119
Bulgaria	32	28	37	40	44	44	44
Cyprus	87	88	90	92	99	100	99
Czech Rep.	77	71	79	83	81	82	80
Denmark	132	132	124	123	125	123	127
Estonia	36	45	62	70	69	64	64
Finland	108	117	114	118	119	115	115
France	116	115	110	108	107	108	108
Greece	84	84	91	90	92	94	90
Ireland	104	132	145	148	133	128	128
Italy	121	118	105	104	104	104	101
Latvia	31	36	48	56	56	51	51
Lithuania	36	40	53	59	61	55	57
Luxembourg	223	245	254	275	279	266	271
Malta	86	85	78	76	79	82	83
Hungary	51	54	63	62	64	65	65
Germany	129	118	116	116	116	116	118
Netherlands	123	134	131	132	134	132	133
Poland	43	48	51	54	56	61	63
Portugal	77	81	80	79	78	80	80
Romania	np	26	35	42	47	47	47
Slovakia	47	50	60	68	73	73	74
Slovenia	**75**	**80**	**87**	**88**	**91**	**87**	**85**
Spain	91	97	102	105	104	103	100
Sweden	125	128	122	125	124	119	123
U. K.	113	119	122	116	112	111	112

Source: Eurostat Portal Page – Economy and Finance – National Accounts, 2012.

Figure: **Relative change in GDP per inhabitant in PPS (in p.p.) in comparison with EU-27 in 2010**



Source: Eurostat Portal Page - Economy and Finance – National Accounts, 2012; calculations by IMAD.

Real growth of gross domestic product

Gross domestic product dropped by 0.2% in 2011. The already low GDP growth in 2010 (1.4%) was followed by a contraction of GDP in 2011 amid a deeper decline in domestic consumption and lower growth in exports of goods and services compared to 2010. Exports thus remained the main factor of growth. Within domestic consumption, inventories again made a positive contribution to GDP growth, but it was nearly half lower than in the preceding year. Economic activity was shrinking throughout the year, most notably in the last quarter (seasonally adjusted).

Under the influence of incentives from the external environment, investments in machinery and equipment also increased last year, as did exports. Imports were higher as well. Last year, exports of goods and services rose by 6.8%, 2.7 p.p. less than in 2010. Exports of goods again recorded much higher growth than exports of services. The growth of exports had been easing for years in view of the slackening growth in Slovenia's main trading partners, but the last quarter of 2011 recorded a smaller decline (seasonally adjusted). The production in the manufacturing sector, which is highly export-oriented, responded faster and more strongly to the slowdown in foreign demand than exports. Production volume declined particularly in medium-low-technology industries (the rubber, metal and non-metal industries), which are, as manufacturers of intermediate goods, among the first to suffer from shrinking demand. The relatively smaller slowdown of growth in exports than in production volume in manufacturing was, according to our estimate, partly due to re-export activity, which is relatively strong in trade in electricity and petroleum products. As a result of incentives from the international environment and growing production capacities,[1] domestic investment in machinery and equipment was up 6.4% last year, which is more than in 2010 (by 2 p.p.). As a result of the imports of intermediate goods, investment equipment and transport services, imports of goods and services also expanded last year, by 4.7%, which is 2.5 p.p. less than a year earlier.

Investment in construction remains much lower than before the crisis. A significant decline in the construction sector in 2009 that followed the investment cycle in previous years deepened further in the past two years, so that in 2011 construction investment was around 50% lower than before the crisis. In all three years, activity was declining in all construction segments. The decline in residential construction, the largest in this period, followed the vigorous construction activity in the previous period and was still related to the stock of unsold flats. Another factor is the financial crisis, which is also related to the decline in non-residential construction activity. In civil-engineering, where activity dropped least in these three years, the decline mainly reflected the moderation of infrastructure construction, partly on account of the completion of certain projects in the years before the crisis and partly due to deteriorated public finances and the nature of deficit reduction during the economic crisis.[2]

Household and government consumption shrank in 2011. Amid a contraction of disposable income and in an environment of increased uncertainty, households reduced spending for the third year in a row. With a further decline in employment and modest real growth of wages, household income from wages was lower than in 2010. In 2011, households again repaid more consumer loans than they took out. Government consumption also dropped (by 0.9%), for the first time since the onset of the economic crisis, according to our estimate due to a decline in intermediate consumption. As a result of limited public funds, the growth of the number of employees in the general government sector also slowed last year.

In 2011, GDP growth also dropped in the euro area but was, as in the preceding year, higher than in Slovenia. Last year, GDP in the euro area was up 1.4% on the previous year when it recorded 2% growth. The delay in Slovenia's economic recovery is still mainly due to domestic factors, primarily the situation in the construction sector and related activities, poor access to sources of finance, fiscal conditions and movements on the labour market, which are not conducive to the recovery of private consumption. Moreover, the slow pace of recovery is also partly related to export growth. In 2009, Slovenia's exports shrank more than on average in the euro area and a comparison with Slovenia's main trading partners in the EU (Germany, Italy, Eastern European EU Member States) shows that exports in those countries are picking up at a faster pace.

[1] Capacity utilisation in manufacturing reached 79.9% in Q4 2011; this is still less than before the crisis (it was highest in 2007: 85.7%) but nevertheless considerably more than in 2009 and 2010 (71.3% and 76.4%, respectively).

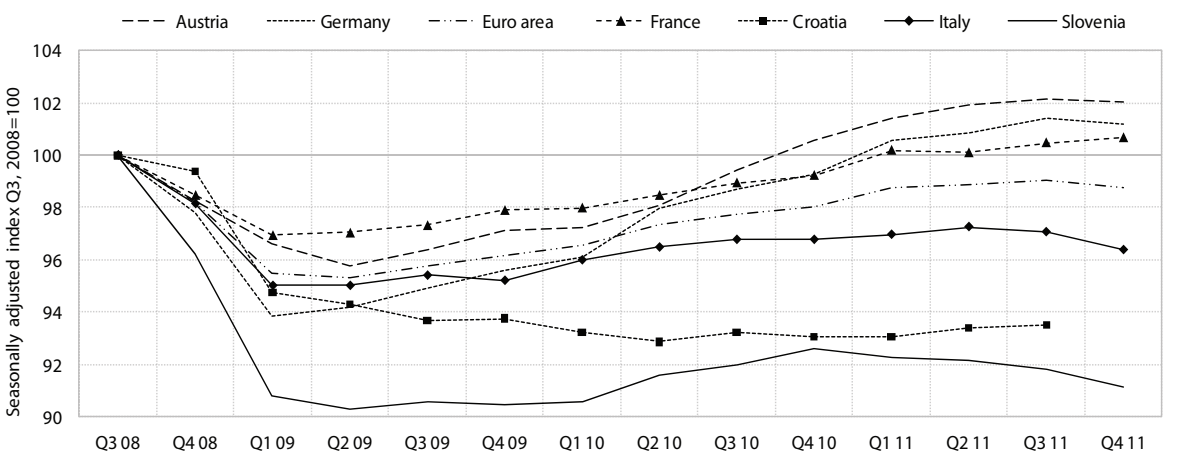
[2] The reduction in public finance expenditure was mainly achieved by cutting the planned expenditure on investments, which were in Slovenia mainly related to construction in the years before the economic crisis.

Table: **Contribution of individual expenditure components to GDP growth in Slovenia**

	1996	2000	2005	2006	2007	2008	2009	2010	2011
Real GDP growth, in %	3.6	4.4	4.0	5.8	6.9	3.6	-8.0	1.4	-0.2
Contributions to GDP growth, in p.p.									
External trade balance (export–import of goods and services)	0.3	2.5	2.2	0.2	-2.0	-0.6	2.3	1.5	1.4
- Exports of goods and services	1.4	6.2	6.1	7.8	9.1	2.0	-11.5	5.6	4.5
- Imports of goods and services	1.1	3.7	3.9	7.6	11.2	2.6	-13.8	4.1	3.0
Total domestic expenditure	3.3	1.8	1.8	5.7	8.9	4.2	-10.3	-0.1	-1.6
- Private consumption	1.9	0.7	1.1	1.5	3.2	1.9	-0.1	-0.4	-0.2
- Government consumption	0.5	0.6	0.7	0.8	0.1	1.1	0.5	0.3	-0.2
- Gross fixed capital formation	1.8	0.6	0.7	2.6	3.5	2.2	-6.7	-1.9	-2.3
- Changes in inventories	-1.0	0.0	-0.7	0.7	2.0	-1.0	-4.0	1.9	1.0

Source: SI-STAT Data Portal – National Accounts – Gross domestic product, annual data, Gross domestic product by quarters, 2012; calculations by IMAD.

Figure: **Recovery of GDP in Slovenia and its key trading partners**



Source: Eurostat Portal Page - Economy and finance – National accounts, 2012.

Inflation

Consumer prices increased by 2.0% in 2011.[1] As in the previous three years when the rates of inflation were similar, price movements mainly reflected weak economic activity. Different measures of core inflation, which show these effects, moved between 1% and 2% at the end of the year. This is otherwise more than in previous years and a result of the spillover of higher oil and food prices from international markets to the domestic retail prices of certain goods and service from the beginning of 2011 and the end of 2010. Unlike in previous years, the total effect of fiscal charges was small last year (0.1 p.p. to 0.2 p.p.). The greatest contribution arose from higher excise duties on tobacco products. Monthly fluctuations in prices of seasonal goods and services were greater than usual. Energy and food prices also increased most notably since the beginning of the crisis (2009–2011), by 36.0% and 5.5%, respectively. The prices of services rose the least (3.0%), while the prices of non-energy industrial commodities dropped by 4.4%.[2]

Energy price rises accounted for nearly half of last year's total consumer price growth. The principal reason for last year's growth in domestic energy prices was almost 18% higher oil prices (in euros) on global markets. Energy prices grew by 6.9%, in the preceding two years combined by more than 29%, partly also owing to higher excise duties. Energy prices contributed 0.9 p.p. to inflation in 2011, two thirds of which came from higher prices of liquid fuels for transport and heating and the rest from higher prices of gas, district heating and electricity.

Food prices recorded higher growth than in the previous year. Food prices were up 4.9% at the end of the year and contributed 0.8 p.p. to inflation in 2011. They increased 2 p.p. more than a year earlier. As in 2007, when domestic food prices had risen by nearly 14%, last year the main reason for price rises was higher global prices of commodities, but due to less favourable economic circumstances the pass-through to domestic retail prices was much smaller than in 2007.

The movement of prices of other goods and services remained moderate last year. Last year, prices of goods, excluding food and energy, dropped by close to 1% while prices of services rose by 0.4%. The decline in these prices in the last three years and modest growth in services prices in the last two years reflect weak demand. In this period, the largest decline in non-energy commodity prices was recorded for the prices of durable goods and a somewhat smaller decline for the prices of semi-durable goods, whose purchase can be deferred. Prices of non-durables have been growing ever since the beginning of the crisis, though in the last two years at lower rates than previously.

Seasonal fluctuations were stronger than in previous years. Seasonal fluctuations, which impact the dynamics of consumer price index between months, are typical particularly for clothing and footwear (where they are largest), and package holidays and fresh fruit and vegetables (where they are less pronounced). Last year seasonal fluctuations were stronger than in previous years, which can be partly explained by changes early last year in Eurostat's methodology for collecting prices of seasonal goods and services in Slovenia and euro area. According to the SORS estimate, this methodological change contributed 0.2 p.p. to inflation growth in 2011.

Inflation in the euro area was 2.7% last year. Consumer price growth exceeded the ECB's inflation target, which is just below 2% annually. The man factor of inflation was the increase in oil prices on the global market, which had a direct effect on growth in energy prices (with the same contribution to inflation as in Slovenia) and an indirect effect on the increase in other energy prices and certain other retail prices, so that the indicators of core inflation in the euro area also increased relative to the previous year. The key reason for lower inflation in Slovenia than in the euro area as a whole is weaker economic activity, which is shown in lower domestic core inflation, particularly in the component that results from the movement of prices of durable and semi-durable goods, which in the past three years were more or less falling in Slovenia, while they grew somewhat in the euro area. Slovenia also recorded somewhat lower growth in the prices of services.

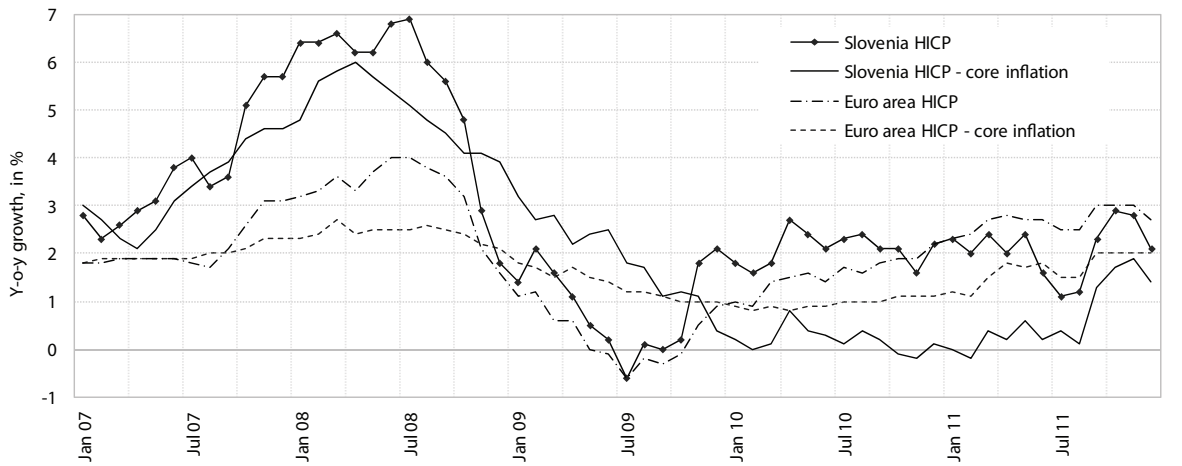
[1] In December 2011 compared with December 2010.
[2] The calculation of growth according these groups is based on the Harmonised Index of Consumer Prices (HICP).

Table: **Annual price rises in Slovenia and in the euro area, in %**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
Consumer prices in Slovenia (CPI)	9.0	8.9	2.3	2.8	5.6	2.1	1.8	1.9	2.0
Goods	7.1	8.8	2.0	2.1	6.0	1.3	1.9	2.7	2.7
Services	15.9	9.2	3.0	4.3	4.8	3.8	1.6	0.0	0.4
Administered prices	10.0	16.0	7.7	2.1	7.2	-7.8	12.6	11.5	7.1
Energy	8.2	18.9	9.8	3.7	9.6	-11.9	14.7	14.3	9.1
Other	11.4	12.0	3.0	-2.1	1.5	0.4	4.0	0.7	1.6
Consumer prices in the euro area (HICP)	2.5	2.5	2.2	1.9	3.1	1.6	0.9	2.2	2.7

Source: SI-STAT Data Portal – Prices – Consumer price indices, 2012; annual data (SORS), 2012; Eurostat Portal Page – Economy and Finance – Prices – Harmonised index of consumer prices, 2012; calculations by IMAD.

Figure: **Y-o-y consumer price rises in Slovenia and in the euro area (HICP)**



Source: Eurostat Portal Page – Economy and Finance – Prices – Harmonised index of consumer prices, 2012.
Note: Core inflation – consumer prices without energy and non-processed food.

General government balance

The general government deficit increased further in 2011, reaching its highest level since 1995. The general government deficit[1] for 2010 is estimated at 6.4% of GDP, up 0.4 p.p. from the 2010 level. In a deteriorated macroeconomic environment, total general government revenue increased only by 1.2% and expenditure by 2.0%. The high deficit level in 2011 was also due to specific transactions that increased general government expenditure as a current transfer (by 1.3% of GDP). The general government deficit was generated primarily at central government level,[2] much as it was in previous years. The deficit of local governments declined to 0.1% of GDP, while social security funds recorded a slight surplus (0.1% of GDP).

In 2011, general government revenue increased mainly due to transferred revenues. General government revenue as a share of GDP increased by 0.3 p.p. last year, to 44.5% of GDP, mostly on account of transferred revenues (payments from the EU budget, 1.3 p.p.), as other revenues (non-tax revenues, capital revenues, donations) dropped slightly and the contribution of revenues from taxes and contributions was neutral. The key tax categories of revenue structure otherwise did not change much. The relative share of revenue from assessed social security contributions remained level over the year before (15.5% of GDP). The share of assessed taxes on production and imports dropped by 0.2 p.p. of GDP (14.1% of GDP) due to modest domestic spending. Within that, the assessed value added tax declined somewhat more in nominal terms; revenue from excise duties also dropped, but to a lesser extent, as lower excise duties on energy were offset by revenue from slightly higher sales of excise products. Other taxes on production increased, by 2.4%. The relative share of current taxes on income and property (after the assessment of personal income tax and corporate income tax according to business results) remained the same as in 2010 (8.2% of GDP).

General government expenditure as a share of GDP rose by 0.6 p.p. in 2011 (50.9% of GDP). Its growth is, in addition to capital transfers and social benefits in cash and kind, also increasingly affected by expenditure on interest. The year 2011 recorded a strong increase (by 0.9 p.p.) in the relative share of capital transfers due to equity injections into NLB d.d and some state-owned companies, the takeover of debts from Slovenian Railways and the public company for the construction of hydroelectric power plants on the Sava River and payments of guarantees called. These transfers accounted for 1.3% of GDP. The share of social benefits in cash and kind grew by 0.6 p.p., mainly as a consequence of the rising number of unemployed and socially disadvantaged people as the indexation of pensions and social transfers was limited by the intervention law. With accelerated government borrowing in the last two years, the share of expenditure on interest increased by 0.4 p.p. Owing to restrictive wage policies in the public sector and modest growth in the number of employees in the general government sector (0.4%), the share of the compensation of employees remained at the 2010 level in 2011 (12.7% of GDP). The contraction of general government expenditure was reflected in a decline in the share of capital and capital transfers (by 0.7 p.p. of GDP), while the share of expenditure on subsidies declined (by 0.3 p.p. of GDP) due to a gradual expiration of anti-crisis measures. Expenditure on intermediate consumption as a share of GDP also shrank (by 0.3%).

The euro area saw a positive shift towards fiscal consolidation last year, according to the EC's estimate. According to the EC's estimate,[3] the general government deficits in the euro area and the EU declined by 2.1 p.p. and 1.9 p.p. on average, respectively, in 2011. The deficit in Slovenia was thus already more than 2 p.p. above the euro area average last year, after being slightly lower in 2010.

[1] ESA95 methodology.

[2] In the entire period 2000–2011, the deficit of the central government accounted for over 90% of the total deficit.

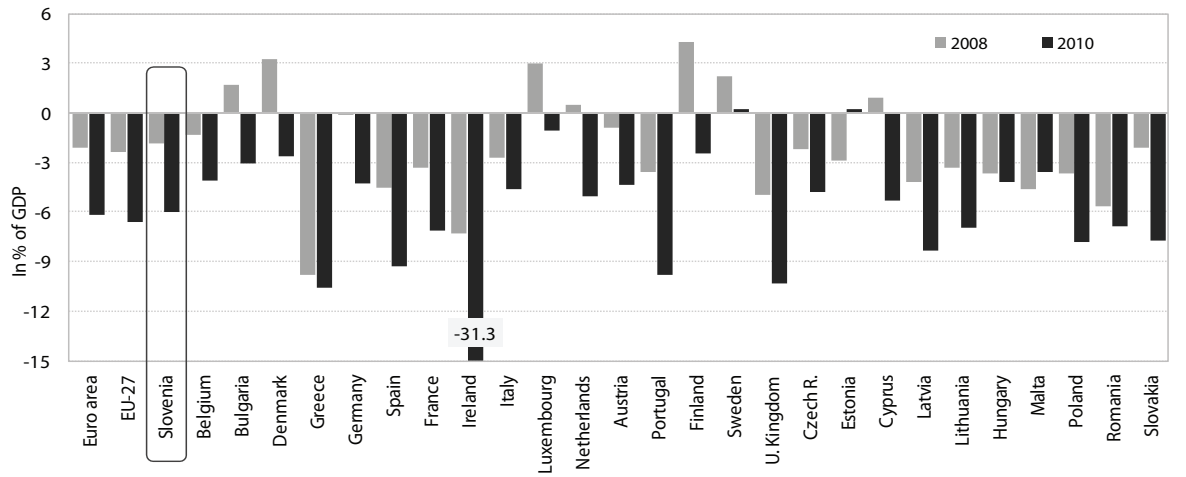
[3] European Economic Forecast – Autumn 2011 (European Commission), 2011.

Table: **General government revenue, expenditure and balance according to ESA95, Slovenia, 2000-2011, as a % of GDP**

	2000	2005	2006	2007	2008	2009	2010	2011
General government revenue	43.0	43.8	43.1	42.5	42.4	43.2	44.3	44.5
General government expenditure	46.7	45.3	44.5	42.5	44.3	49.3	50.3	50.9
General government deficit	**-3.7**	**-1.5**	**-1.4**	**0.0**	**-1.9**	**-6.1**	**-6.0**	**-6.4**
Central government	-3.2	-2.2	-1.4	-0.1	-1.3	-5.1	-5.2	-6.4
Local government	0.0	0.0	-0.1	-0.1	-0.6	-0.6	-0.4	-0.1
Social security funds	-0.5	0.7	0.1	0.2	0.0	-0.4	-0.4	0.1

Source: SI-STAT Data Portal - Economy - National accounts – Main aggregates of the general government, First release (SORS), 30 March 2012 (for 2008–2011). Non-financial accounts: general government S–13; calculations by IMAD (for 2000, 2005–2007).

Figure: **General government deficit/surplus, 2008 and 2010, as % of GDP**



Source: Eurostat Portal page – Government Finance Statistics, 2012.

General government debt

The outstanding amount of the general government debt at the end of 2011 is estimated at EUR 16.9 bn or 47.6% of GDP.[1] The debt rose by EUR 3.2 bn in 2011 and includes government borrowing to repay the debt that matured at the beginning of this year. After reaching its lowest level in 2008, the trend decline in the debt-to-GDP ratio (debt ratio) reverted in 2009, as the debt increased sharply (by 13.4 p.p.) due to the widening deficit and pre-financing of the 2010 borrowing requirement (the 7th highest increase among EU countries). In the next two years, debt growth slowed, but remained relatively high (12.3 p.p. in total). In 2009–2011, the debt ratio thus increased by as much as 25.7 p.p., almost double the size reached in 2008.

The bulk of the general government debt is the debt of the central government (96% of the total at the end of 2011). However, the share of the local government non-consolidated debt was also increasing steadily, particularly in 2008–2011, when it averaged EUR 11 m per year. As a result, the debt-to-GDP ratio of local governments doubled in the 2009–2011 period.

At the beginning of 2011, Slovenia mainly borrowed by issuing long-term securities on the euro area market, and at the end of the year, by issuing short-term treasury bills on the domestic market. In the first quarter of 2011, it issued a 10-year and a 15-year bond (each worth EUR 1.5 bn) on the euro area market, while in December 2011 it issued 18-month treasury bills in the amount of EUR 907 m on the domestic market to pre-finance the 2012 borrowing requirement. Most of the central government debt is thus still long-term (92% at the end of 2010). The weighted average maturity of the debt portfolio is 6.2 years and the debt maturity profile will be relatively evenly spread in the future years.

Slovenia's government bond issuance on the euro area market in the first quarter of 2011 took place in a still relatively favourable environment but the conditions deteriorated rapidly in the second half of the year. The 10-year government debt spread over benchmark averaged 120 basis points in Q1 2011. Market conditions deteriorated considerably after the EU Summit in May 2011 as its outcome was considered insufficient to cater to the needs of euro area countries affected by the debt crisis. With the sovereign debt crisis spreading to Italy and Spain in July 2011, the spreads of government bond yields deteriorated significantly in a number of countries in the EU. The spread of Slovenia's government bonds doubled (250 basis points), which was also due to specific domestic factors. In an environment of increased systemic risk, the credit rating of Slovenia was revised downwards one notch by three major rating agencies in the months of September and October (Moody's September 23rd; Fitch September 28th and S&P October 20th), stating deterioration of the banking system, weak policy implementation, deterioration of fiscal position and lack of a credible consolidation strategy as the main reasons.[2] In the first half of November, the government debt spread vis-à-vis German benchmark government bonds reached 600 basis points, the highest level thus far. By the end of the year, it declined, but remained relatively high (close to 500 basis points).

In 2009–2011, the general government debt in Slovenia was rising faster than the EU average. Totalling 47.6% at the end of 2011, the debt-to-GDP ratio was still significantly below that in the euro area as a whole, but it increased relatively more in the past three years (by 25.7 p.p., the euro area average by 17.9 p.p.).[3]

[1] Report on the general government deficit and debt – March (2012 Poročilo o primanjkljaju in dolgu države – marec 2012).

[2] Moody's revised further Slovenia's credit rating by one notch on 22 December 2011.

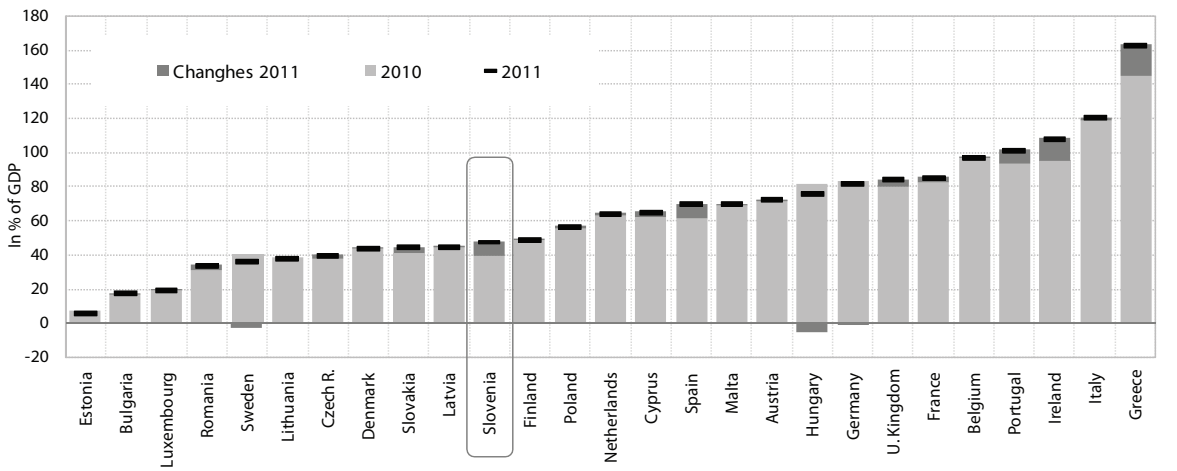
[3] European Economic Forecast – Autumn 2011 (European Commission), 2011.

Table: **Consolidated general government debt by sub-sectors, Slovenia, 2007–2011**

	In EUR m	2007	2008	2009	2010	2011
1	**General government, total, in EUR m**	**7,981**	**8,180**	**12,450**	**13,737**	**16,954**
1.1	Central government	7,904	8,092	12,110	13,204	16,347
1.2	Local government	256	354	523	626	685
1.3	Social-security funds	3	3	3	52	52
1.4	Consolidated debt among sub-sectors	-182	-268	-187	-146	-130
	In % of GDP					
1	**General government, total, in % of GDP**	**23.1**	**21.9**	**35.3**	**38.8**	**47.6**
1.1	Central government	22.9	21.7	34.3	37.3	45.9
1.2	Local government	0.7	0.9	1.5	1.8	1.9
1.3	Social-security funds	0.0	0.0	0.0	0.1	0.1
1.4	Consolidated debt among sub-sectors	-0.5	-0.7	-0.5	-0.4	-0.4

Source: Main aggregates of the general government sector (SORS).
Note: Data on debt are consolidated (reduced by the amounts of debt between government units).

Figure: **General government debt in EU countries, 2011**



Source: AMECO data base, 2012 and Main general government aggregates (SORS).

Balance of payments

The current account of the balance of payments recorded a modest deficit in 2011. After declining substantially in 2009, the deficit in current transactions narrowed further in 2010, then increased somewhat in 2011 and totalled EUR 385.3 m (1.1% of GDP). The deficit decline in 2010 was due to a lower deficit in income from capital and higher inflows of funds from the EU budget, which increased further in 2011. The surplus in trade in services also widened last year, but so did the deficits in factor incomes and merchandise trade. With regard to the structure by sectors, the deficit of the public sector and the surplus of the private sector widened again in 2011.

The merchandise trade deficit in 2011 was not much higher than the deficit in 2010. The merchandise trade deficit recorded EUR 1,334.8 m in 2011, EUR 129.9 m more than in 2010. In 2011, exports again recorded higher real growth (7.7%) than imports (5.7%), but the terms of trade[1] deteriorated less notably than in 2010. Broken down by end-use product groups, the merchandise trade deficit widened mainly due to a lower surplus in trade in consumer goods as a result of the expiration of incentives for the purchase of new vehicles in certain EU countries, which showed in lower exports of Slovenian vehicles. Imports continued to increase. The deficit in trade in intermediate goods narrowed, which was, despite higher prices of fuels and lubricants, due to a higher surplus in trade in goods for the manufacture of parts and accessories for motor vehicles. The deficit in trade in investment goods rose somewhat, mainly as a result of higher imports of machinery and equipment.

The surplus in the balance of services increased primarily due to higher income from travel and transport services. The surplus in the services balance widened by EUR 124.4 m to EUR 1,432.7 m, mainly due to a higher surplus in trade in travel services, which was largely due to a lower value of domestic households' trips abroad, amid a subdued growth in inflows from tourism. A wider trade surplus was also recorded in transport services, with the exception of rail transport. The deficit in trade in other services was also higher last year, primarily due to a lower surplus in trade in business services.

In 2011, the deficit in the balance of income from capital increased, unlike in 2010. The surplus in the balance of income from labour widened again. The deficit in factor incomes amounted to EUR 636.1 m in 2011, an increase of EUR 129.4 m over 2010, mainly due to higher net payments of interest on external debt. Interest payments have been increasing since the third quarter of 2010. Net interest payments of the government sector increased the most, as a result of bonds issued by the government and financial institutions (banks) to mitigate the consequences of the financial crisis and due to maturing coupon payments on bonds. Net interest payments of commercial banks were also higher last year, despite continued deleveraging, which can be explained by tighter terms of financing on international financial markets, and to a certain extent also by higher margins in light of the situation in the Slovenian banking sector. Net interest receipts of the Bank of Slovenia declined, largely due to higher interest payments into the Eurosystem, while net interest receipts from inter-company debt transactions within direct investment increased. The net inflow of income from labour rose mainly due to higher inflows of income earned by Slovenian residents abroad, while the outflow of foreign workers' income abroad remained around the previous year's level.

The absorption of funds from the EU budget improved last year. The surplus in the balance of current transfers widened further in 2011, to EUR 153.0 m, which is an increase of EUR 47.0 m over 2010. The widening was solely the result of improved absorption of EU funds, as the state budget recorded a surplus in the amount of EUR 407.1 m against the EU budget in 2011 (in 2010, EUR 326.4 m). In 2011, Slovenia received EUR 812.2 m[2] from the EU budget; the absorption from structural funds improved the most, by as much as 40% in comparison with 2010. The receipts from the Cohesion Fund were much lower, 40% relative to 2010, mainly as a result of failed public tenders for large infrastructure projects (railway infrastructure). Slovenia's payments to the EU budget totalled EUR 405.1 m. Within other government transfers, net payments of taxes and contributions abroad increased somewhat. The deficit in the private sector's transfers was higher than in 2010, on account of higher insurance payments and other transfers.

[1] The terms of trade according to the national accounts statistics deteriorated by 1.6% (in 2010 by 4.7%); import prices were up 6.1% and export prices 4.4%.

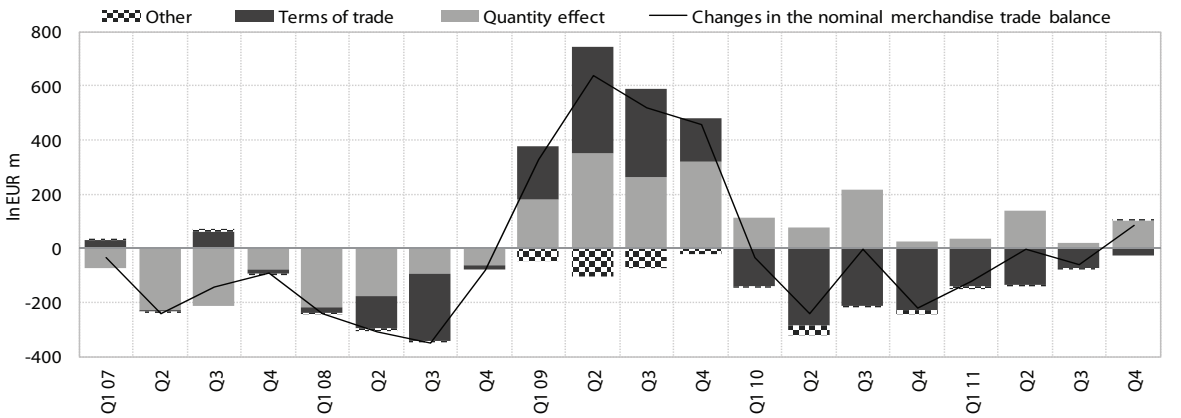
[2] 95.1% realisation with regard to the level planned in the state budget. The higher realisation was due a more realistic planning of inflows in the revised state budget.

Table: **Current account of the balance of payments and terms of trade, Slovenia, 1995–2011**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
Current account, in % of GDP	-0.3	-2.7	-1.7	-2.5	-4.8	-6.9	-1.3	-0.8	-1.1
Goods	-4.6	-5.7	-3.6	-3.7	-4.8	-7.1	-2	-3.4	-3.7
Services	2.8	2.3	3.2	3.2	3	3.8	3.3	3.7	4
Labour and capital income	1	0.1	-1	-1.4	-2.3	-2.8	-2.2	-1.4	-1.8
Current transfers	0.5	0.6	-0.3	-0.6	-0.7	-0.8	-0.4	0.3	0.4
Real growth rates of trade in goods and services, %									
Exports of goods and services	1.1	13.1	10.6	12.5	13.7	2.9	-17.2	9.5	6.8
Imports of goods and services	11.3	7.1	6.7	12.2	16.7	3.7	-19.6	7.2	4.7
Terms of trade, index									
Total	103	96.9	98	99.5	100.9	98.5	104.3	96.2	98.6
Goods	103.1	96.2	97.6	99.6	100.6	98.2	104.7	95.3	98.4
Services	100.6	102.1	99.9	99.5	102.7	99.4	99.9	101.5	100.2

Source: SI-STAT data portal – National accounts, 2012; Financial accounts, External economic relations (Bank of Slovenia), 2012; calculations by IMAD.

Figure: **Contribution of quantities and prices to the balance of trade in goods, in EUR m, 2007–2011**



Source: SI-STAT data portal – National Accounts, 2012; calculations by IMAD.
Note: The effect of the terms of trade and the quantity 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 y-o-y 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 quantity 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 of prices and the growth of quantities.

Gross external debt

Amid a more moderate growth of gross external debt, the debt of the general government has increased rapidly since the beginning of the financial and economic crisis. After expanding by EUR 0.4 bn in 2010, gross external debt climbed to EUR 41.6 bn by the end of 2011 and was EUR 0.9 bn higher than in December 2010. Also in 2011 most of the increase was contributed by the gross external debt of the *general government*, which rose by roughly the same amount as a year earlier, by EUR 1.7 bn to EUR 9.8 bn. Gross external debt increased mainly in the first quarter, when the government issued 10- and 15-year bonds in the total amount of EUR 3.0 bn.[1] At the end of the year, general government debt accounted for 23.7% of the total gross external debt, which is somewhat more than at the end of 2010 (20.1%). *The debt of affiliated companies* (enterprises with a 10% or higher foreign ownership share) also rose to a similar extent as in the previous year, by EUR 0.6 bn to EUR 5.2 bn; approximately two thirds of debt was generated by non-banking financial institutions involved in financial leasing, the rest by non-financial corporations (companies). After the slight decline in the previous year, the debt of *other sectors* (companies, in particular) also grew last year, by EUR 0.4 bn to EUR 9.9 bn. Its growth was largely a consequence of borrowing in the form of short-term and long-term loans, which companies had been repaying in the previous year. The volume of short-term commercial credits used by Slovenian companies to finance the imports of goods and services expanded again, yet less than in 2010. *Commercial banks* were repaying external debt for the third year in a row. Their external debt, which amounted to EUR 13.6 bn, was EUR 2.5 bn lower than at the end of 2010 (in 2010 it had dropped by EUR 0.4 bn). Banks net repaid EUR 2.3 bn in 2011 (EUR 1.5 bn in foreign loans and EUR 0.8 bn in deposits), EUR 0.8 bn more than a year earlier. They also carried out an early redemption of part of state-guaranteed bonds. The share of bank debt in gross external debt thus shrank considerably in 2011, from 39.3% in 2010 to 32.7%. Owing to the limited access to foreign sources of finance, banks had to tap central bank funds last year. Having declined in the previous two years, the debt of the *Bank of Slovenia* thus increased by EUR 0.6 bn last year, to EUR 3.0 bn, as the Bank of Slovenia borrowed short-term from the Eurosystem again to provide liquidity for domestic commercial banks. The long-term debt of the BS in the form of other debt liabilities remained at the same level as in 2010.

[1] At 4.375% and 5.125% interest rates, respectively.

Looking at the structure of gross external debt, in 2011 public debt increased again, while publicly guaranteed debt remained around the previous year's level and non-guaranteed private debt declined. *Private non-guaranteed debt* was dropping in the past three years, most notably in 2009 and 2010. In 2011, repayments of liabilities amounted to EUR 0.8 bn, so that private debt declined to EUR 23.4 bn. *Public and publicly guaranteed debt* combined rose further in 2011, but at more moderate growth rates than in the preceding two years. Specifically, public debt[2] grew by roughly the same amount as in 2010 (EUR 1.7 bn), while publicly guaranteed debt[3] remained around the 2010 level (EUR 18.1 bn in total, of which public debt EUR 9.8 bn). The volume of guarantees to domestic financial institutions declined, while the BS's liabilities to the Eurosystem increased. At the end of 2011, public and publicly guaranteed debts accounted for 43.7% of gross external debt (of which public debt for 23.7% and publicly guaranteed debt for 20.9%), which is 20.4 p.p. more than in 2008. Excluding liabilities to affiliated entities, which are not tracked for maturity, long-term debt represented 76.7% of total gross external debt, which is 0.2 p.p. more than in 2010.

Slovenia remains among the least indebted countries in the euro area. At the end of 2011, its gross external debt climbed to 116.6 % of GDP (a 1.7 p.p. higher figure than a year earlier). This is still much less than the average debt in the euro area, which had already reached 209.2% of GDP in 2010. As the euro is the predominant currency in the currency structure of external debt and with trade and capital flows in euros representing the prevailing share in the structure of flows, the fluctuations of the exchange rate do not pose a significant risk of an increase in the share of gross external debt in GDP or for its repayment. The risks are related to possible major shocks that could reduce economic growth and to a pronounced tightening in borrowing conditions.

[2] External public debt is generated with borrowing of the institutional government sector (according to ESA 95) 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 transferrable securities on a foreign financial market.

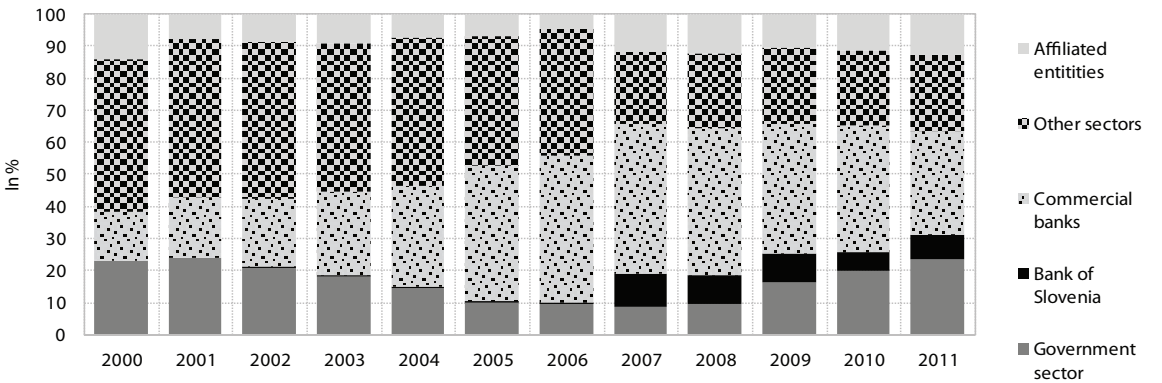
[3] Publicly guaranteed debt is a liability of a private legal entity, but payment is guaranteed by the state. Publicly guaranteed debt includes Bank of Slovenia liabilities to the Eurosystem incurred by the transfer of monetary policy from the BS to the ECB.

Table: **Slovenia's gross external debt position, end of the year, in EUR m, 1995–2011**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
Total gross external debt	4,275	9,491	20,496	24,067	34,783	39,234	40,294	40,699	41,557
Short-term debt	1,470	2,283	4,573	5,239	10,733	11,595	9,640	8,461	8,462
Public and publicly guaranteed debt	0	0	70	77	3,588	3,603	3,360	2,145	2,774
Private non-guaranteed debt	1,470	2,283	4,503	5,162	7,145	7,992	6,280	6,316	5,688
Long-term debt	2,083	5,895	14,509	17,710	20,058	22,820	26,456	27,606	27,875
Public and publicly guaranteed debt	1,178	2,883	3,729	4,275	4,508	5,533	10,602	14,351	15,355
Private non-guaranteed debt	905	3,012	10,780	13,435	15,550	17,287	15,854	13,255	12,520
Liabilities to affiliated entities	722	1,312	1,415	1,119	3,992	4,818	4,198	4,632	5,219
Public and publicly guaranteed debt	0	0	0	0	0	0	0	0	0
Private non-guaranteed debt	722	1,312	1,415	1,119	3,992	4,818	4,198	4,632	5,219

Source: Monthly Bulletin of the Bank of Slovenia, 2012.

Figure: **Structure of Slovenia's gross external debt by sector, 1995–2011**



Source: Monthly Bulletin of the Bank of Slovenia, 2012; calculations by IMAD.

Labour productivity

A severe drop in labour productivity[1] in 2009 was followed by growth in 2010 and 2011, but given the weak economic recovery, it was largely due to lower employment. After being relatively strong for more than ten years (3.9% annually, on average), labour productivity growth dropped to a mere 1% at the onset of the economic crisis in 2008. In 2009, it declined by 6.3% owing to the contraction of economic activity. The decline was followed by 4% growth in 2010, which was, amid modest GDP growth (1.4%), mainly due to a decline in employment (-2.5%), as employment tends to adjust to lower economic activity with a lag. In 2011, economic activity shrank slightly (by 0.2%), but with employment continuing to fall (albeit less than in the preceding two years) labour productivity increased to 1.6%.

In the previous two years (2010 and 2011), labour productivity growth mainly stemmed from manufacturing activities and traditional services (transport and trade in particular). During the strong business cycle (2005–2008), the main contributions to productivity growth came from manufacturing and construction, as well as certain traditional (trade and transport) and financial activities. All these activities were marked by strong sectoral productivity growth. The structural component made a decisive contribution to the high national productivity growth only in the construction sector (the share of construction in total employment of the economy increased strongly in this period). After the slump in productivity in 2009, whose structure was the mirror image of that from the pre-crisis period (the drop in productivity was mainly due to sectors with the greatest positive contributions in 2005–2008), in 2010 and 2011, productivity growth once again mainly stemmed from manufacturing activities and traditional services. Knowledge-intensive market services (information-communication and professional-technical services) made a somewhat greater positive contribution to growth than in 2005–2008, while financial intermediation services contributed somewhat less. The greatest deviation of labour productivity from its pre-crisis trend was recorded for the construction sector. Its contribution to labour productivity growth, which has been negative since 2009, arises from its lower share (structural component) and waning productivity. The contribution of public services (public administration, education, health and social work) has also increased notably since 2008, largely on account of their higher share in total employment (structural component) due to a drop in employment in the private sector of the economy.

Following the steeper decline in 2009, Slovenia recorded higher labour productivity growth in 2010 and 2011 than the EU as a whole. In 2010 and 2011, real productivity growth in Slovenia was somewhat higher (4.0% and 1.6%, respectively) than that in the EU (2.5% and 1.1%, respectively), where it had declined less (by 2.5%) than in Slovenia (by 6.3%) in 2009. In both years, the movement of employment[2] had a larger impact on labour productivity in Slovenia than in the EU, while economic activity was weaker.[3]

In 2010 (the most recent data available), Slovenia's gap with the EU average in terms of labour productivity (in purchasing power standards/PPS) remained at the same level as in 2009 when it had widened significantly. With GDP shrinking more than in the EU, the gap in productivity (in PPS) between Slovenia and the EU average widened by 3 p.p. in 2009. In 2010, the relatively larger drop in employment in Slovenia than in the EU was almost entirely offset by the relatively lower growth of GDP in Slovenia in comparison with the EU average. In 2010 (the latest available data), Slovenia thus reached 80.4% of the EU average in terms of labour productivity in PPS (74.0% of the euro area average), which is approximately the same level as in 2009.

[1] Labour productivity is calculated as the ratio of GDP at constant prices to employment according to the methodology of national accounts statistics.

[2] In 2010, employment dropped by 2.5% in Slovenia, compared with 0.5% in the EU; in 2011, employment dropped by 1.7% in Slovenia, while in the EU it had already increased by 0.4%.

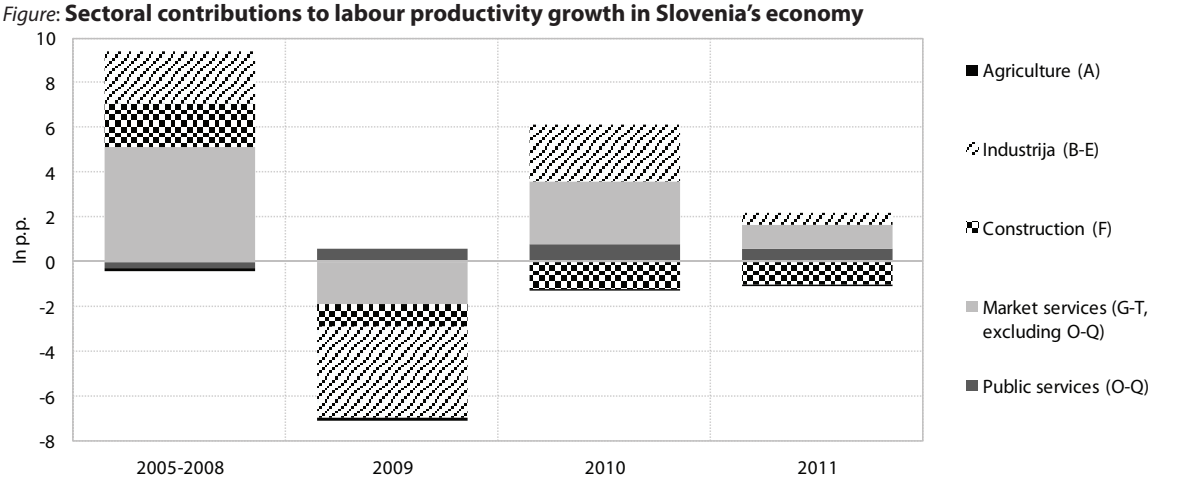
[3] In 2010, GDP grew by 1.4% in Slovenia and 1.9% in the EU. In 2011, it declined by 0.2% in Slovenia while in the EU it already started to grow (1.5%).

Table: **Labour productivity (GDP per employee) in PPS, in %, EU27=100**

	2000	2005	2006	2007	2008	2009	2010
EU-27	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
EMU-17	111.9	109.1	109.0	109.1	109.3	109.3	108.7
Austria	123.5	118.5	119.1	117.0	116.5	115.5	115.3
Belgium	137.3	130.4	129.1	127.6	126.8	127.5	127.5
Bulgaria	31.3	35.8	36.4	37.5	39.6	40.1	41.8
Cyprus	84.3	82.9	84.1	85.5	91.0	91.4	90.3
Czech Rep.	65.6	73.0	74.0	76.3	74.0	75.0	73.4
Denmark	111.1	107.2	107.0	104.8	105.8	106.2	111.6
Estonia	47.2	60.8	62.4	66.7	66.0	65.8	69.2
Finland	115.5	111.2	110.6	113.6	113.3	110.1	111.5
France	120.4	117.4	116.2	116.4	116.1	117.1	116.0
Greece	94.2	95.9	97.3	95.2	97.9	98.3	94.8
Ireland	129.4	136.0	136.4	137.9	128.6	132.0	136.9
Italy	127.5	112.1	111.1	111.6	112.9	112.6	109.6
Latvia	40.1	47.8	48.8	51.4	51.6	52.8	54.6
Lithuania	43.2	55.0	56.8	59.6	62.1	57.5	62.3
Luxembourg	176.9	170.3	179.5	179.9	178.1	168.0	169.9
Hungary	57.0	67.7	67.8	67.0	70.9	72.1	71.2
Malta	98.9	91.7	89.8	88.6	90.5	93.0	91.5
Germany	107.2	108.6	108.7	108.4	107.9	104.9	105.3
Netherlands	115.0	114.5	114.4	114.5	115.4	112.3	113.2
Poland	55.5	61.6	61.0	62.2	62.3	65.5	66.7
Portugal	72.1	72.9	73.1	74.0	73.5	75.8	76.4
Romania	23.7	36.1	39.7	43.4	49.1	49.2	49.0
Slovakia	58.4	68.8	71.7	76.4	79.8	79.8	81.6
Slovenia	**76.1**	**83.2**	**83.4**	**83.1**	**83.8**	**80.8**	**80.4**
Spain	104.2	101.4	102.8	103.1	104.3	109.8	109.0
Sweden	114.9	112.0	113.1	114.9	114.2	111.3	114.0
U. K.	111.3	113.0	112.6	110.1	106.8	105.5	106.6

Source: Eurostat Portal Page - Economy and finance – National accounts, 2011.

Figure: **Sectoral contributions to labour productivity growth in Slovenia's economy**



Source: Calculations by IMAD based on SORS data (National accounts, 2012).
Note: data for 2011 pertain to productivity growth from Q3 2010 to Q3 2011.

Market share

In 2010, the shrinkage of Slovenia's world market share deepened and Slovenia was in the group of EU countries with above-average declines, for the third year in a row. In 2008–2009, Slovenia was in 8th place in the relatively large group of EU countries that saw their world market shares decline, while in 2010, when the world market share of the EU deepened as well, it was 4th even. This indicates a more pronounced weakening of export competitiveness of the Slovenian economy during the crisis. Specifically, in 2001–2007, when the world market share of the EU was practically stagnant, Slovenia was in 10th place[1] among the 15 Member States with world market share growth, although behind most new Member States, which are its main competitors.

A deeper decline in Slovenia's world market share in 2010 reflected the contraction of its market shares both in and outside the EU. After in 2009, Slovenia's market shares in Germany and France and hence on the EU market increased due to incentives for car purchases, they declined again in 2010 due to their abolition. Although in 2010 Slovenia's market shares dropped in most of our main trading partners in the EU, except in Austria and Poland, the decline of its market share in the EU was nevertheless visibly smaller (-1.9%) than on the world market (-10%). The larger decline on the world market was primarily the result of a lower market share in Russia (by a third).[2] Meanwhile, Slovenia's market shares in Bosnia and Herzegovina shrank again in 2010, after growing in 2009, while its market share in Croatia ceased to decline. Broken down by the Standard International Trade Classification (SITC) sections, the decline in Slovenia's world market share in 2010 was, besides by road vehicles, also impacted by industrial machinery, electrical machinery and appliances, medical, pharmaceutical and certain other chemical products[3], furniture and miscellaneous manufactured articles.

Quarterly data show that in the first nine months of 2011 the falling of Slovenia share of the world goods trade slowed more notably than in the EU as a whole.[4] Despite the relatively more favourable movements compared with the EU average, Slovenia

Table 1: **Slovenia's world market share according to SITC**

SITC code		Share in Slovenia's exports in 2010, in %	Share on world market, annual growth, in %		
			2001–2007	2008–2009	2010
0 to 9	**Total**	**100.0**	**4.8**	**-2.7**	**-11.6**
0 to 4	**Food and raw materials**	**11.9**	**5.8**	**7.0**	**-3.6**
5 to 8	**Manufactured products**	**88.1**	**5.4**	**-2.7**	**-11.8**
5	Chemicals and related products n.e.s.	16.2	5.7	1.2	-9.2
54	Medical and pharmaceutical products	8.8	4.9	-3.1	-3.4
6	Manufactured goods classified chiefly by material	22.2	2.8	-5.8	-8.3
67	Iron and steel	3.5	3.1	-11.1	3.7
68	Non-ferrous metals	3.1	0.7	-12.1	-4.1
69	Manufactures of metal	4.7	5.9	-7.7	-6.5
7	Machinery and transport equipment	39.0	8.5	0.0	-14.2
71	Power generating machinery and equipment	2.9	4.4	-2.2	5.2
74	General industrial machinery n.e.s.	5.8	9.3	-5.9	-6.1
77	Electrical machinery, apparatus and appliances	11.0	6.1	-0.7	-6.0
78	Road vehicles	14.2	9.5	7.0	-24.0
8	Miscellaneous manufactured articles	10.8	0.4	-8.3	-15.4
82	Furniture and parts thereof	3.0	-1.0	-15.5	-16.0
89	Miscellaneous manufactured articles n.e.s.	3.3	7.4	-6.5	-11.9

Source: United Nations, UNCTAD, 2011; calculations by IMAD. Note: SITC – Standard International Trade Classification. 1All allocated products (SITC 0 to 8+961+971).

[1] The average annual growth rates of the EU and Slovenian world market shares in 2001–2007 were 0.2% and 4.2%, respectively; in 2008–2009, the world market share of the EU declined by 2.2% and that of Slovenia by 3.2%; in 2010, by 6.7% and 10%, respectively.
[2] The decline was a consequence of the modest growth of Slovenia's exports to Russia (by 2.9% in nominal terms), amid a concurrent strong increase of Russian imports (by nearly 50%). The other, Asian and South American, markets (China, India and Brazil) that have otherwise grown fastest during the crisis are relatively insignificant for Slovenia, given the structure of its foreign trade.
[3] Essential oils, perfumes and toiletries, plastic products etc.
[4] The Slovenian and the EU shares on the world goods market declined by a respective 0.2% and 1.1% (annually) in the first nine months of 2011.
[5] In the UK, the Czech Republic, Hungary, the Netherlands, Belgium, Denmark, Greece, Finland, Sweden and Romania.

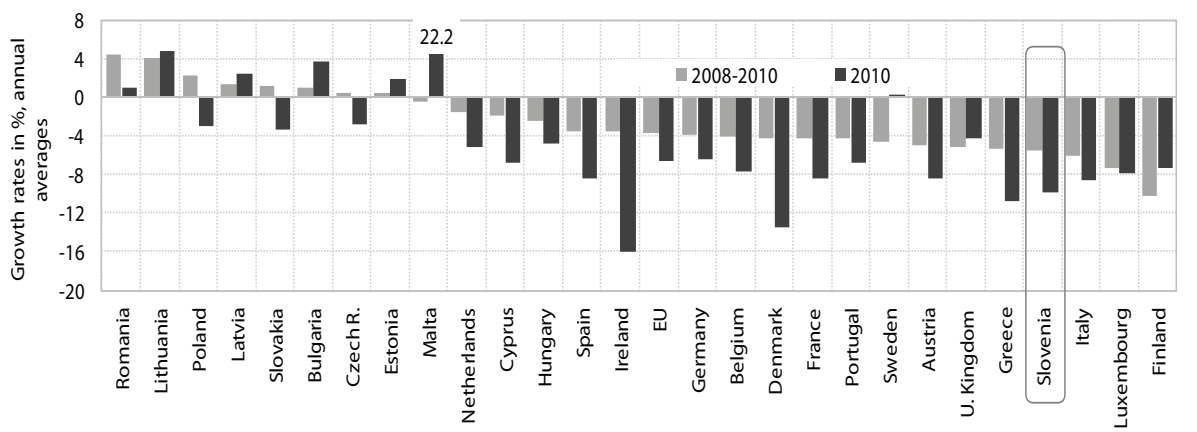
was still high (sixth) in the group of EU countries whose shares on the world goods market declined, as the market shares of the other eleven Member States for which data are available increased last year. The negative trend came to a halt largely on account of renewed growth in Slovenia's market shares in Germany and Croatia. Owing to market share growth in Germany and certain relatively less important EU markets,[5] Slovenia's market share in the EU expanded once again. The contraction of Slovenia's market shares outside the EU also eased noticeably due to a rebound in market share growth in Croatia.

Table 2: **Slovenia's shares in the world market and in main trading partners, in %**

	1995	2000	2005	2006	2007	2008	2009	2010
Market share on world market [1]								
Slovenia	0.162	0.137	0.173	0.176	0.193	0.183	0.181	0.163
EU	np	37.437	38.384	37.712	38.042	36.415	36.360	33.942
Slovenia's market share in main trading partners [2]								
Germany	0.540	0.474	0.457	0.449	0.472	0.459	0.470	0.450
Italy	0.605	0.498	0.589	0.612	0.687	0.630	0.626	0.608
Austria	0.805	0.959	1.203	1.355	1.328	1.311	1.280	1.311
France	0.249	0.204	0.311	0.268	0.287	0.275	0.351	0.328
United Kingdom	0.088	0.055	0.086	0.097	0.115	0.110	0.110	0.107
Poland	0.361	0.470	0.446	0.488	0.515	0.487	0.437	0.469
Hungary	0.754	0.525	0.536	0.630	0.940	0.838	0.828	0.823
Czech Republic	0.522	0.468	0.521	0.525	0.574	0.507	0.514	0.458
Croatia	11.866	8.724	8.729	8.470	8.267	8.155	8.065	8.065
Serbia	N/A	N/A	N/A	5.514	5.447	5.109	5.322	5.199
Bosnia and Herzegovina	N/A	N/A	9.030	8.000	7.514	7.586	8.272	7.585
Russian Federation	N/A	0.564	0.587	0.541	0.473	0.445	0.425	0.284

Source: United Nations Commodity Trade Statistics Database, 2011; calculations by IMAD.
Note: [1] 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. [2] 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.

Figure: **Market shares of EU Member States on the world market, average annual growth rates in %**



Source: United Nations Commodity Trade Statistics Database, 2011; calculations by IMAD.

Unit labour costs

In 2010, the ratio of labour costs to GDP deteriorated for the third year in a row. After the strong growth in 2009 (by 5.6%) arising from a substantial decline in labour productivity due to lower economic activity, in 2010 real unit labour costs continued to grow (1.4%) owing to strong growth in private sector wages under the impact of the increase in minimum wage. As a result of a rebound in economic growth, but primarily due to the shrinkage of employment, labour productivity rose again in 2010, yet less than the compensation of employees per employee. This was another significant wage increase during the crisis. The first, in 2008, was due to wage adjustment for high past inflation and productivity, particularly in the private sector, and partly also to the beginning of the elimination of wage disparities in the public sector. After declining slightly in 2000–2007,[1] real unit labour costs therefore started to grow in 2008.

After it deteriorated more than in the economy in 2008–2009, in 2010 the ratio of labour costs to value added in manufacturing improved somewhat. *Being the most export-oriented sector, manufacturing was hit hardest by the sharp fall in foreign demand, particularly in 2009.* Manufacturing recorded an above-average fall in value added, and consequently, an above-average drop in labour productivity.[2] *Growth in real unit labour costs in manufacturing was therefore much stronger (6% per year in 2008–2009) than in the economy as a whole (4.1%), despite weaker growth in the compensation of employees per employee.* However, with a rebound in foreign demand, in 2010 manufacturing also enjoyed much higher labour productivity growth than other sectors of the economy due to a larger increase in value added and a steeper fall in employment. Nonetheless, the decline in real unit labour costs was relatively modest (-0.6%) owing to a concurrent, more pronounced, increase in the real compensation per employee (chiefly under the impact of higher minimum wage).[3]

Having deteriorated less than in the Slovenian economy in 2008–2009, the cost competitiveness in the EU as a whole improved in 2010. In 2010, real unit labour costs in the EU had already dropped, after growing less than in Slovenia in 2008–2009, while real unit labour costs in Slovenia continued to grow slowly. As was the case in 2008, in 2010, the deterioration of Slovenia's competitive edge resulted from higher growth in the compensation per employee than in the EU, and in 2009, from a greater decline in labour productivity as the fall in economic activity in Slovenia was among the largest in the EU. In 2008–2010, Slovenia was ranked second among EU Member States in terms of loss in cost competitiveness.[4] *Slovenia's position had already deteriorated slightly before the crisis, in 2000–2007, when its cost competitiveness improved less than, on average, in the EU.* In the second half of the 1990s, real unit labour costs in Slovenia declined at a much faster pace than in the EU.[5]

According to the quarterly data, the ratio of labour costs per employee to GDP per employee improved in 2011, but less than in most other countries in the euro area and the EU. After three years of growth, in 2011 real unit labour costs dropped due to lower wage growth. Amid slight weaker economic activity and a slower decline in employment, labour productivity growth was also lower than in 2010, but still somewhat higher than growth in the compensation of employees per employee. Manufacturing, which had suffered a greater loss in cost competitiveness than other sectors of the economy in 2008–2009, also recorded a greater improvement in 2011. Slovenia was among EU and euro area countries with smaller gains in cost competitiveness in 2011.[6] Its worse position was primarily a result of lower labour productivity growth.

[1] In 2000–2007, real unit labour costs dropped by 0.4% annually, on average; in the second half of the 1990s, by 2.6%.

[2] The decline in employment in manufacturing was also larger than in other sectors of the economy, but failed to totally offset the negative effects of the larger drop in value added on labour productivity. In 2009 employment would have dropped even more, had the government not passed two intervention acts to preserve jobs during the economic crisis (see the indicator Employment Rate).

[3] In addition to the effect of changes in employment structure.

[4] In 2000–2007 the improvement in cost competitiveness was more pronounced than in Slovenia in eleven Member States, in 1995–1999 only in one (Ireland), with Slovenia sharing the second/third place with Estonia.

[5] The average annual drop of real unit labour costs in 2000–2007 in Slovenia was 0.4%, in the euro area 0.6% and in the EU 0.5%; in 1996–1999, in Slovenia 2.6%, in the euro area 0.8% and in the EU 0.6%.

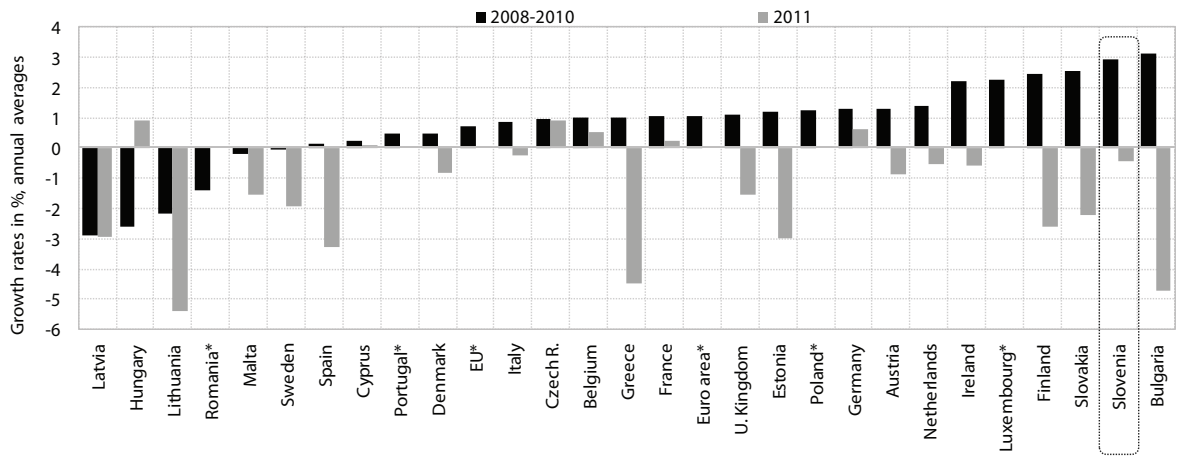
[6] Among the 23 EU countries for which data are available, 15 countries recorded larger drops in real unit labour costs than Slovenia and 9 among the 15 euro area countries.

Table: **Unit labour costs in Slovenia and the EU**

Real annual growth rates, in %	1996–2006	2007	2008	2009	2010	2011
Until labour costs[1]						
Slovenia	-1.1	-1.5	1.9	5.6	1.3	-0.4
EU-27	-0.5	-0.9	1.0	2.8	-1.6	N/A
EMU-16	-0.6	-0.9	1.6	3.0	-1.4	N/A
Unit labour costs[2] – Slovenia						
Total	-1.1	-1.6	2.0	6.3	1.6	-0.7
Manufacturing	-1.8	-2.2	3.0	9.1	-0.6	-3.2

Source: SI-STAT data portal – Economy, 2011; Eurostat Portal Page – Economy and Finance, 2011.
Notes: [1]compensation of employees per employee at current prices divided by GDP per employee at current prices; [2]compensation of employees per employee at current prices divided by value added per employee at current prices; N/A –not available.

Figure: **Real growth of unit labour costs in Slovenia and EU Member States, annual averages, in %**



Source: Eurostat Portal Page – Economy and Finance, 2011.
Note: *Data for the first nine months are not yet available.

Structure of merchandise exports by factor intensity

Slovenia's gap with EU countries in terms of high-tech exports remains wide. After the remarkable one-off increase in 2003,[1] the share of high-tech products in merchandise exports was declining in 2004 and 2005, and then started to grow modestly. A more visible increase was recorded only in 2008 and 2009 (from 17.4% in 2007 to 21.1% in 2010), in 2009 only due to a considerable shrinkage of exports of less competitive industries at the beginning of the economic crisis. Among high-tech products, pharmaceuticals represent the largest share, as they were less affected by lower demand in the first period of the crisis[2]. Amid a gradual recovery of exports of other product groups, the share of pharmaceuticals, and hence the share of high-tech products in Slovenian merchandise exports, declined somewhat again (by 0.8 p.p.). In the period since the beginning of the crisis, the relatively wide gap in exports of the most technology-intensive products between Slovenia and the EU average narrowed only in 2008; in the following two years it widened somewhat again and remains high, close to 7 p.p. Moreover, in 2010 the gap with the average of new EU countries even rose (by 3 p.p.) to the highest level in the last decade. The share of medium-high-tech products in Slovenian merchandise exports also declined slightly in 2010 (by 0.3 p.p.), on account of lower passenger car exports[3] after the phase-out of the temporary incentives for new car purchases in some European countries. This is the product group where Slovenia has otherwise the greatest comparative advantages in exports (see Table).

For a number of years, the importance of products with low value[4] added in merchandise exports has been declining primarily due to a lower share of labour-intensive products. The share of low-tech products has also shrunk noticeably since the beginning of the economic crisis. The share of labour-intensive products dropped further in 2010. Since Slovenia's accession to the EU, the share of these products has been falling rapidly chiefly on account of the lower shares of textile products, furniture and paperboard manufactures. The relative volume of labour-intense products has thus been approaching the EU average in the last few years. However, in 2010 it was still nearly three percentage points higher than the EU average and almost one percentage point higher than the average in the new EU Member States. Data for 2010 also indicate a further decline in the share of low-tech products in merchandise exports (1.2 p.p.), which had been relatively high until 2008. After several years of growth, the share of exports of miscellaneous metal products shrank in 2009 and 2010. The decline in 2010 was largely related to a fall in the share of iron and steel profiles. The share of low-tech products was thus only 1.6 p.p. higher than the EU average in 2010.

The share of exports of natural-resource-intensive products[5] increased markedly in 2010 after being relatively stable for a number of years. A more pronounced increase in 2010 (by 1.6 p.p.) was due to significant growth in the share of electricity and aluminium exports, most of which was not based on increased production, according to our estimate. As a result of significant regional differences in prices and increased transmission capacity on the Slovenian-Italian border, electricity transit from Croatia and Austria to Italy rose substantially in 2010. Owing to a larger volume of trading, imports and exports of electricity grew considerably and hence the share of electricity in merchandise exports, even though net exports (the difference between exports and imports) accounted for only slightly more than a fifth of total electricity exports that year. Due to lower demand, the volume of primary aluminium production had dropped to a mere 41% of full capacity in 2009 and climbed only to 48% in 2010, which leads us to believe that the significant increase in the share of aluminium in merchandise exports relative to 2009 was largely due to higher selling prices. The shares of aluminium exports in 2009 and 2010 were otherwise much lower than before 2008.

[1] As a result of increased sales of pharmaceuticals to the American market.

[2] In 2008 exports of pharmaceuticals rose by 20.2% in nominal terms; in 2009 they shrank by 8.4% while in 2010 they increased by 1.6%.

[3] A decline by 1.4 p.p., while the share of other products from this group was increasing.

[4] The groups of low-tech and labour-intensive products 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.

[5] 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 1 : **Structure of merchandise exports by factor intensity*, in Slovenia and in the EU**

		2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Resource-intensive	EU-27	18.2	17.7	17.7	17.7	18.2	17.9	19.4	19.2	20.3	19.6	20.6
	EU-15	18.0	17.5	17.7	17.6	18.2	17.8	19.4	19.3	20.5	19.6	20.7
	EU-12	20.7	19.7	18.8	18.2	18.8	19.2	19.0	18.5	19.5	19.4	20.6
	Slovenia	15.3	15.1	14.6	14.6	14.0	15.4	16.1	15.5	15.8	15.9	17.5
Labour-intensive	EU-27	10.6	10.7	10.7	10.4	9.8	9.0	8.6	8.5	8.2	8.7	8.2
	EU-15	10.1	10.1	10.1	9.8	9.3	8.6	8.2	8.1	7.9	8.4	7.9
	EU-12	18.5	18.9	18.8	17.7	15.8	14.0	12.3	11.4	10.2	10.8	10.2
	Slovenia	21.6	21.3	20.0	18.7	17.8	17.0	14.2	12.6	11.7	11.6	11.0
Low-tech	EU-27	6.9	7.0	7.0	7.2	7.7	7.0	7.4	7.9	8.2	7.0	7.0
	EU-15	6.6	6.7	6.7	6.9	7.4	6.6	7.1	7.6	7.8	6.7	6.7
	EU-12	10.5	10.9	11.0	11.0	11.5	10.6	10.8	11.1	11.0	9.1	9.0
	Slovenia	9.9	9.9	9.9	10.1	10.8	8.8	10.2	10.4	11.1	9.8	8.6
Medium-tech	EU-27	29.8	30.4	30.5	30.9	31.0	30.1	29.9	30.8	30.0	28.4	28.6
	EU-15	29.8	30.3	30.5	30.7	30.8	29.8	29.5	30.2	29.5	27.8	28.0
	EU-12	30.1	30.6	31.5	33.1	33.3	33.3	34.3	35.5	34.1	33.7	33.4
	Slovenia	36.2	36.2	37.3	37.3	38.3	40.2	39.1	40.9	39.3	39.9	39.6
High-tech	EU-27	28.7	28.7	28.7	27.6	27.1	27.7	27.7	25.8	25.2	27.7	27.2
	EU-15	29.4	29.4	29.5	28.3	27.9	28.5	28.6	26.5	25.8	28.3	27.7
	EU-12	18.1	17.3	17.9	18.0	18.8	18.2	19.2	19.7	20.6	22.9	23.3
	Slovenia	15.5	16.0	16.7	17.9	17.2	16.0	17.1	17.4	18.8	21.1	20.3

Source: Handbook of Statistics 2007–2008 (United Nations), 2007; United Nations Commodity Trade Statistics Database, 2011; calculations by IMAD.
Note: * The classification of products into individual groups is based on the UN methodology (Trade and Development Report, 2002). The classification does not include all products and therefore the sum of the five product groups does not necessarily equal 100.

Table 2: **Relative export advantage index* of Slovenia's exports by factor intensity**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Resource-intensive	0.841	0.856	0.823	0.824	0.767	0.857	0.834	0.806	0.775	0.810	0.849
Labour-intensive	2.037	1.997	1.878	1.798	1.811	1.885	1.655	1.493	1.432	1.338	1.353
Low-tech	1.432	1.418	1.413	1.402	1.399	1.259	1.369	1.306	1.357	1.402	1.232
Medium-tech	1.216	1.193	1.222	1.208	1.235	1.336	1.307	1.329	1.313	1.403	1.381
High-tech	0.537	0.559	0.581	0.648	0.635	0.579	0.618	0.672	0.748	0.763	0.745

Source: Handbook of Statistics 2007–08 (United Nations); United Nations Statistics Division: Comtrade; calculations by IMAD.
Note: * 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 exports of the group of countries that serves as a reference level (in this case, the EU-27).

Exports and imports as a share of GDP

Slovenia's trade integration rate increased again in 2011, which was in addition to foreign demand, also due to higher foreign trade prices. The average share of trade in goods and services relative to GDP reached 71.8% in 2011, a 6.6 p.p. higher figure than a year previously. After a significant decline in 2008 and 2009, Slovenia's trade integration rate rose again last year, mainly due to increased trade integration of goods in international trade flows, while the relative volume of trade in services has been growing only modestly for several years, except in 2009. The share of goods exports expanded by 6.1 p.p., the share of merchandise imports by 6.3 p.p. The growth of Slovenia's exports of goods to the EU remained relatively high. Exports to non-EU markets also recorded stronger growth, particularly to the former Yugoslav countries and the US. The growth of goods exports was underpinned by growth in medium-high- and medium-low-technology industries, which have a predominant share in Slovenia's total exports of goods. Electricity exports also picked up considerably last year; among shrinking electricity production, this is related to higher exports, which were, to a certain extent, intended for re-exports. Having been increasing vigorously for the second successive year, electricity exports thus contributed 1 p.p. to the growth of exports in 2011. On the side of imports, intermediate goods imports have been picking up fastest because of the strong dependence of Slovenian producers on foreign suppliers and individual phases of production, and were higher in 2011 than before the crisis. Imports of electricity also recorded much stronger growth. The increase in consumer goods imports was largely attributable to imports of food and beverages, gasoline and passenger cars, while imports of durable goods declined. Imports of investment goods, which are mainly affected by the current and expected economic conditions at home and abroad, were recovering at the slowest pace. The growth of the value of merchandise imports was also underpinned by rising prices of energy products and other primary commodities, which is why import prices rose faster than export prices. The terms of trade[1] therefore deteriorated further in 2011 (by 1.6%). In 2011, the share of services exports in GDP was 0.8 p.p. higher than a year earlier, while the share of services imports remained unchanged for the fourth year in a row. Exports of services recorded a somewhat larger share of transport and travel services, where Slovenia has comparable advantages over the EU as a whole. *The share of knowledge-intensive services (the group of other services), which include insurance, financial, computer and IT services, communication services, licences, patents and copyrights, and other business services, continued to decline in 2011*. In this segment of services exports Slovenia lags behind the current trends in the services trade.

In 2010 and 2011, as well as in the whole period since the beginning of the crisis (2008), in Slovenia the trade integration rate increased more than in the EU as a whole and more than in the majority of the small economies of the EU. After a substantial decline in 2008 and 2009, which had been much larger than the EU average, in 2010 and 2011 the share of international trade in GDP expanded much more than in the EU, where in the last two years economic growth was not based solely on growth in foreign demand.[2] The average share of exports and imports in GDP also increased somewhat more in Slovenia than in the EU as a whole since the beginning of the crisis (in 2008–2011). In the preceding two years, the relative volume of foreign trade was also rising faster than, on average, in small open economies of the EU, yet more slowly than in Baltic countries and in Slovakia.

[1] The terms of trade are an important indicator of economic development, particularly in small open economies, which are fairly vulnerable to external price shocks. Given the price inelasticity of the quantity of exports and imports demanded, changes in foreign trade prices also affect nominal net exports. Net exports are thus positively correlated with the terms of trade.

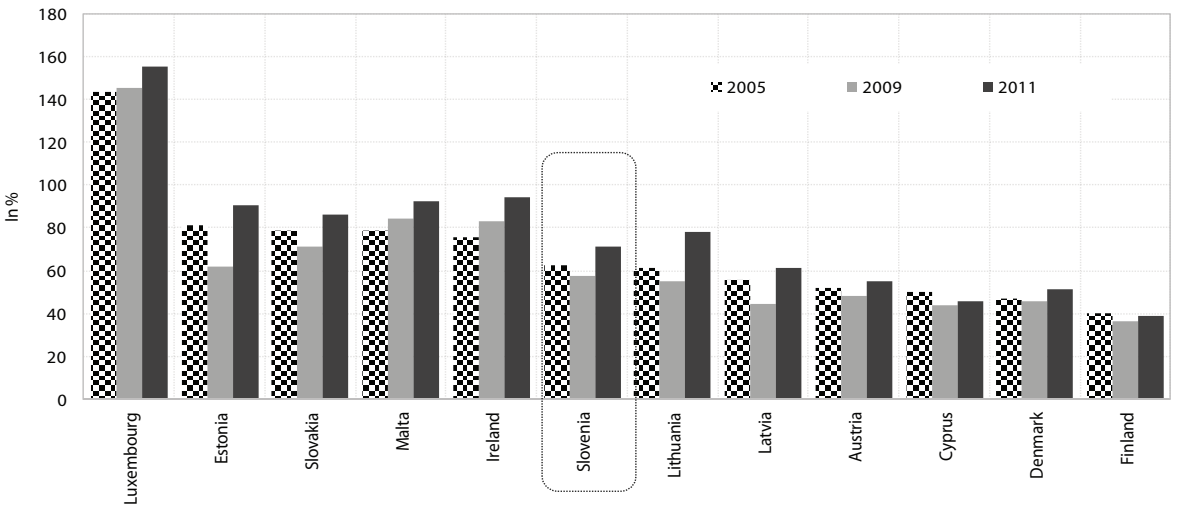
[2] In Slovenia, domestic consumption declined further in 2010 and 2011, while in the EU it already started to grow.

Table: **Average trade-to-GDP ratio (exports and imports)[1] in Slovenia and the EU, in %**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
Trade-to-GDP ratio – Slovenia	**50.6**	**55.4**	**62.4**	**66.8**	**70.4**	**68.8**	**57.7**	**65.1**	**71.8**
Goods	42.1	47.1	52.6	56.7	59.7	57.3	46.8	53.7	59.9
Services	8.5	8.4	9.7	10.1	10.7	11.4	10.8	11.5	11.9
Exports of goods and services	**49.6**	**53.7**	**62.2**	**66.5**	**69.6**	**67.1**	**58.4**	**65.4**	**72.3**
Goods	39.7	44.2	50.8	54.8	57.3	53.7	45.8	51.9	58.0
Services	9.8	9.5	11.4	11.7	12.3	13.4	12.6	13.5	14.3
Imports of goods and services	**51.5**	**57.2**	**62.6**	**67.1**	**71.3**	**70.4**	**57.0**	**64.9**	**71.3**
Goods	44.4	49.9	54.5	58.6	62.2	60.9	47.9	55.4	61.8
Services	7.1	7.2	8.1	8.4	9.1	9.5	9.1	9.4	9.5
Trade-to-GDP ratio – EU-27	**28.8**	**35.8**	**36.8**	**39.3**	**39.9**	**41.2**	**36.3**	**40.2**	**42.9**
Goods	22.8	27.9	28.4	30.5	30.8	31.8	27.2	30.8	33.3
Services	6.0	7.9	8.4	8.8	9.1	9.5	9.1	9.5	9.6

Sources: SI-STAT data portal – National accounts, 2012; Eurostat Portal Page – Economy and Finance, 2012; calculations by IMAD.
Note: [1] The ratio between the average value of total exports and imports according to the national accounts statistics and GDP in current prices.

Figure: **Average trade-to-GDP ratio (exports and imports)[1] in small EU economies**



Sources: SI-STAT data portal – National accounts, 2012; Eurostat Portal Page – Economy and Finance, 2012; calculations by IMAD.
Note: [1] The ratio between the average value of total exports and imports according to the national accounts statistics and GDP in current prices.

Foreign direct investment

In 2010, inward foreign direct investment (FDI) in Slovenia started to increase again, while outward FDI continued to decline. Inward FDI stock rose by 2.2%, but was still 4.1% lower than in the record year of 2008. Outward FDI stock dropped further (by 0.9%), being 2.8% below the record level in 2008. The changes are also corroborated by data on FDI flows. In 2010, inward FDI flows were positive again (in contrast to those in 2009), but only at a fifth of those in 2008. Outward FDI recorded inflows, for the first time thus far, which means disinvestment of Slovenian investors abroad. In 2010, Slovenia thus recorded a net inflow of FDI in the amount of EUR 333.5 m. Breaking down the change in FDI stock to changes in equity capital and reinvested profits, and to changes in net claims (liabilities from intra-company loans), we can see significant differences between inward and outward FDI. In inward FDI, the increase in stock was largely due to higher net liabilities of foreign parent companies to Slovenian subsidiaries (EUR 176 m or 64.3% of the total increase), while the decline in outward FDI stock was mainly a result of a decline in equity capital of Slovenian investors.[1]

Amid a modest increase in inflows, the share of inward FDI relative to GDP remains much lower than in most other EU countries. The stock of inward FDI as a share of GDP rose substantially in 2005–2008 (from 21.7% to 30.1% of GDP). In the following two years, the relative stock of FDI had first swung down, then up, and reached 30.4% by the end of the period (2010), which is just slightly above the previous highest level in 2008. In the last two years, changes in the relative FDI stock were, besides by changes in the value, also strongly affected by a substantial decline of GDP in 2009, which increased only modestly in 2010. The stock of outward FDI, which had also grown markedly in the second half of the previous decade (from 9.9% to 15.8% of GDP in 2005–2009), dropped in 2010 for the first time thus far (to 15.6%). Slovenia is marked by different dynamics than most other EU countries, in which the inward FDI stock had already declined in 2008 as a consequence of the economic crisis, then rebounded in 2009 and dropped again in 2010. Slovenia thus recorded a decline and a rebound with a one-year delay. It otherwise remains among the EU countries with the lowest inward FDI stock as a share of GDP. A lower share than in Slovenia is recorded only in Greece, Italy and Germany. In terms of outward FDI stock as a share of GDP, among the new Member States, Slovenia lags behind Cyprus, Estonia, Malta and Hungary.

The FDI flows and changes in FDI stocks in 2010 indicate a gradual recovery and renewed increase in inward FDI and a cessation of disinvestment on the side of outward FDI. In 2011, FDI inflows in Slovenia amounted to EUR 786.2 m, compared with only EUR 273.9 m in 2010. Disinvestment of Slovenian outward FDI was otherwise also recorded in 2011, but only in the amount of EUR 8.0 m, which is much less than in 2010 (EUR 59.6 m). In 2011, Slovenia thus recorded net inflows of EUR 794.2 m from FDI. The structure of inflows was as follows: 25.9% of the total, an increase in equity capital; 7.1%, reinvested profits; and 66.9%, an increase in net liabilities of Slovenian subsidiaries to parent companies abroad (intra-company loans). The growth of inward FDI flows, in the form of both equity capital and intra-company loans and in particular the positive flow of reinvested profits (EUR -239.5 m in 2010 and EUR 56.0 m in 2011) may be a sign of a gradual return of confidence of foreign parent companies in their Slovenian subsidiaries. This is also evidenced by the results of surveys among Slovenia-based foreign subsidiaries. In 2009, as many as 68% of respondents anticipated a decline in sales in the current year; in 2010, 59%; and in 2011, just 23%. The improvement of expectations for the following year is even more obvious. In 2009, 61% of respondents expected their sales volume to improve in the following year; in 2010, 79%; and in 2011, 77%. As for the number of employees, in 2009, 42% anticipated an increase, in 2010, 67%, and in 2011, 69%. Moreover, having totalled a mere 15.6% in 2009 and 17.9% in 2010, the share of enterprises planning to expand their business activities in Slovenia nearly doubled in 2011, to 34.8% (Burger, Jaklič, Rojec, 2011). However, it should be taken into account that the 2011 survey was conducted in September and October when economic forecasts for the next year were higher than at the beginning of 2012.

[1] Equity capital decreased by EUR 171.5 m, while net claims of Slovenian investors on to their foreign subsidiaries even increased by EUR 121.6 m.

Table: **Flows and stocks of inward and outward FDI[1] in Slovenia, 2000–2011[2],EUR m**

	2000	2005	2006	2007	2008	2009	2010	2011
INWARD FDI								
Year-end stock	3,109.8	6,133.6	6,822.3	9,765.1	11,236.3	10,537.8	10,771.5	11,314.2 (30 September)
Inflow	149.1	472.5	513.3	1,106.4	1,329.5	-469.7	273.9	786.2
Stock as a % of GDP	14.8	21.7	22.0	28.2	30.1	29.8	30.4	N/A
OUTWARD FDI								
Year-end stock	825.3	2,788.7	3,452.2	4,916.6	5,677.0	5,568.4	5,518.5	5,431.4 (30 September)
Outflow[3]	-71.7	-515.6	-687.0	-1,316.6	-983.3	-174.2	59.8	8.0
Stock as a % of GDP	3.9	9.9	11.1	14.2	15.2	15.8	15.6	N/A

Source: www.bsi.si; SI-STAT Data Portal – National Accounts, 2009, 2008; for 2011 Bank of Slovenia, 2011.
Notes: [1] Companies in which a foreign investor holds a 10% or higher capital share. [2] Since 1996, the figure has also included direct investment of companies in second 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 that are part of the foreign owner's group of companies (see International economic relations - Bank of Slovenia, March 2007, pp. 11–13). [3] Negative value denotes outflow; N/A – not available.

Figure: **Inward FDI stock relative to GDP in the EU, 2005 and 2010**

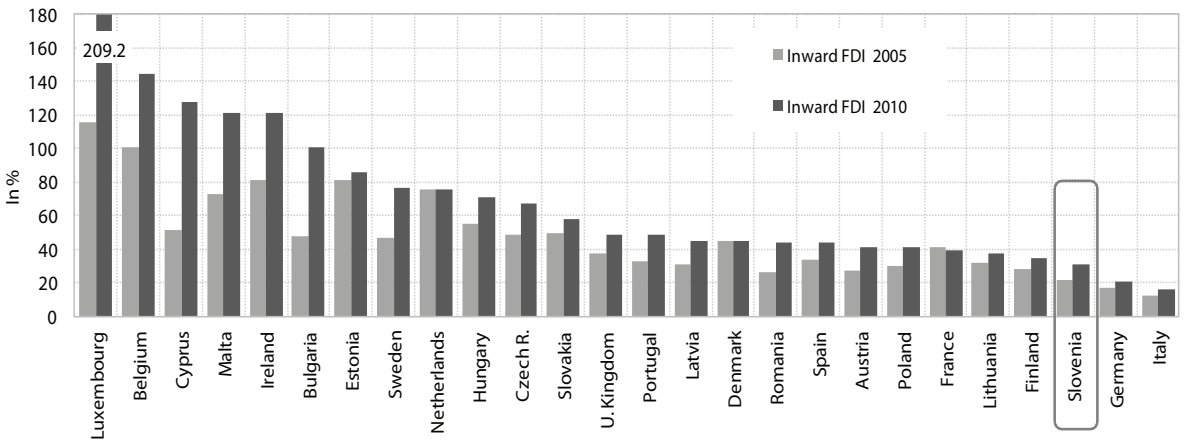
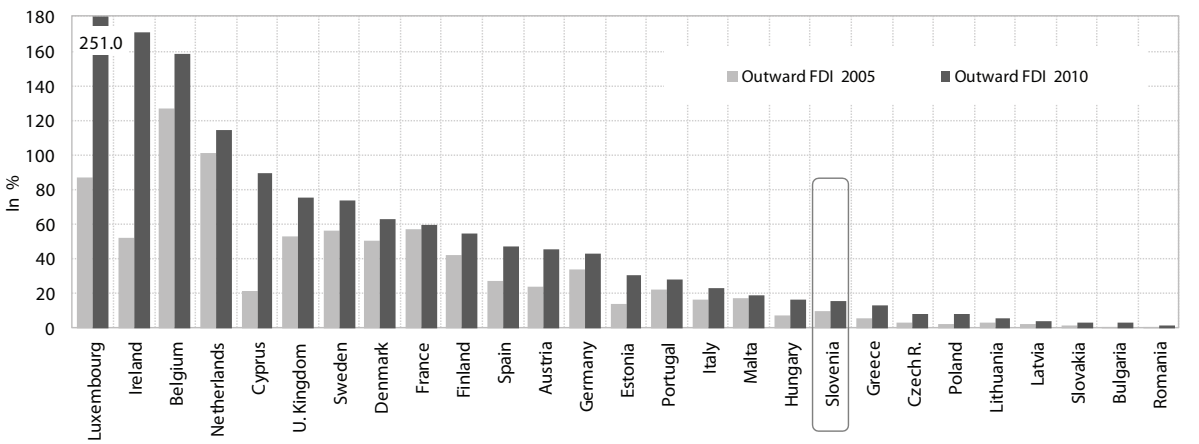


Figure: **Outward FDI stock relative to GDP in the EU, 2005 and 2010**



Source: World Investment Report (UNCTAD), 2011; for Slovenia see the table above.

Entrepreneurial activity

Entrepreneurial activity in Slovenia also dropped notably in 2011, while in the EU it was already strengthening considerably. According to the Global Entrepreneurship Monitor (GEM), in 2011, the rate of the total early-stage entrepreneurial activity (TEA index)[1] dropped in Slovenia for the third successive year. Since the beginning of the economic crisis, it has already declined by as much as two fifths, from 6.4% in 2008 to 3.7% in 2011, which is the lowest level since 2004 (2.6%). The drop was mainly due to a significant decline in the share of new entrepreneurs, i.e. those who have been paying wages or salaries for no longer than 3.5 years (during the crisis by 0.6 p.p,). The share of nascent entrepreneurs, i.e. individuals actively trying to start a business or owning and running a business that has operated for no more than three months, also shrank, by 0.3 p.p. (during the crisis by 2.2 p.p.). The overall entrepreneurial activity rate therefore declined further last year, by 1.1 p.p., to a great extent precisely because of the decline in early-stage entrepreneurial activity, as the share of established entrepreneurs remained approximately the same as in 2010. In the 20 EU Member States that participated in the GEM project,[2] the average total early-stage entrepreneurial activity rate had already picked up substantially in 2011, totalling 6.9% (2010: 4.8%). The gap between Slovenia and the EU average thus widened markedly, by 3.2 p.p., being the largest thus far.[3] In the EU, the share of entrepreneurs who have operated a business independently for no more than three months strengthened significantly (to 4.3% or nearly by 60%), while the share of new entrepreneurs rose somewhat less (to 2.7% or by a fifth). The overall entrepreneurial activity has also already increased in the EU, to 12.8% on average, on account of both total early-stage entrepreneurial activity and a higher share of established entrepreneurs (by a good tenth).

The decline in early-stage entrepreneurial activity is still characterised particularly by a lack of business opportunities. In 2011, the share of entrepreneurs engaged in early-stage entrepreneurial activity to exploit perceived business opportunities plunged to 3.0%, the lowest level since 2004 (2.2%). It shrank further relative to the preceding year, by 0.7 p.p. (by 2.6 p.p. since the beginning of the economic crisis). Perceived business opportunities nevertheless remain the main driving force behind the decisions to start an independent business, as was the case in favourable economic times, given that the share of necessity-driven early stage entrepreneurship still lags significantly behind the share of opportunity entrepreneurship (see Table). The share of necessity entrepreneurship shrank visibly[4] last year and was only slightly lower than in the period of good economic conditions (2005–2008). In the 20 EU Member States included in the survey, the average rate of early-stage entrepreneurial activity driven by perceived business opportunities strengthened substantially last year, by 1.4 p.p. to 5.0%, while the rate of necessity early-stage entrepreneurial activity rate grew much less, by 0.7 p.p. to 1.7%. Among EU Member States, opportunity entrepreneurial activity declined only in Slovenia and Hungary (to 4.1%), while strengthening most notably in Portugal and Romania (to 6.0% and 5.7%, respectively).

The barriers to doing business in Slovenia did not change much in 2011 and the payment default risk remains the major limiting factor. According to Interstat[5] data, at the end of 2011 by far the largest share of entrepreneurs surveyed (60.5%)[6] reported payment default risk as the most serious obstacle to business operation. Troubles related to excessive administrative burden and tax policy eased somewhat towards the end of last year, but they are still recognised as an important impeding factor (cited by around 30% of entrepreneurs). On the other hand, issues related to competitiveness and access to funds for current operations, and a consequent decline in sales (perceived by around a fifth of entrepreneurs; in August 2011, by only a tenth) started to worsen towards the end of the year.

[1] For methodological explanation of measures of entrepreneurial activity see notes below the Table.

[2] In 2011, 20 Member States were included in the GEM project (the same as in 2010 except Italy, plus the Czech Republic, Lithuania, Poland and Slovakia); in 2010, 17 Member States.

[3] In 2008 and 2009, Slovenia's TEA-index exceeded the EU average by 1.1 p.p. and 0.4 p.p., respectively.

[4] The decline in necessity entrepreneurship could be partly explained by a lower number of beneficiaries of self-employment subsidies in 2011 (4,502; in 2010: 5,148). The interest in participating in this measure that was carried out by the Employment Service of the RS was high in 2011, but funding was limited. The Employment Service therefore stopped referring people to self-employment training programmes temporarily at the end of 2011 (Employment Service of the RS, 2011).

[5] Interstat conducted a business climate survey in Slovenia last year, in August and December; before that, in June and December (Interstat, 2012).

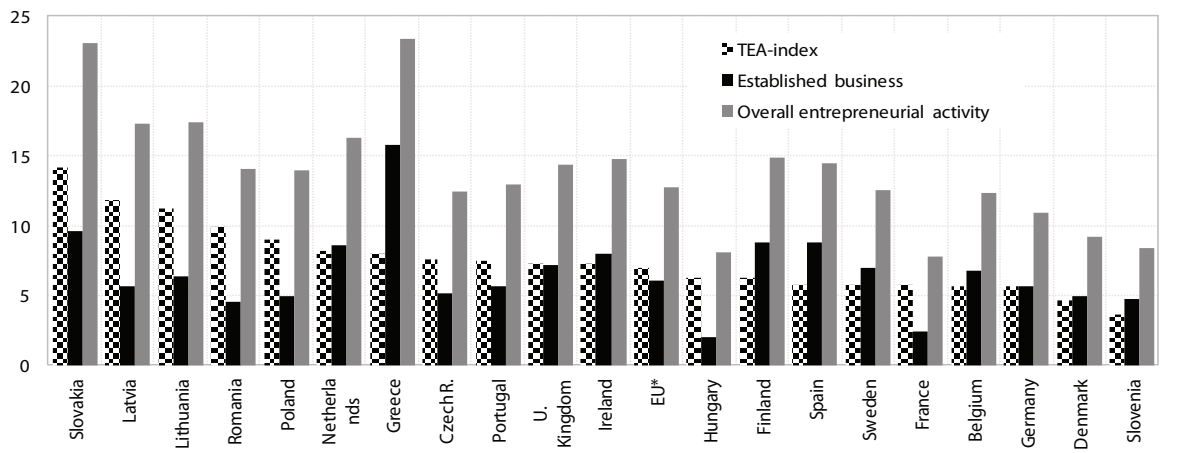
[6] The peak was recorded at the end of 2009 (74.6%).

Table: **Selected indicators of entrepreneurial activity in Slovenia, 2002–2011**

As a % of the population aged 18–64	2002	2005	2006	2007	2008	2009	2010	2011
TEA-index[1]	4.6	4.4	4.6	4.8	6.4	5.4	4.7	3.7
TEA-nascent entrepreneurs[2]	3.3	3.0	2.9	3.0	4.1	3.2	2.2	1.9
TEA-new entrepreneurs[3]	1.5	1.4	1.8	1.8	2.4	2.1	2.4	1.8
TEA-opportunity[4]	3.3	3.8	4.0	4.2	5.6	4.7	3.7	3.0
TEA-necessity[5]	1.4	0.5	0.5	0.5	0.8	0.5	0.8	0.4
Established business[6]	-	6.3	4.4	4.6	5.6	5.7	4.9	4.8
Overall entrepreneurial activity[7]	-	10.1	9.0	9.3	11.8	10.8	9.5	8.4

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; Rebernik et al., 2009; Rebernik et al., 2010; Rebernik et al., 2011, Kelley et al., 2012.
Notes: [1] 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 new businesses or engaging in new business activities, including self-employment [2] TEA-nascent entrepreneurs who have paid 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. [3] TEA new entrepreneurs. [4] TEA-opportunity measures the share of the population who engage in entrepreneurial activity to exploit a perceived business opportunity. [5] TEA-necessity measures the share of the population who have set up a business out of necessity. [6] Established business represents the share of people who own a firm that has been operating for more than 42 months. [7] The overall entrepreneurial activity includes the TEA index and the share of established business.

Figure: **Selected indicators of entrepreneurial activity in Slovenia and 20 EU Member States included in the GEM project in 2011**



Source: Kelley et al., 2012.
Note: * Weighted average of the 20 EU Member States included in the GEM 2011 project; calculations by IMAD.

Share of non-financial market services

The share of non-financial market services in value added increased further in 2010. Non-financial market services[1] generated 44.1% of total value added in 2010 (39.7% of all persons in employment), 1.6 p.p. more than at the adoption of Slovenia's Development Strategy (2005). The increase was underpinned by growth in knowledge-intensive services[2] (1.2 p.p. of value added), which had also increased their share in the structure of value added in the whole period since the beginning of the economic crisis (2008–2010). The faster growth of knowledge-intensive services is associated with the catching-up process, given that Slovenia lags behind advanced economies in this area. The increase in their share in the structure of the economy in the period of the economic crisis is otherwise due to a more pronounced shrinkage in other activities (in particular manufacturing, construction and traditional services). Among other (non-financial) market services, predominantly traditional services (trade, transportation and accommodation and food service activities) play the most important role. Their economic importance increased notably in the period of favourable economic trends (2005–2008), when value added was growing vigorously in most trade sectors, road freight transport, warehousing and support activities for transportation. Since the outbreak of the economic crisis (2008), the share of traditional services in value added of the economy has shrank somewhat, but remains higher than in 2005.

Business services are still among the fastest growing knowledge-intensive services, but they still lag considerably behind the SDS target. After stagnating in 2003–2006, the share of knowledge-intensive non-financial market services (which include telecommunications, certain business services[3] and some transport activities) increased in the following years (except in 2009), accounting for 13.0% of total value added in 2010. Growth was largely generated by business services. In the period of implementing SDS (2005–2010), their share rose by 1.4 p.p. (in the last year by 0.4 p.p.), totalling 10.9% in 2010. Among knowledge-intensive business services, the shares of information, professional, scientific and technical activities and some administrative and support service activities grew most notably in both the whole period and in 2010 Even though it grew significantly in the latter part of the decade, in 2010 the share of business services still lagged significantly behind the SDS target for 2013, i.e. 12% of value added on Slovenia's economy.

The gap between Slovenia and the EU average in the share of non-financial market services in value added narrowed further in 2010. Nevertheless, Slovenia's greatest development potential still lies particularly in knowledge-intensive services. Slovenia's lag behind the EU average in terms of the share of non-financial market services in the structure of the economy has decreased in recent years, totalling 3.8 p.p. in 2010. This was mainly a result of Slovenia's catching up in business services, while its share of predominantly traditional services (trade, transportation, accommodation and food service activities) has exceeded the EU average for several years.[4] Among business services, the gap with the EU average narrowed most notably in professional, scientific and technical activities, also in information service activities. All these activities combined make up the largest share of knowledge-intensive services. In 2009, for which the most recent international data are available, the share of knowledge-intensive business services was 1.3 p.p. smaller than in the EU (in 2000: 3 p.p.; in 2005: 1.6 p.p.). In view of a relatively large increase in the share of business services in Slovenia in 2010, we estimate that Slovenia's lag behind the EU average narrowed further that year, although the gap with the most advanced countries (used as the benchmark of development in setting SDS objectives) remains considerable (see Figure 2). Given that knowledge-intensive services could play an important role both as activities with high value added and as competitiveness factors of other activities, Slovenia still has significant development potential in this area.

[1] Activities of the Standard Classification of activities (SKD): wholesale and retail trade and repair of motor vehicles (G), transportation and storage (H), accommodation and food service activities (I), information and communication activities (J), real estate (L), professional, scientific and technical activities (M), administrative and support service activities (N), arts, entertainment and recreation (R), other service activities (S), activities of households as employers (T).

[2] According to Eurostat's methodology, knowledge-intensive services comprise water transport (section 50), air transport (section 51), motion picture, video and television programme production, sound recording and music publishing activities (59 and 60), telecommunications (61), computer programming and other information service activities (sections 62 and 63), scientific and technical activities (M), employment activities (78), security and investigation activities (80–82).

[3] As of this year, SORS started to publish data on individual segments of national accounts in line with the Regulation No. 1893/2006 establishing the NACE Revision 2 statistical classification of economic activities. The new classification (SKD 2008) brings certain changes in the release of data on service activities. Real estate, renting and business services are now roughly divided into three categories: real estate (L), professional, scientific and technical activities (M) and administrative and support service activities (N). In this chapter, the latter two categories and part of information and communication activities (SKD J) are referred to as business services, a definition that was also set at the adoption of SDS.

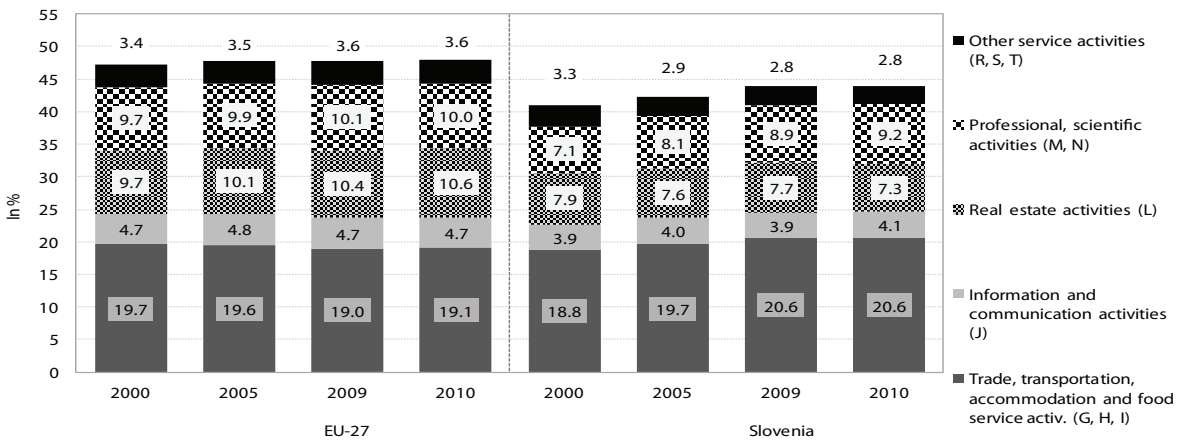
[4] A wide gap, which in 2010 increased to 3.2 p.p., is otherwise recorded in real estate activities, but this could also be explained by a high share of propriety housing in Slovenia, which is characterised by relatively low and constant growth rates of value added.

Table: **Share of non-financial market services in value added**

In %	1995	2000	2005	2006	2007	2008	2009	2010
Non-financial market services – N,F,T,S	39.7	41.0	42.5	42.5	42.9	43.7	43.9	44.1
Trade, transportation, accommodation and food service activities (G, H, I)	19.2	18.8	19.7	20.0	20.6	20.9	20.6	20.6
Information and communication activities (J)	2.9	3.9	4.0	4.0	4.0	4.0	3.9	4.1
Real estate activities (L)[1]	7.9	7.9	7.6	7.4	7.1	7.3	7.7	7.3
Professional, scientific, administrative and support service activities (M, N)	6.6	7.1	8.1	8.3	8.6	8.9	8.9	9.2
Other service activities (R, S, T)	3.2	3.3	2.9	2.8	2.6	2.6	2.8	2.8
Knowledge-intensive N,F,T,S	8.6	10.0	11.8	12.0	12.4	12.7	12.7	13.0
Part of transport activities[2]	0.3	0.3	0.4	0.4	0.5	0.6	0.4	0.4
Business services[3]	7.0	8.2	9.5	9.7	10.0	10.4	10.6	10.9
Telecommunication activities[4]	1.3	1.6	1.9	1.9	1.9	1.7	1.7	1.7

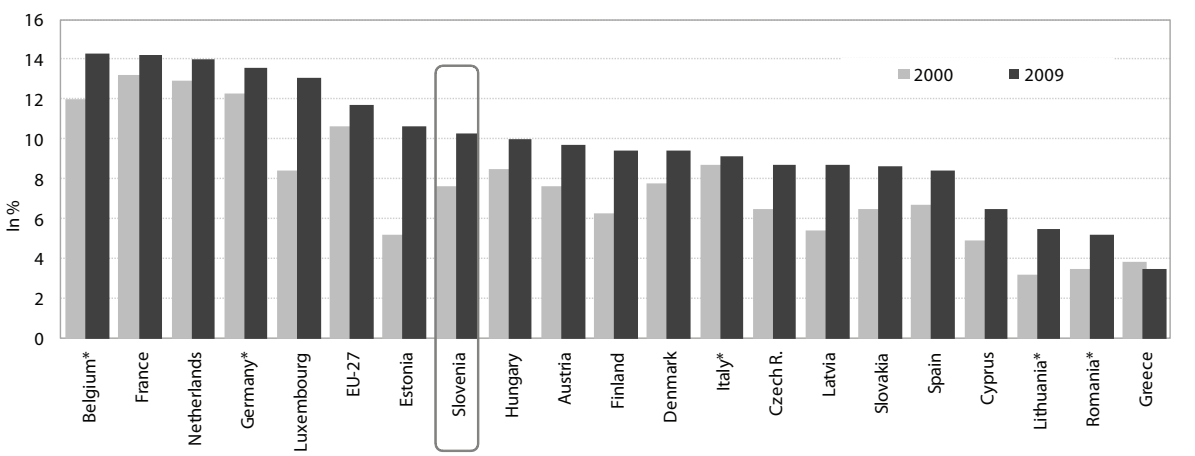
Source: SI-STAT data portal – National Accounts (SORS), 2012; calculations by IMAD.
Notes: [1] The largest part of real estate activities is the estimated housing activity of households (81.7% in 2010), which is characterised by relatively low and constant growth rates of value added. [2] Knowledge-intensive transportation activities are: water transport (section 50) and air transport (section 51). [3] Knowledge-intensive business services are: motion picture, video and television programme production, sound recording and music publishing activities (59 and 60), computer programming and other information service activities (sections 62 and 63), professional, scientific and technical activities (M), employment activities (78), security and investigation activities (80–82.) [4] Telecommunications (61).

Figure 1: **Share of non-financial market services in value added in Slovenia and the EU**



Source: Eurostat Portal Page - Economy and Finance – National Accounts, 2012; calculations by IMAD.

Figure: **Share of knowledge-intensive business services in value added, Slovenia and the EU**



Source: Eurostat Portal Page - Economy and Finance – National Accounts, 2012; calculations by IMAD.
Note: *data for 2008.

Total assets of banks

The value of the indicator of total assets of banks relative to GDP has been dropping since 2009. The decline in 2011 was, as in 2010, attributable to a lower value of total assets (by 3%). Specifically, banks stepped up net repayments of foreign deposits and loans again in 2011, to EUR 2.3 bn, while the inflows of domestic non-banking sector deposits dropped below EUR 700 m. The inflows of household deposits to domestic banks were much more moderate as well, which we estimate was a result of poor labour market conditions and growing uncertainties on financial markets. On the other hand, government borrowing increased, totalling nearly EUR 4 bn, but the government used most of these assets to finance its consumption and repay matured liabilities, depositing only a small portion in banks. Not being able to repay foreign liabilities from domestic sources, banks had to reduce the volume of investment. They curtailed their lending activity significantly and disinvested abroad. Total assets of domestic banks could have dropped even more, had it not been prevented by the ECB, which provided nearly EUR 900 m in additional loans at the end of the year. Annually, the liabilities to the ECB grew by EUR 1.1 bn. Against the background of low economic activity and high exposure to sectors that were hit hardest during the economic crisis (construction and activities related to buyouts), additional impairments and provisions strongly increased the burden on banks. In the year 2011 alone, they overshot EUR 1 bn , being almost two fifths higher than in 2010.

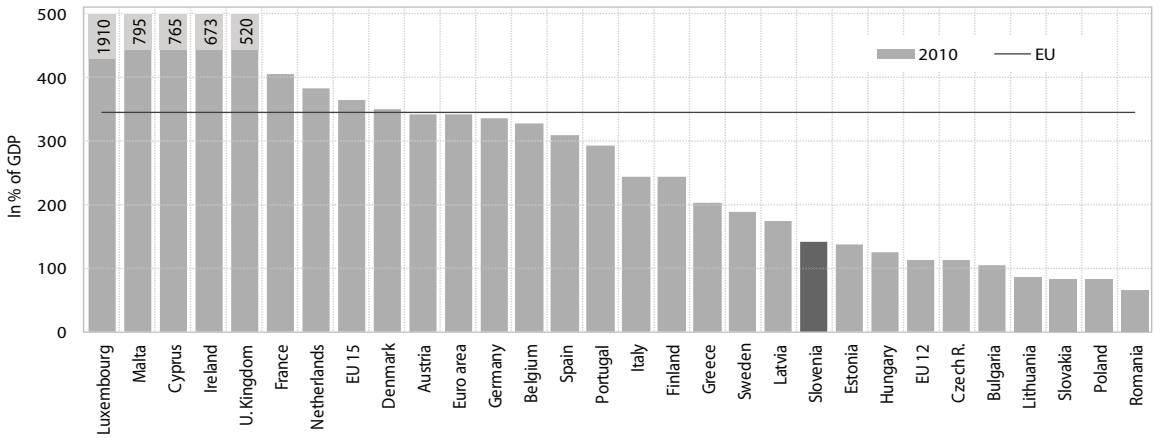
In 2010, the development gap between Slovenia and the EU average widened for the first time in the last five years and we estimate that similar movements also continued in 2011. In 2010, banks' total assets relative to GDP also dropped in the EU as a whole. In the EU, the main reason for the decline was the relatively strong (4.2%) growth of the nominal value of GDP, while total assets rose only by 3.5%. In Slovenia, banks' total assets decreased by 2.5% in 2010, in view of the strongly limited sources of funding because of which banks were forced to disinvest in order to repay their obligations. In 2010, the contraction of total assets was (besides in Slovenia) recorded only in Austria, Belgium, Cyprus, Ireland and the Baltic countries. In 2010 (the most recent international data available), Slovenia was thus still in the bottom third of EU countries on this indicator, being also outperformed by some new EU Member States (Malta, Cyprus and Latvia). We estimate that Slovenia's development gap with the EU widened again in 2011, given that in Slovenia the value of this indicator continued to drop, while recording somewhat more favourable movements in the EU. The lending activity in the EU otherwise moderated last year, as a result of higher net repayments of the government and lower net borrowing of households, but loan volume nonetheless grew, which leads us to believe that total assets also strengthened in this period. This was also made possible by the ECB, which loaned nearly EUR 500 m to euro area banks at the end of the year.

Table: **Basic structure of banks' total assets, EUR m**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
Assets	9,138	14,776	29,135	33,717	42,343	47,628	51,612	50,319	48,788
as a % of GDP	58.3	70.4	101.8	109.1	122.5	127.7	146.2	142.1	136.9
Loans to banking sector	1,571	1,723	2,849	3,058	4,072	4,031	5,708	4,815	4,662
Loans to non-banking sectors	3,764,	7,731	15,909	20,089	28,302	33,530	33,910	34,450	32,991
Other assets	3,803	5,322	10,376	10,570	9,969	10,067	12,005	11,054	11,135

Source: Bank of Slovenia's Annual Report, Financial Stability Report (various volumes), Monthly Bulletin of the Bank of Slovenia.

Figure: **Total assets of banks in selected EU countries, 2010, as a % of GDP**



Source: Financial Stability Report, 2011; European Banking Federation, 2011; national accounts (SORS), 2012, Eurostat, 2012.

Insurance premiums

Growth in the volume of insurance premiums slowed markedly in the previous two years (2009 and 2010), but due to the low level of GDP the value of the indicator of insurance premiums relative to GDP was the highest on record. The volume of insurance premiums was growing rapidly in 2005–2008, but due to high economic growth the relative volume (in comparison with GDP) nevertheless remained practically unchanged, at around 5.5%. Growth in the volume of premiums eased in 2009 with the beginning of the economic crisis, but the indicator of insurance premiums relative to GDP rose considerably (to 5.9%) due to a substantial decline in GDP. The growth of insurance premiums continued to slow (1% growth) in 2010. Amid modest growth in nominal GDP, the relative volume of premiums thus stagnated at 5.9%. Last year's low growth in the volume of premiums was due to the volume of non-life insurance premiums, which declined for the first time thus far (by 0.3%). After dropping in 2009, the volume of life insurance premiums rose, but its growth reached just a third of the average annual growth in the past decade. The decline in non-life insurance premiums was again mainly a result of lower premiums in motor vehicle liability insurance, which we estimate was still due to the strong competition in this insurance segment, as the number of registered vehicles increased further in 2010, by 0.6%. The volume of land motor vehicles insurance (including hull insurance) and the volume of credit insurance continued to increase, recording some of the highest growth rates. Amid the decline in lending activity, the increase in credit insurance is a consequence of a more restrictive credit policy of banks, which require higher collaterals before granting a loan than in the past.

In the EU,[1] insurance premiums as a share of GDP also remained unchanged (at 9.1%) in 2010 after a significant increase in the previous year as a result of the decline in GDP. The overall volume of premiums grew by a solid 5%. Both the volume of non-life and the volume of life insurance premiums increased, but the growth of the latter (6%) was nearly double that of the former. Despite the increase, the volume of life insurance premiums was still much lower than before the international financial crisis.

The gap in the development of the insurance sector between Slovenia and the EU thus remained unchanged in 2010. Slovenia reached just below two thirds of the euro area average, recording the second highest value among the new EU Member States and a higher value than three old EU members (Austria, Spain and Greece). A relatively small lag behind the EU average remains due to an above-average share of non-life insurance premiums, with health and car insurance accounting for the predominant share. Meanwhile, Slovenia still lags significantly behind in the share of life insurance premiums, reaching a mere third of the EU average, which indicates poor development and the low depth of Slovenia's insurance market. The low value of this indicator also reflects the volume of savings for old age, which is still low.

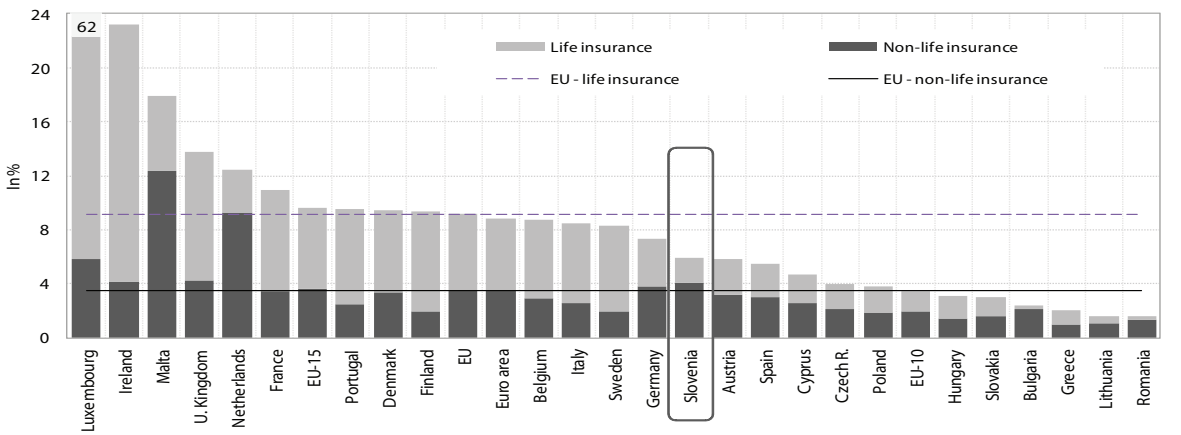
[1] Data not available for Estonia and Lithuania.

Table: **Insurance premiums by type of insurance in Slovenia**

	1995	2000	2005	2006	2007	2008	2009	2010
Relative to GDP, in %								
Insurance premiums, total	4.2	4.4	5.4	5.6	5.5	5.4	5.9	5.9
Life insurance	0.6	0.9	1.6	1.7	1.8	1.7	1.8	1.9
Non-life insurance	3.6	3.5	3.8	3.8	3.7	3.7	4.1	4.1
Structure, in %								
Insurance premiums, total	100.0	100.0	100.0	100.0	100.0	100.0	100	100
Life insurance	14.8	19.4	30.0	31.3	32.2	31.8	30.4	31.3
Non-life insurance	85.2	80.6	70.0	68.7	67.8	68.2	69.6	68.7
Year-on-year nominal growth rates, in %								
Insurance premiums, total	61.8	6.3	6.3	11.4	9.8	6.6	2.7	1.0
Life insurance	66.9	14.2	8.3	16.3	12.7	5.5	-2.0	4.1
Non-life insurance	60.9	4.5	5.5	9.3	8.4	7.1	4.8	-0.3

Source: Statistical Insurance Bulletin 2011 (Slovenian Insurance Association), 2011; http://www.zav-zdruzenje.si/.

Figure: **Total insurance premiums, life and non-life insurance premiums in the EU Member States, 2009, as % of GDP**



Source: Statistical Insurance Bulletin 2011 (Slovenian Insurance Association), 2011; Sigma: World Insurance in 2010: Premiums back to growth – capital increases, 2011.

Market capitalisation

In 2011, the indicator of the market capitalisation of shares relative to GDP declined for the second consecutive year. Having soared before the tightening of the financial crisis (2006 and 2007), after 2007 the market capitalisation relative to GDP has mainly been dropping, except in 2009 when GDP dropped substantially as well, so that the indicator rose slightly despite the lower market capitalisation of shares. The market capitalisation of shares on the Ljubljana Stock Exchange thus reached only 13.7% of GDP at the end of 2011, the lowest value in the last twelve years and less than a quarter of the highest level in 2007. In 2011, the market capitalisation of shares declined somewhat more than 30%, nearly twice as much as in the preceding year. The decline was chiefly due to a lower value of shares, as the main index on the Ljubljana Stock Exchange (SBI TOP) saw a similar drop. A smaller part of the decline can be attributed to a lower number of shares listed on the Ljubljana Stock Exchange. Trading in shares otherwise grew by slightly less than a tenth last year, but remains fairly modest.

The Slovenian capital market plays a relatively insignificant role in providing fresh capital. However, in the credit crunch situation it could become relatively more important, although in uncertain conditions the financing by issuing shares is much more modest and the valuation of shares is lower. The Slovenian capital market came to a complete standstill for several reasons, the first being that the government still owns a significant part of the economy and is averse to foreign ownership, which drives away potential foreign investors. Another reason is the developments in the run-up to the financial crisis when a significant portion of the market was intended solely for the consolidation of ownership of enterprises, which was carried out in a fairly non-transparent way. The main role of the capital market, i.e. to help enterprises raise fresh capital, has been marginalised and in this unfavourable situation it can no longer be revived. Non-transparent practices are turning away both domestic and foreign investors and, with its low number of investors, the liquidity on the Ljubljana Stock Exchange is among the lowest in the EU.

Slovenia's development gap to the EU average widened again in 2011. In 2011, the market capitalisation of shares relative to GDP reached less than a quarter of the EU average, which was at 56.7% of GDP. In the EU, this indicator also dropped last year (after two years of growth), by a solid tenth. The decline was largely due to more than a tenth lower value of the market capitalisation of shares. Specifically, the public finance troubles of certain EU countries and expectations of slower economic activity adversely affected the dynamics on global financial markets where the values of securities mainly declined. In the EU the indices dropped more than on other, more developed capital markets, as the MSCI Europe Index,[1] measured in euros, fell by more than a tenth last year. The MSCI World Index[2] dropped by one half less, which was, according to our estimate, partly due to a lower value of the euro.

[1] It measures the movements on capital markets in 16 countries in Europe, besides the old EU countries excluding Luxembourg also Norway and Switzerland.

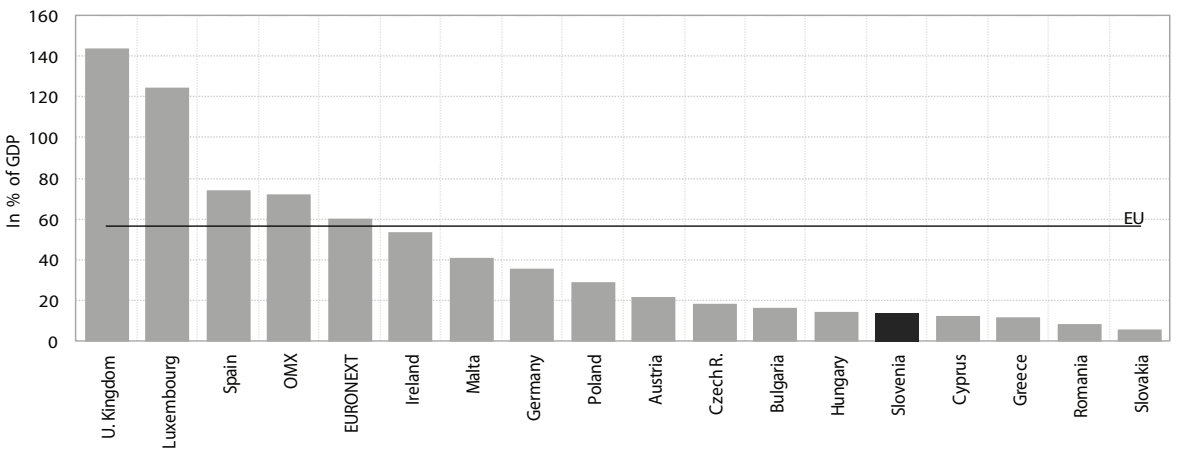
[2] It measures the movements on capital markets in 24 developed countries. In addition to the countries covered by the MSCI Europe Index, it includes Australia, Canada, Hong Kong, Japan, New Zealand, Singapore and the US.

Table: **Selected capital market indicators for Slovenia, 1995–2011**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
Market capitalisation of shares excluding investment funds, in EUR m[1]	250.7	3,333.7	6,696.6	11,513.1	19,740.1	8,468.4	8,462.2	7,027.9	4,872.8
Market capitalisation of shares excluding investment funds, in % of GDP	1.6	15.6	23.3	37.1	57.1	22.7	24.3	19.5	13.7
SBI TOP			941.02	1,473.33	2,518.92	854.26	982.67	850.35	589.58
No. of securities	49	267	227	202	185	187	174	159	
Shares	27	197	128	109	96	96	89	80	69
of which investment funds	0	44	10	7	10	11	11	6	1
Bonds	22	68	99	93	89	90	85	79	70

Source: Annual Statistical Report (Ljubljana Stock Exchange), 2012; National accounts (SORS), 2012; calculations by IMAD.
Notes: SBI – Slovenian Stock Exchange Index, [1] IMAD's conversion into euros taking into account the exchange rate on the last day of the current year.

Figure: **Market capitalisation in selected EU member states, 2011, as a % of GDP**



Source: Annual Statistical Report (Ljubljana Stock Exchange), 2012; First release – National accounts (SORS), 2012; Stock market capitalisation (Eurostat), 2012; calculations by IMAD.
Note: From January 2001 onwards, Euronext comprises the Stock Exchanges of Paris, Amsterdam and Brussels. In February 2002, the Lisbon Stock Exchange joined in. OMX comprises the Scandinavian (Denmark, Finland, Sweden) and the Baltic Stock Exchanges (Estonia, Latvia, Lithuania) and the Iceland Stock Exchange.

THE SECOND PRIORITY

Efficient use of knowledge for economic development and high-quality jobs

- Share of the population with a tertiary education
- Average years of schooling of adult population
- Ratio of students to teaching staff
- Public expenditure on education
- Private expenditure on education
- Expenditure on educational institutions per student
- Adult participation in education
- Gross domestic expenditure on R&D
- Science and technology graduates
- Intellectual property
- Researchers
- Internet use and access

Share of the population with a tertiary education

The share of the population with a tertiary education increased in 2010, but was still lower than the EU average. According to the Labour Force Survey (LFS) for the second quarter of 2011, the share of the population aged 25–64 with a tertiary education was 25.5%, 1.8 p.p. more than a year before. In the past two years, this share has increased more in Slovenia than in the EU as a whole, but remained lower than in the EU. During the implementation of SDS, Slovenia managed to narrow its gap to the EU (by 2.2 p.p. in 2005 to 1.0 p.p. in 2011), but with higher efficiency of studies (in view of the high participation of young people in tertiary education), the closing of the gap could be faster.

The share of the population with a tertiary education is growing on account of the rapidly growing number of graduates as a result of increased enrolment in tertiary education, and the introduction of Bologna studies. The number of graduates in Slovenia rose by 14.7% in 2005–2009; in the EU as a whole by 11.5%. In 2010, the number of graduates increased by 8.8% to 19,694. The strong growth is attributable to the increase in the number of enrolled students and the introduction of Bologna studies, as due to the shorter duration of these studies, the average number of the years of schooling is much shorter than in older programmes. The share of Bologna programme graduates[1] in the total number of graduates from under- and postgraduate higher education studies increased considerably in 2010. All of this also increased the share of the population with a tertiary education in 2011.

Slovenia's gap in the share of the population with a tertiary education is widest among older people, while in some younger age groups Slovenia exceeds the EU average. In the age group of 25–34 years, Slovenia lagged behind the EU average in 2011 by 0.5 p.p., but within this group there was a significant gap in the share of young people aged 25–29 (27.5%, which is 4.3 p.p. below the EU average). With the high percentage of youth (20–24 years[2]) participating in a tertiary education, Slovenia's gap in the share of young people with a tertiary education is largely due to the low efficiency of studies and the participation in education mainly because of the benefits associated with the student status. Higher than the EU average is the share of young people aged 30–34 with a tertiary education, which totalled 37.1% in the second quarter, up 3.1 p.p. from the year before. During the implementation of SDS, the share of young people aged 30–34 with a tertiary education increased markedly (by 12.1 p.p.), while the corresponding shares of the population in the age groups of 45–54 (22.7%) and 55–64 (17.1%) were lower than in the EU as a whole.

The share of women with a tertiary education is much higher than the share of men, with the gender gap in education having increased further in 2011. The share of women with a tertiary education totalled 30.9% in 2011; the share of men 20.3%. The education gap between women and men is increasing. In 2011, it was the widest in the whole period of the implementation of SDS when it also strongly exceeded the average in the EU.[3] The significantly higher share of women with a tertiary education is related to the higher share of women enrolled in this level of education. As the female share in the total number of students enrolled in a tertiary education grew further in 2010/2011 (women: 60.6%; men: 39.4%), the gender gap in the share of the population with a tertiary education is not expected to narrow in the future either.

[1] The share of Bologna programme graduates totalled 25.3% in 2010, a 10 p.p. increase over 2009.

[2] The participation of young people aged 20–24 in a tertiary education (47.7%) was significantly above the EU average (29.3%) in 2009, being the highest among the EU countries in the period of the implementation of SDS.

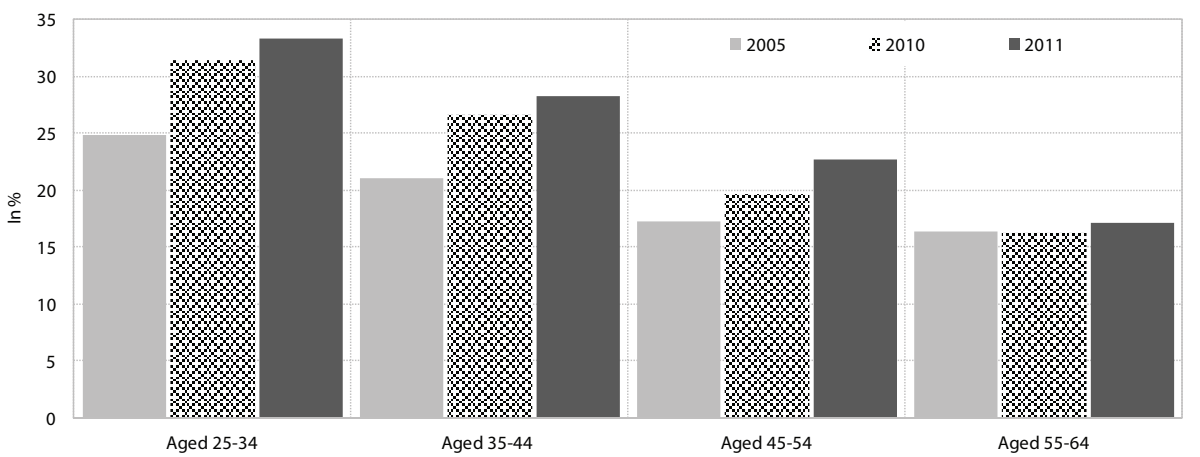
[3] In the EU as a whole, the share of women with a tertiary education totalled 27.6% in 2011, while the corresponding share of men was 25.5%.

Table: **Share of population aged 25–64 with a tertiary education, EU, 1995–2011 (2nd quarter), in %**

	1998	2000	2005	2006	2007	2008	2009	2010	2011
EU-27	**9.4**	**18.5**	**22.2**	**22.8**	**23.4**	**24.1**	**25.0**	**25.7**	**26.5**
Austria	N/A	14.5	17.6	17.7	17.7	18.1	19.1	19.5	19.0
Belgium	25.3	27.1	30.7	31.0	31.4	31.9	32.4	35.2	34.9
Bulgaria	N/A	18.4	21.4	21.7	22.1	22.8	22.9	22.8	23.4
Cyprus	N/A	25.1	27.8	29.9	33.0	34.6	34.3	35.1	37.1
Czech Republic	10.5	11.5	13.1	13.5	13.7	14.3	15.4	16.7	18.0
Denmark	25.4	25.2	32.9	34.8	30.5	34.3	32.7	33.1	33.2
Estonia	30.2	28.9	33.6	32.9	34.0	33.5	35.9	35.7	36.9
Finland	28.8	32.3	34.5	34.9	36.4	36.5	37.1	37.1	38.7
France	N/A	N/A	25.0	25.9	26.8	27.1	28.6	28.9	29.6
Greece	16.8	16.9	20.5	21.3	21.9	22.5	22.7	23.7	25.1
Ireland	N/A	21.2	28.3	30.1	31.2	32.7	34.2	36.1	36.9
Italy	8.6	9.4	11.9	12.7	13.5	14.3	14.4	14.7	15.0
Latvia	17.0	18.0	21.5	21.4	23.6	24.2	23.7	26.9	27.7
Lithuania	41.0	41.8	26.5	27.2	29.8	30.5	30.2	32.3	33.4
Luxembourg	0.0	17.9	26.5	24.0	28.6	28.3	34.0	34.5	35.9
Hungary	13.1	14.0	17.0	17.8	17.9	19.1	19.8	20.0	20.9
Malta	N/A	5.4	12.1	12.4	12.4	13.3	12.8	12.9	16.0
Germany	N/A	22.5	24.5	24.2	24.3	25.1	26.3	26.4	27.3
Netherlands	21.8	24.0	29.9	29.8	30.3	32.0	32.3	33.8	31.5
Poland	10.7	11.4	16.5	17.8	18.8	19.6	21.2	22.6	23.3
Portugal	8.3	9.0	12.7	13.4	13.6	14.2	14.7	15.5	16.9
Romania	8.7	9.2	11.0	11.8	12.0	12.9	13.2	13.4	14.3
Slovakia	10.3	10.2	13.9	14.4	14.4	14.6	15.6	17.1	18.4
Slovenia	**14.4**	**15.7**	**20.0**	**21.5**	**22.9**	**21.9**	**22.5**	**23.7**	**25.5**
Spain	20.0	22.5	28.2	28.4	28.9	29.3	29.5	30.5	31.4
Sweden	27.4	29.5	29.3	30.3	31.2	31.9	32.8	34.0	35.0
United Kingdom	N/A	24.4	28.3	29.3	30.4	31.6	32.9	34.5	36.6

Source: Eurostat Portal Page – Population and Social Conditions, 2012.
Note: N/A – not available.

Figure: **Share of population with a tertiary education, Slovenia, by age, 2005–2011 (second quarter), in %**



Source: Eurostat Portal Page – Population and Social Conditions, 2012

Average years of schooling of adult population

In 2010, the average number of years of schooling of the adult population increased further. According to the comparable data on the average number of the years of schooling of the population released by UNDP (United Nations Development Programme, see table),[1] Slovenia's population aged 25 and older completed an average of 11.6 years of schooling in 2010,[2] which ranks Slovenia relatively high both among EU countries (in 2010, a higher number of years of schooling was recorded in only four EU Member States) and worldwide. According to these calculations, the average number of years of schooling increased by 0.3 since the previous year, and by 1.2 over the whole period of the implementation of SDS (2005–2010).[3] The high figure in Slovenia is mainly due to a large share of the population with upper secondary education. In terms of the population with a tertiary education, Slovenia is only slowly closing the gap with the EU average,[4] but in Slovenia the number of years of schooling increases mainly due to a growing share of generations completing a tertiary education. Among these, the share of women is on the increase, making the gender gap in the average educational attainment even wider.[5] According to IMAD's calculations of the average years of schooling[6] based on data from the Labour Force Survey, the population aged 25–64 completed 12 years of schooling[7] in Slovenia in 2010 (women 12.1 and men 11.8). Given the high participation of young generations in tertiary education, the average number of years of schooling increases much faster for younger than older age groups. On average, the educational attainment of people aged 25–39 is an entire schooling year higher than that for the age group 40–64, which in turn exceeds by nearly one year and a half the educational attainment of those older than 65.

The average number of years of schooling of the active population is also increasing, largely due to a higher number of employees with a tertiary education. According to the Labour Force Survey, the workforce in Slovenia had completed 12.2 years of schooling, on average, in 2010 (the same as in the previous year or 0.3 years more than in 2005). According to the Statistical Register of Employment, the average number of years of schooling of the population in employment is somewhat lower.[8] In September 2011, it was 12.2 years and a year earlier 11.9 years. The economic crisis was hardest on sectors employing less-educated workforce (construction, labour-intensive manufacturing). This is why the number of employed people with lower and middle vocational education declined in particular in these years. The number of employed people with general secondary education also dropped in 2010, while the number of those with post-secondary and higher education increased in both years, particularly in business and public services and trade, and in 2011 also in manufacturing.

[1] These calculations are generally based on data from population censuses stored in the UNESCO database, while data for the interim years are estimated using the Barro and Lee methodology.

[2] The same average number of years of schooling of the population aged 25 and older was also obtained by IMAD's calculation for 2010 based on the Labour Force Survey. The IMAD calculation using the more detailed data from the register-based census of the Slovenian population as of 1 January 2011 also gave a similar result (11.5 years).

[3] According to IMAD's calculations based on Labour Force Surveys, the average number of years of schooling in 2010 was only 0.1 years higher than in 2009, or 0.3 years higher than in 2005. Barro and Lee generally take into account only data from population censuses instead of sample surveys, which they consider too rough because of the small samples. For Slovenia they made an exception for 2010 upon request by SORS, as their old estimate for Slovenia had still been based on the 1991 census data for Yugoslavia. Upon the intervention by SORS, which provided them with data from the population censuses for Slovenia, they have already updated figures in their dataset at http://www.barrolee.com/, while they have yet to correct the starting point in the released estimate. Much like the calculation according to the 2011 population census, the calculations of the average years of schooling according to the censuses of Slovenia's population in 1991 and 2002 do not differ substantially from IMAD's calculations using data from Labour Force surveys (for 1993 and 2002); similar calculations were also published in the updated dataset by Barro and Lee.

[4] See the indicator Share of the population with a tertiary education.

[5] Since 2003, the average number of years of schooling of women has exceeded that of men.

[6] Calculations taking into account the following assumptions on the average regulatory length of schooling: 6.0 years without completed primary school, 8.0 years with completed primary school, 9.5 years with lower vocational education, 11.0 years with middle vocational education, 12.2 years with completed professional or general upper secondary school, 14.0 years with post-secondary education, 16.2 with university education and 19.0 years with post-graduate education.

[7] This is higher, as the population aged 65 and older generally has lower educational attainment than younger population groups. According to our calculations based on the Labour Force Survey, the Slovenian population aged 65 and over had 10.2 years of schooling in 2010.

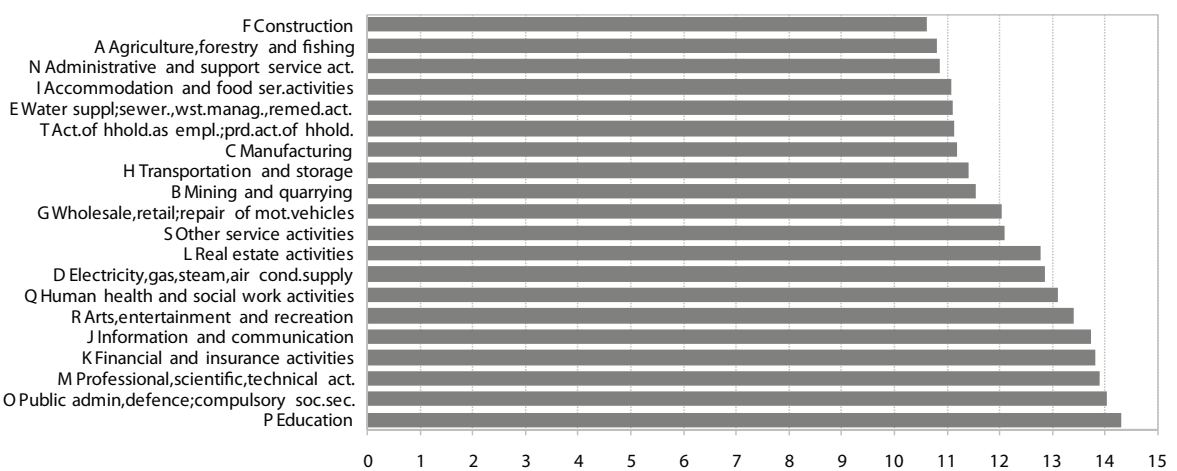
[8] Data in the Statistical Register of Employment exclude self-employed farmers and people in informal employment, but they do include temporarily employed foreigners who mainly have lower education (and are not captured in the Labour Force Survey).

Table: **Average number of years of schooling of the population aged 25 years and over, Slovenia and the EU, 1995–2010**

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
Austria	8.6	9.1	9.9	10.1	10.3	10.5	10.6	10.6
Belgium	9.7	10.0	10.6	10.6	10.7	10.6	10.8	10.9
Bulgaria	9.3	9.5	10.0	10.1	10.2	10.4	10.5	10.6
Cyprus	9.2	9.7	9.0	9.1	9.3	9.4	9.6	9.8
Czech Republic	11.4	11.9	13.1	12.9	12.6	12.6	12.5	12.3
Denmark	9.9	10.5	11.1	11.2	11.2	11.3	11.5	11.4
Estonia	10.5	11.7	11.9	11.9	11.9	12.0	12.0	12.0
Finland	9.2	8.2	10.1	10.1	10.2	10.2	10.2	10.3
France	8.3	9.3	9.9	10.0	10.2	10.3	10.4	10.6
Greece	8.2	8.6	9.8	9.8	9.9	10.0	10.1	10.1
Ireland	10.9	11.2	11.4	11.4	11.5	11.5	11.6	11.6
Italy	7.8	8.4	9.5	9.6	9.8	9.9	10.0	10.1
Latvia	8.8	9.4	10.4	10.6	10.8	11.0	11.3	11.5
Lithuania	9.1	9.9	10.7	10.7	10.8	10.8	10.9	10.9
Luxembourg	9.3	9.7	9.9	9.9	10.0	10.0	10.0	10.1
Hungary	10.4	10.5	10.7	10.8	10.8	10.9	11.0	11.1
Malta	8.3	9.0	9.7	9.8	9.8	9.9	9.9	9.9
Germany	9.4	10.5	12.2	12.2	12.2	12.2	12.2	12.2
Netherlands	10.5	10.8	11.0	11.1	11.2	11.4	11.5	11.6
Poland	9.1	9.5	9.7	9.7	9.8	9.8	9.9	10.0
Portugal	6.4	6.8	7.2	7.3	7.4	7.5	7.6	7.7
Romania	9.5	9.9	10.1	10.2	10.3	10.3	10.4	10.4
Slovakia	11.2	11.2	11.6	11.6	11.6	11.6	11.6	11.6
Slovenia	**8.7**	**9.4**	**10.1**	**10.4**	**10.7**	**11.0**	**11.3**	**11.6**
Spain	7.7	9.1	9.7	9.8	10.0	10.1	10.2	10.4
Sweden	10.5	11.0	11.7	11.7	11.7	11.7	11.7	11.7
United Kingdom	8.1	8.5	8.9	8.9	9.0	9.1	9.2	9.8
Slovenia according to Labour Force Surveys	**10.4**	**10.8**	**11.2**	**11.3**	**11.4**	**11.4**	**11.5**	**11.6**

Source: International Human Development Indicators – UNDP (http://hdrstats.undp.org/en/indicators/103006.html); Barro and Lee methodology (2010) based on UNESCO statistics data; calculations by IMAD using data by SORS: Labour Market, Labour Force Survey.

Figure: **Average number of years of schooling of active population by activity, 2011**



Source: Labour Market – Statistical Register of Employment, SORS; calculations by IMAD.

Ratio of students to teaching staff

The ratio of students to teaching staff in tertiary education in Slovenia is improving but is still very unfavourable. On the international level, the ratio of students[1] to teaching staff[2] is frequently used as an indicator of the quality of tertiary education.[3] A lower ratio (i.e. fewer students per teacher) presumably facilitates the use of active teaching techniques and enhances communication between students and teachers. All of this contributes to the quality of the teaching process, which, in turn, influences the quality of the acquired knowledge and skills. In terms of the ratio of students to teaching staff in tertiary education, in 2009 (2008/2009 academic year), for which the latest data are available at the international level, Slovenia lagged significantly (with 20.0 students per teacher) behind the average of the 21 EU countries that are also OECD members (15.5). Although in the period of the implementation of SDS the ratio improved from 22.7 in 2005 to 20.0, Slovenia has the least favourable ratio among EU Member States. The high ratio of students-to-teaching staff in tertiary education in Slovenia is also attributable to the benefits of student status. The students to teaching staff ratio in tertiary education was also improving in 2009/2010 and 2010/2011, as a result of a lower number of students enrolled and more teaching staff. In the period of SDS implementation, the ratio improved somewhat in Slovenia, but insufficiently in terms of increasing the quality of studies.

[1] All students participating in tertiary education are covered in the equivalent of full-time study = full-time students + 1/3 (i.e. part-time students + candidates for graduation + post-graduate students (SORS, Teaching staff at higher-education institutions and vocational colleges, Slovenia, 2006).

[2] Teaching staff includes instructional and professional support staff at vocational colleges (vocational college lecturers, exercise instructors and lab assistants) and teaching faculty (assistant professors, associate and full professors, lectors, lecturers and senior lecturers), while it excludes researchers and higher education assistants (teaching assistants, librarians, specialist advisors, research advisors, senior researchers, researchers and skills teachers).

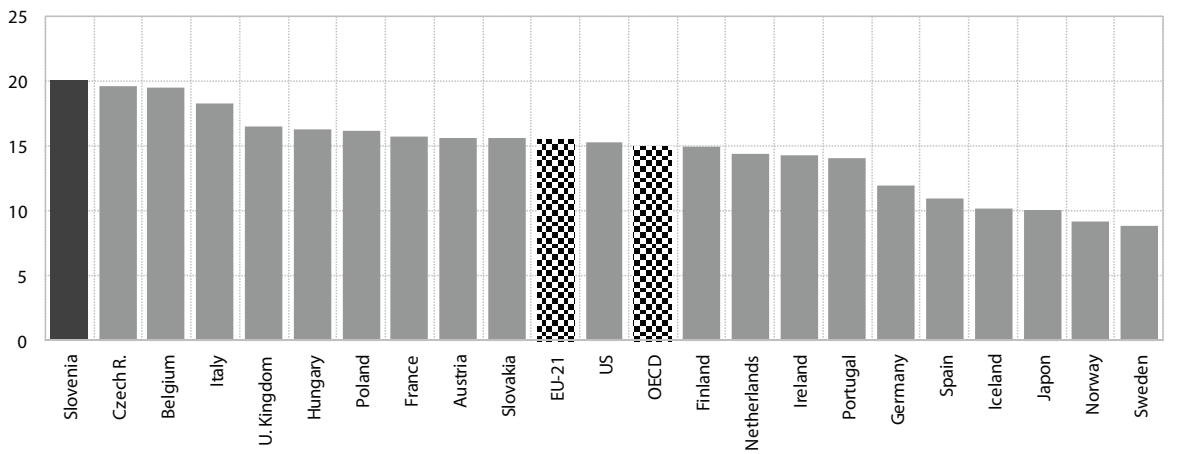
[3] Tertiary education includes full-time and part-time post-secondary vocational studies, higher undergraduate studies and post-graduate studies.

Table: **Ratio of students to teaching staff in tertiary education, Slovenia and OECD countries, 1998–2009**

	1998	2000	2005	2006	2007	2008	2009
OECD	**14.8**	**14.7**	**15.8**	**15.3**	**15.3**	**15.8**	**14.9**
EU-21	**N/A**	**N/A**	**16.4**	**16.0**	**16.0**	**15.4**	**15.5**
Austria	N/A	N/A	15.3	13.0	13.7	14.6	15.6
Belgium	N/A	19.9	19.6	18.7	18.1	19.0	19.5
Czech Rep.	13.5	13.5	19.0	18.5	18.6	19.1	19.6
Estonia	N/A	N/A	14.9	N/A	N/A	N/A	N/A
Finland	N/A	N/A	12.5	15.8	16.6	15.8	14.9
France	N/A	18.3	17.3	17.0	16.6	16.2	15.7
Greece	26.3	26.8	30.2	27.8	26.3	N/A	N/A
Ireland	16.6	17.4	17.4	17.9	16.5	15.9	14.3
Italy	N/A	22.8	21.4	20.4	19.5	19.5	18.3
Hungary	11.8	13.1	15.9	16.5	17.1	17.1	16.3
Germany	12.4	12.1	12.2	12.4	12.1	11.5	11.9
Netherlands	N/A	12.6	N/A	N/A	N/A	14.9	14.4
Poland	N/A	14.7	18.2	17.3	17.2	16.7	16.1
Portugal	N/A	N/A	13.2	12.7	13.2	13.8	14.1
Slovakia	N/A	10.2	11.7	12.4	13.2	15.4	15.6
Slovenia	**N/A**	**23.8**	**22.7**	**21.4**	**21**	**20.5**	**20.0**
Spain	17.2	15.9	10.6	10.8	10.4	11.1	10.9
Sweden	9.0	9.3	8.9	9.0	8.8	8.5	8.8
United Kingdom	17.7	17.6	18.2	16.4	17.6	16.9	16.5
Iceland	9.3	7.9	11.0	10.7	10.2	10.1	10.2
Japan	11.8	11.4	11.0	10.8	10.6	10.4	10.1
Norway	13.0	12.7	N/A	10.5	10.0	9.3	9.2
US	14.6	13.5	15.7	N/A	15.1	15.0	15.3

Source: Education at a Glance, (OECD), issues 2002–2011; Teaching staff at higher education institutions and vocational colleges, Slovenia, (SORS, First release), 2010; Teaching staff at higher education institutions and vocational colleges, Slovenia, (SORS, First release), 2009; Teaching staff at higher education institutions and vocational colleges, Slovenia, (SORS, First release), 2008; Teaching staff at higher education institutions and vocational colleges, Slovenia, (SORS, First release), 2007; Teaching staff at higher education institutions and vocational colleges, Slovenia, (SORS, First release), 2006; Rapid reports No. 5; Teaching and professional staff at higher education institutions and vocational colleges, (SORS), 2001; SI-STAT Data Portal – Demography and social statistics – Education, 2011.
Notes: [1] Data are available only for the EU countries that are members of the OECD. Since 2009 only data for the EU-21 have been available; up to 2009 for EU-19; N/A – data not available.

Figure: **Ratio of students to teaching staff in tertiary education, Slovenia and OECD countries, 2009 (2008/2009 academic year)**



Source: Education at a Glance (2011); Teaching staff at higher education institutions and vocational colleges, Slovenia (First release), 2010; SORS; SI-STAT Data Portal – Demography and social statistics – Education, 2011; calculations by IMAD.

Public expenditure on education

Total public expenditure[1] on education as a share of GDP[2] is high and increased further in 2009. In 2009, it amounted to 5.7% of GDP, 0.5 p.p. more than a year earlier. Amid the 3% real increase in public expenditure on education, the substantial expansion of the share was largely related to the steep decline in GDP. In 2008 (the latest international data available), the share exceeded the EU average, which can be explained by a high participation in education in Slovenia.

In 2009, public expenditure on education increased most notably in real terms at the pre-school and tertiary levels of education. In 2009, public expenditure on education grew at all education levels, except primary education. The largest increase was recorded for the pre-school level (by 8.2%), due to a higher number of children in kindergartens (a higher number of kindergartens, additional class units and new hiring). Amid a further increase in the number of births in 2010, and in view of the implementation of the national targets for pre-school education set in the White Paper on Education and Training from 2011 (increasing the participation of children in kindergartens, lowering the standards[3]) and the EU objectives (increasing enrolment in kindergartens), we can also expect public expenditure for this level to increase in the future. In 2009, significant growth was also recorded for public expenditure on tertiary education (by 7.2%). Direct expenditure on educational institutions rose in particular, which is linked to additional jobs, the provision of funds to eliminate wage disparities and the funding of development tasks and equipment. Expenditure on transfers for students/households grew as well, yet much less. During SDS implementation, public expenditure increased most notably at the pre-school and tertiary levels of education, which also recorded higher enrolment, in contrast to public expenditure on upper secondary education, which declined due to a lower number of students.

Slovenia allocates the bulk of public expenditure on education for primary education. In 2009, public expenditure on pre-school education totalled 0.56% of GDP in Slovenia; according to data for 2008 (the most recent available international data), it was somewhat below the EU average. The increase in these expenses is related to EU policies and national policies for improving the participation of children in this level of education. Accounting for the largest share in total public expenditure, expenditure on primary education totalled 2.49% of GDP in 2009. For upper secondary education, 1.26% of GDP was allocated in Slovenia in 2009, 0.12 p.p. less than at the beginning of SDS implementation in 2005. Public expenditure on tertiary education totalled 1.38% of GDP in 2009, 0.13 p.p. more than in 2005. In 2008, its share in GDP was somewhat higher than in the EU as a whole (1.14% of GDP).

The share of public expenditure on transfers to students/households[4] at the tertiary level declined in 2009, but is still relatively substantial. Having totalled 7.8% for all levels of education in 2009, the share has been declining for several years, but it nevertheless exceeded the EU average (6.4%) in 2008. The share of public expenditure on transfers at the tertiary level also dropped in 2009 (to 22.1%), but it is much higher on average than in the EU (2008: 16.7%). In the period of the implementation of SDS, the shares of public expenditure on transfers for all levels of education and at the tertiary level of education declined.

[1] Total public expenditure on education comprises the total budgetary expenditure on formal education of youth and adults at central and local 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 using internationally comparable methodology based on the UOE questionnaire (a joint questionnaire of UNESCO, OECD and Eurostat).

[2] The share of total public expenditure on education in GDP is calculated with regard to the GDP revision, SORS release, August 2011.

[3] The White Paper on Education and Training in the RS from 2011 anticipates a lowering of preschool standards to no more than 12 children per class unit in the first age period and the ratio of children to adults in a class unit to 6:1 for nine hours per day. In the second age period, the class unit should have no more than 20 children and the ratio of children to adults should be 10:1 six hours per day. The standard for advisers should be reduced from 30 class units to 20.

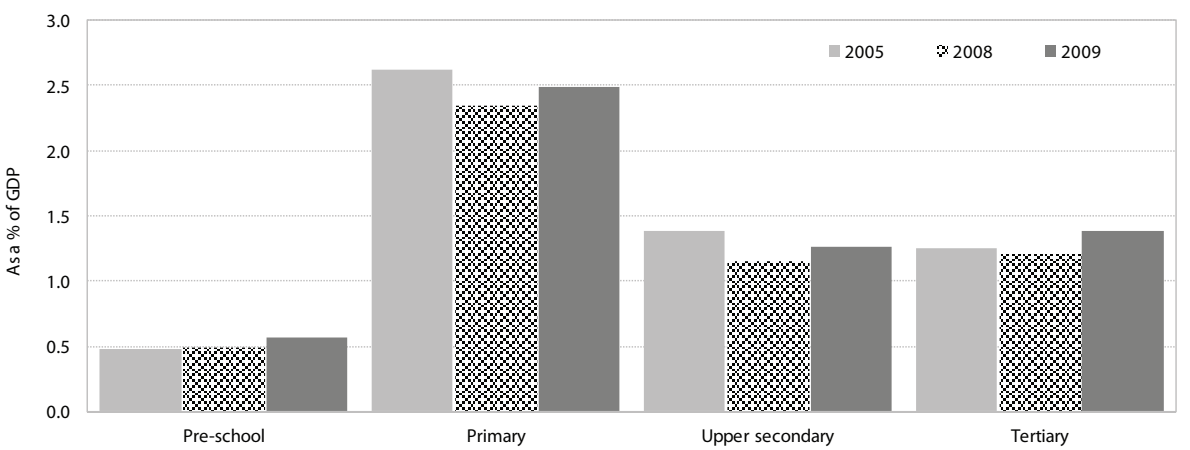
[4] Public transfers on education comprise scholarships, child benefits in the part where an additional condition for payment is participation in education, subsidies for transport, meals, accommodation, textbooks, learning technology and professional literature, etc.

Table: **Total public expenditure on education as a share of GDP, EU-27, 1995–2008**

	1995	2000	2005	2006	2007	2008
EU-27	**N/A**	**4.88**	**5.04**	**5.04**	**4.96**	**5.07**
Austria	6.04	5.74	5.48	5.46	5.40	5.46
Belgium	N/A	N/A	5.93	6.00	6.02	6.46
Bulgaria	3.39	3.97	4.51	4.24	4.13	4.61
Cyprus	4.63	5.35	6.92	7.02	6.93	7.41
Czech Republic	N/A	3.97	4.26	4.60	4.20	4.08
Denmark	7.67	8.29	8.30	7.97	7.83	7.75
Estonia	5.88	6.10	4.88	4.75	4.85	5.67
Finland	6.85	5.89	6.31	6.19	5.91	6.13
France	6.04	6.03	5.65	5.58	5.59	5.58
Greece	2.87	3.39	4.04	N/A	N/A	N/A
Ireland	5.07	4.28	4.75	4.76	4.90	5.62
Italy	4.85	4.55	4.43	4.70	4.29	4.58
Latvia	6.19	5.64	5.06	5.07	5.00	5.71
Lithuania	5.12	5.90	4.90	4.84	4.67	4.91
Luxembourg	4.26	N/A	3.78	3.38	3.15	N/A
Hungary	5.39	4.42	5.47	5.42	5.20	5.10
Malta	N/A	4.49	6.79	N/A	6.31	6.01
Germany	4.62	4.46	4.53	4.40	4.50	4.55
Netherlands	5.06	4.96	5.48	5.46	5.32	5.46
Poland	5.10	4.89	5.47	5.25	4.91	5.09
Portugal	5.37	5.42	5.39	5.25	5.30	4.89
Romania	N/A	2.86	3.48	N/A	4.25	N/A
Slovakia	5.01	3.93	3.85	3.80	3.62	3.59
Slovenia	**5.69**	**5.75**	**5.73**	**5.72**	**5.16**	**5.20**
Spain	4.66	4.28	4.23	4.27	4.35	4.62
Sweden	7.22	7.21	6.97	6.85	6.69	6.74
United Kingdom	5.02	4.46	5.36	5.47	5.39	5.36

Source: Eurostat Portal Page – Population and Social Conditions, 2012; Expenditure on formal education, 2009 – provisional data – SORS (2011); Expenditure on formal education, Slovenia, 2005 – 2008 – final data – revision – SORS (2011); Expenditure on formal education, 2004 – SORS (2007); Expenditure on formal education, (2006) – SORS; Statistical Yearbook 2008 – SORS (2008); Expenditure on formal education, 1995 – 2003 – SORS (2006).
Notes: Indicators for Slovenia calculated based on the latest GDP revision (August 2011); N/A – not available.

Figure: **Total public expenditure on formal education, by level of education, as a % of GDP, Slovenia, 2005–2009**



Source: Expenditure on formal education, Slovenia, 2005 – 2008 – final data – revision – SORS (2011); Expenditure on formal education, 2009 – provisional data – SORS (2011).
Note: Indicators for Slovenia calculated based on the latest revision of GDP (August 2011).

Private expenditure on education

In 2009, the share of private expenditure on formal education[1] remained at roughly the same level as in the previous year. The share of private expenditure on education is, at the international level, an important indicator of financial access to education. In 2009, it totalled 11.5% for all levels of formal education, which is approximately the same figure as a year earlier. The share of private expenditure on education (the most recent international data) was below the EU average in 2008. In the whole period of SDS implementation, it declined by 2.3 p.p.

The share of private expenditure on the pre-school level of education shrank in 2009, for the second consecutive year, while it increased at primary and upper secondary levels. According to the Kindergarten Act from 1996, the basis for the price paid by parents is the price of the programme attended by the child. It covers the costs of education, care and meals, but it does not include funds for investment and investment maintenance. In 2009, the share of private expenditure on pre-school education totalled 20.7%,[2] being the highest in the last three years among all levels of education. The decline in the share of private expenditure is also a result of the Act Amending the Pre-School Institutions (ZVrt-D) from 2008, stipulating that when more than one child from the family attends kindergarten, the parents pay a lower price by one category for the older child in the family and are exempt from payment for younger children. Another factor is an increase in the share of investment funds in total expenditure, which are not included in the price of the kindergarten programme paid by parents. In 2008, the share of private expenditure on pre-school education (22.5%) significantly exceeded the average of the 21 EU countries that are also OECD members (12.2%). The share of private expenditure on primary education totalled 8.7% in 2009 (up 0.5 p.p. from the year earlier). At the upper secondary level, it amounted to 8.9% (up 0.2 p.p. from the year before). Compared to 2005 (the beginning of SDS implementation), the share of private expenditure on primary education rose by 1 p.p., while at the upper secondary level the share remained more or less unchanged.

The share of private expenditure on tertiary education is low and in 2009 it declined further. Private expenditure at the tertiary level includes tuition fees, enrolment fees and other contributions, costs of accommodation in residence halls, etc.). In Slovenia, full-time study at the first and second levels is free, while part-time students pay high tuition fees. In 2009, the share of private expenditure amounted to 14.5% of GDP (1.3 p.p. less than a year earlier). The share of private expenditure on tertiary education has been shrinking for several years due to a decline in enrolment in part-time studies, and an increase in enrolment in 2nd level Bologna studies, which are publicly funded for full-time students.[3] In the 2008/2009 academic year, no call for applications for pre-reform masters and specialist programmes was launched for first-year students, which led to a decrease in funds raised from tuition fees. Slovenia thus deviates from the common practice in most EU countries that have tuition fees not only in private, but also in public institutions, and is similar to some Northern European countries (Sweden, Finland, Norway), where public institutions are tuition free. In 2008, the share of private expenditure on tertiary education was below the EU average for the first time in the period of the implementation of SDS (in 2008: Slovenia: 16.2%; EU: 20.9%). During SDS implementation, the share of private expenditure on tertiary education dropped substantially, in contrast to the EU as a whole, where it rose.

[1] The share of private expenditure on educational institutions in total expenditure on educational institutions (public and private expenditure). Private expenditure on educational institutions includes expenditure of households and other private entities paid directly to educational institutions (expenditure on school fees, meals, open-air school, accommodation for pupils and students in residence halls, etc.).

[2] The share was 1.8 p.p. smaller than in 2008, and 3.5 p.p. smaller than at the beginning of SDS implementation (2005).

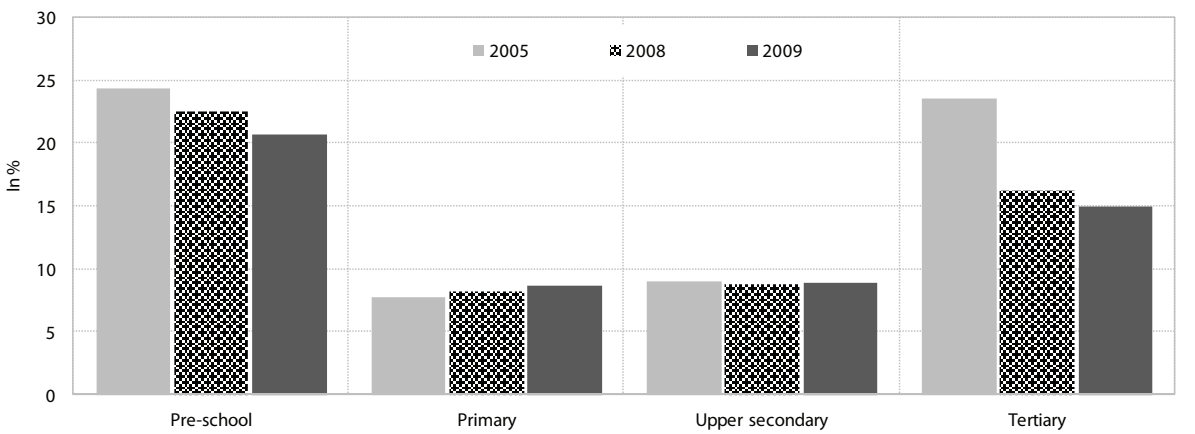
[3] Pursuant to the Decree amending the Decree on budgetary financing of higher education and other university member institutions from 2004 to 2008, passed in 2006, budget funding is provided to full-time students enrolled in post-secondary vocational and university degree programmes adopted prior to 11 June 2004, and to those enrolled in first- and second-level study programmes, excluding pre-graduation students at a higher-education institution in the current year.

Table: **Share of private expenditure on all levels of formal education, EU-27, 1999–2008, in %**

	1999	2000	2005	2006	2007	2008
EU-27	**12.2**	**11.5**	**12.7**	**12.6**	**13.5**	**13.8**
Austria	5.1	5.8	8.6	10.8	9.0	9.2
Belgium	5.0	7.9	5.8	5.6	5.6	5.7
Bulgaria	12.7	14.7	13.9	15.2	15.0	12.8
Cyprus	34.0	34.9	16.7	16.6	17.5	17.3
Czech Republic	12.4	10.1	12.4	11.1	11.3	12.7
Denmark	4.0	4.0	7.7	8.1	7.5	7.8
Estonia	N/A	N/A	N/A	N/A	6.5	5.3
Finland	2.2	2.0	2.2	2.5	2.5	2.6
France	8.1	8.8	9.2	9.1	9.0	10.0
Greece	6.7	6.2	6.0	N/A	N/A	N/A
Ireland	7.3	7.0	6.3	6.2	5.2	6.2
Italy	9.7	9.1	9.5	7.7	8.9	8.6
Latvia	9.8	11.1	13.8	12.0	10.4	9.9
Lithuania	N/A	N/A	9.8	9.2	9.3	9.9
Hungary	12.1	11.7	8.7	9.5	N/A	N/A
Malta	6.1	10.6	5.3	N/A	5.7	5.0
Germany	19.2	18.9	18.0	14.8	14.6	14.6
Netherlands	16.3	15.9	16.0	15.7	16.2	16.4
Poland	3.1	N/A	9.3	9.5	9.4	12.9
Portugal	1.3	1.4	7.4	8.0	8.3	9.5
Romania	9.8	8.3	N/A	N/A	10.8	N/A
Slovakia	2.2	3.6	16.1	14.8	13.8	17.5
Slovenia	**13.9**	**14.9**	**13.0**	**12.8**	**13.1**	**11.6**
Spain	17.7	12.6	11.4	11.1	12.7	12.9
Sweden	3.0	3.0	3.0	2.7	2.6	2.7
United Kingdom	16.3	14.8	19.9	24.7	30.5	30.5

Source: Eurostat Portal Page – Population and Social conditions, 2012; Expenditure on formal education, Slovenia, 2005 – 2008 – final data – revision – SORS (2011); Expenditure on formal education, 2009 – provisional data – SORS (2011). Expenditure on formal education, 1995 – 2003 SORS (2006).
Note: Data for Luxembourg not available: N/A – not available.

Figure: **Share of private expenditure on formal education, by level of education, Slovenia, 2005–2009, in %**



Source: Expenditure on formal education, Slovenia, 2005 – 2008 – final data – revision – SORS (2011); Expenditure on formal education, 2009 – provisional data – SORS (2011).
Note: Indicators for Slovenia calculated based on the latest GDP revision (August 2011).

Expenditure on educational institutions per student

Expenditure on educational institutions per student (measured in EU PPS[1]) grew in 2008, being again above the EU average. In 2008 (the most recent available data) it totalled EUR PPS 6,528.7, exceeding the EU average by EUR PPS 70. Relative to the preceding year, it increased more than in the EU as a whole. During the period of the implementation of SDS, it rose by 9.7%. Slovenia also exceeds the EU average in terms of expenditure on educational institutions per student relative to GDP per capita (in %), which also takes into account the level of a country's economic development. In 2008 this expenditure totalled 28.6% for all education levels, 3.0 p.p. more than in the EU as a whole.

Expenditure on educational institutions per student in tertiary education in Slovenia is low. In 2008, Slovenia had the highest expenditure on educational institutions per student at the primary level, which totalled EUR PPS 7,182.6, exceeding expenditure at the levels of upper secondary (EUR PPS 5,535.6) and tertiary education (EUR PPS 6,441.0). At the tertiary level, Slovenia lags significantly behind most other EU countries with regard to expenditure (EU average: EUR PPS 9,296.1). In 2008, expenditure on educational institutions per tertiary-education student increased more (by EUR PPS 485.9) than in the EU as a whole (by EUR PPS 194.3). The increases at the primary and upper secondary levels were smaller. At these two levels expenditure per student increased due to lower enrolment and increased expenditure on educational institutions.[2] In 2008 expenditure on educational institutions per tertiary-education student was even lower than at the time of the adoption of SDS (in 2005). We estimate that in 2009 expenditure on educational institutions per tertiary-education student rose, amid an increase in expenditure on educational institutions and a decline in the number of enrolled students. This expenditure was also low relative to per capita GDP, which also takes account of the level of economic development (28.3%). In 2008, the gap with the EU average narrowed to 8.6 p.p. Low expenditure per student is related to the high participation rate of young people (aged 20–24) in tertiary education, significantly higher than the EU average, which is also attributable to fictitious enrolments in tertiary education. During the implementation of SDS, expenditure on educational institutions per tertiary-education student as a percentage of GDP dropped sharply, in contrast to that in the EU as a whole, where it rose substantially. The reason for the 2005–2008 decline is that the high increase in the participation in tertiary education was not accompanied by growth in expenditure on education; in the private part, expenditure even declined.[3]

[1] Purchasing power standard.

[2] In contrast, at the tertiary level, expenditure on educational institutions dropped due to a decline in private expenditure, while public expenditure grew. As a consequence, expenditure on educational institutions per student increased less than it would have if private expenditure had not declined.

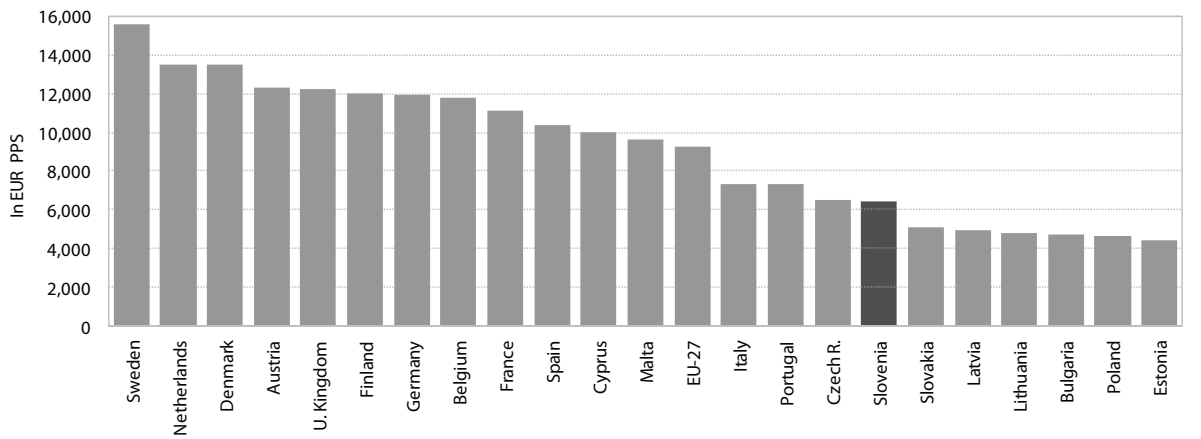
[3] See the indicator Private expenditure on education.

Table: **Annual expenditure on educational institutions per student; in purchasing power standards (EUR PPS) and in comparison with GDP per capita, 2001–2008**

	In EUR PPS					Expenditure per student in comparison with GDP per capita, in %				
	2001	2005	2006	2007	2008	2001	2005	2006	2007	2008
EU-27	**5,081.1**	**5,673.4**	**5,936.0**	**6,250.7**	**6,458.7**	**24.6**	**25.3**	**25.2**	**24.9**	**25.6**
Austria	7,001.9	8,092.4	8,633.5	8,694.9	8,836.3	28.3	28.9	29.3	28.4	28.4
Belgium	6,283.4	6,431.2	6,974.1	7,263.7	7,866.2	25.7	23.9	25.0	25.2	27.2
Bulgaria	1,326.2	1,952.8	2,131.4	2,290.0	2,840.1	22.9	25.2	24.7	24.4	27.4
Cyprus	4,953.1	6,584.4	7,136.3	7,708.0	8,460.8	27.6	32.2	33.3	33.1	35.2
Czech Republic	2.786.5	3,792.4	4,411.9	4,451.8	4,520.1	20.1	22.2	24.2	22.3	22.4
Denmark	7,305.7	8,092.7	8,402.3	8,595.4	8,701.1	28.9	29.1	28.6	28.5	28.9
Estonia	N/A	2,825.0	3,181.5	3,674.7	4,226.0	N/A	20.4	20.7	21.4	25.0
Finland	5,285.8	6,202.1	6,400.9	6,682.0	6,987.6	23.1	24.1	23.7	22.8	23.8
France	5,931.3	6,295.6	6,493.9	6,928.3	7,030.8	25.9	25.3	25.3	25.6	26.0
Greece	3,237.7	4,485.0	N/A	N/A	N/A	18.9	21.7	N/A	N/A	N/A
Ireland	4,636.5	6,026.1	6,516.3	7,172.4	N/A	17.7	18.6	18.9	19.4	N/A
Italy	6,384.6	5,901.6	6,438.5	6,205.2	6,608.8	27.4	25.0	26.1	24.1	25.9
Latvia	1,995.1	2,682.7	3,074.2	3,665.5	4,332.4	26.0	24.6	25.2	26.4	30.3
Lithuania	1,860.3	2,447.4	2,751.2	3,174.4	3,622.4	22.7	20.6	21.0	21.5	23.3
Luxembourg	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hungary	N/A	3,801.7	3,995.1	N/A	N/A	N/A	26.8	26.7	N/A	N/A
Malta	3,306.7	5,914.3	N/A	6,437.1	6,220.3	21.5	33.8	N/A	33.8	32.7
Germany	5,815.2	6,620.5	6,474.1	6,752.1	6,953.1	25.2	25.2	23.6	23.4	24.1
Netherlands	6,265.8	7,317.3	7,494.2	7,891.0	8,068.9	23.7	24.9	24.2	24.0	24.0
Poland	2,183.8	3,068.2	3,040.5	3,225.9	3,781.0	23.2	26.6	24.8	23.8	26.7
Portugal	4,037.2	4,813.9	5,016.3	5,124.9	4,978.6	26.4	27.8	27.8	27.2	25.3
Romania	N/A	1,437.9	N/A	N/A	N/A	N/A	18.3	N/A	N/A	N/A
Slovakia	1,845.6	2,695.0	2,936.3	3,122.0	3,523.4	17.8	19.9	19.6	18.5	19.5
Slovenia	**4,647.5**	**5,949.2**	**6,248.5**	**6,055.4**	**6,528.7**	**29.5**	**30.2**	**30.1**	**27.4**	**28.6**
Spain	4,526.5	5,681.7	6,169.8	6,772.9	6,940.5	23.3	24.8	24.9	25.9	27.0
Sweden	6,095.6	7,029.8	7,395.8	7,906.5	8,067.4	25.4	26.0	25.8	25.9	26.3
United Kingdom	5,152.4	7,137.2	7,925.4	7,971.5	7,941.6	22.1	26.1	28.1	27.3	26.6

Source: Eurostat Portal Page – Population and Social Conditions, 2012.
Note: PPS – purchasing power standards; N/A – not available.

Figure: **Expenditure on educational institutions per student, in EUR PPS, tertiary education, 2008**



Source: Eurostat Portal Page – Population and social conditions, 2012.

Adult participation in education

The level of adult participation in formal education[1] is higher than the EU average, but in 2009 it declined for the third year in a row. Participation of adult population aged 25–64 in all levels of formal education amounted to 4.0% in 2009 (the latest available data), exceeding the EU average by 0.7 p.p. Relative to the preceding year it dropped, in contrast to that in the EU as a whole. Adult participation in all levels of formal education also declined in the whole period of the implementation of SDS.

Adult participation in education was highest at the tertiary level, but there is still room for improvement, particularly at the level of primary education. Much as in other EU countries, the participation rate of adults aged 25–64 in primary education is low (0.1%). More adults should be included in primary education, as there are 21 thousand people with incomplete primary school in this age group[2] while the number of those enrolled in primary school is much lower.[3] We estimate that the low number of adults participating in primary education is also due to the methods of delivering primary school curricula, which are not adjusted to adults. Adult participation in upper secondary education, which was 0.7% in 2009, is otherwise somewhat above the EU average, but, given the relatively high number of persons with incomplete upper secondary school in Slovenia, it is low. The participation of adults in upper secondary education should be increased, particularly in the age groups of 30–39 and 40–64, which have the largest shares of low-educated people.[4] The highest participation rate was recorded in tertiary education. In the 2010/2011 academic year, for which the most recent data are available for Slovenia, it was 2.8%, 0.4 p.p. less than a year earlier. In 2009 the share otherwise exceeded the EU average by 0.8 p.p., but in recent years the gap has been closing.

Adult participation in non-formal education improved in 2010, but the participation of people with a lower education remains low. The participation of the adult population aged 25–64 in non-formal education amounted to 10.2 % in 2010, exceeding the EU average by 3.5 p.p. Participation in Slovenia increased slightly relative to the preceding year (by 1.0 p.p.), while it remained unchanged in the EU as a whole. In the period of SDS implementation, adult participation in non-formal education increased. The gap between female (11.8%) and male participation rates (8.6%) widened in 2010, being higher than on average in the EU (1.5 p.p.). With regard to age, participation in non-formal education is highest in the 35–44 age group, totalling 12.2% in 2010.[5] By level of education, the low participation of people with a lower education remains a problem (2010: 2.5%), as no progress was made in this area in the period of the implementation of SDS. The gap between the participation rates of tertiary- and low-educated people totalled 19.1 p.p. in 2010, much more than in the EU as a whole (9.9 p.p.). In terms of participation in non-formal education, the gap in between employed and unemployed persons widened as well.[6] In the period of SDS implementation, adult participation in non-formal education rose across all socio-economic groups, except for tertiary-educated people.

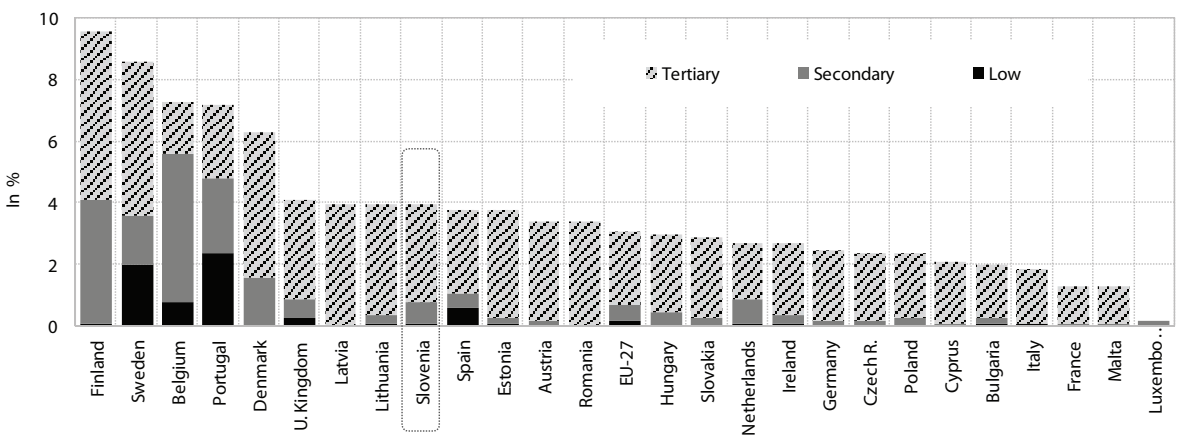
[1] It includes full-time and part-time students at all levels of formal education (primary, upper secondary and tertiary).
[2] According to the Labour Force Survey; no formal education, incomplete 1st stage primary education (1–3 years) and incomplete 2nd stage primary education (4–7 years).
[3] In the 2009/2010 school year 1,517 adults. In 2009 (the most recent data), 744 persons in the 25–64 age group were enrolled in primary school.
[4] In 2009, 1.3% of people aged 30–39 participated in upper secondary education and 0.2% of those in the 40–64 age group.
[5] The participation rate in the 25–34 age group was 11.9%; in the 45–54 age group: 10.0%; and in the 55–74 age group: 5.4%.
[6] In 2010, the participation of employed people in education increased, totalling 12.1%, while the participation of unemployed declined to 8.5%.

Table: **Participation of the population aged 25–64 in formal and non-formal education, EU–27, in %**

	Participation in all levels of formal education, in %					Participation in all levels of non-formal education[1], in %			
	1998	2000	2005	2008	2009	2004	2005	2009	2010
EU-27	**2.8**	**3.3**	**4.2**	**3.2**	**3.3**	**7.4**	**7**	**6.7**	**6.7**
Austria	3.2	3.4	2.6	3.3	3.5	10.6	10.5	10.8	10.5
Belgium	N/A	5.2	7.4	7.7	7.6	7.8	6.5	4.8	5.2
Bulgaria	1.5	1.5	1.7	2.1	2.2	0.3	0.2	0.4	0.3
Cyprus	N/A	0.3	1	1.6	2.1	8.1	4.8	4.9	5.3
Czech Republic	1	1.1	2.7	2.5	2.7	4.9	3.9	4.9	5.6
Denmark	4.7	5	6.7	6.3	6.3	20.3	22	27.7	28.6
Estonia	N/A	2.4	4.4	4.3	4.2	3	2.4	6.7	7.2
Finland	5.6	6.9	9.5	10.5	10.4	17.4	16.4	15.6	16.2
France	N/A	1.2	1.5	1.4	1.4	7.2	6.5	5.1	4.4
Greece	0.9	0.6	3	N/A	N/A	0.7	0.6	1.8	1.6
Ireland	1.7	2	2.8	2.8	2.8	4.2	4.1	2.7	3
Italy	1.7	1.9	2.2	2	2.1	4.1	3	3.3	3.6
Latvia	1.5	2.9	4.7	4.4	4.1	4.5	3.8	2.5	2.3
Lithuania	0.9	1.6	4.2	4	4.2	3.6	2.8	1.5	1.5
Luxembourg	N/A	0.3	0.4	0.7	0.4	8.9	7.4	11.8	11.4
Hungary	1.5	2.3	4	3.5	3.2	1.8	1.5	0.9	1.2
Malta	0	0.8	1.9	1.1	1.3	4.1	4.4	5.2	4.9
Germany	2.6	2.4	2.3	2.5	2.6	5.3	5.2	5.2	5.1
Netherlands	2.9	2.6	2.5	2.6	2.7	10.3	9.2	10	9.5
Poland	1.6	2	2.7	2.5	2.7	2.7	1.8	1.9	2.4
Portugal	2.8	3.3	3.3	6.5	7.2	2	1.3	1.8	1.8
Romania	0.6	0.7	1.8	3	3.4	0.4	0.2	N/A	N/A
Slovakia	N/A	N/A	2.2	3	2.9	3.4	3.2	1.2	1.1
Slovenia	**1.5**	**2.5**	**4.4**	**4.1**	**4**	**11.3**	**9.5**	**9.2**	**10.2**
Spain	2.4	2.5	3.8	3.7	3.7	2.9	8	8.3	8.4
Sweden	9	10.3	9.4	8.8	8.9	30.2	16.4	17.6	19.8
United Kingdom	7.1	11	14	4.1	4.2	32.1	25.2	17.9	17.2

Source: Eurostat Portal page — Population and Social Conditions – Education and training, 2012.
Note: N/A – not available. [1] Data on adult participation in non-formal education are available from 2004 onwards.

Figure: **Participation rates of the population aged 25–64 in individual levels of formal education, 2009, in %**



Source: Eurostat Portal page — Population and Social Conditions – Education and training, 2012

Gross domestic expenditure on research and development

The share of gross domestic expenditure on R&D (GERD) grew further in 2010, totalling 2.11% of GDP. This result was mainly attributable to real GERD growth, as well as, partly, a higher number of reporting units in the Slovenian business sector[1] and modest GDP growth in 2010. GERD totalled EUR 745.9 m, having increased by 11.6% in real terms (56.7% in the 2005–2010 period). In 2010, Slovenia exceeded the EU average for the first time on record, by 0.11 p.p., given that real GERD growth in the EU as a whole lagged significantly behind (by 9.5 p.p.).

The share of the business sector in the funding of GERD grew somewhat in 2010. The business sector increased R&D investment by 12.3% in real terms, while its share in the funding of GERD rose to 58.4%, by 0.4 p.p. Business sector expenditure as a share of GDP also increased in 2010, to 1.23% of GDP or by 0.15 p.p. The business sector remains the main recipient of funds from abroad, even though its share declined (2005: 57.4%, 2010: 47.5%). The share of the government sector in the funding of GERD shrank somewhat, while the shares of the higher education sector and foreign funds remained unchanged (see figure); in real terms, all sectors increased investment in R&D. The government sector slowed real growth in R&D expenditure relative to 2009, in contrast to the higher education sector, which accelerated it markedly.

The volume of tax relief on investment in R&D nearly doubled in 2010, reaching the highest level thus far. A total of 491 taxpayers claimed tax relief on R&D investment[2] in 2010 (2009: 418, 2008: 483). After the shrinkage in the previous year,[3] the volume of tax relief grew by 91.8%, to EUR 93.6 m. The total amount of claimed tax relief was nearly 50% higher than in 2008. Much as in previous years, the bulk of tax relief on R&D investment was claimed by taxpayers in the manufacturing sector (77.0%), of which the most were in the manufacture of pharmaceutical raw materials and preparations (34.3%), computers, electronic and optical equipment (9.8%), electrical equipment (8.0%) and motor vehicles, trailers and semi-trailers (6.8%). Enterprises from service activities claimed much less tax relief on R&D investment; within that, enterprises providing knowledge-based services[4] accounted for a significant share, nearly one fifth. Additional regional relief on R&D was claimed by 178 taxpayers (2009: 164, 2008: 195) who met special conditions in terms of development level. Although the volume of claimed regional relief rose by close to a fifth, to EUR 11.8 m, it was still by a solid tenth lower than in 2008 and remained concentrated on a slightly lower number of eligible entities than the basic relief on R&D.

Expenditure on R&D remains confined within the sectors of funding, which also affects cooperation and the transfer of R&D achievements from the public research sector to the business sector. Confined, one-way financial flows from the aspect of R&D funding, and as a consequence, closed research sectors impact the interest for cooperation and reflect in ineffective transfer of R&D results between the public[5] and private research sectors. Data on sources of funds for R&D expenditure reflect a high level of sectoral self-financing, as in 2010 as much as 93.0% of business sector expenditure was passed back to the same sector (2005: 91.7%). The situations is similar for public sector funds (2010: 70.1%, 2005: 89.2), but the results for the business sector improved in the past two years. The EU average for 2009[6] was 87.1% for public sector expenditure (2005: 86.0%), and 94.8% for business sector expenditure, transferred back to the same sector. In 15 Member States, this share was even higher than in Slovenia, while it was lowest in Latvia (82.4%).

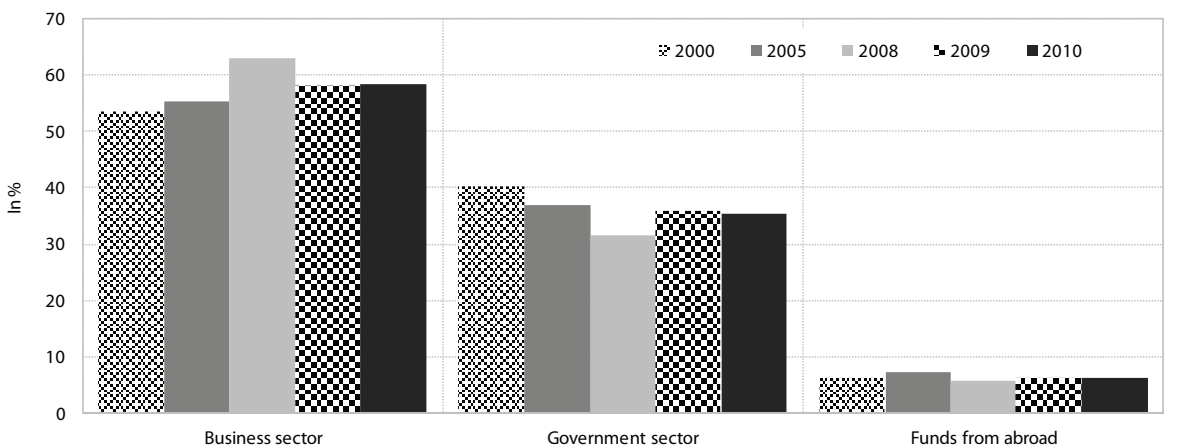
[1] The number of reporting units covered increased by 57 enterprises contributing 4.5% to business sector expenditure.
[2] Introduced in 2006 based on the Corporate Income Tax (OG RS, No. 117/06, 56/08, 76/08, 5/09, 96/09 and 43/10).
[3] In 2006–2010, the amount of claimed tax relief on R&D investment declined only in 2009 (by 22.0%).
[4] Information and communication (SCA 2008 – J), financial and insurance (K), and professional, scientific and technical activities (M).
[5] Including the government and higher education sectors.
[6] The last year for which data for most Member States are available.

Table: **Gross domestic expenditure on R&D in Slovenia and selected EU Member States, in % of GDP**

	1996	2000	2005	2006	2007	2008	2009	2010
EU-27	**1.75**	**1.86**	**1.83**	**1.85**	**1.85**	**1.92**	**2.01**	**2.00**
Austria	1.60	1.93	2.46	2.44	2.51	2.67	2.72	2.76
Belgium	1.76	1.97	1.83	1.86	1.89	1.97	2.03	1.99
Bulgaria	0.52	0.51	0.46	0.46	0.45	0.47	0.53	0.60
Cyprus	N/A	0.25	0.41	0.43	0.44	0.43	0.49	0.50
Czech Republic	0.92	1.17	1.35	1.49	1.48	1.41	1.48	1.56
Denmark	1.84	2.24	2.46	2.48	2.58	2.85	3.06	3.06
Estonia	N/A	0.60	0.93	1.13	1.08	1.28	1.43	1.62
Finland	2.53	3.35	3.48	3.48	3.47	3.70	3.92	3.87
France	2.27	2.15	2.11	2.11	2.08	2.12	2.26	2.26
Greece	N/A	N/A	0.60	0.59	0.60	N/A	N/A	N/A
Ireland	1.29	1.11	1.24	1.24	1.28	1.45	1.74	1.79
Italy	0.98	1.04	1.09	1.13	1.17	1.21	1.26	1.26
Latvia	0.42	0.45	0.56	0.70	0.60	0.62	0.46	0.60
Lithuania	0.49	0.59	0.75	0.79	0.81	0.79	0.83	0.79
Luxembourg	N/A	1.65	1.56	1.66	1.58	1.57	1.66	1.63
Hungary	0.64	0.81	0.94	1.01	0.98	1.00	1.17	1.16
Malta	N/A	N/A	0.57	0.62	0.58	0.56	0.54	0.63
Germany	2.20	2.47	2.51	2.54	2.53	2.69	2.82	2.82
Netherlands	1.98	1.94	1.90	1.88	1.81	1.77	1.82	1.83
Poland	0.65	0.64	0.57	0.56	0.57	0.60	0.68	0.74
Portugal	0.56	0.73	0.78	0.99	1.17	1.50	1.64	1.59
Romania	0.68	0.37	0.41	0.45	0.52	0.58	0.47	0.47
Slovakia	0.91	0.65	0.51	0.49	0.46	0.47	0.48	0.63
Slovenia	**1.29**	**1.38**	**1.44**	**1.56**	**1.45**	**1.65**	**1.86**	**2.11**
Spain	0.81	0.91	1.12	1.20	1.27	1.35	1.39	1.39
Sweden	N/A	N/A	3.56	3.68	3.40	3.70	3.61	3.42
United Kingdom	1.83	1.81	1.73	1.75	1.78	1.79	1.86	1.77

Source: Eurostat Portal Page – Science and Technology – Research and Development, 2012.
Note: Data for 2010 are final only for the Czech Republic, Finland, Latvia, Lithuania, Hungary, Poland, Rumania, Slovenia and Slovakia; data for other countries are provisional; data for EU-27 are Eurostat's estimate; N/A – data not available.

Figure: **Gross domestic expenditure on R&D by source of funds, Slovenia, 2000, 2005, 2008–2010, in %***



Source: Research and development activity, Slovenia, 2000–2010 (SORS).
Note: *Due to their small shares in the GERD funding structure, the higher education and private non-profit sector are not shown (in 2005–2010, both sector combined contributed 0.2%, on average, to GERD).

Science and technology graduates

The number of science and technology graduates[1] increased strongly in 2010. It rose for the fourth year in a row (in 2010 by 28.5%). The number of science and technology graduates per 1,000 population aged 20–29 is also rising. In 2010 it grew by 15.0%, compared with 11.4% in 2009 (EU average: 14.3). In the period of the implementation of SDS, the number of these graduates surged as a result of high enrolment. With higher efficiency of studies, its growth could be even higher.[2] In 2010/2011 the number of students enrolled in science and technology studies declined, yet less than the total number of those in tertiary education. Such movements are related to demographic changes, i.e. the shrinking population of young people for enrolment in tertiary education, which is unfavourable from the perspective of employers, who find it hard to employ graduates from mechanical engineering, computer science and informatics, electrical engineering and construction.[3] The expected unfavourable demographic movements and growing needs for science and technology graduates call for additional incentives to boost enrolment in study fields that are most in demand, with appropriate scholarship policies for both tertiary and upper secondary education. In 2009 and 2010 the number of tertiary science and technology students receiving scholarships even declined.

The share of science and technology graduates in all tertiary graduates increased significantly in 2010. It totalled 21.1%, which is 3.2 p.p. more than in 2009, and was largest since the beginning of the implementation of SDS. Slovenia is approaching the EU average (22.0%), though it is lagging behind the leading Member States (Austria, Finland). The favourable movements reflect increased enrolment in science and technology in previous years; the share of students enrolled in this field also increased in 2010/2011, which nevertheless indicates an appropriate shift.

The movements in the area of science and technology graduates are favourable. Having increased by 9.3% in 2010, the number of doctors of science and technology follows the favourable movements from previous years. Their share in the total number of doctors rose as well, to 53.2%, and exceeds the EU average. In view of the existing and planned government incentives (the young researchers programme and the young researchers from the business sector programme[4]), increased enrolment in doctoral studies of science and technology is also to be expected in the future. In 2011, a public tender for capacity building of development units in companies was issued, which pools incentives from previous tenders (the young researchers in the business sector, interdisciplinary groups and experts in companies). Companies can receive co-funding for the employment or training of young researchers enrolled in post-graduate studies, the employment of researchers from public research organisations in a new research and development group, the employment or engagement of top Slovenian or foreign researchers and experts to transfer knowledge from specialised R&D areas, and the inclusion of the company's researchers into a new R&D group.

[1] In accordance with ISCED 97, indicators for science and technology cover two broader fields, i.e. science, mathematics and computing (ISC 42, 44, 46 and 48) and engineering, manufacturing and construction (ISC 52, 54 and 58). The classification is based on the International Standard Classification of Education (ISCED) 1997 and Eurostat's Fields of Education and Training Manual, 1999. The indicators cover the total number of graduates of tertiary education in the field of science and technology who completed their studies in the observed calendar year.

[2] The average duration of undergraduate science and technology studies in 2010 was 6.2 years.

[3] According to the survey of the Employment Service of Slovenia on the employment trend in the past year and forecast for the coming year (LPZAP, Forecast of Skill Needs for 2011, 2011).

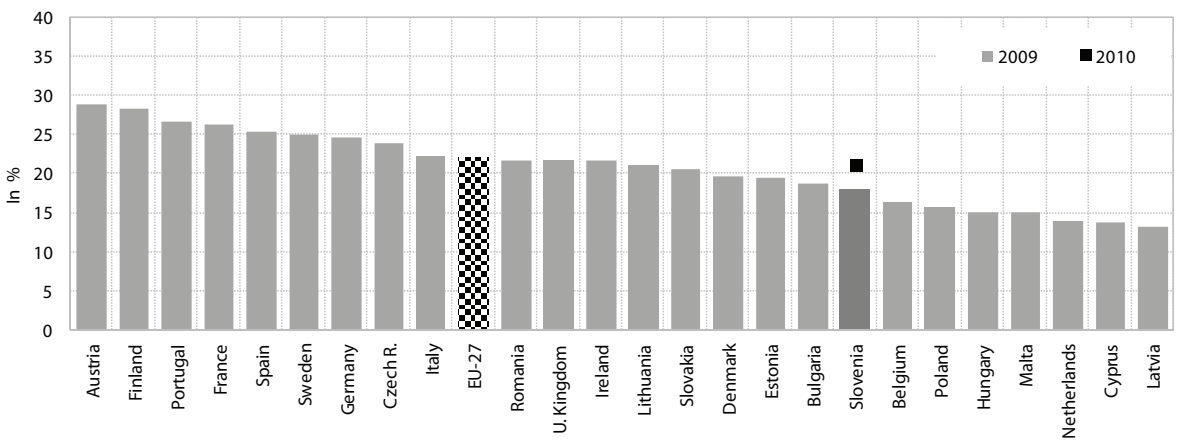
[4] The measure of co-financing young researchers in the business sector was implemented until 2010.

Table: **Number of science and technology graduates per 1,000 population aged 20–29 years, 1998–2009**

	1998	2000	2005	2006	2007	2008	2009
EU-27	**8.8**	**10.1**	**13.2**	**13.0**	**13.4**	**13.9**	**14.3**
Belgium	N/A	9.7	10.9	10.6	14.0	11.6	12.0
Bulgaria	5.5	6.6	8.6	8.5	8.4	9.1	10.1
Czech Republic	4.6	5.5	8.2	10.0	12.0	15.0	15.3
Denmark	8.1	11.7	14.7	13.8	16.4	15.5	15.2
Germany	8.8	8.2	9.7	10.7	11.4	12.5	13.5
Estonia	3.3	7.8	12.1	11.2	13.3	11.4	10.8
Ireland	22.9	24.2	24.5	21.4	18.7	19.5	17.2
Greece	N/A	N/A	10.1	N/A	8.5	11.2	N/A
Spain	8.0	9.9	11.8	11.5	11.2	11.6	12.5
France	18.5	19.6	22.5	20.7	20.5	20.1	20.2
Italy	5.1	5.7	12.4	13.0	8.2	7.6	N/A
Cyprus	N/A	3.4	3.6	4.3	4.2	4.0	4.6
Latvia	6.1	7.4	9.8	8.9	9.2	8.8	9.8
Lithuania	9.3	13.5	18.9	19.5	18.1	17.8	18.5
Luxembourg	1.4	1.8	N/A	N/A	N/A	1.8	N/A
Hungary	5.0	4.5	5.1	5.8	6.4	6.1	7.5
Malta	1.3	3.4	3.4	5.0	7.1	6.0	7.0
Netherlands	6.0	5.8	8.6	9.0	8.9	8.8	8.9
Austria	7.9	7.2	9.8	10.8	11.0	11.8	14.0
Poland	4.9	6.6	11.1	13.3	13.9	14.1	14.3
Portugal	5.2	6.3	12.0	12.6	18.1	20.7	14.6
Romania	4.2	4.5	10.3	10.5	11.9	15.2	20.0
Slovenia	**8.0**	**8.9**	**9.8**	**9.5**	**9.8**	**10.4**	**11.4**
Slovakia	4.3	5.3	10.2	10.3	11.9	15.0	17.5
Finland	15.9	16.0	18.1	17.9	18.8	24.3	19.0
Sweden	7.9	11.6	14.4	15.1	13.6	13.2	13.0
United Kingdom	15.5	18.5	18.4	17.9	17.5	17.6	17.5

Source: Eurostat Portal Page – Population and Social Conditions – Education and training, 2012; SI-STAT Data Portal – Demography and social statistics – Education, 2012.
Note: N/A – not available.

Figure: **Share of science and technology graduates in the total number of graduates, EU 2009 and Slovenia 2010, in %**



Source: Eurostat Portal page — Population and Social Conditions – Education and training, 2012.

Intellectual property

The growth of the number of patent applications filed with the EPO accelerated in Slovenia in 2010, but Slovenia's gap to the EU average remains significant. Provisional data show that in 2010[1] Slovenian applicants filed 66 patent applications per million population[2] with the EPO (the EU average was twice as high). Although the relative number of patent applications has increased by an average of 4.1% per year in the period of the implementation of Slovenia's Development Strategy (in the EU as a whole by 2.9%), Slovenia still lags significantly behind the EU. In 2010, Slovenia's gap widened relative to the preceding year, as the EU recorded much faster growth in the number of patent applications with the EPO. According to data by the SIPO (Slovenian Intellectual Property Office of the Republic of Slovenia), Slovenian applicants filed 470 national patent applications[3] in 2011, 3.3% more than in 2010.

After the progress in 2010, Community trade marks and designs recorded less favourable movements in 2011. In 2011 Slovenia filed 73.2 applications for Community trade marks per million population with the OHIM,[4] which is nearly a third less than in 2010 and the largest setback among all EU Member States. Besides Slovenia, only Hungary, Latvia, Ireland and Belgium registered a lower number of Community trade mark applications than in the preceding year. Slovenia reached just 49.1% (in 2010: 76.0%) of the EU average,[5] which totalled 149.1 trade marks per million population. Despite the lower number of Slovenian applications for Community trade mark protection, the average annual 2005–2011 growth remains among the highest in the EU (Slovenia: 28.8%; Slovakia: 38.4%; Estonia: 28.9%; the Czech Republic: 21.9%; EU-27: 8.8%). Slovenian applicants registered 64.4 Community designs per million population with the OHIM. The decline relative to the preceding year was much smaller than in Community trade mark applications. Most of the other Member States' results deteriorated in 2011, as just seven countries registered more Community designs than a year before. The EU average was 101.4 Community designs per million population; Slovenia reached 63.5% of the average, which is otherwise the best result in 2004–2011. Close to two fifths of Slovenian enterprises that registered Community designs with the OHIM in 2011 deal with the manufacture of household goods[6] and paper and paper stationery.[7]

[1] The data on patent applications for 2010 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 released by Eurostat (for more information, see the Slovenian Economic Mirror 2/2009).

[2] The results of comparisons of patent applications per million population or per GDP in purchasing power parities do not differ significantly. According to OECD data, the same countries are in the first seven places according to both comparisons, regardless of the denominator (OECD, 2009). To ensure a better comparability between countries, we used the number of population in the denominator to avoid the impact of the frequent and fairly substantial changes due to the (annual) revisions of GDP.

[3] They guarantee legal protection of inventions in the territory of Slovenia since the patent application filing date.

[4] Office for Harmonisation in the Internal Market.

[5] Slovenia recorded less favourable results at the beginning of the period (2004–2006) for which data on Community trade marks are available.

[6] Which include a wide array of goods, such as: dishes, glassware, cooking utensils and containers, flatirons, appliances for washing and cleaning (SIPO, 2012).

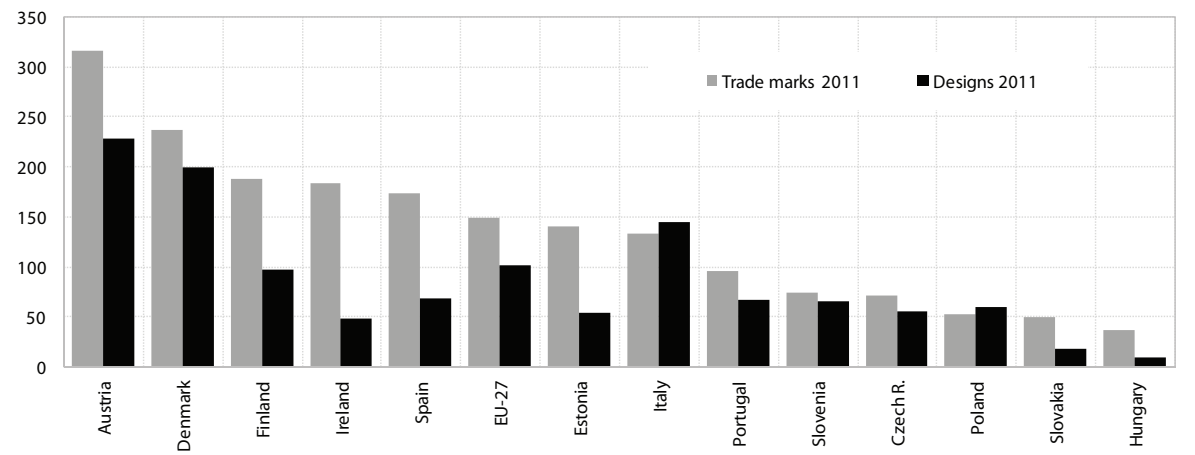
[7] According to the International Classification for Industrial Designs under the Locarno Agreement (Industrial Property Act, OG RS No. 102/04).

Table: **Patent applications filed with the EPO by year of first filing[1], per million population**

	2000	2004	2005	2006	2007	2008 [2]	2009[3]	2010[4]
	EU-27	**112.5**	**114.8**	**115.8**	**114.8**	**115.5**	**115.8**	**132.6[5]**
Austria	147.9	176.9	184.3	207.8	201.6	209.9	218.4	206.6
Belgium	128.4	145.3	141.2	139.4	143.9	143.1	143.6	188.2
Bulgaria	0.9	2.3	3.1	3.5	1.6	1.7	1.2	1.2
Cyprus	9.0	8.2	22.4	8.3	12.0	13.2	10.4	43.6
Czech Republic	6.5	11.0	10.6	14.9	17.6	19.7	22.6	15.7
Denmark	183.4	202.3	213.1	199.6	227.9	235.8	242.6	333.0
Estonia	4.1	6.6	4.7	15.8	21.0	25.9	32.9	20.1
Finland	277.0	262.3	250.4	251.8	233.9	224.4	215.7	306.3
France	120.7	133.2	132.8	132.3	133.6	133.9	134.3	147.3
Greece	5.2	6.0	10.0	9.5	9.3	10.4	10.6	7.5
Ireland	55.0	66.3	65.2	66.4	72.1	74.0	77.4	115.3
Italy	70.4	79.0	83.4	84.8	81.6	82.4	82.0	67.7
Latvia	3.8	4.2	8.2	7.6	7.2	8.8	9.0	14.7
Lithuania	1.3	3.2	2.6	2.8	2.9	3.8	4.2	2.7
Luxembourg	186.1	252.2	213.5	230.0	148.5	169.3	154.8	842.5
Hungary	11.8	15.1	13.4	16.3	18.4	19.4	21.5	10.3
Malta	11.8	15.0	27.9	19.4	16.8	17.3	13.9	74.8
Germany	269.0	278.6	288.5	288.0	289.1	292.7	294.5	334.4
Netherlands	218.2	223.8	212.3	223.8	197.1	188.0	179.5	359.4
Poland	1.1	3.3	3.2	3.7	5.3	5.9	6.8	5.4
Portugal	4.1	5.6	11.4	10.1	11.6	13.6	14.3	7.6
Romania	0.3	1.1	1.3	0.9	1.5	1.7	1.8	0.7
Slovakia	2.1	3.8	5.8	7.3	7.0	8.1	8.8	4.4
Slovenia	**25.5**	**56.5**	**53.9**	**49.5**	**59.3**	**60.3**	**61.9**	**66.0**
Spain	20.1	28.5	31.3	30.5	30.8	31.4	31.6	31.2
Sweden	259.5	244.5	263.7	284.3	298.8	315.7	332.0	381.1
UK	103.4	92.7	91.9	91.9	87.3	85.5	83.4	87.1

Source: Eurostat Portal Page – Science and Technology – Patent Statistics, 2012; EPO Annual Report – statistics 2010, 2011.
Note: [1]Data for 2010 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 2010, 2011). [2, 3] Eurostat's estimate; [4] provisional data; [5] IMAD's estimate based on the calculation of data for Member States.

Figure: **Number of Community trade-mark and registered design applications per million population, selected EU Member States, 2011**



Source: OHIM Web Page, 2012; calculations by IMAD.

Researchers

Growth in the number of researchers slowed somewhat in 2010, while in the business sector the favourable trends in the number of researchers continued from as early as 2005. The total number of researchers[1] rose by 3.5% in 2010, most notably in the higher education and business sectors (by 14.4% and 3.4%, respectively), while in the government sector the number of researchers dropped substantially. In 2010, the share of business sector researchers retained the highest level thus far, 44.0%. The number of active researchers is also still highest in the business sector; in 2005–2010, it was increasing by an average of 11.8% per year. In 2009, doctors of science[2] represented 15.0% of researchers in the business sector and as many as 60.6% of researchers in the higher education sector. With accelerated growth in the number of researchers, the Slovenian business sector had already drawn closer to the EU average in 2009 (2010: 45.3%), but the gap widened again in 2010. As many as 55.8% of all researchers worked in the public sector,[3] which is the largest divergence compared with the structure of active researchers in the EU (see Figure). Similar developments are also typical of other new EU Member States, which appears to be a consequence of the previous R&D system.[4] Regarding the number of researchers in all persons employed, Slovenia has exceeded the EU average for three years in a row (see table).

In 2005–2009, nearly half of researchers worked in engineering and technology. In 2009,[5] 45.1% of researchers in Slovenia were active in this field. A higher share was recorded only in the Czech Republic[6](by 3 p.p.). Nearly a third of all researchers and the highest share (a solid quarter) of doctors of sciences worked in the field of natural sciences. Many fewer were employed in medical and agricultural sciences (7.6% and 2.3%, respectively). Social sciences and humanities combined employed around a tenth of researchers and almost a third of doctors of science. In the business sector, in 2009, two thirds of researchers in Slovenia worked in manufacturing and just below one third in services. In the latter, the largest share was recorded in Estonia and Ireland (73.8% and 67.1%, respectively), while Germany and Finland had the highest shares of researchers in manufacturing (79.9% and 75.4%, respectively).

Thus far the actual and potential brain drain in Slovenia has been low. According to the survey on the Slovenian emigration of scientists in the 1995–2009 period (Bevc and Ogorevc, 2011), the brain drain[7] of Slovenian scientists is not massive, as it is partly reversing and turning into brain gain. However, it may become an issue in the future because of the reasons for emigration (better conditions for research work abroad, limited job opportunities for young researchers) and the characteristics of emigrants (increasingly younger and more educated people leaving the country). Similar findings were found among young researchers[8] (Ograjenšek et al., 2011), according to which no more than 2% of young researchers worked abroad in 2010.[9]

After completing their doctoral degrees under the young researchers from the business sector programme, two thirds of researchers found work in the business sector. The survey of young researchers (Ograjenšek et al., 2011) shows that just over 60% of researchers found work in enterprises in which they were trained. This may imply that many enterprises availed themselves of this instrument and related financial support to increase the knowledge potential in the short term or only for a single research project, and are not interested in employing highly qualified staff in the long run or cannot afford it because of higher costs. However, such results reduce the efficiency of the use of funds under this scheme.

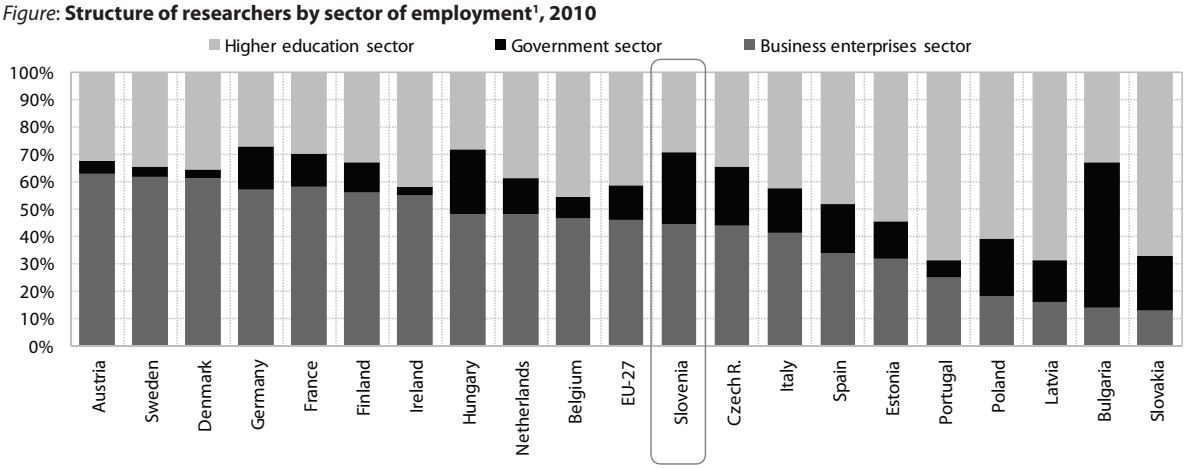
[1] The number of researchers is expressed in full time equivalent. The analysis covers solely researchers (without technicians and other supporting staff).
[2] Data based on the survey of careers of doctors of science, which was for the first time conducted by SORS in 2010.
[3] Including the government and higher education sectors.
[4] It was characterised by a strong R&D base within public research institutions.
[5] The last year for which data are available.
[6] Data on researchers in sciences for old EU Member States are not available.
[7] Its share in all researchers has remained unchanged since Slovenia's accession to the EU (1% of all registered researchers at the time of the survey).
[8] Young researchers in both research institutions and the business sector.
[9] As at the end of the year, based on the available data of the Slovenian Research Agency.

Table: **Number of researchers in FTE per 1 000 employees**

	1996	2000	2005	2006	2007	2008	2009	2010
EU-27	**N/A**	**5.5**	**6.5**	**6.6**	**6.6**	**6.8**	**7.1**	**7.2**
Austria	N/A	N/A	7.4	7.4	7.9	8.4	8.5	8.8
Belgium	6.6	7.5	7.8	8.2	8.3	8.3	8.6	8.5
Bulgaria	N/A	3.4	3.4	3.3	3.4	3.4	3.7	3.6
Cyprus	N/A	1.0	2.0	2.1	2.1	2.1	2.3	2.3
Czech Republic	N/A	3.0	5.1	5.4	5.7	6.0	5.8	6.0
Denmark	6.4	N/A	10.2	10.3	10.8	12.5	13.0	13.0
Estonia	N/A	4.7	5.5	5.4	5.6	6.1	7.2	7.1
Finland	N/A	N/A	16.5	16.5	15.7	16.2	16.6	16.9
France	7.0	7.4	8.1	8.4	8.7	8.8	9.1	N/A
Greece	N/A	N/A	4.5	4.5	4.7	N/A	N/A	N/A
Ireland	4.8	5.0	5.9	6.0	6.0	6.9	7.6	7.8
Italy	3.8	3.1	3.7	3.8	4.0	N/A	4.4	4.6
Latvia	N/A	4.0	3.2	3.7	3.8	3.9	3.7	4.0
Lithuania	N/A	5.5	5.2	5.4	5.5	5.6	6.0	6.2
Luxembourg	N/A	9.1	11.5	10.5	10.8	11.3	11.0	11.5
Hungary	2.9	3.8	4.1	4.5	4.4	4.8	5.3	5.6
Malta	N/A	N/A	3.2	3.4	3.1	3.4	3.1	3.6
Germany	6.5	7.1	7.5	7.5	7.7	7.8	8.2	8.5
Netherlands	5.0	5.4	5.9	6.4	6.0	5.9	5.5	6.2
Poland	N/A	3.8	4.4	4.1	4.0	3.9	3.9	4.0
Portugal	2.7	3.3	4.1	4.8	5.5	7.8	8.7	9.2
Romania	N/A	1.9	2.5	2.0	2.0	2.1	2.1	2.1
Slovakia	N/A	4.7	4.9	5.1	5.2	5.2	5.6	6.6
Slovenia	**5.2**	**4.8**	**5.5**	**6.1**	**6.3**	**7.1**	**7.6**	**8.0**
Spain	4.0	4.9	5.8	5.9	6.0	6.5	7.1	7.3
Sweden	N/A	N/A	12.7	12.6	10.0	10.9	10.4	10.8
United Kingdom	5.5	6.2	8.7	8.8	8.7	8.6	8.9	8.1

Source: Eurostat Portal Page – Science and Technology – Research and Development, 2012; Eurostat Portal Page – Population and Social Conditions – Labour Market, 2012.
Note: N/A – not available.

Figure: **Structure of researchers by sector of employment[1], 2010**



Source: Eurostat Portal Page – Science and Technology – Research and Development, 2012; calculations by IMAD.
Note: [1] Excluding the private non-profit sector because of its small share in the structure of employed researchers by sector of employment (SLO: 0.2%, EU-27: 1.1%).

Internet use and access

The share of Internet users did not increase in 2011. Following the rapid expansion of Internet use in previous years, the share of users who have used the Internet in the last three months and the share of those who use the Internet at least once a week declined in 2011 (67% and 64%, respectively, of the population aged 16–74), while the share of everyday users remained unchanged (54%). In terms of Internet use, Slovenia has been close to the EU average since 2005, but not in all user groups. Last year, the share of less-educated Internet users shrank significantly (by a high of 9 p.p.), as did, to a certain extent, the share of older users (55–74 years). These are the only population groups characterised by a much lower share of Internet users than in the EU as a whole. In the preceding two years, the gap to the EU average had been closing in both groups, most strongly among the less-educated. Last year's reversal of trend (with the share of Internet users in the EU growing further in both groups) widened this gap again to the highest level in the whole last six-year period for which data are available. Last year's changes could, at least partly, reflect the impact of the economic crisis on Internet usage among people who were most affected by the crisis. This is also indicated by data on Internet use by activity. The share of Internet users shrank noticeably in the group of retired and other inactive persons, and slightly also in the unemployed and students. Slovenia also stands out in a relatively low share of Internet users among less educated and older people in comparison with some new EU Member States that already boast a higher prevalence of Internet use than Slovenia. Most of these countries already outpaced or surpassed Slovenia on this indicator last year (the Czech Republic, Hungary, Malta, Latvia), while Estonia and Slovakia have had higher Internet shares since as early as 2007.

Amid a rapid spreading of broadband Internet connections in 2011, the number of households with Internet access increased further in 2011. The share of households with Internet access at home reached 72% in 2011. The increase (by 4 p.p.) was again attributable to a higher share of households with broadband Internet access (by 5 p.p. to 67% in 2011), which increasingly use advanced technologies. The share of households with the otherwise still prevailing connection over the telephone network (xDSL) thus declined, while the share of users of more advanced broadband connections (optical network, wireless WiFi connection, 3G modem) doubled, for the first time reaching 2nd place among broadband connections. The share of Internet access over cable network or mobile phone (3G) also continues to grow. In terms of households with Internet connection (including broadband connection), Slovenia follows the EU average. Internet access is characterised by similar features as Internet usage. Among the main reasons for not having Internet access Slovenian households state that they do not need it; that they don't have proper skills; or that the costs of connection and equipment are too high. In Slovenia all these reasons are much more pronounced than in the EU. Only households in the first two income quintiles stand out in comparison with the EU. This is again a sign of a relatively significant impact of education/qualifications and income situation in Slovenia on Internet access and use. To prevent a deepening of the digital divide, which could have negative implications for economic and social development, it is necessary to continue the efforts to attract all population groups by increasing Internet affordability and with proper training. Furthermore, it is also necessary to extend the provision of important, user-friendly e-services. In the context of affordability, it is essential to ensure sufficient competition and efficient supervision of providers.

Internet access and usage by enterprises are high; however, a weakness is the lack of automated data exchange with buyers and suppliers. All enterprises[1] in Slovenia with Internet access use a broadband connection, much as those in the EU. Their share increased again in 2011 (by 7 p.p. to 92%), being higher than in the EU (85%) in all enterprises regardless of size. Given the high availability of the Internet, the share of enterprises that interact with other institutions (other enterprises, public authorities, financial institutions) in electronic form is also high, as expected. Slovenia also has a higher share of enterprises with a fully automated data exchange with public authorities and financial institutions, which appears to be related to the relatively high availability of e-services in these institutions.[2] There are more possibilities to improve the competitive advantages with the increased use of information-communication technologies between enterprises. Specifically, the share of enterprises with a fully automated data exchange with buyers and suppliers is well below the EU average. Also, Slovenian enterprises avail themselves of e-invoices to a much lesser extent than those in the EU. In these areas, Slovenian enterprises also lag significantly behind most new EU Member States. This could be related to a lower degree of Slovenian enterprises' integration in international flows as regards formal ownership compared to their counterparts in other new Member States, for example through foreign direct investment which usually contributes to a faster introduction of new technologies.

[1] Enterprises with 10 or more employees, except those in the financial sector.

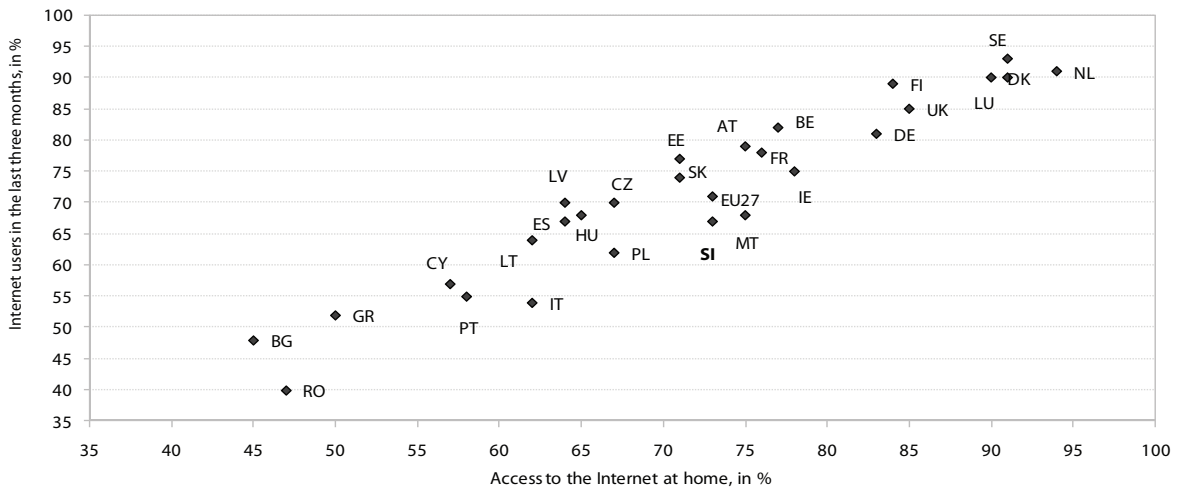
[2] The prevalence of e-government services in Slovenia is 95%; in the EU as a whole 84% (data for 2010).

Table: **Internet usage and access by households and individuals, Slovenia, 2005–2001[1], in %**

	2005	2006	2007	2008	2009	2010	2011	EU 2011
Households with Internet access at home	48	54	58	59	64	68	72	73
Households with broadband Internet access at home	19	34	44	50	56	62	67	68
Internet users in the last three months (16–74)	47	51	53	56	62	68	67	71
Regular Internet users[2], total (16–74 years)	40	47	49	52	58	65	64	68
By age:								
16–24 years		81	83	91	95	97	98	91
25–54 years		54	57	60	68	76	76	76
55–74 years		12	12	16	20	26	25	40
By education:								
Low (or unskilled)		19	23	28	36	41	30	45
Secondary	40	47	49	52	56	65	67	71
Higher		87	88	86	92	93	93	92

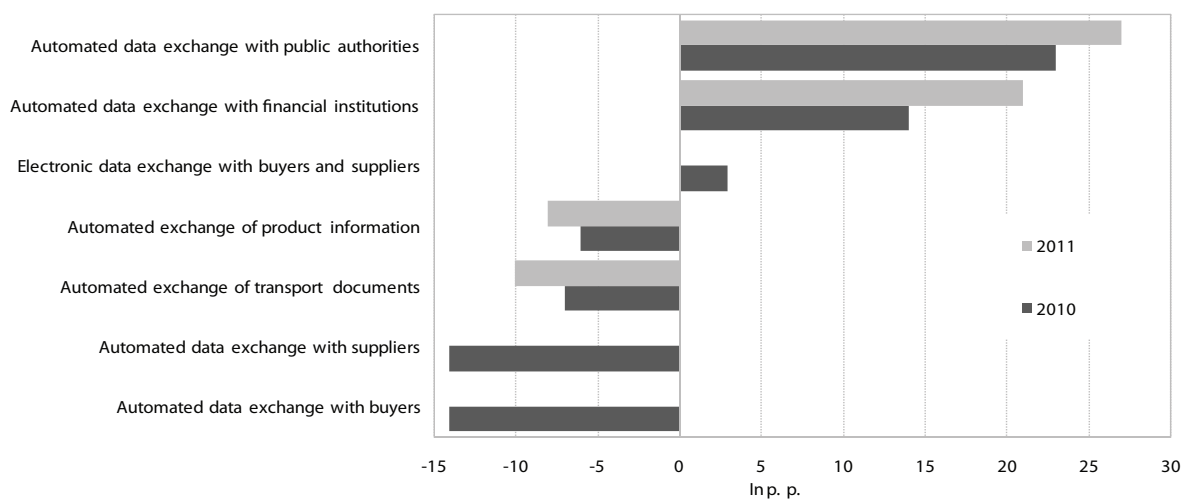
Sources: SI-STAT Data Portal – Information Society (SORS), 2012; Eurostat Portal Page – Information Society, 2012.
Notes: [1] Data for all years refer to the first quarter of the year. [2] Those using the Internet at least once a week.

Figure: **Internet usage and access by households and individuals, EU, 2011[1]**



Source: Eurostat Portal Page – Information Society, 2012. Note: [1] Data refer to the first quarter of the year.

Figure: **Electronic integration of enterprises with other institutions – gap between Slovenia and the EU average**



Source: Eurostat Portal Page – Information Society, 2012. Note: A positive value means a higher share of such enterprises in Slovenia than in the EU as a whole.

THE THIRD PRIORITY:

An efficient and less costly state

- General government expenditure by function
- Economic structure of taxes and contributions
- Fiscal burden of taxes and contributions
- Subsidies
- State aid

General government expenditure by function

Following the strong fiscal expansion in 2008, general government expenditure recorded lower growth[1] in the following two years, particularly in 2010. As in previous years, expenditure on social protection made the greatest contribution to the total growth of expenditure in the last two years. The second most important category influencing expenditure growth in 2010 was recreation, culture and religion.

Within expenditure structure, expenditures on economic affairs and recreation, culture and religion have increased most notably since the adoption of SDS in 2005. The largest share in the structure of general government expenditure by function comes from expenditure on social protection, health and education, for which Slovenia allocated 64.4% of total expenditure in 2010, somewhat less than in 2005 (65.8%). The share of expenditure allocated for education has declined strongly since 2005 (by 1.4 p.p.), while the shares of expenditure on social protection and health have remained nearly unchanged. Among other expenditure groups, large increases were posted for the shares of expenditure on economic affairs (by 1.5 p.p.) and recreation, culture and religion (by 1.6 p.p.), while the share for general public services declined substantially (by 1.6 p.p.). The changes in expenditure structure show that Slovenia has made some structural shifts since the adoption of SDS. Expenditure on economic affairs (which is related to the absorption of EU funds and fosters the competitiveness of the economy in the form of investment in particular) increased, while expenditure on general public services was reduced in pursuit of the SDS goal of a less costly state. The decline in the share of expenditure on education and the substantial increase in the share of expenditure on recreation, culture and religion are, however, not directly related to SDS targets.

The shifts in expenditure structure in 2009–2010 show increased divergence from SDS goals. A continuation of such trends would, because of the fast growth of the share of social protection expenditure, which was still at the 2005 level in 2010, crowd out other expenditure categories, which foster the competitiveness of the Slovenian economy and sustainable development. The shares of expenditure on economic affairs, environmental protection, housing and community amenities and health already started to decline in 2010, while the share of expenditure on education remained at the same level as in 2009. The shares of expenditure on general public services, defence and public order and safety stopped shrinking as well, which is no longer in line with the goal of making government cheaper. The share of expenditure on recreation, culture and religion is still growing at an accelerated pace. The restructuring of expenditure in 2005–2008 started precisely by curbing expenditure on social protection, so that its share in the structure contracted by 1.4 p.p. The economic crisis impacted only certain sub-groups of expenditure, changing the structure of social protection expenditure in favour of unemployment (due to a higher number of unemployed people and the functioning of automatic stabilisers), family and children and sickness and disability. Within social protection expenditure, expenditure on old age increased most notably in nominal terms, as it accounts for the largest share, more than half of total social protection expenditure. However, an unselective lowering of social protection expenditure can deteriorate the fairly favourable results of social development.

With lower general government expenditure as a share of GDP (49.1%) than the EU average (50.9%), in 2009 Slovenia's expenditure structure remained similar to that of the EU average. Slovenia had lower shares of expenditure in total expenditure than the EU-27 average in the categories of social protection (2.8 p.p.), general public services (1.2 p.p.), health (0.5 p.p.), public order and safety (0.3 p.p.) and housing and community amenities (0.3 p.p.), and higher shares in the categories of education (2.6 p.p.), economic affairs (1.5 p.p.) and recreation, culture and religion (1.3 p.p.).

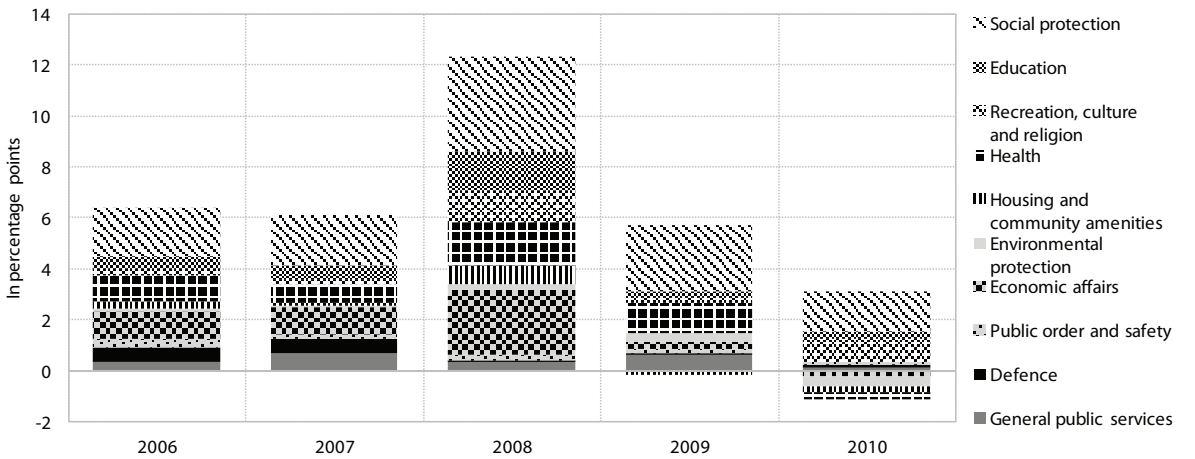
[1] The analysis is made at the first level of the Classification of the Functions of Government (COFOG).

Table: **General government expenditure by function, Slovenia, as a % of total expenditure**

	2000	2005	2006	2007	2008	2009	2010
General public services	12.8	13.0	12.5	12.5	11.5	11.5	11.4
Defence	2.4	3.0	3.3	3.6	3.2	3.1	3.1
Public order and safety	3.9	3.7	3.8	3.7	3.6	3.5	3.6
Economic affairs	11.1	8.7	9.2	9.7	10.9	10.6	10.2
Environmental protection	1.4	1.8	1.8	1.8	1.7	1.9	1.5
Housing and community amenities	1.4	1.2	1.4	1.4	1.9	1.7	1.4
Health	13.8	13.9	14.1	13.9	13.9	14.3	13.8
Recreation, culture and religion	2.7	2.9	2.9	2.9	3.7	3.7	4.5
Education	13.4	14.7	14.3	14.0	13.8	13.3	13.3
Social protection	37.1	37.2	36.7	36.5	35.8	36.4	37.3

Source: General government expenditure by function, Slovenia, January 2012 (SORS); calculations by IMAD.

Figure: **Contribution to general government expenditure growth by expenditure function, Slovenia, 2006–2010, in percentage points**



Source: General government expenditure by function, Slovenia, January 2012 (SORS); calculations by IMAD.

Economic structure of taxes and contributions

A comparison of the economic structures of taxation systems[1] shows that Slovenia diverges from the EU average in its higher tax burden on consumption and labour and a lower burden of capital. The share of taxes on consumption in total taxes and contributions totalled 37.3% in Slovenia in 2009 and exceeded the EU average (33.4%). In terms of the share of taxes on consumption in total taxes Slovenia is in the top third of EU countries, as in 2009 only eight countries had a higher share. The share of taxes on labour (52.0%) was also above the EU average (48.0%). Slovenia is also ranked in the upper half of the EU on this indicator, with a higher share recorded in only ten Member States. The share of taxes on capital accounted for just 11.0% of all taxes and contributions in Slovenia in 2009, which is a much lower figure than in the EU as a whole (18.8%). With regard to the share of these taxes in total taxes, Slovenia is at the tail-end of the EU, with only Estonia and Latvia trailing behind.

In 2009, the gap in the economic structure of taxes between Slovenia and the EU average narrowed relative to 2000. In Slovenia, the otherwise very low share of taxes on capital in total taxes and contributions grew, while the average share in the EU declined. After 2005, Slovenia recorded a more pronounced increase in the tax burden on capital, particularly in 2007 when the conditions for capital gains were favourable and the rate of corporate income tax was still high (25%), with no significant tax relief. In 2007, income tax recorded a ten-year high. Following the tax reform in 2007 the burden on capital started to decline again. The decline was due to a gradual phase-down of the corporate income tax rate (from 25% to 20% in 2010), higher tax relief and changes in the personal income tax. Meanwhile, the macroeconomic situation deteriorated. Although the burden on capital has been declining since 2007, in 2009 it was still higher than in 2000. The tax burden on labour in the overall tax burden decreased in Slovenia, while growing slightly in the EU as a whole. Slovenia has a higher tax burden on labour than other EU countries mainly because of high social security contributions. Slovenia is fifth among EU Member States regarding social security contributions as a share of GDP; only France, Germany, the Czech Republic and Austria have higher shares. After the tax reform in 2007, the burden on labour otherwise declined somewhat due to changes in the personal income tax and a gradual phasing out of the payroll tax, but is still higher than the EU average. The share of taxes on consumption in total taxes and contributions increased slightly both in Slovenia and the EU. It was fairly stable in the entire period. After 2002, it had risen somewhat due to a higher value added tax rate, while in the following years it was mainly impacted by changes in excise duties, which were being adjusted to meet the requirements of the EU directives and to compensate for changes in the prices of excise products and the shortfall of budgetary revenues during the crisis.

The calculation and comparison of implicit tax rates[2] also confirm the above-average tax burden on labour in Slovenia in 2009. In Slovenia, the implicit tax rate on consumption in 2009 was 24.2% compared to the EU average of 20.9%. Only seven Member States, Nordic countries in particular, had higher rates than Slovenia. In Slovenia the implicit tax rate on consumption has been dropping since 2003, while increasing on average in the EU. In 2009, the calculated implicit tax rate on labour in Slovenia was 34.9%, higher than the EU average of 32.9% due to the relatively high social security contributions. Twelve Member States had higher rates than Slovenia in 2009. The implicit tax rate on capital for 2009 for Slovenia is estimated at 21.0%, below the EU-25[3] average of 24.6%. Nine countries had lower rates than Slovenia, including the Baltic countries and the Czech Republic, Hungary, Poland and Slovakia.

[1] 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 consumers and producers and as taxes on final consumption. Taxes on labour are directly tied to wages and paid by employees and employers. Taxes on capital relate to taxes on capital, corporate income, income from household capital (annuities, dividends, interests, other income from property), capital gains, on property, etc.

[2] The implicit tax rate on consumption is defined as the ratio between taxes on consumption and final household consumption expenditure on the territory of a 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 taxes on wage bill and payroll.

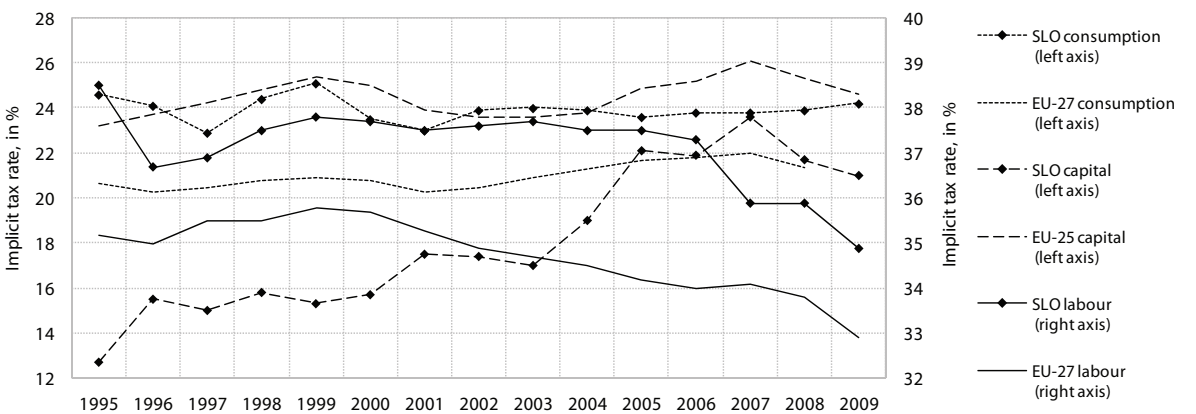
[3] EU-27 data not available.

Table: **Economic structure of taxes and social security contributions, 2005 and 2009, as a % of GDP**

	Total		Taxes on consumption		Taxes on labour		Taxes on capital	
	2005	2009	2005	2009	2005	2009	2005	2009
EU-27	**39.1**	**38.4**	**11.1**	**10.6**	**19.6**	**20.0**	**8.6**	**7.9**
Austria	42.3	42.7	12.2	12.0	23.4	24.2	6.8	6.5
Belgium	44.9	43.5	11.1	10.6	23.8	23.7	9.9	9.0
Bulgaria	31.3	28.9	15.8	14.7	11.8	9.9	3.6	4.3
Cyprus	35.5	35.1	15.2	13.4	11.3	12.2	9.0	9.5
Czech Republic	37.1	34.5	11.3	11.2	19.1	17.5	6.8	5.8
Denmark	50.8	48.1	16.2	15.2	24.8	27.1	10.0	5.9
Estonia	30.6	35.9	12.8	14.6	15.4	18.7	2.4	2.6
Finland	43.9	43.1	13.7	13.4	23.2	23.8	7.1	5.9
France	43.5	41.6	11.2	10.6	23.0	22.8	9.5	8.4
Greece	31.9	30.3	11.2	10.8	12.9	12.5	7.8	7.1
Ireland	30.7	28.2	11.4	10.0	10.4	11.8	8.9	6.5
Italy	40.4	43.1	10.0	9.8	20.4	22.1	10.0	11.2
Latvia	29.0	26.6	12.1	10.2	14.0	13.8	2.8	2.5
Lithuania	28.5	29.3	10.8	11.2	14.5	15.1	3.3	3.3
Luxembourg	37.6	37.1	10.9	10.2	15.4	16.4	11.3	10.5
Hungary	37.5	39.5	14.5	15.0	18.3	19.7	4.6	4.7
Malta	33.7	34.2	14.4	13.5	10.2	9.8	9.1	10.9
Germany	38.8	39.7	10.1	11.1	22.6	22.7	6.0	5.9
Netherlands	37.6	38.2	12.0	11.8	18.2	20.9	7.4	5.5
Poland	32.8	31.8	12.3	11.5	12.8	12.1	8.0	8.2
Portugal	31.5	31.0	12.9	10.9	12.2	13.0	6.5	7.1
Romania	27.8	27.0	12.3	10.3	11.0	11.9	4.5	4.8
Slovakia	31.3	28.8	12.3	10.3	12.5	12.5	6.5	5.9
Slovenia	**38.6**	**37.6**	**13.4**	**14.0**	**20.6**	**19.6**	**4.7**	**4.1**
Spain	35.6	30.4	9.8	7.2	16.2	16.7	10.1	7.4
Sweden	48.9	46.9	12.6	13.3	29.1	27.4	7.2	6.1
United Kingdom	36.0	34.9	11.2	10.4	14.3	14.0	10.7	10.5

Source: Taxation trends in the European Union (Eurostat, European Commission), 2011.

Figure: **Implicit tax rate on consumption, labour and capital (as a % of the base), 1995–2009**



Source: Taxation trends in the European Union (Eurostat, European Commission), 2011.

Fiscal burden by taxes and contributions

The total fiscal burden by taxes and contributions measured as a share of GDP in Slovenia is below the EU average. It totalled 38.4% of GDP in 2010, compared with 39.6% in the EU as a whole. However, there are significant differences across the EU; the gap between the countries with the highest (Denmark: 48.5% of GDP) and those with the lowest burdens (Lithuania, Bulgaria: 27.4% of GDP) amounts to as much as 21.1 p.p. Slovenia ranks in the middle of countries on this indicator.

The total fiscal burden by taxes and contributions rose by 0.4 p.p. of GDP in Slovenia in 2010. Social security contributions as a share of GDP rose by 0.2 p.p. of GDP, reaching the highest level since 2000. In 2010, the share of tax revenues stopped falling and even grew relative to the preceding year. This was mainly due to the increase in the share of taxes on production and imports, which was, amid subdued economic activity, largely underpinned by higher rates of excise duties and value added tax, primarily from imports. The burden of taxes on income and wealth declined for the third consecutive year, with revenue from personal income tax dropping in particular in the unfavourable macroeconomic situation, as well as revenue from corporate income tax due to lower tax rates and changes in tax relief. Taxes on capital otherwise rose somewhat in nominal terms in 2010, but their structural share is insignificant.

The highest share of all collected taxes and social security contributions belongs to the central government. In 2010, 49.0% of all collected taxes belonged to the central government. After 2005, the structural share of the central government in collected taxes and contributions declined by 6.6 p.p. In 2010 just over 39% of collected taxes belonged to social security funds and this share is growing owing to a more favourable growth of social security contributions. The share of the local governments is also rising, as a result of changes in the share of personal income tax, which accounted for nearly 11% of all collected taxes and contributions in 2010. Just below one percent of collected taxes and contributions belongs to European institutions.

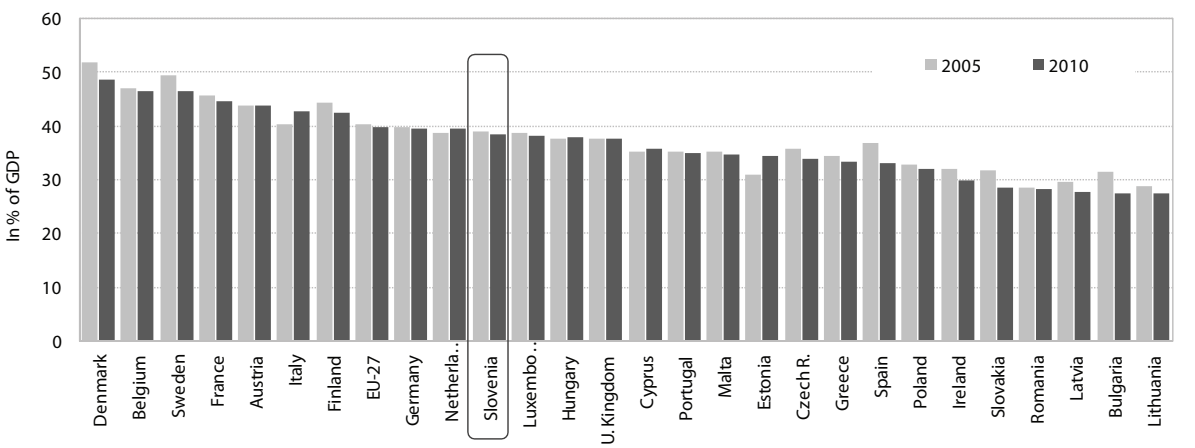
The fiscal burden by taxes on production and imports and social security contributions in Slovenia is above the EU average, while the burden by taxes on income and wealth is lower. The share of taxes on production and imports totalled 14.3% of GDP in 2010 (13.0% in the EU as a whole). A higher fiscal burden than in Slovenia was recorded by seven Member States, including Sweden, France, Denmark, Bulgaria and Cyprus, as well as the neighbouring countries of Austria and Hungary. In the previous two years, the average share in the EU grew, with five countries increasing VAT and excise duty rates due to the fiscal consolidation in 2009, and another eight in 2010. The share also increased in Slovenia, by 0.2 p.p. of GDP. The fiscal burden by social contributions in Slovenia is also higher than on average in the EU. In 2010, the share of social security contributions in Slovenia totalled 15.2% of GDP (12.9% of GDP in the EU as a whole). The social security contributions in Slovenia are among the highest in the EU. In 2010, only France, Germany and the Czech Republic recorded higher shares. In the EU as a whole the share of social security contributions declined in 2010, while in Slovenia it increased. The fiscal burden by taxes on income and wealth in Slovenia is below the EU average. In 2010, the share of taxes on income and wealth totalled 8.2% of GDP (12.4% of GDP in the EU as a whole). Last year, the average share in the EU was stable, after a small drop in 2009, while in Slovenia the corresponding share is declining due to the lowering of the tax burden on income and wealth following the 2007 reform. The tax burden on capital is thus stable both in Slovenia and the EU as a whole, albeit at a very low level. The average share in the EU is around 0.3% of GDP, while the share in Slovenia is negligible.

Table: **Fiscal burden by taxes and social security contributions, in % of GDP**

	2000	2005	2006	2007	2008	2009	2010
In % of GDP							
Taxes and social contributions	37.5	39.0	38.6	38.0	37.6	38.0	38.4
Taxes	23.1	24.5	24.3	24.1	23.3	22.8	22.9
Taxes on production and imports	15.7	15.8	15.2	14.9	14.4	14.4	14.6
Taxes on goods and services	13.4	12.9	12.7	12.8	12.8	13.4	13.6
Other taxes on production	2.3	2.9	2.5	2.1	1.6	1.0	1.0
Current taxes on income, wealth	7.3	8.7	9.1	9.2	8.9	8.3	8.2
Taxes on capital	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Social contributions	14.4	14.5	14.3	13.9	14.3	15.3	15.5
Structure, in %							
Taxes and social contributions	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Taxes	61.6	62.8	63.1	63.4	62.0	59.9	59.6
Taxes on production and imports	42.0	40.4	39.4	39.2	38.2	37.9	38.0
Taxes on goods and services	35.8	33.0	33.0	33.6	34.0	35.2	35.4
Other taxes on production	6.2	7.4	6.4	5.6	4.2	2.7	2.7
Current taxes on income, wealth	19.4	22.3	23.6	24.1	23.7	21.8	21.5
Taxes on capital	0.2	0.1	0.0	0.1	0.1	0.1	0.1
Social contributions	38.4	37.2	36.9	36.6	38.0	40.1	40.4

Source: SORS; calculations by IMAD.

Figure: **Fiscal burden by taxes and social security contributions, 2005 and 2010, in % of GDP**



Source: Taxation trends in the European Union (Eurostat, European Commission), 2011.

Subsidies

In 2010, general government subsidies retained the high level of 2009, when they had increased mainly due to the measures mitigating the economic crisis. After remaining unchanged for several years, the share of subsidies in GDP (1.6%) increased to 2.2% of GDP in 2009 owing to an increase in subsidies and a concurrent decline in GDP. In nominal terms, they grew by a quarter (by EUR 155 m to EUR 766.5 m) compared with 2008. In 2010 they stayed at the level of 2009 (2.2% of GDP or a decline by EUR 3.3 m to EUR 763.2 m). According to the most recent internationally comparable data for 2009, subsidies in Slovenia were much higher than the EU average (1.3% of GDP) and increased more (0.6 p.p. of GDP) relative to the stable 2005–2008 average than in the EU (0.2 p.p.). While six countries had still been ahead of Slovenia in 2008, in 2009 only two Member States recorded a higher level of subsidies than Slovenia (Austria, 3.6%; and Denmark, 2.6%) and only one country (Belgium) had the same level (Belgium).

The classification of subsidies by function shows that Slovenia allocates the bulk of subsidies for economic affairs, particularly general economic, commercial and labour affairs and transport. Slovenia earmarks most subsidies for economic affairs. Their structural share, which had been diminishing in the period until 2008 (2006: 79%; 2008: 74%) on account of faster growth in subsidies for other functions, grew again in 2009 (to 79%). In 2010, these subsidies declined by EUR 10.9 m and their structural share shrank by 1 percentage point. In 2005–2008, expenditure on subsidies accounted for 24.5% (2008) to 31.3% (2006) of total general government expenditure on economic affairs. In 2009, the share increased to 33.1%, and then remained unchanged in 2010. The data on subsidies for economic affairs at the second level indicate that while until 2008 the bulk of subsidies had been allocated for agriculture and transport, subsidies for general economic, commercial and labour affairs grew substantially in 2009 in order to alleviate the impact of the economic crisis. After representing around 30% of all subsidies for economic affairs in 2005–2008 and then dropping markedly in 2009 (to 20.1%), in 2010 subsidies for agriculture were halved to a mere 10% of all subsidies for economic affairs. The decline in subsidies for agriculture reflects the increased financing of this sector from EU funds. Subsidies for transport accounted for an even higher share (around 50% in 2008); in 2009, they rose somewhat in absolute terms, while declining in relative terms (to 39.5%). In 2010 subsidies for transport increased substantially again (by 15.9%) and their share climbed to 46.5%. The relatively low subsidies for general economic, commercial and labour affairs surged in 2009 in response to the economic crisis (2008: 11.1%; 2009: 32.2%) due to the measures aimed at preserving jobs and fostering the competitiveness of the economy. As the number of unemployed persons continues to grow while the competitiveness of the economy is still too low, in 2010 the subsidies for this function increased further in absolute terms, but their share in the overall subsidies for economic affairs declined to 31.4%.

Subsidies for other non-economic affairs, which had maintained the 2008 level in 2009, increased in 2010. Subsidies for other non-economic affairs, representing from 20% (2009) to 25% (2008) of all subsidies, had remained at the 2008 level in 2009 (just above EUR 150 m) and increased by 4.8% or EUR 7.6 m in 2010. Until 2008 most subsidies had been allocated for environmental protection, while in the last two years their share fell drastically (2008: 31.8%; 2010: 21.4% of all subsidies for non-economic affairs). On the other hand, subsidies for social protection and education expanded noticeably. In 2010 subsidies for social protection thus already accounted for as much as 35%, and subsidies for education for as much as 23% of all subsidies for non-economic affairs.

Subsidy programmes are highly fragmented and uncoordinated, and Slovenia still lacks a central register of beneficiaries. The numerous subsidy programmes are fragmented by ministries and their services. A single record of the government's development policies classifying all government measures by programmes and projects[1] (as was planned in 2007) has yet to be established. The effects of subsidies are therefore not measured, except by individual case studies, which cover only on a narrow scope of measures by individual grantors. In view of the lack of transparency (subsidies are closely intertwined as individual companies receive subsidies from different ministries, or even from different services within the same ministries), the reasons for establishing a comprehensive system to assess the effects of subsidies are multifaceted. While such a system is important to determine the efficiency of subsidies and their beneficiaries, it is also necessary from the perspective of government expenditure, as in addition to the costs of subsidy programmes, it should also capture the costs of administrative activities related to the procedure of granting subsidies.

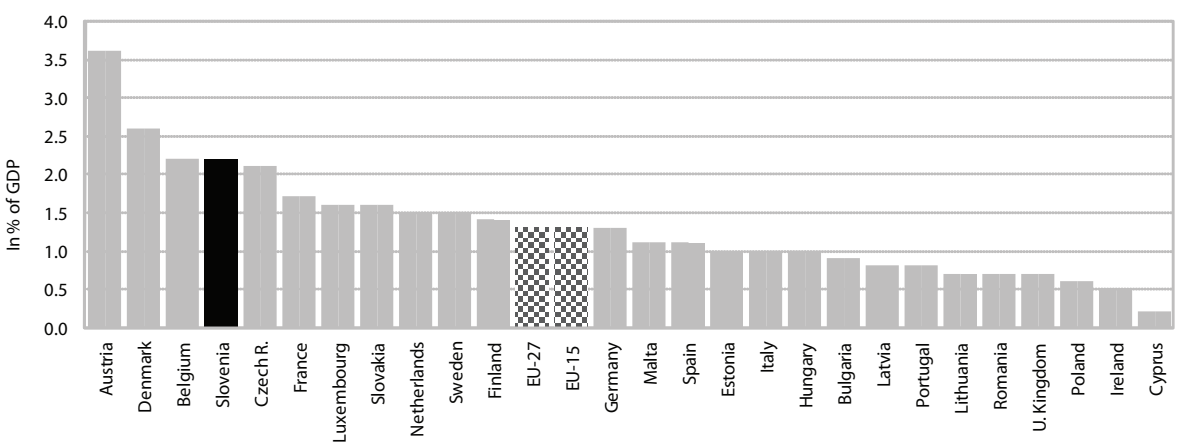
[1] Decree on the documents of development planning bases and procedures for the preparation of the central and local government budgets, OG of RS, No. 44/2007.

Table: **General government subsidies, 1995–2009, in % of GDP**

	1995	2000	2005	2006	2007	2008	2009
EU-27	**N/A**	**N/A**	**1.1**	**1.1**	**1.1**	**1.1**	**1.3**
EU-15	**1.6**	**1.3**	**1.1**	**1.1**	**1.1**	**1.2**	**1.3**
Austria	2.8	3.1	3.4	3.4	3.3	3.5	3.6
Belgium	1.2	1.2	1.6	1.7	1.9	2.1	2.2
Bulgaria	N/A	1.0	0.8	0.7	0.8	1.1	0.9
Cyprus	0.9	1.4	0.7	0.5	0.4	0.4	0.2
Czech Republic	2.9	2.8	1.8	1.9	1.8	1.7	2.1
Denmark	2.7	2.4	2.3	2.2	2.2	2.2	2.6
Estonia	0.8	1.1	0.7	0.9	0.9	1.0	1.0
Finland	2.7	1.5	1.3	1.4	1.3	1.3	1.4
France	1.6	1.5	1.4	1.4	1.5	1.4	1.7
Greece	0.4	0.1	0.1	0.1	0.1	0.1	0.1
Ireland	1.0	0.7	0.5	0.4	0.5	0.5	0.5
Italy	1.4	1.2	0.9	0.9	1.0	1.0	1.0
Latvia	1.2	1.0	0.5	0.6	0.6	0.9	0.8
Lithuania	N/A	0.8	0.7	0.7	0.9	0.7	0.7
Luxembourg	1.6	1.5	1.6	1.5	1.5	1.5	1.6
Hungary	2.2	1.6	1.4	1.4	1.4	1.1	1.0
Malta	1.7	1.4	2.1	2.2	2.0	2.1	1.1
Germany	2.1	1.7	1.2	1.2	1.1	1.1	1.3
Netherlands	1.0	1.5	1.2	1.1	1.2	1.2	1.5
Poland	N/A	N/A	0.6	0.6	0.6	0.6	0.6
Portugal	1.2	1.2	1.0	0.9	0.8	0.7	0.8
Romania	3.4	1.8	1.5	1.8	1.3	0.8	0.7
Slovakia	4.7	2.5	1.3	1.3	1.2	1.7	1.6
Slovenia	**2.2**	**1.9**	**1.6**	**1.6**	**1.6**	**1.6**	**2.2**
Spain	1.0	1.1	1.0	1.0	1.1	1.1	1.1
Sweden	3.6	1.6	1.4	1.5	1.4	1.4	1.5
United Kingdom	0.7	0.4	0.6	0.7	0.7	0.6	0.7

Source: Eurostat Portal Page – Government Finance Statistics, 2012; for Slovenia, data by SORS, 2012.
Note: N/A – not available.

Figure: **General government subsidies, 2009, in % of GDP**



Source: Eurostat Portal page – Government Finance Statistics, 2012.

State aid[1]

After the significant increase in 2009 owing to measures to mitigate the impact of the economic crisis, state aid declined markedly in 2010 but remained higher than in the period before 2009. In 2010 state aid amounted to EUR 460.1 m, which is 1.28% of GDP and 2.8% of total general government expenditure. After expanding by as much as 86.5% in 2009 (by EUR 280.6 m or by over 0.84% of GDP), state aid shrank by 23.9% or EUR 144.6 m in 2010 (0.43% of GDP). Regardless of this substantial decline, in 2010 state aid was still higher than that in 2008 (by 0.48% of GDP or EUR 136 m) or in any other years since Slovenia's accession to the EU[2] (Thirteenth Survey on State Aid in Slovenia, 2012).

The decline of state aid in 2010 arose from the phasing-out of the special temporary scheme called 'aid to remedy a serious disturbance in the economy'. Only EUR 37.6 m in state aid was thus allocated under this scheme in 2010 (in contrast to as much as EUR 215.4 m in 2009), with aid for financial institutions being cut substantially. Other forms of horizontal aid used by Slovenia to deal with the effects of the economic crisis rose by EUR 42.1 m in 2010 and were much higher (by EUR 104.6 m) than in 2008. The largest increase was recorded for aid for R&D, which was as much as three and a half times higher than in 2008 and 45% higher than in 2009. Aids for employment and environmental protection soared as well. Certain categories of horizontal aid (aids for small and medium-sized enterprises and training) are dropping gradually on account of an increase in measures allocated under the '*de minimis*' rule, which are not considered state aid. Aids for regional development and culture are also being reduced, in both absolute and relative terms. In 2010, aid was (for the first time) allocated under a new scheme referred to as the risk-capital measure, but its amount was small. Also without the aid intended to remedy a serious disturbance in the economy, the increase of horizontal aids as a share of total state aid (2008: 47.6%; 2010: 64.4%) pursues the development goals defined in Slovenia's Development Strategy and the Europe 2020 strategy, as well as the goal of increasing the general impact of state aid on the development of individual recipients and, through the spillover effects, on the society as a whole. The amounts of state aid dedicated for special sectors declined somewhat in 2010 relative to 2009; state aid for transport increased while aids for other sectors (in particular agriculture and fisheries and coal mining) declined.

State aid (excluding crisis aid and aid for rail transport[3]) is much higher than the EU average. According to EC data (State Aid Scoreboard, 2011), the average state aid in the EU is nearly one half lower than that in Slovenia (EU: 0.6%; Slovenia: 1.1% of GDP). Only Hungary (2.3%) and Malta (1.4% of GDP) recorded higher aid in relative terms, while Finland was on par with Slovenia. However, the amount of aid earmarked for the financial sector to mitigate the impact of the financial crisis in the 2008–2010 period was well below the EU average (Slovenia: 6.0%; EU: 13.1% of 2010 GDP).(Commission staff working paper, Autumn 2010 update, 2011).

State aid in gradually being shifted into aids granted under the 'de minimis'[4] rule, which are not considered state aid and are therefore not controlled by the EU. The aids under this rule, having totalled around EUR 10 m in Slovenia in 2006, expanded to a high of EUR 28.6 m in 2008. In 2009 they surged to EUR 84.9 m and accounted for as much as 14% of total state aid. This remarkable increase was partly a consequence of measures adopted in response to the economic crisis, as well as, to a certain extent, the above-mentioned shift from the controlled state aids. In 2010, these aids shrank by 28.5%, but remained high (EUR 60.7 m), accounting for 13.2% of total state aid. They were granted for various purposes, particularly for employment, and small and medium-sized enterprises.

[1] State aids arise from the EU's regime and represent all measures of a state in terms of its expenditures (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 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.

[2] A comparison with the pre-accession years, when the total state aid had been taken into account, is not realistic, as since Slovenia's accession to the EU a significant portion of state aid to agriculture, i.e. measures under the Common Agricultural Policy (CAP), is no longer considered state aid.

[3] In its latest survey the European Commission published only data on state aids without crisis aid and the aid for rail transport.

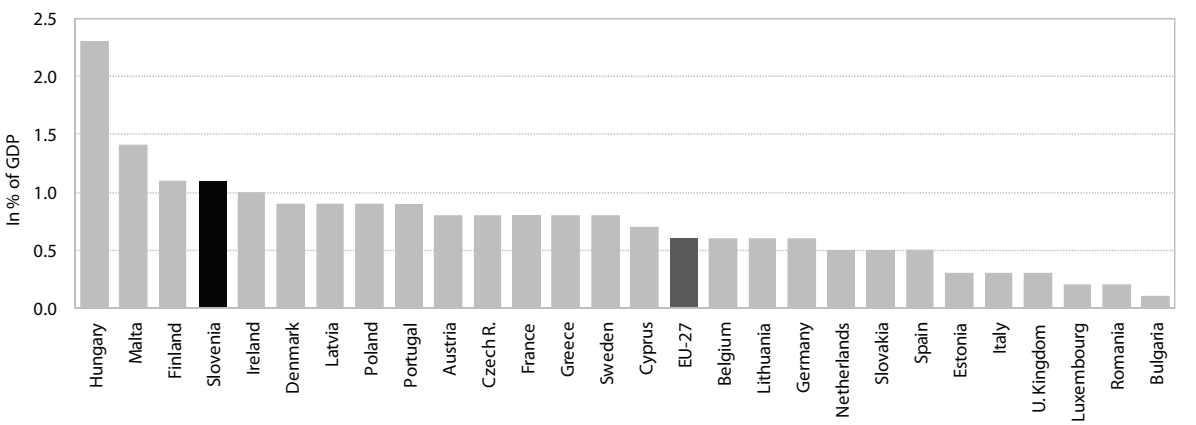
[4] The "de minimis" rule (aids of small amount) is an instrument which allows Member States to grant subsidies of limited amount very rapidly, without notification to the Commission and entering into any administrative procedure. The rule is based on the assumption that, in the vast majority of cases, 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) EC. The ceiling for the aid covered by the "de minimis" rule is EUR 200,000 per recipient over any three fiscal years.

Table: **State aids (excluding aid to remedy the effects of the economic crisis and aid for rail transport), as a % of GDP**

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**1.0**	**0.6**	**0.6**	**0.8**	**0.5**	**0.6**	**0.6**	**0.6**
Austria	1.1	0.7	0.5	0.8	0.4	0.7	0.9	0.8
Belgium	0.6	0.5	0.4	0.4	0.4	0.4	0.6	0.6
Bulgaria	N/A	N/A	0.1	0.1	0.6	0.6	0.5	0.1
Cyprus	N/A	2.6	1.4	0.6	0.7	0.6	1.0	0.7
Czech Republic	N/A	2.4	0.6	0.8	0.8	1.0	0.7	0.8
Denmark	0.7	1.0	0.8	0.8	0.8	0.8	1.0	0.9
Estonia	N/A	0.1	0.3	0.3	0.2	0.3	0.3	0.3
Finland	2.8	1.4	1.3	1.3	1.1	1.1	1.2	1.1
France	0.8	0.6	0.6	1.7	0.5	0.7	0.8	0.8
Greece	1.4	0.6	0.4	0.4	0.5	0.7	0.9	0.8
Ireland	0.7	1.1	0.5	0.5	0.7	1.2	0.9	1.0
Italy	1.2	0.5	0.4	0.4	0.4	0.4	0.4	0.3
Latvia	N/A	0.7	1.1	1.3	2.2	0.6	0.7	0.9
Lithuania	N/A	0.3	0.5	0.5	0.6	0.4	0.6	0.6
Luxembourg	0.5	0.3	0.3	0.2	0.2	0.2	0.3	0.2
Hungary	N/A	1.1	3.2	2.3	1.9	2.4	1.8	2.3
Malta	N/A	3.4	3.5	2.8	2.4	1.9	1.9	1.4
Germany	1.4	0.8	0.7	0.8	0.6	0.6	0.7	0.6
Netherlands	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5
Poland	N/A	1.0	0.8	0.9	0.6	0.9	0.9	0.9
Portugal	0.9	0.8	0.9	0.9	1.3	0.9	1.0	0.9
Romania	N/A	N/A	0.6	0.7	1.2	0.6	0.7	0.2
Slovakia	N/A	0.4	0.6	0.5	0.4	0.6	0.5	0.5
Slovenia	**N/A**	**1.0**	**0.7**	**0.7**	**0.6**	**0.7**	**1.0**	**1.1**
Spain	1.0	0.9	0.5	0.5	0.5	0.5	0.5	0.5
Sweden	0.5	0.4	1.0	1.0	0.9	0.9	0.9	0.8
United Kingdom	0.4	0.2	0.2	0.2	0.3	0.2	0.3	0.3

Source: State Aid Scoreboard, Autumn 2011, (European Commission), 2011.
Note: N/A – not available.

Figure: **State aids (excluding aid to remedy the effects of the economic recession and aid for rail transport), 2010, as a % of GDP**



Source: State Aid Scoreboard, Autumn 2011, (European Commission), 2011.
Note: Legend on the left: as a % of GDP.

THE FOURTH PRIORITY:

A modern welfare state and higher employment

- Employment rate
- Unemployment rate
- Long-term unemployment rate
- Temporary employment
- Part-time employment
- Social-protection expenditure
- Pension expenditure
- Health expenditure
- Expenditure on long-term care
- Human development index
- Minimum wage
- Risk of poverty
- Material deprivation
- Health care resources
- Capacities of the education system
- Life satisfaction

Employment rate

The employment rate[1] has declined for the third year in a row, in the last two years more sharply than in the EU as a whole. The reason lies in tightened economic conditions, which had larger negative consequences in Slovenia than on average in the EU, and the consequent fall in employment. Until 2003, the employment rate in Slovenia had hovered around 63%, but it rose substantially in 2004 upon Slovenia's accession to the EU, exceeding both the EU average and the average of the EU-15. It had been rising continually until 2008, then started to fall in 2009 owing to a decline in economic activity (see Table). The fall in employment in 2009 was relatively small in comparison to the drop in economic activity, partly due to the usual lag in labour market response to the economic situation, but also as a result of the government stepping in and adopting two intervention acts[2] that helped to preserve jobs in some vulnerable industries. In 2010 and 2011 employment continued to drop, despite the modest recovery. Enterprises were mitigating the 2009 drop in productivity with further cuts in employment. Moreover, the effects of the government intervention expired or declined, and in the second half of 2011 economic growth started to fall again. In 2011, the employment rate in Slovenia thus fell by around 2 p.p., dropping below the EU average in the first and second quarters for the first time to date.

In 2011, employment dropped most notably in construction. The volume of informal work was also substantially lower. In 2011, the number of formally employed persons according to the Statistical Register of Employment (SRE) fell by 2.1% relative to that in the same period of 2010, most notably in construction (by 13.6%). It also decreased (by 2% or more) in agriculture, industry, and production and various non-business services. In 2011, employment increased only in information, professional and administrative support service activities, and among public services in education, health and social work, while it dropped in public administration. The number of formally employed persons declined in particular (by 2.4%), within that most notably the number of foreigners working in Slovenia (by 14.3%), while the number of self-employed persons rose (by 2.4%, excluding farmers, the number of whom also increased for statistical reasons). Comparing these data with those from the Labour Force Survey, according to which employment declined more than according to the Statistical Register, we estimate that the number of persons in informal employment[3] dropped in 2011 for the second year in a row (according to our estimates, by around 14% in 2011 and 3% in 2010).

In 2011, the employment rate declined for all age categories and both genders. In the last three years the employment rates of young people aged 15–24 and people aged 25–54 declined in particular. The year 2011 also saw a substantial drop in the employment rate in the age group of 55–64, which had otherwise been increasing slowly until 2009, although it has always been one of the lowest in the EU. In the second quarter of 2011, it totalled a mere 30.6% (16.9 p.p. less than the EU average). The employment rate of youth hovered around the EU average in 2007–2010, largely due to high informal employment in this population group (mainly work through student job agencies), but in 2011 it dropped more than in the EU as a whole. In the second quarter of 2011, it stood at 30.9% (2.7% less than in the EU). Formal employment of the young population according to SRE (see Figure) remains low. The female employment rate in particular is higher than in the EU. After hovering around 58% until 2003, it had been growing rapidly in 2004–2008 and reached 64.5% in 2008. Since then it has been declining, totalling only 61.1% in the second quarter of 2011 (in the EU 58.7%). The rate of male employment, having moved around 67% until 2003, caught up with the EU average in 2007–2009. By 2008 it grew to 72.9%, while in the last two years it was dropping faster than in the EU, recording a low of 67.6% by the second quarter of 2011 (2.6% lower than the EU average).

In 2011, the government intervened much less in the labour market than in the preceding two years. March 2011 saw the phase-out of the last subsidies according to one of the two acts by which the government was mitigating the economic crisis on the labour market. The effect of active employment policy programmes was also lower in 2011, and only around 10 thousand unemployed found work under employment, self-employment and public works programmes, a third fewer than the year before.

[1] In the age group of 15–64 years.

[2] The Partial Subsidising of Full-Time Work Act, OG RS 5/2009, and the Partial Reimbursement of Payment Compensation Act, OG RS 42/2009.

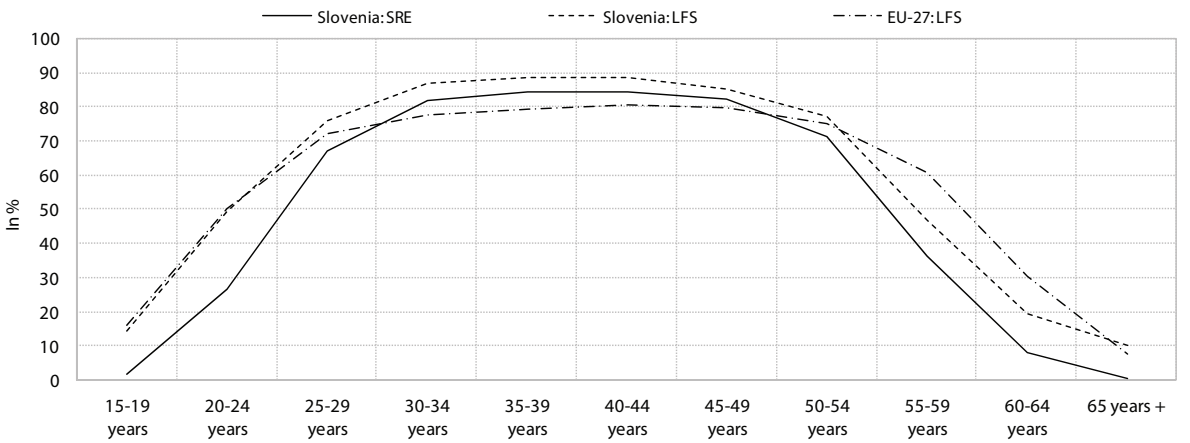
[3] People who work either as unpaid family workers, on contractual basis or in the grey economy.

Table: **Employment rates (15–64 age group) according to the Labour Force Survey, in %**

	1995	2000	2005	2006	2007	2008	2009	2010	2011 (Q2)
EU-27	**N/A**	**62.2**	**63.4**	**64.4**	**65.3**	**65.8**	**64.5**	**64.1**	**64.5**
Austria	68.8	68.5	68.6	70.2	71.4	72.1	71.6	71.7	72.1
Belgium	56.1	60.5	61.1	61.0	62.0	62.4	61.6	62.0	62.5
Bulgaria	N/A	50.4	55.8	58.6	61.7	64.0	62.6	59.7	58.2
Cyprus	N/A	65.7	68.5	69.6	71.0	70.9	69.9	69.7	69.0
Czech Republic	N/A	65.0	64.8	65.3	66.1	66.6	65.4	65.0	65.7
Denmark	73.4	76.3	75.9	77.4	77.1	77.9	75.7	73.4	73.3
Estonia	N/A	60.4	64.4	68.1	69.4	69.8	63.5	61.0	64.3
Finland	61.6	67.2	68.4	69.3	70.3	71.1	68.7	68.1	70.1
France	59.5	62.1	63.7	63.6	64.3	64.8	64.0	63.8	64.0
Greece	54.7	56.5	60.1	61.0	61.4	61.9	61.2	59.6	56.4
Ireland	54.4	65.2	67.6	68.7	69.2	67.6	61.8	60.0	59.5
Italy	51	53.7	57.6	58.4	58.7	58.7	57.5	56.9	57.3
Latvia	N/A	57.5	63.3	66.3	68.3	68.6	60.9	59.3	61.4
Lithuania	N/A	59.1	62.6	63.6	64.9	64.3	60.1	57.8	60.8
Luxembourg	58.7	62.7	63.6	63.6	64.2	63.4	65.2	65.2	63.8
Hungary	N/A	56.3	56.9	57.3	57.3	56.7	55.4	55.4	55.8
Malta	N/A	54.2	53.9	53.6	54.6	55.3	55.0	56.1	57.3
Germany	64.6	65.6	65.5	67.2	69.0	70.1	70.3	71.1	72.5
Netherlands	64.7	72.9	73.2	74.3	76.0	77.2	77.0	74.7	74.7
Poland	np	55.0	52.8	54.5	57.0	59.2	59.3	59.3	59.7
Portugal	63.7	68.4	67.5	67.9	67.8	68.2	66.3	65.6	64.8
Romania	N/A	63.0	57.6	58.8	58.8	59.0	58.6	58.8	58.8
Slovakia	N/A	56.8	57.7	59.4	60.7	62.3	60.2	58.8	59.6
Slovenia	**62.9**	**62.8**	**66.0**	**66.6**	**67.8**	**68.6**	**67.5**	**66.2**	**64.4**
Spain	46.9	56.3	63.3	64.8	65.6	64.3	59.8	58.6	58.3
Sweden	70.9	73.0	72.5	73.1	74.2	74.3	72.2	72.7	74.5
United Kingdom	68.5	71.2	71.7	71.6	71.5	71.5	69.9	69.5	69.4

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2011.
Note: N/A – not available.

Figure: **Employment rate by age, Slovenia and EU-27, 2010**



Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2011.
Note: LFS: LFS – Labour Force Survey; SRE: Statistical Register of Employment (including formally employed and self-employed persons).

Unemployment rate

In 2011, the survey and registered unemployment rates in Slovenia grew less than a year earlier, while the internationally comparable survey rate remains below the EU average. Since the third quarter of 2008, when it fell to the lowest level on record (4.1%), the survey unemployment rate increased to a high 8.5% by the first quarter of 2011 as a result of the deteriorating economic situation, and totalled 8.1% in 2011 as a whole (0.8 p.p. more than in 2010). It was still lower than, on average, in the EU and in the euro area, where it stood at 9.7% and 10.2% in 2011 as a whole, respectively. The registered unemployment rate rose by 1 p.p., amounting to 11.8% in the year as a whole. From 2008, when it had been lowest since 1990 (63%), it nearly doubled by January 2011. In 2011 as a whole, it did not increase significantly, which can be explained by a slower decline in employment.[1]

The growth of unemployment among women, youth and people with a low and secondary education eased in 2011, but the (otherwise low) unemployment rate of people with a tertiary education is increasing at a stronger pace. The survey unemployment rate of women, which had hovered around 7% in 2001–2006 and dropped to 4.4% by the third quarter of 2008, has since been rising again. Since 2009, it has been lower than the unemployment rate of men. In 2011, the survey unemployment rate of women averaged 8.1%, the survey unemployment rate of men 8.3%. The registered unemployment rate of women (12.4% in 2011 as a whole) remains higher than that of men (11.4%). As a result of the crisis, the survey unemployment rate of youth, which was the lowest on record in the second quarter 2007 (9.3%), rose to as much as 18.6% by the first quarter of 2011, averaging 15.3% in the year as a whole. However, it remains much below the EU average, according to our estimate mainly due to student work and high participation of youth in tertiary education. The unemployment rates of people with a low and secondary education were marked by similar dynamics. The former rose from 6.6% in 2008 to 15.7% in the first quarter of 2011, recording 14.0% in the first three quarters of 2011 as a whole. The latter increased from an average of 4.4% in 2008 to 9.2% in the first quarter of 2011, averaging 8.5% in the first three quarters of the year. The survey unemployment rate for persons with a tertiary education, which is on a slow, though steady, upward trend, increased again in 2011 (to 5.0% in the first three quarters).

In 2011, somewhat fewer persons registered as unemployed than in 2010, and more unemployed persons found work or were deleted from the unemployment register for reasons other than employment. A total of 82,150 persons registered as unemployed because they lost work, 1.6% less than a year earlier. Within that, more persons became unemployed due to bankruptcies, the winding up of sole proprietorships or termination of fixed-term employment. The share of the latter among those who registered because of job loss increased to 55.0%. The number of newly registered first-time job-seekers also declined (by 14.3%). On the other hand, more unemployed persons landed work (7.0%) or were struck off the unemployment register for other reasons (9.7%). Around one third of people deleted from the register gave up looking for work. Only one sixth of the unemployed who found work became employed through active employment policy programmes (employment and self-employment programmes and public works; around a third less than a year before). Even though during the year the average annual number of unemployed persons was dropping, it rose by 10.9% in 2011 as a whole as measured by the survey, or 10.1% according to the register, i.e. to 84 thousand and 110.7 thousand, respectively. In the 2000–2008 period, the former dropped from 68 to 46 thousand, the latter from 107 to 63 thousand.

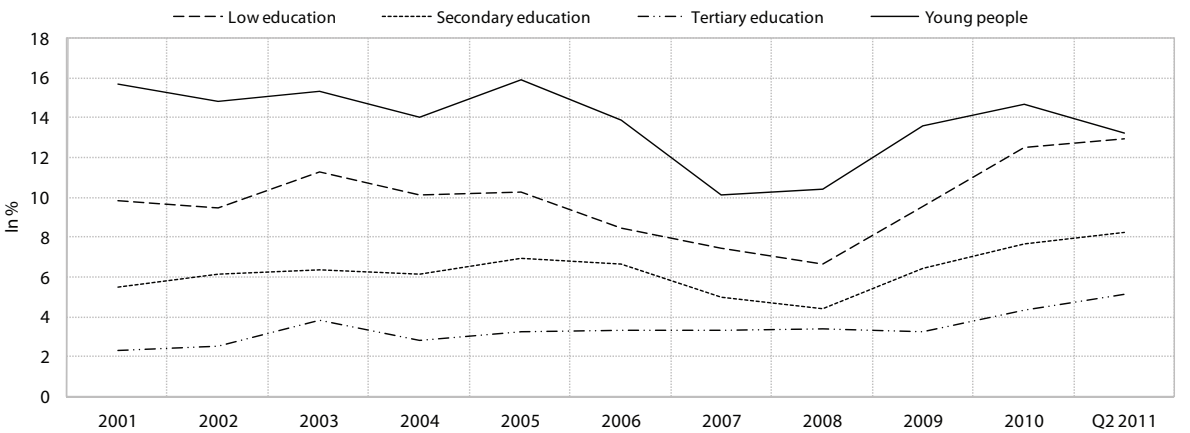
[1] See the Employment rate indicator.

Table: **Survey unemployment rate, in %**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
EU-27	**N/A**	**8.7**	**8.9**	**8.2**	**7.1**	**7.0**	**8.9**	**9.6**	**9.7**
Austria	3.9	3.6	5.2	4.8	4.4	3.8	4.8	4.4	N/A
Belgium	9.7	6.9	8.5	8.3	7.5	7.0	7.9	8.3	7.2
Bulgaria	N/A	16.4	10.1	9.0	6.9	5.6	6.8	10.2	11.1
Cyprus	N/A	4.9	5.3	4.6	3.9	3.7	5.3	6.2	7.8
Czech Republic	N/A	8.7	7.9	7.2	5.3	4.4	6.7	7.3	6.8
Denmark	6.7	4.3	4.8	3.9	3.8	3.3	6.0	7.4	7.6
Estonia	N/A	13.6	7.9	5.9	4.7	5.5	13.8	16.9	12.5
Finland	15.4	9.8	8.4	7.7	6.9	6.4	8.2	8.4	7.8
France	11	9.0	8.9	8.8	8.0	7.4	9.1	9.4	9.7
Greece	N/A	11.2	9.9	8.9	8.3	7.7	9.5	12.6	N/A
Ireland	12.3	4.2	4.4	4.4	4.6	6.0	11.8	13.5	14.4
Italy	11.2	10.1	7.7	6.8	6.1	6.8	7.8	8.4	N/A
Latvia	N/A	13.7	8.9	6.8	6.0	7.5	17.1	18.7	N/A
Lithuania	N/A	16.4	8.3	5.6	4.3	5.8	13.7	17.8	15.4
Luxembourg	2.9	2.2	4.5	4.7	4.1	5.1	5.1	4.4	4.8
Hungary	N/A	6.4	7.2	7.5	7.4	7.8	10.0	11.2	10.9
Malta	N/A	6.7	7.3	6.9	6.5	6.0	6.9	6.9	6.4
Germany	8	7.5	11.2	10.3	8.7	7.5	7.8	7.1	5.9
Netherlands	6.6	3.1	4.7	3.9	3.2	2.8	3.4	4.5	4.4
Poland	N/A	16.1	17.8	13.9	9.6	7.1	8.2	9.6	9.7
Portugal	7.2	4.0	7.7	7.8	8.1	7.7	9.6	11	12.9
Romania	N/A	7.3	7.2	7.3	6.4	5.8	6.9	7.3	7.4
Slovakia	N/A	18.8	16.3	13.4	11.1	9.5	12.0	14.4	13.4
Slovenia	**N/A**	**6.7**	**6.5**	**6.0**	**4.9**	**4.4**	**5.9**	**7.3**	**8.1**
Spain	18.4	11.1	9.2	8.5	8.3	11.3	18.0	20.1	21.7
Sweden	8.8	5.6	7.8	7.1	6.2	6.2	8.4	8.4	7.5
United Kingdom	8.5	5.4	4.8	5.4	5.3	5.6	7.6	7.8	N/A

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2012
Note: N/A – not available.

Figure: **Selected specific survey unemployment rates, Slovenia**



Source: Eurostat Portal Page - Population and Social Conditions – Labour Market, 2012.

Long-term unemployment rate

The long-term unemployment rate,[1] an indicator of social cohesion and labour-market problems, increased somewhat again in Slovenia in 2011. It was around the level Slovenia recorded before 2005. After a longer period of decline (2000–2009) and a 1.5 p.p. increase in 2010, the long-term unemployment rate climbed to 3.5% in the second quarter of 2011 (up 0.3 p.p. from a year earlier). It increased more for men than for women; in the second quarter of 2011, the female long-term unemployment rate stood at 3.1% (up 0.1 p.p. from a year earlier) and the male long-term unemployment rate at 3.8% (up 0.5 p.p. from a year earlier).

The long-term unemployment rate in Slovenia is still somewhat below the EU average, but has been growing faster than in the EU in the last two years. In 2008–2011, Slovenia's long-term unemployment rate drew very close to the EU average.[2] In both Slovenia and the EU as a whole, in 2008–2011 (the second quarter), the long-term unemployment rate for men increased more than that for women. In Slovenia this can be explained by a drop in construction activity and the lower educational attainment of men. In 2008–2011, the most notable increases in the long-term unemployment rate were seen in Lithuania and Latvia: just above 7 p.p. In Slovakia, which has the highest rate (9.1%), long-term unemployment was already relatively high before the crisis. However, certain countries recorded no major changes during the crisis, or even had lower long-term unemployment in 2011 than in 2008 (Germany, Belgium, Luxembourg).

The share of long-term unemployed people in total unemployment has not increased significantly in the last year, though it is above the EU average. As a result of a high inflow of newly unemployed people at the beginning of the crisis in 2009 when people were still unemployed for relatively short periods of time, the share of long-term unemployed people in total unemployment first contracted significantly, only to increase strongly in 2010 (by 14.2 p.p.) with the rising duration of unemployment. In the second quarter of 2011 the share totalled 45.0%, similar to the year before. After being below the EU average in the second quarter of 2009, it exceeded it in 2010 and 2011 (similar to the 2000–2008 period). In Slovenia, long-term unemployed women accounted for 42.3% of total unemployed women in the second quarter of 2011 (approximately the same share as in the EU as a whole), while the corresponding share of men totalled 47.1% (EU: 43.45%). In the second quarter of 2011, the share of long-term unemployed women in the total number of long-term unemployed women was 3 p.p. lower than a year before (in men, 3 p.p. higher).

Structural problems on the labour market have increased somewhat in the last two years. The increase in structural unemployment in Slovenia is also reflected in the rate of very long-term unemployment,[3] which stood at 1.8% in the second quarter of 2011 (an increase of 0.5 p.p. relative to the year earlier), 0.7 p.p. higher than before the crisis (the second quarter of 2008). A longer duration of unemployment reduces an individual's human capital and employability. The growth of long-term unemployment indicates that it will be hard to reduce unemployment in any significant way in the years to come. The rise in long-term unemployment calls for strengthening active employment policy programmes, which would reduce and prevent long-term employment. The participation of long-term unemployed persons[4] in active employment policy programmes has been relatively low in recent years,[5] and should be increased.

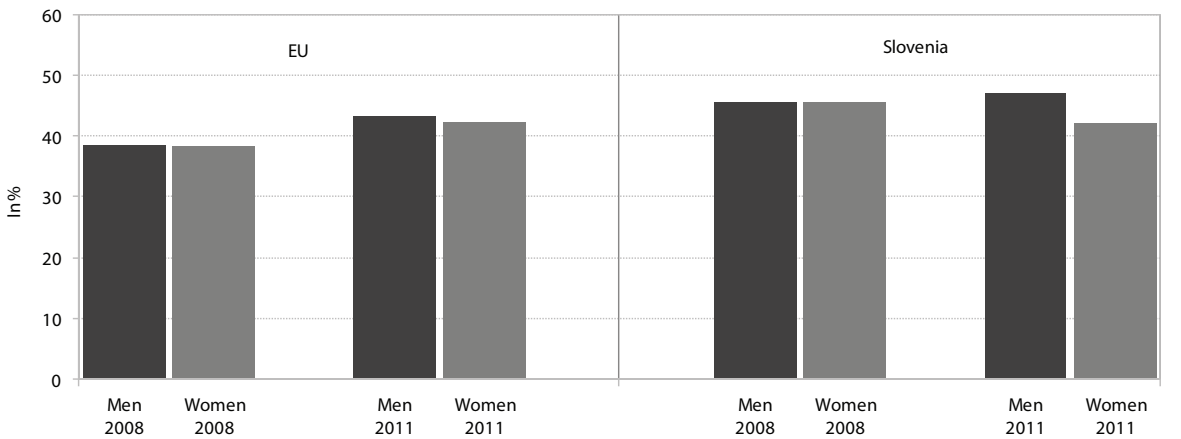
[1] The long-term unemployment rate is the ratio of the number of people unemployed for a year or more to the total labour force.
[2] In the second quarter of 2008, the long-term unemployment rate in Slovenia was 1.2 p.p. lower than in the EU as a whole, in contrast to 0.5 p.p. in the second quarter of 2011.
[3] The very long-term unemployment rate is the ratio of persons unemployed for over two years to the total labour force.
[4] In 2010, 19% of all long-term unemployed persons participated in active employment policy programmes.
[5] In 2008 and 2009, around 13% of long-term unemployed persons participated in active employment policy programmes; in 2010: 19%.

Table: **Long-term unemployment rate in 2000–2010,1 EU countries**

	2000	2005	2006	2007	2008	2009	2010	2011
EU-27	**4.0**	**4.2**	**3.8**	**3.1**	**2.6**	**2.9**	**3.8**	**4.0**
Austria	N/A	1.2	1.3	1.2	0.8	0.9	1.2	1.1
Belgium	3.6	4.2	4.6	3.8	3.3	3.5	4.1	3.2
Bulgaria	9.6	6.0	4.8	3.9	2.9	2.8	4.3	6.3
Cyprus	1.3	1.5	0.8	0.7	0.4	0.5	1.2	1.2
Czech Republic	4.3	4.1	4.0	2.9	2.2	1.8	3.0	2.6
Denmark	0.8	1.2	0.8	0.7	0.5	0.4	1.3	2.0
Estonia	6.2	4.3	2.8	2.4	1.4	3.2	8.5	7.3
Finland	2.7	2.2	1.9	1.6	1.1	1.2	1.9	1.7
France	N/A	3.8	4.0	3.4	3.0	3.3	3.8	3.8
Greece	6.3	5.2	4.9	4.1	3.6	3.7	5.4	8.0
Ireland	1.7	1.6	1.6	1.4	1.7	2.9	6.4	8.3
Italy	6.4	3.9	3.5	2.9	3.2	3.3	4.1	4.2
Latvia	8.1	4.3	2.6	1.7	1.7	4.0	8.1	8.8
Lithuania	8.1	4.6	2.6	1.5	0.8	2.8	7.4	8.0
Luxembourg	0.5	1.2	1.3	1.3	1.8	1.3	1.4	1.6
Hungary	3.1	3.2	3.4	3.5	3.6	3.9	5.5	5.4
Malta	4.0	3.8	3.1	2.5	2.3	3.1	2.9	2.9
Germany	4.1	6.1	5.8	4.9	4.2	3.6	3.4	2.9
Netherlands	N/A	2.2	2.0	1.5	1.1	0.9	1.2	1.5
Poland	7.3	10.5	8.1	5.1	2.5	2.3	2.9	3.5
Portugal	1.9	3.9	4.2	4.1	3.9	4.5	6.2	6.3
Romania	3.4	4.0	4.0	3.3	2.3	2.3	2.4	3.0
Slovakia	10.4	11.7	10.5	8.4	7.3	5.9	9.1	9.1
Slovenia	**4.3**	**3.0**	**3.1**	**2.2**	**1.9**	**1.7**	**3.2**	**3.5**
Spain	4.7	2.3	1.9	1.7	1.8	3.8	7.2	8.6
Sweden	1.4	N/A	1.1	0.9	0.7	1.0	1.5	1.4
United Kingdom	1.5	1.0	1.2	1.3	1.3	1.7	2.6	2.6

Source: Eurostat Portal Page – Labour market – Employment and Unemployment, Main indicators.
Note: [1] Data refer to the second quarter of the year.

Figure: **Long-term unemployed as a share of total unemployed by gender in Slovenia and the EU, 2008 and 2011**



Source: Eurostat Portal Page- Labour market – Employment and Unemployment, Main indictors, 2012.

Temporary employment

The prevalence of temporary employment in Slovenia is above the EU average and increased further in the period of the implementation of SDS. The frequency of the use of temporary employment is mainly related to the rigid regulation of employment (protection of regular employment), the seasonal nature of production and a higher level of uncertainty regarding future demand. Slovenia is among those countries that have a high share of temporary employment[1] and its gap with the EU average has widened since 2005.[2] Fixed-term employment and work through student job agencies account for the largest share of temporary employment. The prevalence of temporary employment in Slovenia is mainly due to the relatively strong protection of regular employment. As a result, hiring through temporary work agencies is increasing[3] and so is student work, which is attractive for employers due to high flexibility and lower tax burden compared to regular employment.

In 2011, the share of temporary employment in total employment in Slovenia remained at a similar level as in 2010. In response to declining demand, employers are adjusting the number of employees by not renewing fixed-term contracts. The share of temporary employment thus decreased in 2008 and 2009 amid the moderation and decline of economic activity. In the period of modest economic growth, rather than for full-time permanent employment contracts, employers opted for various forms of temporary jobs, which can be cut relatively quickly and involve no firing costs. In 2010, the prevalence of temporary employment thus grew again, to 17.7% (up 1.3 p.p. from the second quarter of 2009), and also remained at that level in the second quarter of 2011 (17.5%).

In Slovenia, women are more frequently in temporary employment than men. The share of temporarily employed women therefore exceeds the EU average more than is the case in men. As in other countries, the share of temporarily employed women in total employment is higher than the corresponding share of men. In the second quarter of 2011, the share of temporarily employed women in the age group 15–64 years totalled 19.5% (0.4 p.p. less than a year earlier). The corresponding share of men amounted to 15.7% (the same figure as a year before). In the second quarter of 2011, the share of temporarily employed women (aged 15–64) in Slovenia was 4.7 p.p. higher than in the EU as a whole, the share of men 2.1 p.p.

The prevalence of temporary employment is typically highest among the young (particularly young women) and the share of young people in this type of employment continued to increase in 2011. The labour market remained highly segmented, which is related to the prevalence of work through student job agencies. This is also the reason Slovenia deviates strongly from other countries regarding temporary employment of the young. Amid a significant drop in employment in this population group, the share of temporarily employed young people (in the age group 15–24) rose in the second quarter of 2011, totalling 72.5% (up 5 p.p. from the year before).[4] The share of young women in this type of employment did not increase in 2011 and stands around 80%, while the corresponding share of men is 9.8 p.p. higher than a year before, 67.5%. In the EU as a whole, 42.2% of young people were in temporary employment in the second quarter of 2011 (41.9% of men and 42.5% of women), the same percentage as a year before.

The number of temporarily employed low-skilled people dropped most sharply during the economic crisis. As a result of the strong drop of activity in the construction sector and in low-technology manufacturing industries, less-skilled people were hit hardest by the crisis. The number of low-skilled employees[5] dropped most notably in 2008–2011. Employers reduced the number of employees mainly by cutting temporary jobs.[6] The share of temporary employment is highest among low-skilled employees who also have relatively lower income. The at-risk-of-

[1] As evident from the Table, Poland and Spain have the highest prevalence of temporary employment in the EU. The high ranking of Poland is mainly related to the above-average share of people employed in agriculture, while in Spain the reasons for the high prevalence are in the rigidity of employment regulation and the above-average share of employees in tourism and construction, which is seasonal.

[2] In the second quarter of 2005, the share of temporary employment in Slovenia amounted to 16.8% (exceeding the EU average by 2.4 p.p.), in the second quarter of 2011, 17.5% (exceeding the EU average by 3.1 p.p.).

[3] According to data by the Ministry of Work, Family and Social Affairs, the agencies provided around 12 thousand workers, nearly three times as many as in 2006.

[4] In the second quarter of 2011, the number of employed persons in the age group 15–24 was 10.2% lower than in the second quarter of 2010, while the number of temporarily employed persons in the same age group was down 6%. Student work decreased by 23%.

[5] In the second quarter of 2011, the number of employed persons with a low education was down 31.7% from the same period of 2008.

[6] In the second quarter of 2011, the number of low-skilled employees was one third lower than in the second quarter of 2008.

[7] In 2010, the at-risk-of-poverty rate of people in temporary employment totalled 10.7%, in contrast to the rate of 3.7% recorded for those with permanent jobs.

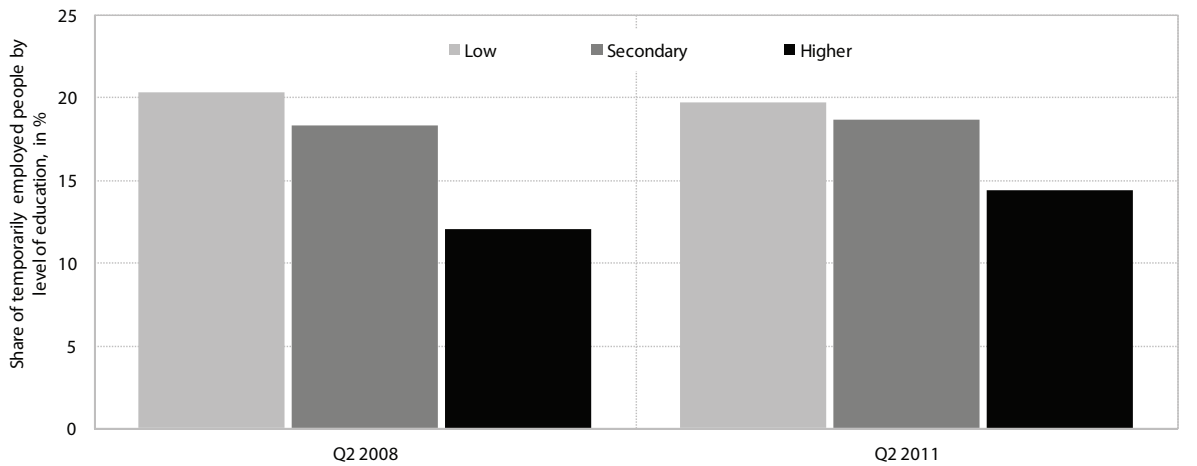
poverty rate among temporarily employed people is therefore much higher than among those who have permanent jobs.[7]

Table: **Share of temporary employment in total employment in the age group 15–64**

	2000	2005	2006	2007	2008	2009	2010	2011
EU	**N/A**	**14.4**	**15.1**	**14.6**	**14.2**	**13.5**	**14.0**	**14.2**
Austria	8.6	8.8	8.7	8.8	8.7	8.6	8.9	9.0
Belgium	9.0	9.1	8.8	8.8	7.7	8.2	7.5	8.8
Bulgaria	N/A	6.3	6.2	5.7	5.1	5.2	4.8	4.1
Cyprus	10.7	13.9	13.9	12.9	14.4	14.2	14.5	14.0
Czech Republic	7.2	8.0	8.1	7.9	7.4	7.4	8.2	8.0
Denmark	10.2	9.9	9.6	9.0	8.5	9.1	8.6	9.3
Estonia	2.3	3.3	3.3	2.3	1.8	2.3	4.2	4.7
Finland	17.7	18.1	18.0	17.3	16.9	15.9	16.8	16.7
France	N/A	14.3	15.1	15.1	15.0	14.3	15.2	15.3
Greece	13.8	12.1	10.9	11.2	11.6	12.2	12.8	11.9
Ireland	5.3	2.5	7.5	9.2	8.0	8.1	9.2	10.2
Italy	10.1	12.4	13.0	13.4	13.9	12.8	12.9	13.7
Latvia	6.7	8.4	7.1	5.3	2.8	3.7	6.7	7.4
Lithuania	3.8	5.1	4.7	3.7	2.7	2.7	2.6	3.6
Luxembourg	3.4	5.3	6.1	6.9	7.7	7.4	6.6	6.4
Hungary	6.8	7.2	6.7	7.5	7.8	8.2	9.7	9.2
Malta	3.9	4.0	3.8	5.5	4.1	4.9	4.9	5.2
Germany	12.8	13.8	14.2	14.3	14.7	14.3	14.6	14.7
Netherlands	13.8	15.1	16.1	17.9	18.0	17.9	18.5	18.0
Poland	5.6	25.4	27.1	28.1	26.9	26.5	27.0	27.0
Portugal	19.8	19.5	20.2	22.2	23.3	21.7	23.0	22.8
Romania	2.9	2.6	1.9	1.6	1.3	0.9	1.1	1.9
Slovakia	4.0	4.9	5.0	5.3	4.0	4.1	5.7	6.6
Slovenia	**12.8**	**16.8**	**17.9**	**18.5**	**16.9**	**16.4**	**17.7**	**17.5**
Spain	32.4	33.3	34.4	31.9	29.4	25.3	24.9	25.6
Sweden	14.3	16.0	17.3	17.7	16.4	15.5	15.8	16.3
United Kingdom	6.6	5.4	5.5	5.7	5.2	5.4	6.1	6.1

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2012.
Note: Data for the second quarter of the year.

Figure: **Share of temporarily employed persons by level of education**



Source: Eurostat Portal Page - Population and Social Conditions – Labour Market, 2012; calculations by IMAD.

Part-time employment

The share of part-time employment in Slovenia declined in 2011. In the second quarter of 2011, the share of part time employment in total employment (age group 15–64) totalled 9.1% (1.4 p.p. less than in a year earlier).[1] The decline in part-time jobs was, among other things, a result of the phasing-out of subsidies for employment with shorter working hours.[2] Over the last year, the share has decreased across all age groups, in particular among young people aged 15–24 (from 42.2% to 40.1%). The latter is to a great extent related to lower employment of young people through student job agencies in the second quarter of 2011,[3] which could also be explained by restrictions imposed on this type of employment in the public sector.

The share of part-time employment in Slovenia is still below the EU average, except for the share of part-time employment among the young. The total share of part-time employment in total employment (age group 15–64) in Slovenia (9.1%) lagged behind the EU average (18.9%) in the second quarter of 2011. Notwithstanding this aggregate lag, Slovenia has a higher prevalence (42.2%) of part-time employment among the young (the 15–24 age group) than the EU as a whole (30.3%), which is largely attributable to student work.

The share of involuntary part-time employment in Slovenia is relatively low, as the main reasons for part-time employment are training and education, and sickness and disability. According to the Labour Force Survey, around 7.5% of people working part time do so involuntarily, much fewer than in the EU as a whole, where involuntary part-time employment accounts for more than a quarter of total part-time employment. The low share of involuntary part-time employment in Slovenia is also corroborated by data on reasons for part-time work: the main reasons stated by part-timers in Slovenia are participation in education and training (around 30% of part-time workers), and sickness and disability (around 20%). In the EU as a whole, the most frequently cited reasons are 'impossible to find a full-time work" (25.7%) and 'child and adult care reasons' (21.9%). We estimate that more than half of the part-time jobs in Slovenia reflect systemic possibilities for part-time employment, which is wholly or partially financed by the state.[4] Excluding part-time work through student job agencies, only around 20% of people working shorter hours do so for reasons other than sickness, disability or parenthood.

Part-time employment is most widespread among low-skilled people,[5] but it is precisely this group of part-time workers that diminished most notably last year. In the second quarter of 2011, 16.1% of low-skilled workers[6] worked part time (4.8 p.p. less than a year before). The corresponding shares of workers with a secondary and tertiary education were 9.6% (0.3 p.p. more than a year before) and 5.4% (1.6 p.p. less than a year earlier), respectively. In the second quarter of 2011, the total number of persons in part-time employment was 16.2% lower than in the same period of 2010.[7] The large share of part-time workers with a lower education also contributes to the fact that the at-risk-of-poverty rate among people working part time is higher than among full-time employees.[8]

[1] The number of persons in part-time employment dropped by 16.1% and the number of all employed persons by 3.9%, which indicates that employers are adapting to the labour market situation using more flexible types of employment.

[2] Subsidies according to the Partially Subsidizing of Full-Time Work Act were paid out until September 2010; on average, 5,802 subsidies were paid per month in the second quarter of 2010.

[3] According to LFS data, student work declined by 23.1% year-on-year in the second quarter of 2011.

[4] Systemic possibilities for working shorter hours include part-time work due to child care according to the Parental Protection and Family Benefit Act, for health reasons according to Health Care and Health Insurance Act, and because of disability according to the Pension and Disability Insurance Act.

[5] People with a low education are those who completed levels of education 0–2 according to the International Standard Classification of Education (ISCED).

[6] The share of part-time employment among less-educated workers is the ratio of the number of part-time workers with a low education to the total number of employed persons with a low education.

[7] Owing to decreased demand for such workers (a drop of activity in the construction sector) and for student work, the share of part-time workers with a low education level diminished considerably last year, being 40% lower year-on-year in the second quarter of 2011. Part-time employment among persons with a low education in the 15–24 age group dropped by 46%.

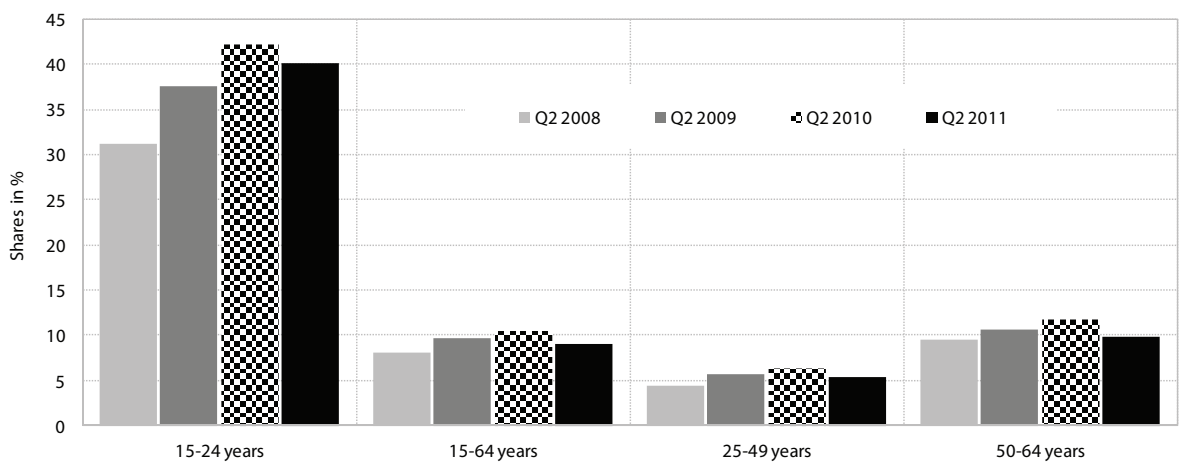
[8] In 2010, the at-poverty-rate for full-time workers totalled 4.5%, and for part-time workers (i.e. those working shorter hours) 7.5%.

Table: **Share of part-time employment in total employment in the age group 15–64 years**[1]

	2000	2005	2006	2007	2008	2009	2010	2011
EU	**N/A**	**18.0**	**18.3**	**17.7**	**17.7**	**18.2**	**18.7**	**18.9**
Austria	16.0	20.4	21.5	22.0	22.7	24.1	24.5	24.4
Belgium	20.6	21.7	22.9	22.5	22.4	23.0	24.1	25.1
Bulgaria	N/A	2.3	1.9	1.7	1.9	2.3	2.2	2.3
Cyprus	7.6	7.5	6.7	6.1	6.6	7.3	7.8	8.6
Czech Republic	4.8	4.3	4.4	4.4	4.3	4.8	5.2	4.7
Denmark	21.4	21.5	22.9	23.6	23.9	25.1	26.3	25.8
Estonia	6.3	6.8	7.1	7.0	5.6	10.7	10.4	9.5
Finland	11.9	13.2	13.0	13.0	12.3	12.7	13.6	13.6
France	N/A	17.1	17.2	17.3	16.9	17.2	17.7	17.8
Greece	4.4	4.6	5.6	5.5	5.2	5.8	6.1	6.2
Ireland	16.6	N/A	16.9	17.6	18.0	20.4	21.6	22.7
Italy	8.7	12.6	13.2	13.3	14.4	14.2	14.8	15.3
Latvia	10.5	8.9	6.0	6.4	5.7	7.6	8.9	8.5
Lithuania	8.9	6.3	8.6	7.9	6.3	8.2	7.7	7.7
Luxembourg	11.2	17.4	17.1	17.5	16.3	17.0	17.8	18.1
Hungary	3.4	4.1	3.9	3.8	4.1	5.2	5.3	6.5
Malta	6.1	8.8	9.6	10.7	11.4	11.0	11.2	12.0
Germany	19.1	23.6	25.4	25.6	25.4	25.5	25.7	25.9
Netherlands	41.0	45.8	45.8	46.3	46.7	47.6	48.5	48.5
Poland	9.3	9.7	9.0	8.5	7.6	7.8	7.8	7.2
Portugal	8.1	8.4	8.1	8.9	8.8	8.6	8.5	9.7
Romania	14.0	9.6	8.6	8.6	8.8	8.6	10.5	9.4
Slovakia	1.8	2.3	2.7	2.6	2.1	3.8	4.0	4.0
Slovenia	**5.3**	**7.8**	**8.4**	**8.8**	**8.1**	**9.7**	**10.5**	**9.1**
Spain	8.0	12.6	12.1	11.8	11.9	12.8	13.4	14.0
Sweden	21.8	24.3	24.3	24.3	26.1	26.0	25.4	24.9
United Kingdom	24.4	24.6	24.3	24.2	24.2	25.0	25.7	25.6

Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2012.

Figure: **Share of part-time employment by age group in 2008–2010**



Source: Eurostat Portal Page – Population and Social Conditions – Labour Market, 2012.

Social-protection expenditure

As a consequence of the economic crisis and demographic changes, social protection expenditure grew strongly in 2009. In 2009, it totalled EUR 8,568 m,[1] up 6.6% in real terms from the previous year (in 2001–2008 around 3% annually in real terms). Its strong growth was mainly attributable to the above-average increase in expenditure on pensions (by a real 7.2%), which represent the largest share of social protection funds. In view of growing unemployment, fewer wage earners and more recipients of social transfers, expenditure on unemployment benefits surged in real terms (by 32%), as did expenditure on family/children (by 14.1%) and social exclusion not elsewhere classified, particularly on financial social assistance (13%).

Social protection expenditure as a share of gross domestic product expanded by nearly 3 percentage points in 2009. It accounted for 24.2% of GDP (in 2008: 21.5%). The increase in social protection expenditure as a share of GDP was, besides to the real growth of this expenditure, also due to a sizeable contraction of GDP (by 8.0%), as was also typical for other countries in the EU. Compared with the EU average, Slovenia thus retained roughly the same level of social protection expenditure in terms of purchasing power standards per capita (PPS) as in the previous year.

The structure of social protection expenditure by function remained more or less unchanged in 2009. Expenditure on old age, which together with expenditure on sickness and health care makes up the largest share of social protection expenditure, rose somewhat further in 2009 (to 39%), while expenditure on sickness and health care dropped slightly (to 32.8%). The shares of funds for family, unemployment and social exclusion not classified elsewhere also increased, while the shares of disability and survivors functions declined. The EU also dedicates the largest shares of total social protection expenditure to old age (39%), and sickness and health care (29.5%). A comparison of expenditures on individual categories of social protection in purchasing power standards per capita shows that total expenditure in Slovenia was lower than in the EU mainly due a lower level of funds allocated for old age, sickness and health care, and unemployment.

The sources of social protection receipts changed significantly in 2009. Social protection receipts increased by a total of 5.8% in real terms, of which the receipts from budgetary sources rose by a solid fifth (21.6%), while social contributions dropped somewhat as a result of a decline in the wage bill. Social contributions, representing 65.2% of all social protection receipts, nevertheless remained the most important source of financing social protection schemes: within that, employers' contributions accounted for 26.4% (in 2008: 27.5%) and contributions by protected persons for 38.9% (in 2008: 41.5%). Government contributions made up 33.2% of all receipts in 2009 (in 2008: 29.1%). The increase in the government share was partly due to the economic crisis, given that unemployment benefits, financial social assistance and child benefits (the volume of which has increased substantially during the crisis) are financed from budgetary sources. Budgetary spending on pensions increased even more, as a result of lower contributions for pension and disability insurance amid a concurrent increase in expenditure on pensions.

The sources of financing social protection in the EU did not change as much as in Slovenia in 2009. Looking at the structure of social protection receipts in the EU, government contributions also increased most notably in 2009 (although only by 1.5 p.p.), while social contributions by employers and protected persons declined slightly (by 0.8 p.p. and 0.2 p.p., respectively). The share of social contributions in Slovenia nevertheless remains more than 8 p.p. higher than the EU average (the share of employers' social contributions is even almost twice as high as in the EU), while the government share is nearly 6 p.p. lower than in the EU. In Slovenia, social protection receipts thus mostly stem from the contributions by protected persons (38.8%), in contrast to the EU, where the largest share comes from budgetary sources (39.1%).

The share of funds spent on administrative costs of the implementation of services and distribution of social protection receipts has been declining in Slovenia since 2006. In 2009, it accounted for 1.83% of total expenditure (in 2008: 1.96%), which is nearly two thirds less than the EU average (2.96%). The highest shares of administrative costs are recorded in the Netherlands (4.62%), France (3.85%) and Germany (3.76%), the lowest in Romania (1.11%), Estonia (1.13%) and Cyprus (1.30%). These data show that Slovenia exhibits a fairly high level of cost effectiveness in the distribution of social protection funds.

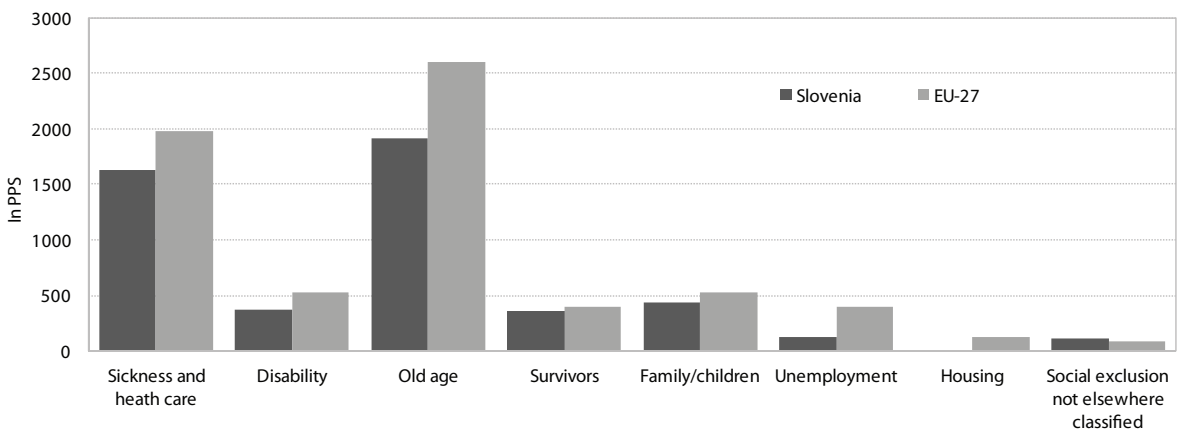
[1] The most recent data on social protection expenditure; (source: Expenditure and receipts of social protection schemes, Slovenia, 2009 – final data, November 29, 2011).

Table: **Social protection expenditure in Slovenia and in the EU, as a % of GDP and in PPS per capita**

	In % of GDP						Per capita PPS, EU=100					
	2000	**2005**	**2006**	**2007**	**2008**	**2009**	**2000**	**2005**	**2006**	**2007**	**2008**	**2009**
EU	**26.4**	**27**	**26.6**	**25.7(p)**	**26.7(p)**	**29.5(p)**	**100**	**100**	**100**	**100**	**100**	**100**
Austria	28.3	28.7	28.2	27.7	28.4	30.7	141	133	133	133	133	131
Belgium	25.4	27.3	27	26.7	28.1	30.4	125	131	137	120	119	119
Bulgaria	10.2	15.1	14.2	14.1	15.4	17.2	11	20	20	22	25	26
Cyprus	14.8	18.3	18.5	18.1	18.5	20.9	50	62	62	66	68	71
Czech Rep.	18.8	18.3	17.9	18.0	18.0	20.4	50	42	54	58	57	59
Denmark	28.8	30.2	29.2	28.7	29.6	33.4	144	138	136	135	138	138
Estonia	13.8	12.5	12.1	12.1	14.8	19.1	24	29	30	33	39	42
Finland	25	26.7	26.4	25.3	26.1	30.2	111	113	113	116	117	118
France	29.5	31.5	30.8	30.6	31	33(p)	129	128	125	128	121	119
Greece	23.5	24.8	24.7	24.8	26.2	27.9	75	83	85	88	91	89
Ireland	13.7	17.9	18.2	18.7	22	27.8	69	96	100	108	108	118
Italy	24.7	26.3	26.6	26.7	27.8(p)	29.8(p)	109	102	104	107	107	104
Latvia	15.6	12.8	12.6	11.2	12.7	16.8(p)	21	23	24	24	27	30
Lithuania	15.7	13.2	13.3	14.4	16	21.2(p)	24	26	28	33	37	40
Luxembourg	19.5	21.7	20.4	19.3	20.2	23.1	182	203	207	206	215	213
Hungary	19.9	21.9	22.4	22.6	22.8	23.4	41	51	53	54	56	51
Malta	16.5	18.4	18.3	18	18.4	20	55	53	52	54	55	56
Germany	29.6	30	28.9	27.7	27.9	31.3(p)	131	128	125	124	121	122
Netherlands	26.3	27.8	28.8	28.3	28.4	31.6(p)	134	134	141	146	140	136
Poland	19.6	19.7	19.3	18.1	18.5	19.7	36	37	38	38	40	41
Portugal	20.9	24.5	24.6	23.8	24.3	26.9	64	72	72	73	70	72
Romania	13	13.4	12.8	13.5	14.2	17	13	17	18	22	25	27
Slovakia	19.3	16.5	16.3	16	16	18.8(p)	37	37	39	42	43	47
Slovenia	**24.1**	**23**	**22.7**	**21.3**	**21.3**	**24.2(p)**	**73**	**74**	**74**	**73**	**74**	**73**
Spain	19.9	20.5	20.5	20.6	22.1	25(p)	75	79	81	86	87	89
Sweden	29.8	31.1	30.6	29.2	29.5	32.1(p)	145	140	139	141	139	132
UK	26.4	26.2	26	23.2	26.2	29.1(p)	119	118	117	106	112	111

Source: Eurostat Portal Page – Social Protection – Expenditure on social protection, % of GDP, and Social benefits per head of population by function, PPS; 2012; calculations by IMAD.
Notes: PPS – purchasing power standards; p – preliminary data; data for Slovenia for 2000 exclude housing data.

Figure: **Social protection – Social benefits per head of population by function, 2009, in PPS**



Source: Eurostat Portal Page – Social Protection – Social benefits per head of population by function, PPS, 2012.

Pension expenditure

Expenditure on all types of pensions from compulsory insurance[1] reached 11.6% of GDP in 2011. In the last three years, the share of pension expenditure has increased substantially and is even higher than at the beginning of the pension system reform in 2000 (11.0%). Due to the implementation of the reform, pension expenditure was rising more slowly than GDP until 2007. Since the onset of the economic crisis, the share of expenditure in GDP has been surging, mainly (but not only) due to the contraction of GDP that was followed by only modest growth. Furthermore, the increase has also resulted from faster annual growth in the number of retirees in recent years, which can be attributed to the baby boom generation entering retirement, and the accelerated retirement of people who wanted to escape the anticipated pension reform. From 2005 onwards, expenditure has also been growing due to a more favourable pension adjustment mechanism. In 2010 and 2011, two emergency acts were passed to quell expenditure growth, enforcing (on a temporary basis) a more restrictive pension adjustment mechanism.

Slovenia is ranked below the EU average in terms of pension expenditure as a share of GDP. With a 10.9% share, Slovenia was below the EU average (13.1%)[2] in 2009 (the most recent data for the EU). In the crisis period of 2008–2009, pension expenditure as a share of GDP increased in both Slovenia and other countries in the EU, following a period of stagnation (2000–2007) or decline in the wake of pension reforms carried out across the entire Europe. In the EU as a whole, the share declined by 0.8 p.p., most notably in the United Kingdom (by 3.4 p.p.), with Slovenia following close behind (1.3 p.p.). The only exception was Portugal, where the share rose by 2.5 p.p.

The dynamics of pension spending is conditional on demographic structure and retirement conditions, which have tightened in EU countries as a result of pension reforms. In Slovenia, the share of population aged 65 or more in total population amounted to 16.5% in 2010, which is lower than the EU average (17.4%), but the share is rising faster than in the EU. In the last ten years, it rose by 2.7 p.p. in Slovenia, and by 1.8 p.p. in the EU as a whole. Only in Germany did the share grow more than in Slovenia (by 4.4 p.p.). In Slovenia, the retirement age has increased by three years since the pension reform in 2000 (for women from 58 to 61 and for men from 60 to 63 years), which lengthened the average exit age from the labour force (2002: 56.6 years; 2006: 59.8 years). In most other EU countries, this age is higher.[3]

Pension expenditure is also affected by the method of determining the pension amount and the annual adjustment formula. A higher correlation between the pension amount and the contributions paid is one of the guidelines for pension reform both in Slovenia and in the EU. The period of what is called 'the best years' is being gradually raised in Slovenia. The 2000 reform extended the pension qualifying period to the best 18 consecutive years. The law that was passed in 2011 and then rejected in a referendum envisaged a gradual lengthening of the qualifying period for a full pension to 30 years (with the possibility of discounting three worst years). In calculating pension benefits, pension insurance systems in EU countries take into account earnings or pension contributions paid in the pension qualifying period, which differs across countries, and in some countries even includes the whole insurance period. The annual pension adjustments in EU countries mainly depend on consumer price growth, in some countries (also) on the growth of wages and other earnings, and GDP growth. In Slovenia, the adjustment mechanism relies on the growth of the average gross wage.

The share of the transfer from the state budget to the pension fund is growing. According to the existing law, the state budget covers the difference between pension insurance revenues from contributions and other sources, and pension expenditure. In the period from 2000 to 2011, the share of the budgetary transfer in total revenues rose from 29.6% to 32%. Until 2008, the share of the budgetary transfer was declining due to the pension system reform, growing employment and higher inflows of contributions from pension insurance schemes. However, the deterioration of the economic environment as a result of the crisis was followed by weak growth in pension insurance contributions amid accelerated retirement. The share of the budgetary transfer has therefore been constantly growing, regardless of emergency measures that temporarily lowered its growth.

[1] According to general PID rules, with the augmented insurance period, early pensions according to the previous Pension and Disability Insurance Act and special acts (the Police Act, the Enforcement of Penal Sanctions Act, Act Prohibiting Production and Trade in Asbestos Products and Restructuring the Asbestos Industry and the Act about Victims of War Violence).

[2] Data comprise public and private pensions. In 2009, in Slovenia pensions from private insurance schemes were not yet paid out.

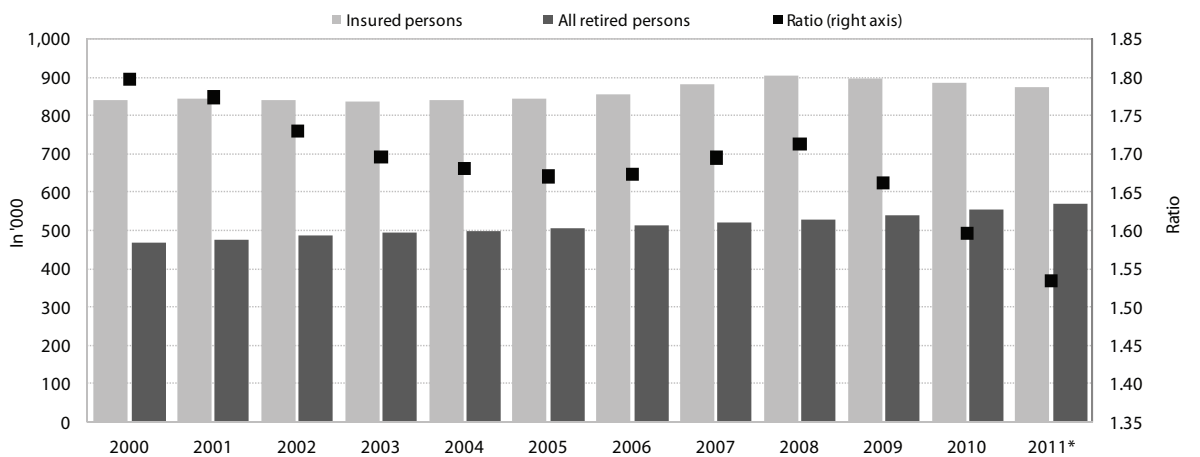
[3] In the last few years, roughly the same exit age as in Slovenia has been recorded in France, Lithuania, Malta and Poland, while the exit age in Slovakia and Romania is lower.

Table: **Share of pension expenditure in GDP, share of population aged 65 and over in total population, retirement age and average exit age from the labour force**

	Share of total expenditure on pensions in GDP, in %			Share of population aged 65 and over in total population, in %		Retirement age		Average exit age from the labour force, total	
						Men	Women		
	2000	2007	2009	2000	2009	2009	2009	2001	2009
EU-27	**N/A**	**11.4**	**13.1**	**15.6**	**17.2**	**N/A**	**N/A**		**61.4**
Belgium	11.0	10.7	12.1	16.8	17.1	65	65	56.8	61.6**
Bulgaria	N/A	6.9	8.8	16.2	17.4	63	60	58.4	61.5
Czech Republic	8.2	7.9	9.1	13.8	14.9	62	60+8m	58.9	60.5
Denmark	10.5	10.7	12.1	14.8	15.9	65	65	61.6	62.3
Germany	13.1	12.4	13.1	16.2	20.1*	65	65	60.6	62.2
Estonia	6.6	5.8	9.1	15.0	17.1	63	61	61.1	62.6
Ireland	3.6	5.2	7.3	11.2	11.0	65	65	63.2	64.1***
Greece	11.1	12.3	13.4	16.5	18.7	65	60	61.3****	61.5
Spain	9.6	9.0	10.1	16.7	16.6	65	65	60.3	62.3
France	13.0	13.3	14.5	15.8	16.5	60-65	60-65	58.1	60.0
Italy	14.4	14.6	16.0	18.1	20.1	65	60	59.8	60.1
Cyprus	5.7	6.6	7.4	11.2	12.7	65	65	62.3	62.8
Latvia	9.6	5.3	8.4	14.8	17.3	62	62	62.4	62.7*
Lithuania	7.8	6.6	9.6	13.7	16.0	62+6m	60	58.9	59.9***
Luxembourg	9.4	8.2	9.5	14.3	14.0	65	65	56.8	N/A
Hungary	8.7	10.5	11.2	15.0	16.4	62	62	57.6	59.3
Malta	7.9	9.0	9.7	12.1	14.1	61	60	57.6	60.3
Netherlands	12.5	12.1	12.8	13.6	15.0	65	65	60.9	63.5
Austria	14.2	13.8	15.1	15.4	17.4	65	60	59.2	60.9**
Poland	12.6	11.6	12.4	12.1	13.5	65	60	56.6	59.3**
Portugal	10.1	12.6	14.1	16.0	17.6	65	65	61.9	62.6**
Romania	6.1	6.4	9.4	13.2	14.9	63+8m	58+8m	59.8	55.5*
Slovenia	**11.0**	**9.7**	**10.9**	**13.9**	**16.4**	**63**	**61**	**56.6******	**59.8*****
Slovakia	7.5	7.3	8.4	11.4	12.1	62	59	57.5	58.8
Finland	10.6	10.8	12.6	14.8	16.7	63-68	63-68	61.4	61.7
Sweden	11.3	11.6	12.9	17.3	17.8	61-67	61-67	62.1	64.3
United Kingdom	11.9	8.5	12.5	15.8	16.3	65	60	62.0	63.0

Source: Eurostat, The 2009 Ageing Report.
Note: *data for 2008, **data for 2007,***data for 2006, ****data for 2002; N/A – data not available.

Figure: **Number of employed and retired persons, ratio of the number of employed to retired people, Slovenia**



Source: PDII, 2012.

Health expenditure

Total health expenditure accounted for 9.1% of GDP in 2010 and 9.0% of GDP in 2011, according to the first provisional estimate.[1] Owing to low growth in revenues from compulsory health-insurance contributions and the implementation of measures for stable health funding, real public expenditure on health dropped for the second consecutive year, by 2.2% in 2010 and 1.7% in 2011.[2] Public expenditure as a share of GDP thus shrank to 6.6% in 2010 and 6.5% in 2011. Moreover, the ratio of public to private expenditure on health changed as well. In 2011, the share of public expenditure totalled only 71.4%. The measures for stable health funding pursued a goal that health care should be financed without further borrowing as well as without an increase in the contribution rate. In the last three years, the savings measures were therefore aimed primarily at containing labour cost growth, cutting expenditure on medicines, reducing depreciation and material costs and transferring a portion of expenditure to the complementary health insurance.[3],[4]

Despite the increase in private expenditure, financial access to health services and medicines remains high in Slovenia. According to the provisional data by the HIIS, the share of private expenditure rose from 26.6% in 2009 (which was just above the EU average) to 28.1% in 2010 and 28.6% in 2011. In international comparisons, financial access is now measured particularly using data on out-of-pocket expenditure (instead of total private expenditure, as previously) and data on the share of expenditure on medical services and goods covered for the majority of population either from obligatory or private insurance contributions (OECD, 2010). That is to say, out-of-pocket spending can represent a financial burden that poorer households cannot afford and therefore causes delays in treatment. Inequalities in health also tend to be higher in countries with higher out-of-pocket expenditure (WHO Regional Office for Europe & Institute of Public Health, 2011). On average, out-of-pocket expenditure represents nearly three quarters of total private expenditure in the EU (i.e. around 17–18% of total health expenditure), while the share of out-of-pocket expenditure in Slovenia remains relatively low, despite the increase over the previous decade. In 2009, nearly half of total private expenditure on health was expenditure from voluntary health insurance (i.e. 12.5% of total expenditure on health; only 12.9% was out-of-pocket expenditure). In 2009, the average out-of-pocket expenditure per capita in Slovenia totalled EUR 210, or EUR 249 in purchasing power parities (PPP), and in the EU, EUR 378. The main reason for lower out-of-pocket expenditure in Slovenia is the high coverage of the population by complementary health insurance. The costs of most health care services and medicines for the majority of the population are thus covered in full, partly from compulsory and partly from complementary insurance contributions. Complementary health insurance thus enables access to a wide basket of benefits to all insured persons and significantly contributes to solidarity between healthy and sick people and the old and the young in financing private expenditure on health. However, certain studies (Joint EPC–EC Report on Health Systems, 2010) emphasise that co-payments to medical services and medicines should not be just an additional source of financing health services, but also a way to avoid their excessive use. The latter is also the reason why in the last years, certain countries (France, Germany) introduced an obligatory out-of-pocket co-payment (participation without the possibility of insurance) for each visit to the doctor and for each prescription filled. The Slovenian system of complementary insurance does not include this type of 'self-control'.

In Slovenia, out-of-pocket expenditure on medicines is much lower than, on average, in the EU.[5] Slovenia otherwise has a somewhat higher share of total private expenditure in the structure of expenditure on medicines than the EU as a whole (see Figure), but a high share of this expenditure is covered from complementary health insurance (22% in 2009). On the other hand, the share of direct household spending alone (27%) is among the lowest in the EU, which confirms the high level of access to medicines in Slovenia. This can, however, be problematic, both from the aspect of excessive use of medicines and a relatively high share of medicines in total spending on health (24%; EU: 21%).

[1] Provisional estimate of health expenditure according to the international methodology of the System of Health Accounts (SHA) (HIIS Business Report for 2011, working material). The estimate is made in cooperation with SORS.

[2] In accordance with international recommendations, the GDP implicit price deflator was used to calculate constant prices instead of the consumer price index (OECD Health at a Glance 2011).

[3] See notes 169 and 170 in chapter 4.2.

[4] Expenditure from compulsory health insurance for wages and contributions shrank by 3.8% in real terms in 2010 and by another 3.4% in 2011; expenditure on medicines and medical devices by 3.5% in 2010 and 1.1% in 2011; real expenditure on sickness benefits grew by 8.5% in 2010 and dropped by 4.3% in 2011. Looking at activities, expenditure on hospital activities declined most notably in real terms (by 3.8%) and expenditure on specialist outpatient services the least (by 0.9%), which can be explained by the transfer of the provision of certain services from the hospital to the outpatient level (HIIS, Data on complementary health insurance, March 2012).

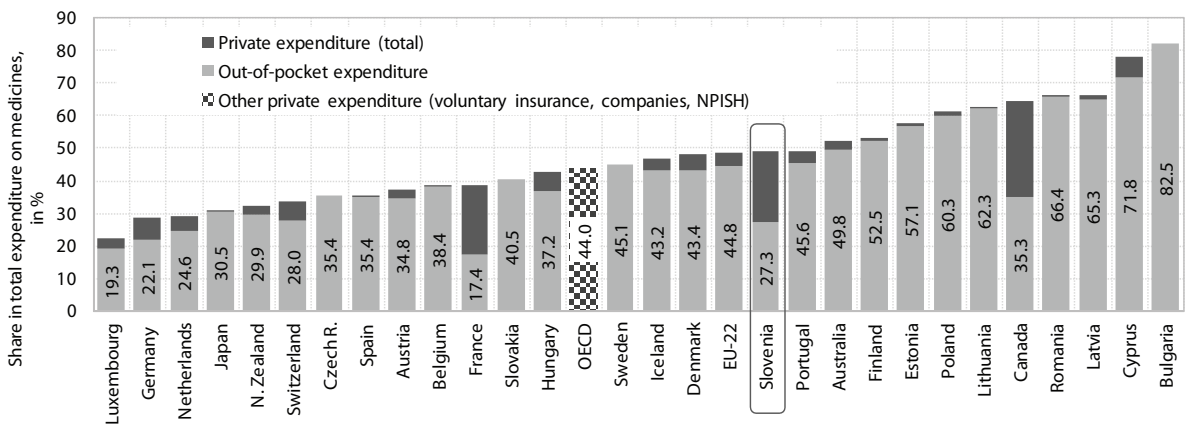
[5] The EU average refers to 22 countries for which data are available.

Table: **Expenditure on health in the EU-27, 2009 and 2008**

	Total health expenditure,[3] as % of GDP[1]			Public health expenditure, as % of GDP[1]			Private health expenditure, share in total health expenditure, in %		Out-of-pocket expenditure, share in total expenditure, in %	
	2000	2008	2009	2000	2008	2009	2000	2009	2001	2009
EU-27[2]	**7.3**	**8.3**	**9.0**	**5.3**	**6.2**	**6.7**	**27.1**	**25.5**	**18.3**	**17.6**
Austria	9.9	10.4	11.0	6.6	8.1	8.6	23.2	22.3	16.0	N/A.
Belgium**	9.0	10.1	10.9	7.6	7.4	8.2	24.0	24.9	N/A	20.0
Bulgaria	6.1	7.2	N/A	6.6	4.2	N/A	40.6	42.2*	N/A	N/A
Cyprus	5.7	5.8	N/A	3.7	2.5	N/A	58.4	57.9*	N/A	N/A
Czech Republic	6.5	7.1	8.2	2.4	5.9	6.9	9.7	16.0	10.2	14.4
Denmark	8.3	10.3	11.5	5.9	8.4	9.8	17.6	15.5*	N/A	N/A
Estonia	5.3	6.1	7.0	6.8	4.8	5.3	22.5	20.8	19.0	20.3
Finland	7.2	8.4	9.2	4.1	6.2	6.8	28.9	25.3	21.8	19.0
France	10.1	11.2	11.8	5.1	8.7	9.2	20.6	22.1	7.2	7.3
Greece	7.9	9.7	N/A	8.0	5.9	N/A	40.0	39.7*	N/A	N/A
Ireland	6.3	8.7	9.5	4.7	6.7	7.2	24.7	23.1	27.7	23.7
Italy	8.1	9.1	9.5	4.6	7.0	7.4	27.5	22.1	22.1	19.7
Latvia	6.0	6.6	6.8	5.8	3.6	4.3	46.1	40.4*	N/A	N/A
Lithuania	6.5	6.6	7.6	3.2	4.8	5.6	30.3	22.8	N/A	N/A
Luxembourg	5.8	6.8	N/A	4.5	5.7	N/A	14.9	16.0	12.5	11.6
Hungary	7.0	7.2	7.5	5.2	5.2	5.2	29.3	30.3	27.7	23.7
Malta	6.8	7.5	N/A	5.0	5.8	N/A	25.8	15.9	N/A	N/A
Germany	10.3	10.7	11.6	4.9	8.1	8.9	20.2	23.1	11.2	13.1
Netherlands	8.0	9.9	12.0	8.2	7.4	9.5	36.9	16.5*	N/A	N/A
Poland	5.5	7.0	7.4	5.0	5.1	5.3	30.0	27.6	28.1	22.2
Portugal	8.8	10.1	N/A	3.9	7.1	N/A	27.5	28.5*	24.9	N/A
Romania	5.2	5.4	5.7	6.4	4.5	4.5	32.7	18.0*	N/A	N/A
Slovakia	5.5	8.0	9.1	3.6	5.4	6.0	10.6	34.3	10.6	25.6
Slovenia	**8.3**	**8.4**	**9.3**	**4.9**	**6.0**	**6.8**	**26.0**	**26.6**	**N/A**	**12.9**
Spain	7.2	9.0	9.5	6.1	6.5	7.0	28.4	26.4	23.9	20.1
Sweden	8.2	9.2	10.1	5.2	7.6	8.2	15.1	18.5	16.6	16.7
UK	7.0	8.7	9.8	7.0	7.2	8.2	20.7	15.9	13.5	10.5

Source: OECD Health Data 2011, Eurostat Database, WHO HFA–DB; data for Slovenia are for 2009: Health expenditure (SORS) June 2011.
Notes: [1] Revision of GDP of September 2011; [2] an arithmetic average – own calculation. For Bulgaria, Cyprus, Latvia, Portugal, the EU-27 average for 2009 takes into account data for the latest year available (2008). The EU-27 average of out-of-pocket expenditure includes only the countries for which data are available.

Figure: **Share of private sources in total expenditure on medicines*, 2009**



Source: Eurostat; calculations by IMAD.
Note: * Only medicines and medico-technical devices; excluding medicines used in hospitals. The EU average refers to 22 countries for which data are available.

Expenditure on long-term care

In 2009, total expenditure on long-term care (LTC)[1] ***in Slovenia accounted for 1.22% of GDP***. Within that, public expenditure reached 0.91% and private expenditure 0.31% of GDP. Total expenditure on long-term care as a share of GDP increased considerably in 2009 (by 0.14 p.p.), largely due to a decline of GDP, but also owing to real growth in this expenditure, which was otherwise much lower (4.6%) than in 2008 (10.1%). Public expenditure in particular recorded lower growth in 2009 (2.0%). Private expenditure increased substantially more (by 12.8%), especially private funds for services of long-term social care. These mainly involve co-payments for accommodation and food in residential homes for the elderly, which rose due to an increase in capacities and a higher, and hence more expensive, standard of care in new, mostly private, homes. Broken down by the sources of finance, the share of private expenditure in total LTC expenditure thus increased in 2009 (to 25.8%); broken down by function,[2] the share of expenditure on services of long-term social care (to 38.0%).

Total expenditure on long-term care as a share of GDP in Slovenia is approximately at the average of 20 EU countries for which data are available, but Slovenia lags behind in the share of public expenditure on long-term care. The average level of total (public and private) expenditure in the 20 EU countries for which data are available was 1.26% of GDP in 2009. However, data on public expenditure alone are more reliable for international comparisons, as proper records on private expenditure are still lacking. In 2009, public expenditure in 20 EU countries averaged 1.18% of GDP, almost the same percentage as in the OECD countries shown in the Figure (1.20% of GDP). In addition to the different levels of development, the gaps between the countries also reflect differences in long-term care systems, the influence of demographic factors and life patterns, particularly regarding the role of family and informal care. According to OECD calculations, in previous years, public expenditure on health services (which represents the bulk of expenditure on long-term care) increased less in Slovenia than in the OECD as a whole (OECD Health at a Glance 2011, 2011).

Slovenia allocates less than a quarter of total expenditure for long-term care at home and this share even declined in 2009. Slovenia lags behind other EU countries especially in provision of help for elderly people living at home, which is also reflected in expenditure. Most EU countries allocate more than 50% of public expenditure on long-term care at home; countries with more developed long-term care systems tend to allocate even more, while Slovenia dedicates only one third[3] of public expenditure for this purpose. Capacities for long-term care at home are otherwise expanding, but the number of institutional long-term care users is growing even faster. This is also reflected in expenditure, so that the share of total (public and private) expenditure on long-term care at home even dropped somewhat in 2006–2009 (2006: 26.4%; 2007: 27.8%; 2008: 24.4%; 2009: 22.5%).

Long-term projections indicate that public expenditure on long-term care[4] will double as a share of GDP by 2060 even as a result of the aging of the population alone. Under the lowest scenario, which takes into account only the ageing of the population, public expenditure on long-term care in Slovenia increases by 0.2 p.p. of GDP by 2020, and by 1.4 p.p. of GDP by 2060; under a scenario that also considers an increase in coverage by formal long-term care to the average level in the EU, by 0.5 p.p. of GDP by 2020, and by as much as 4.2 p.p. of GDP by 2060. In the EU, public expenditure is expected to rise by an average of 0.3 p.p. to 0.5 p.p. of GDP by 2020 (various scenarios), or by 1.4 p.p. to 3.1 p.p. of GDP by 2060 (European Commission in Economic Policy Committee: Draft 2012 Ageing Report, March 2012).

[1] Long-term care is an organised form of health and social assistance provided permanently or occasionally at longer intervals to individuals who are dependent on assistance with their daily routine (instrumental activities of daily living). This definition, determined by the OECD, Eurostat and WHO, is described in detail in the revised OECD manual, a System of Health Accounts 2011, pp. 88–95 and p. 114.

[2] The SHA methodology requires that LTC expenditure is broken down by function, i.e. by services for long-term health and social care. **Long-term health care** is mostly financed from public resources (93% in 2009). These are mostly the HIIS funds intended for health care services in residential homes for the elderly and specialised social institutions, extended hospitalisation, and partly the 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 of daily living (ADL). Close to one half of expenditure (44.0% in 2009) on **long-term social care**, which is related to instrumental activities of daily living (IADL), is covered by public funds (the state and local budgets), while slightly more than half comes from private sources (56.0%). Private funds mostly comprise extra payments for the accommodation and food in residential homes for the elderly and other types of institutional care as well as household expenditure on assistance at home.

[3] As calculated by the European Commission (Health and long-term care expenditure projections availability/collection of data, 2011).

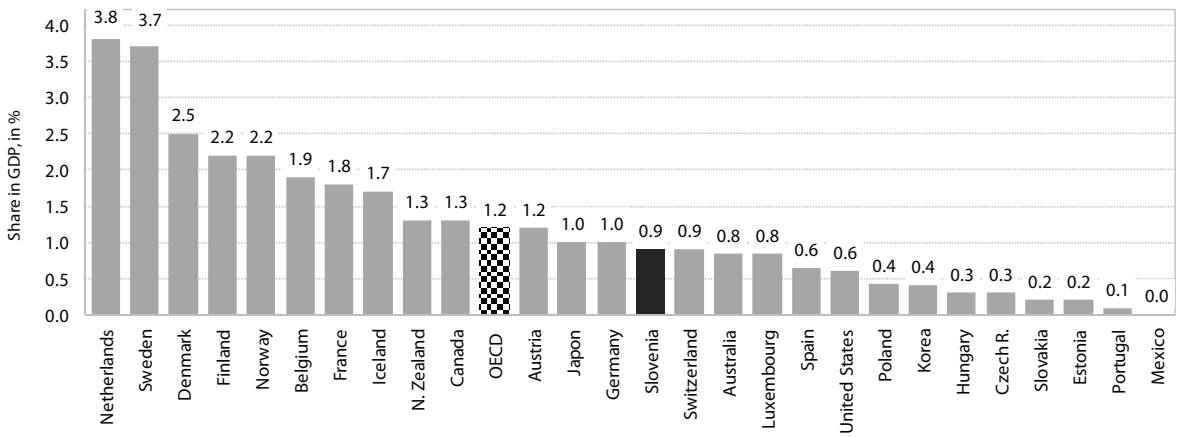
[4] Long-term economic and budgetary projections of public expenditure related to population ageing, which also include expenditure on long-term care, are made every three years by the Ageing Working Group of the Economic Policy Committee at the European Commission. The final round of projections will be completed in April 2012.

Table: **Expenditure on long-term care by source of financing and by function, Slovenia, 2005–2009**

	EUR m			Share in GDP, in %			Strukture, in %			Real growth, in %	Average annual growth per capita, in %
	2005	2008	2009	2005	2008	2009	2005	2008	2009	09/05	05–09
Long-term care	320	401	432	1.12	1.08	1.22	100	100	100	18.2	4.3
By source of financing:											
Public expenditure	246	305	321	0.86	0.82	0.91	76.1	76.1	74.2	14.4	3.4
Private expenditure	74	96	111	0.26	0.26	0.31	23.9	23.9	25.8	30.8	6.9
By function:											
Health care	200	259	268	0.70	0.69	0.76	62.4	64.5	62.0	17.6	4.1
Social care	121	142	164	0.42	0.38	0.46	37.6	35.5	38.0	19.3	4.5

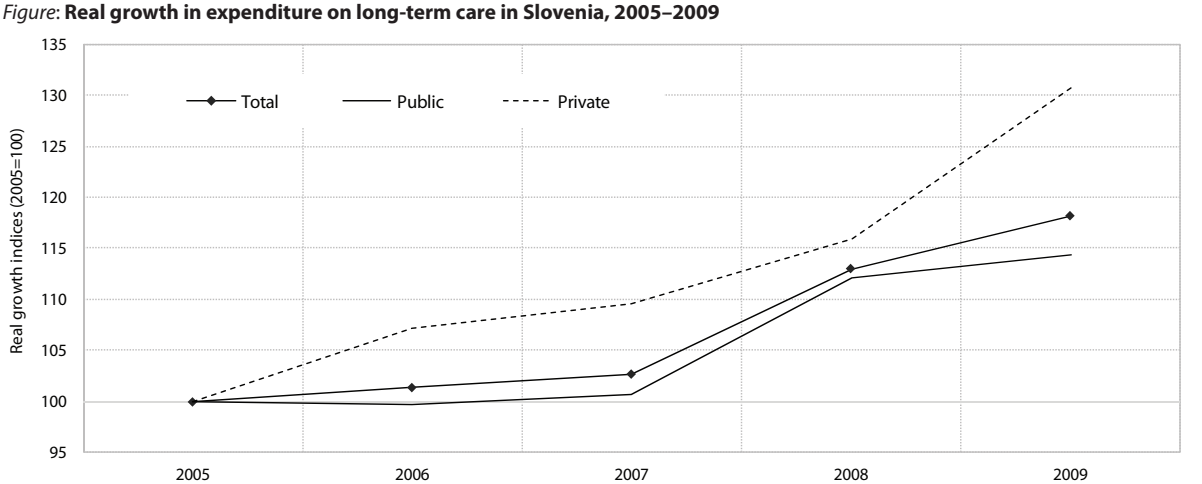
Source: SORS – Health expenditure and sources of funding (Release: 15 June 2011).
Note: According to international recommendations, the GDP implicit price deflator was used to calculate constant prices (instead of the consumer price index) (AHRQ, 2011 and OECD Health at a glance 2011).

Figure: **Public expenditure on long-term care as a share of GDP, Slovenia and OECD countries, 2009, in %**



Source: OECD Heath Data 2011.

Figure: **Real growth in expenditure on long-term care in Slovenia, 2005–2009**



Source: SORS – Health expenditure and sources of funding (Release: June 15, 2011).
Note: According to international recommendations, the GDP implicit price deflator was used to calculate constant prices (instead of the consumer price index) (AHRQ, 2011 and OECD Health at a glance 2011).

Human Development Index

In the 2011 UN Human Development Report, Slovenia remains in the group of countries with very high human development.[1] Despite methodological changes,[2] the Human Development Index totalled 0.884 in 2011. Slovenia is thus placed 21st among 187 countries, which is the same position as in 2010,[3] when its HDI was 0.882 and Slovenia was 21st among 169 countries. The highest HDI value was recorded for Norway (0.943). Slovenia's ranking is improving gradually (in 2010 also due to methodological changes).

As one of the main composite indicators of social well-being and development, the HDI measures three dimensions of human welfare: health, education and income. Slovenia's relatively high position is mainly attributable to the education dimension, as Slovenia is placed relatively high (4th) on the indicators of expected years of schooling (a child of school-entrance age can expect to receive 16.9 years of schooling, compared with 16.7 years in 2010) and average years of schooling of adults (14th) (in Slovenia, mean years of schooling of the population aged 25 and older was 11.6, in comparison with 11.5[4] in 2010). In terms of life expectancy, one of the health indicators, Slovenia ranks 30th (according to UNDP data, life expectancy at birth in Slovenia totalled 79.3 years in 2011; in 2010: 78.8 years). According to the income indicator, Slovenia is 31st (gross national income per capita in purchasing power parity US$ terms totalled 24,914 in Slovenia in 2011; in 2010: 25,857 US dollars.

The Development Report 2011 emphasises once more that economic growth does not necessarily translate into social and environmental well-being, and pursues last year's commitment to broader, more encompassing well-being indicators. Therefore, it also includes indicators of life satisfaction, satisfaction with government measures to reduce emissions, satisfaction with actions to preserve the environment and satisfaction with air and water quality. The report also comprises the three new indices that were introduced experimentally last year: IHDI (the Inequality-Adjusted Human Development Index), MPI (the Multidimensional Poverty Index) and GII (the Gender Inequality Index). The HDI equals the IHDI when there is no inequality among people. As the HDI shows the potential human development that could be achieved if there were no inequality in a country, the IHDI can be viewed as an index of the actual level of human development (accounting for the inequality). In 2011, the Slovenian IHDI was 0.837, 5.3% lower than the HDI. In the group of countries with high human development, only the Czech Republic scored better than Slovenia according to this indicator, by a margin of 5.0%. The Multidimensional Poverty Index (MPI)[5] captures the incidence of multidimensional deprivation, i.e. the proportion of the population deprived in at least three of ten deprivation items, and the intensity of deprivation, i.e. the average number of items in which poor people are deprived. However, this index is highly problematic as regards data. The index was calculated only for 12 of 47 highly developed countries, based on data for 2003. The MPI for Slovenia is an estimate, totalling 0% on all indicators, except the risk of poverty, which is estimated at 0.4%. The Slovenian Gender Inequality Indicator (GII)[6] is 0.175, ranking Slovenia 18th among 187 countries, which is almost the same position as in 2010 (17th out of 138 countries included in the survey). The top position in terms of the GII is held by Sweden, followed by the Netherlands, Denmark, Switzerland and Finland. Slovenia is ranked lowest particularly on the indicator of political representation of women, but this changed after the election in December 2011, when the share of women in the Slovenian parliament increased from 10.8% to 32.2%. Slovenia is thus approaching the countries with high levels of female representation in the parliament (the average in Scandinavian countries totals 40%).

[1] According to the report, countries with very high human development are those with HDI values from 0.943 to 0.793. Countries with HDI values from 0.783 to 0.698 are classified as countries with high human development, while countries with medium and low human development are those with HDI values from 0.510 to 0.286.

[2] In the previous year, the Human Development Index underwent a series of methodological changes. In the report, the new methodology was retroactively applied to calculate the HDI at five-year intervals for 1980–2011. The index captures three dimensions of well-being: health, education and income. Health is still measured by life expectancy at birth, while education is now monitored by the average years of schooling of the population aged 25 and older and the expected years of schooling for a child of school-entrance age. To measure population's income, the report uses gross national income per capita in purchasing power parity US$ terms. For more see Slovenian Economic Mirror (IMAD), November 2010, pp. 28–30.

[3] The 2010 Report actually ranked Slovenia 29th (the index value of 0.828), but this was a result of a mistake by the Unesco Institute for Statistics in calculating the average years of schooling. The mistake (pointed out by IMAD and SORS) was corrected the following year (also retroactively).

[4] A Slovenian estimate. See the previous note.

[5] See also the Material Deprivation indicator.

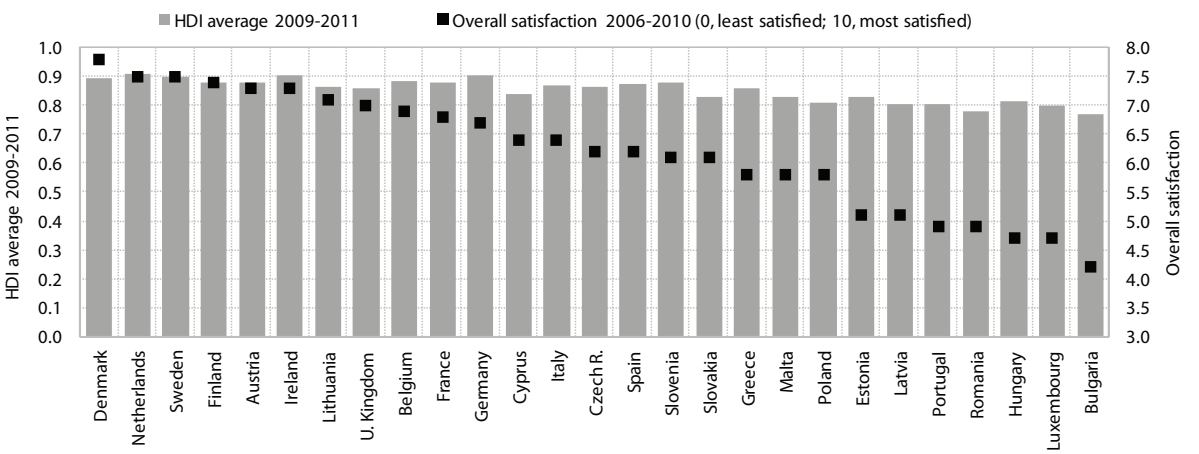
[6] The GII measures women's reproductive health (the maternal mortality ratio and fertility rates of adult women), gender differences in educational attainment (participation in a secondary and tertiary education) and female and male participation in political activities and in the labour force (the share of parliamentary seats and labour force participation rates). The index ranges between 0 and 1, with higher values indicating worse achievements.

Table: **HDI values in EU countries by years, average annual HDI growth in %, HDI ranks in 2011 and change in HDI rank over the last 5 years and last year**

	HDI value						Average annual HDI growth in %		HDI - rank	Change in HDI rank	
	1990	2000	2005	2009	2010	2011	1990–2011	2000–2011	2011	2006–2011	2010–2011
Austrija	0.790	0.839	0.860	0.879	0.883	0.885	0.55	0.48	19	1	0
Belgium	0.811	0.876	0.873	0.883	0.885	0.886	0.42	0.10	18	-1	0
Bulgaria	0.698	0.715	0.749	0.766	0.768	0.771	0.48	0.68	55	0	1
Cyprus	0.747	0.800	0.809	0.837	0.839	0.840	0.56	0.44	31	5	0
Czech Republic	..	0.816	0.854	0.863	0.863	0.865	..	0.53	27	-1	0
Denmark	0.809	0.861	0.885	0.891	0.893	0.895	0.48	0.35	16	-2	0
Estonia	0.717	0.776	0.821	0.828	0.832	0.835	0.73	0.66	34	-2	0
Finland	0.794	0.837	0.875	0.877	0.880	0.882	0.51	0.48	22	-7	0
France	0.777	0.846	0.869	0.880	0.883	0.884	0.62	0.40	20	-1	0
Germany	0.795	0.864	0.895	0.900	0.903	0.905	0.62	0.43	9	-2	0
Greece	0.766	0.802	0.856	0.863	0.862	0.861	0.56	0.64	29	-5	0
Hungary	0.706	0.775	0.803	0.811	0.814	0.816	0.70	0.48	38	0	0
Irland	0.782	0.869	0.898	0.905	0.907	0.908	0.71	0.40	7	-3	0
Italy	0.764	0.825	0.861	0.870	0.873	0.874	0.64	0.52	24	-3	0
Latvia	0.693	0.732	0.784	0.798	0.802	0.805	0.72	0.87	43	-1	0
Lithuania	..	0.749	0.793	0.802	0.805	0.810	..	0.70	40	0	1
Luxembourg	0.788	0.854	0.865	0.863	0.865	0.867	0.45	0.13	25	-3	0
Malta	0.753	0.799	0.825	0.827	0.830	0.832	0.48	0.37	36	-3	0
Netherlands	0.835	0.882	0.890	0.905	0.909	0.910	0.41	0.29	3	5	0
Poland	..	0.770	0.791	0.807	0.811	0.813	..	0.50	39	2	0
Portugal	0.708	0.778	0.789	0.805	0.808	0.809	0.64	0.35	41	2	-1
Romania	0.700	0.704	0.748	0.778	0.779	0.781	0.52	0.95	50	2	0
Slovakia	0.747	0.779	0.810	0.829	0.832	0.834	0.53	0.62	35	0	0
Slovenia	**..**	**0.805**	**0.848**	**0.876**	**0.882**	**0.884**	**..**	**0.85**	**21**	**4**	**0**
Spain	0.749	0.839	0.857	0.874	0.876	0.878	0.76	0.42	23	0	0
Sweden	0.816	0.894	0.896	0.898	0.901	0.904	0.49	0.09	10	-2	0
United Kingdom	0.778	0.833	0.855	0.860	0.862	0.863	0.50	0.33	28	0	0

Source: Human Development Report 2011 (UNDP).

Figure: **Comparison of HDI values (2009–2011 average) and overall satisfaction (2006–2010 average)**



Source: Human Development Report 2011 (UNDP); calculations by IMAD.

Minimum wage

In 2011, the minimum wage recorded higher growth (5.7%) than the average gross wage, so that the ratio between the two increased, to 47.1%. As a result of the possibility of a gradual transition[1] to the statutory amount and January's adjustment,[2] the lowest provisional minimal wage totalled EUR 698 (6.7% higher than in 2010), while the statutory amount was EUR 748. The average gross minimum wage paid rose by 5.7% in 2011, which is much less, on average, than in 2010 (14.6%), when the new Minimum Wage Act became effective in March. Its growth was again much higher than growth in the average gross wage (by 3.7 p.p.), which was modest due to the slow recovery of economic activity and the austerity measures in the public sector. The ratio between the average minimum wage paid and the average gross wage thus rose again in 2011 (according to our calculations, from 45.4% to 47.1%). Similar to previous years, Slovenia is thus ranked in the upper third of EU countries, according to Eurostat's data, but taking into account the statutory amount of the minimum wage, it is at the top of the EU. In 2011, around 80% of minimum-wage earners were already receiving the highest level of minimum wage.[3]

The number of minimum-wage earners increased further in 2011 and more than doubled relative to the period before the adoption of the new Minimum Wage Act. The number of minimum-wage earners rose by 12.9% year-on-year in 2011 and more than doubled relative to 2009 (from 19,047 to 43,565). The share of minimum-wage earners in all employed persons increased as well, from 6.2% to 7.1% in 2011 (2009: 3.0%). The latest comparable data for EU Member States are available for 2007 and show that Slovenia also ranks in the upper bottom of the scale on this indicator.[4] Around 90% of all minimum-wage earners are in the private sector and their number rose to 38,975 last year (2009: 18,596). In the private sector,[5] the share of minimum-wage earners rose from 3.8% to 8.6% in 2009–2011. In the public sector, the increase was tenfold (from 0.3% to 3.0%, or from 451 to 4,590 recipients), but the share of recipients was still much lower than in the private sector. In comparison with the situation before the new act, the number of minimum-wage earners in the private sector rose most notably in trade (from fewer than 2,000 to nearly 8,000) and manufacturing (from more than 6,000 to more than 12,000). These two sectors and miscellaneous activities, together with construction and accommodation and food service activities, employ more than three quarters of all minimum-wage earners.[6] With the exception of trade, these activities are, on average, characterised by the low educational level of employees.

In the previous two years, the increase in the minimum wage contributed to a rise of wages in the private sector, a decline in the share of low-wage earners and in income inequality, but at the same time also to job loss. Based on the dynamics of wages, we estimate that in 2011 nearly a percentage point of wage growth in the private sector is attributable to the impact of higher minimum wage. In 2010, this impact was much larger (a solid 3 p.p.). A small influence on wage growth is also expected in 2012. At the same time, the increase in the minimum wage and a relatively fast transition to its statutory level were reflected in lower inequality of income distribution as measured by the Gini coefficient and interdecile coefficient (9th decile/1st decile).[7] According to the latest available data on the distribution of wages, in 2010, inequality declined on both indicators. The share of low-wage earners,[8] which had until then been rising ever since 2005 (17%), also dropped (from 19.3% to 17.9%). According to the latest European Union Structure of Earnings Survey, the comparable share in the EU as a whole totalled 17.2% in 2006. However, according to the econometric calculations, the significant increase in the minimum wage also contributed to job loss. In the short term around 5,000 persons are estimated to have lost work due to the higher minimum wage, and in the long term around 17,000.[9]

[1] A gradual transition to the new minimum wage level was possible if an immediate increase would have resulted in a substantial loss and threatened the existence of a company, and only in agreement with the representatives of workers.

[2] On 1 January 2011, the minimum wage increased by the year-on-year rise in consumer prices at the end of 2010 (1.9%).

[3] Due to the possibility of different minimum wage levels, AJPES first collected data separately for three ranges of the minimum wage. In 2010, they amounted up to EUR 654, between EUR 655 and 685 and between EUR 686 and 734 in 2010. After the adjustment in 2011, only two ranges remained, up to EUR 698 and between EUR 699 and 748. In March 2010, around 60% of recipients had already received the highest level of minimum wage, and this share was growing throughout the year.

[4] The highest shares are recorded in France (12.9%), Bulgaria (12.4 %), Luxembourg (11.0%) and Latvia (9.2%), and the lowest in Spain (0.7%), Slovakia (1.6%) and the United Kingdom, Malta and Hungary (all around 2.0%).

[5] The private sector included activities A–N, R–S, the public sector activities O–Q.

[6] In manufacturing 28.7%, in trade 18.1%, in other miscellaneous business service 13.3%, construction 10.1% and accommodation and food service activities 5.8%.

[7] Calculated from data on the distribution of persons employed with legal entities with regard to the level of the gross wage.

[8] According to the OECD's methodology, these are full-time workers who receive less than two-thirds of median earnings, i.e. in 2010 up to EUR 864.

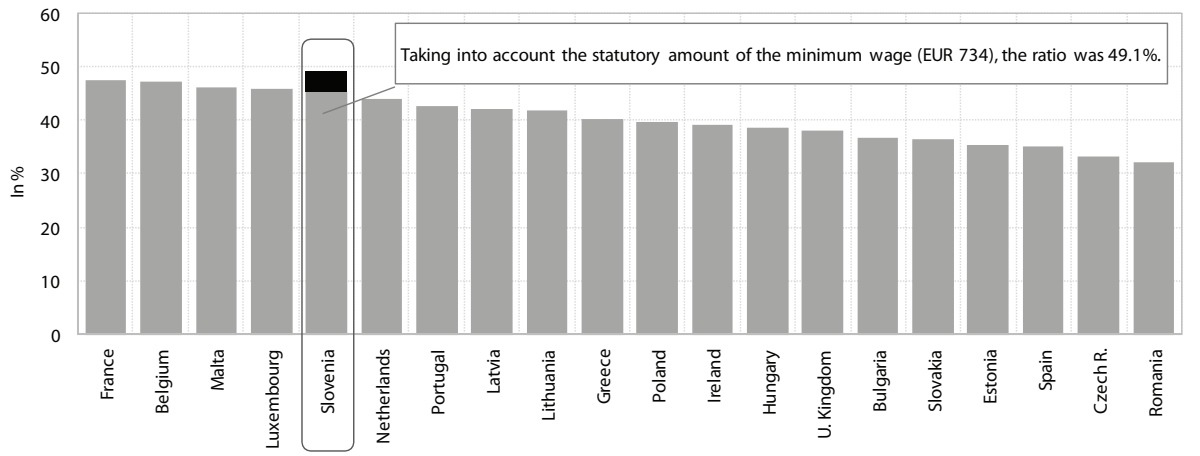
[9] See the IMAD Working Paper, No. 3/2010 (Brezigar et al.: Estimation of the Impact of Minimum Wage Rise in Slovenia

Table: **Average gross minimum wage, average gross wage and the ratio between them, Slovenia, 2000–2011**

	Minimum gross wage	Nominal growth of minimum wage	Real growth of minimum wage	Average gross wage	Nominal growth of gross wage	Real growth of gross wage	Ratio of minimum wage to average 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

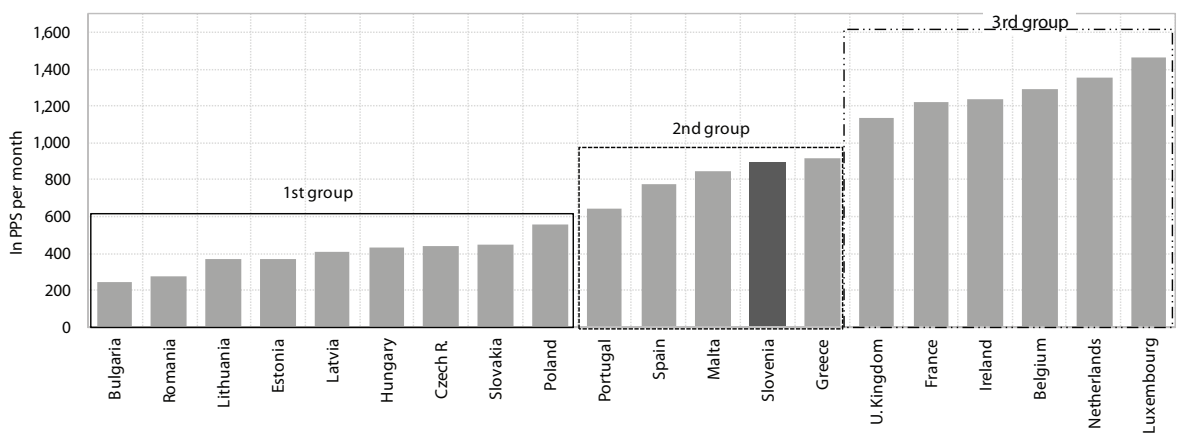
Source: SORS, SCA 2002–2008, SCA 2008 from 2009 onwards, AJPES.

Figure: **Ratio of minimum gross wage to average gross wage, EU Member States, 2010**



Source: Eurostat, for Slovenia SORS, AJPES.
Note: For France, the Netherlands and Poland data for 2009, for Belgium for 2008. Data for other EU-27 countries are not available.

Figure: **Minimum gross wage, EU Member States, July 2011, in PPS**



Source: Eurostat.

Risk of poverty

Around 254,000 persons lived below the poverty threshold in 2010, an increase of 31,000 over the preceding year. The at-risk-of-poverty rate rose by 1.4 p.p. to 12.7%. The depth of poverty remained the same as last year (20.2%[1]). The calculation is based on data on household income in 2009,[2] so that the first impact of the crisis was shown only in data on the at-risk-of-poverty rate for 2010. The at-risk-of-poverty rate increased due to a wider gap in income, which dropped for a significant proportion of households in 2009 as a result of the economic crisis, and due to higher unemployment. At the same time, there were above-average wage rises in certain sectors with high average wages (i.e. health, public administration and electric power supply). Low household income also brought down the at-risk-of poverty threshold, which was at EUR 587 (EUR 6 lower than a year earlier) for one person and EUR 1,232 (EUR 14 lower) for a family of four with two dependent[3] children. The at-risk-of-poverty was still much below the EU average, which remained at the level of previous years. The rate increased more visibly in six countries only (Spain, Slovakia, France, Poland, Greece and the Czech Republic), but less than in Slovenia. Significant differences between EU countries in the situation of households are also indicated by the at-risk-of-poverty thresholds[4] expressed in purchasing power parities (PPP), according to which Slovenia is ranked approximately in the middle (see Figure); this means that the purchasing power of a portion of households whose income falls above the official poverty threshold in Slovenia is actually lower than in some households whose income is less than the poverty threshold, but live in wealthier countries where the threshold is higher.

The effectiveness of social transfers in 2010 remained similar to that in previous years. Had the government not provided social transfers from social security and budgetary funds, the at-risk-of-poverty rate would have been 24.2% in 2010, 2.2 p.p. higher than a year before. The at-risk-of-poverty rate before social transfers, having declined steadily since 2005, rose markedly in 2010 for the first time in a long period. Nevertheless, social transfers made it possible for approximately the same proportion of households as in previous years to raise disposable income above the at-risk-of-poverty threshold, and thus lowered the at-risk-of-poverty rate by 11.5%. In the EU as a whole, social transfers reduce the at-risk-of-poverty rate by 9.3 p.p.

The at-risk-of-poverty rate increased for almost all population groups, once again especially for those that are most vulnerable. With the rate of 74.8%, jobless households with dependent children were at the greatest poverty risk. The material situation of this population group deteriorated the most, as their at-risk-of-poverty rate increased by as much as 14.4 p.p. Very high rates were also recorded for the unemployed (44.1%), single-parent families (31.4%), tenants (27.6%), and women aged 65 and over (27.1%). All these groups also faced higher poverty risk in 2010. On the other hand, the situation of single households and large families, which are also among those at above-average poverty risk, improved somewhat in 2009. The at-risk-of-poverty rate is otherwise mainly impacted by unemployment or inactivity, but in recent years Slovenia has also had to cope with the relatively new problem of the working poor. In 2010, nearly a fifth of persons with income below the poverty threshold were employed. In 2010, the at-risk-of-poverty rate of employed persons was 5.3% in Slovenia (in 2009: 4.8%) and 8.5%, on average, in the EU (in 2009: 8.4%).

Inequality in income distribution also rose in Slovenia with the economic crisis, but is still the lowest in the EU. Both income inequality indicators, which are calculated based on income data for 2009, increased in Slovenia in 2010. The Gini coefficient thus totalled 23.8% (2009: 22.7%), while the quintile share ratio rose from 3.2 to 3.4, meaning that the fifth of the population with the highest income had 3.4 times higher income than the fifth of the population with the lowest income. Income inequality increased mainly due to growing unemployment and hence a higher number of recipients of social transfers, as well as owing to price rises in certain activities with high average wages, particularly in the public sector. Despite the increase, income inequality in Slovenia is still the lowest in the EU according to both indicators.

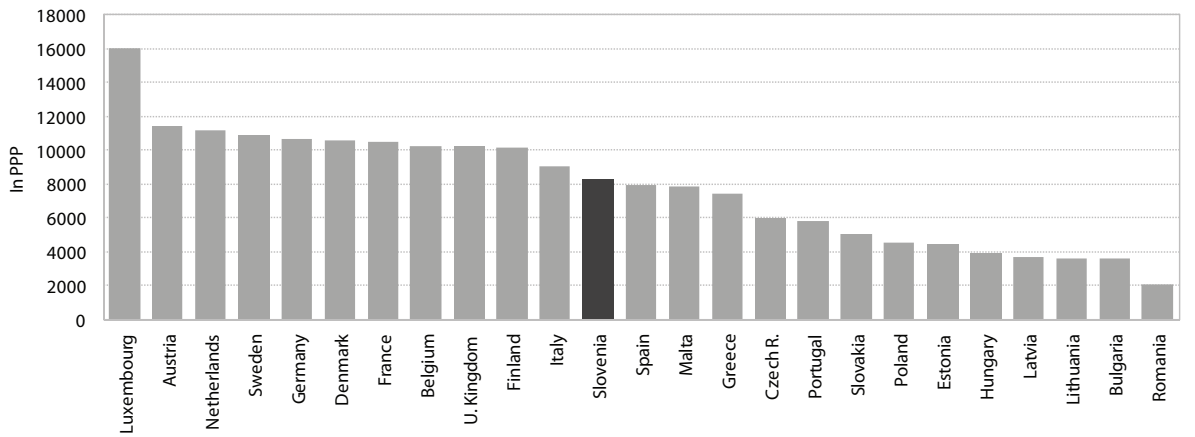
[1] An individual's disposable income was thus 20.2% below the poverty threshold, meaning that an average individual had only EUR 468 of disposable monthly income.
[2] Data on poverty risk in 2010 are derived from the Statistics on Income and Living Conditions (SILC) and are based on data on income received in 2009.
[3] i.e. dependent children under 14 years.
[4] According to Eurostat's methodology, the at-risk-of-poverty threshold is set at 60% of the national median income.

Table: **Selected at-risk-of-poverty and income-inequality indicators, SLO, EU-27 (excluding income in kind)**

		2000*	2005	2006	2007	2008	2009	2010
At-risk-of-poverty rate, in %								
before social transfers[1]	SLO	37,2	25,9	24,2	23,1	23,0	22,0	24,2
	EU-27	23,0	26,0	26,2	25,8	25,1	25,1	25,7s
after social transfers	SLO	13,0	12,2	11,6	11,5	12,3	11,3	12,7
	EU-27	16,5	16,5	16,6	16,7	16,4	16,3	16,4s
women	SLO	18,0	13,7	12,9	12,9	13,6	12,8	14,1
	EU-27	17,1	17,1	17,3	17,5	17,4	17,1	17,1s
men	SLO	12,5	10,6	10,3	10,0	11,0	9,8	11,3
	EU-27	15,0	15,7	15,9	15,8	15,5	15,4	15,7s
children (aged 0–18)	SLO	np	12,1	11,5	11,3	11,6	11,2	12,6
	EU-27	np	19,8	19,9	20,0	20,2	19,9	20,6s
young people (aged 18–24)	SLO	np	10,0	8,9	9,1	9,7	7,7	10,0
	EU-27	np	19,6	20,2	20,3	19,9	20,1	21,2s
elderly (aged 65+)[2]	SLO	21,0	20,3	19,9	19,4	21,3	20,0	20,2
	EU-27	17,0	18,9	19,0	19,3	18,9	17,8	15,9s
single-parent families[3]	SLO	17,5	22,0	22,3	28,6	28,8	28,1	31,4
	EU-27	30,0**	31,1	32,5	33,1	35,6	34,0	36,9s
couples with three or more dependent children (large family)	SLO	10,0	16,6	15,2	15,2	11,3	15,7	13,6
	EU-27	np	25,6	25,8	25,7	26,0	25,9	26,0s
jobless households with dependent children	SLO	np	54,2	59,1	54,4	57,0	60,4	74,8s
	EU-27	np	61,4	63,1	64,6	61,8	56,6	62,6
single households	SLO	36,0	44,0	42,4	39,2	41,9	43,4	38,5
	EU-27	np	23,6	23,7	25,1	25,8	25,6	25,0s
unemployed	SLO	39,5	25,1	33,1	36,2	37,7	43,5	44,2
	EU-27	np	40,0	41,2	43,3	44,6	45,4	45,5s
tenants	SLO	16,6	25,9	21,9	25,7	25,2	22,0	27,6
	EU-27	24,0**	22,7	22,8	24,8	25,3	25,4	25,8s
Income inequality indicators:								
quintile share ratio 80/20	SLO	3,1	3,4	3,4	3,3	3,4	3,2	3,4
	EU-27	4,5	5,0	4,9	4,9	5,0	4,9	5,0 s)
Gini coefficient	SLO	22,0	23,8	23,7	23,2	23,4	22,7	23,8
	EU-27	29,0	30,6	30,2	30,6	30,7	30,4	30,4s)

Source: Eurostat Portal Page - Living Conditions and Welfare - Income and Living Conditions, (EU-SILC 2011), 2011.
Notes: [1] pensions included in income; [2] poverty of the elderly regardless of what type of household they live in; [3] in terms of statistics, this indicates a single-parent household with at least one dependent child; * data for EU-25; **data for 2001; N/P – not available; s – Eurostat's estimate.

Figure: **At-risk-of-poverty threshold in EU countries, 2010, in PPP**



Source: Eurostat Portal Page - Living Conditions and Welfare - Income and Living Conditions, (EU-SILC 2011), 2011.

Material deprivation

The material deprivation rate shows the long-term effects of a bad financial situation of the population. It measures the percentage of people who cannot afford at least three of nine material deprivation items.[1] These items refer to the possession (or lack) of durable consumer goods and the economic strain on households, which is a consequence of limited resources of households rather than differences in tastes, lifestyle preferences, personal choices and living conditions. This is an opinion indicator, which, together with other more commonly used indicators (such as the at-risk-of-poverty and inequality indicators), gives further insight into the living conditions of the population. Unlike other indicators that assess the poverty risk based on income and are limited by a lack of available data (for example on the self-employed and people working in the grey economy, as well as on non-monetary transfers, debts and profits of households, if any, etc.), this indicator is based on responders' answers regarding the nine items mentioned above.

Material deprivation declined in 2010. It dropped from 16.2% in 2009 to 15.8% in 2010. The rate was highest in 2008 (16.9%)[2] and has been falling since then. The decline reflects an improvement in the material situation of households living above the at-risk-of-poverty threshold, as their material deprivation rate declined by 1.1 p.p. (from 13.1% to 12.0%). On the other hand, the material deprivation rate of persons below the threshold increased by 1.4 p.p. (from 41.2% to 42.6%). As a result of a low proportion of the population below the at-risk-of-poverty threshold (12.4%), the average material deprivation rate for total population nevertheless declined. Among the population below the at-risk-of-poverty line, the most materially disadvantaged are the elderly (47% aged 65 and over).

In 2010, the material deprivation rate in Slovenia (15.8%) was lower than the EU average (17.4%). The gaps in material deprivation rates between EU countries are striking. More than half of all households are deprived in three or more analysed items in Bulgaria and slightly fewer than half in Romania. On the other side of the spectrum are countries with less than one tenth of population materially disadvantaged: Luxembourg, Sweden, the Netherlands, Denmark and Finland. Slovenia is among 11 EU countries where material deprivation rates declined in 2010. The material deprivation rate in the EU as a whole, having dropped by 19.9% to 17.1% between 2005 and 2009, rose to 17.4% in 2010. The intensity[3] of material deprivation in Slovenia is also lower than in the EU as a whole. Slovenian households feel deprived in 3.5 items, on average, in contrast to 3.8 in the EU as a whole, while the intensity of deprivation is lowest in Luxembourg (3.2 items) and highest in Bulgaria (4.1 items).

The share of deprivation by items used in calculating the material deprivation rate varies. In Slovenia, most of the materially deprived people are classified as such because they are unable to cover unexpected expenses, afford a one-week annual holiday away from home, or are in arrears on housing-related bills. A telephone, a washing machine and a colour TV are accessible to all (100%); 97% of respondents own a car and 95% of them can keep their home adequately warm (a deterioration by 2 p.p. relative to 2005). Somewhat worse are the results in the capacity to afford a meal with meat (or a vegetarian equivalent) once a week (around 90% of respondents). However, the situation is much grimmer when it comes to the capacity to make regular payments of housing-related bills (80%), go on a one-week holiday away from home (around 70%), or cover unexpected expenses (55%). In comparison with 2009, the situation deteriorated most notably regarding the ability to cope with unexpected expenses, as nearly half of the population do not even have savings in the amount of one minimum wage. The largest increase relative to 2005 is seen in the share of people in arrears on housing-related payments, which has been growing since 2008. The ability to afford a holiday decreased in the lower three quintiles, and the ability to cover unexpected expenses in all quintiles, particularly the bottom two. The answers to how people manage to live on their income paint an even bleaker picture; 31% of respondents of the survey (EU-SILC) manage to make ends meet 'with difficulty' ('with some difficulty' and 'with great difficulty' combined). Within that, 55% of people in the first quintile find it difficult to make it through the month, 39% of those in the second, and more than a quarter (26%) in the third. These shares are not even negligible in the fourth (16%) and in the highest, fifth, quintile (7%). A comparison of reasons shows that material deprivation is mainly a result of deprivation in items that show the economic

[1] These are: The household cannot afford (i) to face unexpected expenses; (ii) a one-week annual holiday away from home; (iii) a meal with meat, chicken or fish (or a vegetarian equivalent) at least every second day; (iv) to pay for arrears (mortgage or rent, utility bills or hire purchase instalments); (v) to keep home adequately warm; (vi) to have a washing machine; (vii) to have a colour TV; (viii) to have a telephone (mobile); (ix) to have a personal car.

[2] Material deprivation based on the EU Survey on Income and Living Conditions (EU-SILC) for EU-15 has been measured since 2003, for all EU-27 countries since 2005.

[3] Defined as the average number of items in which poor households are deprived.

strain on households as a result of current expenses rather than purchases of durable material goods. This methodology of measuring material deprivation therefore seems questionable, at least for Slovenia.

Table: **Material deprivation by items, 2005–2010, in %**

Inability...	2005	2006	2007	2008	2009	2010
... to cover unexpected expenses	43	43	42	45	41	45
... to afford one week of holiday	33	31	30	30	30	31
... to make mortgage, rent, utility bill and hire purchase payments in the last 12 months (for financial reasons)	15	14	14	16	18	20
... to afford a meal with meat (or a vegetarian equivalent)	9	11	10	12	11	9
... to keep home adequately warm	3	3	4	6	5	5
... to afford a washing machine	1	0	0	0	0	0
... to afford a colour TV	1	1	1	1	1	0
... to afford a telephone	1	0	0	0	0	0
... to afford a car	4	3	4	3	3	3

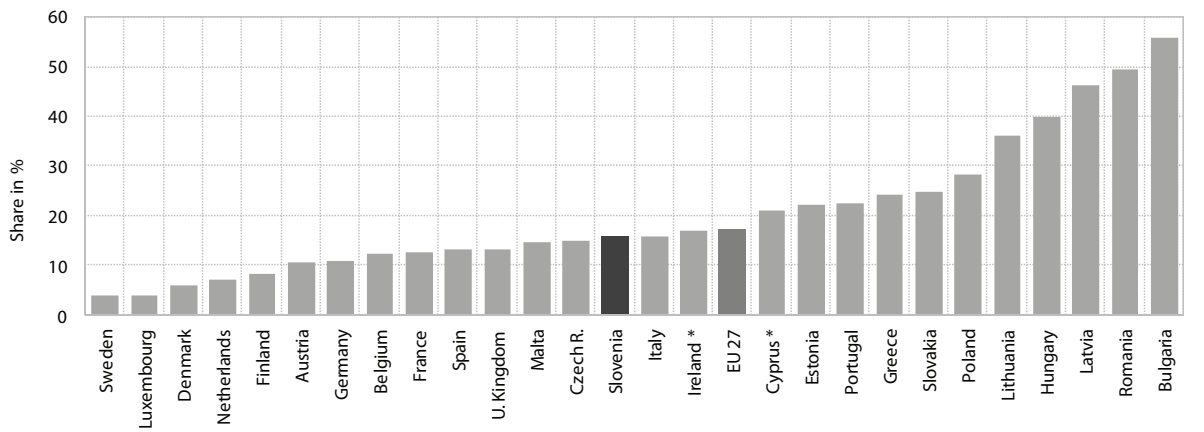
Source: Eurostat.

Table: **Material deprivation relative to the at-risk-of-poverty threshold, 2005–2010, in %**

	2005	2006	2007	2008	2009	2010
Above the at-risk-of-poverty threshold	11.3	11.2	11	13.4	13.1	12
Below the at-risk-of-poverty threshold	40.8	40	41.6	43.1	41.2	42.6

Source: SORS, 2011.

Figure: **Share of materially deprived people in EU-27 (three out of nine items), 2010**



Source: Eurostat, 2011.
Note: Data for Ireland* and Cyprus* are from 2009.

Health care resources

Given the labour-intensive nature of health services, the effectiveness of the health care system is highly dependent on capable and motivated health care workers. The shortage of health care workers, their inappropriate geographical distribution or imbalance in the various health professions are usually attributable to inappropriate human resources planning, which results in difficulties in delivering high-quality, efficient and cost-effective health care and ensuring equity in access to health care services.

Although the number of physicians has been growing somewhat more strongly in recent years, Slovenia's gap to the EU and OECD average nevertheless continues to increase. According to data of the Institute of Public Health, the number of practicing physicians totalled 4,979 in 2010, 1.3% more than in 2009. The indicator of the number of practicing physicians per 100,000 population has improved as well, reaching 243 (2009: 240.7; EU: 330.5). According to the OECD's estimate, the number of physicians grew by an average of 1.0% annually in Slovenia in 2000–2009, in OECD countries by 1.7%, and in the EU by 1.5%, according to our estimate. This means that Slovenia's gap with the OECD and the EU widened in 2000–2009. Slovenia lags most notably in the number of general practitioners (49.8 per 100,000 population in 2010; in the EU-27: 87.4 in 2009), which is problematic as regards both access to health care services and the cost effectiveness of the health care system (the role of 'gatekeepers';[1] a possibility of transferring certain health care services to the primary level). In 2010 and 2011, Slovenia took certain measures to strengthen primary health care: (i) introduction of new training primary health care offices, in which doctors specialising in general medicine can register their patients (under tutorship); (ii) introduction of reference primary health care offices, in which registered nurses assume greater responsibilities; and (iii) additional funding for the primary level of health care (Ministry of Health, 2012).

The number of medical graduates increased significantly in 2010. As the first generation of medical students graduated from the Maribor Faculty of Medicine in 2010, the number of medical graduates rose to 229 (2009: 162). The indicator of the number of medical graduates per 100,000 population therefore increased significantly in Slovenia, from 8.0 in 2009 to 11.2 in 2010 (the 2000–2009 average was only 7.0). Consequently, Slovenia exceeded the OECD average (9.9) in 2010, after having still lagged significantly behind in 2009. Most countries are addressing physician shortages by increasing enrolment at medical schools and by making it easier for foreign physicians to obtain licences. In 2010, Slovenia increased enrolment at the Faculty of Medicine in Ljubljana and Maribor by 30 additional posts. Furthermore, it also passed a new law[2] that shortens the procedures for the recognition of professional qualifications for foreign doctors.

The number of registered nurses (i.e. nurses with a university degree) is rising (too) fast. In 2010, Slovenia recorded 804 medical technicians and nurses[3] per 100,000 population, which is somewhat lower than the EU average (824 in 2009), while the number of nurses per physician (3.3 in 2009) was significantly higher than the OECD average (2.5). Owing to a number of new university colleges of nursing, the number of registered nurses in particular has been growing significantly in recent years. A total of 247 nurses graduated in 2010, 60% more than in 2005. Judging by the number of enrolled students, the inflow of graduates is set to increase strongly in the coming years, according to the estimate of the Institute of Public Health – in 2011 already by as much as 80–100, and by an additional 50 in 2013. The high 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 registered nurses) and long-term care (faster development of long-term care at home). In light of limited hiring in the public sector, registered nurses may have difficulty finding jobs otherwise.

There is practically no gap between the dynamics of the decline in the number of acute hospital beds in Slovenia and the relevant dynamics in the EU. The number of acute hospital beds is declining on account of the shortening of the average length of inpatient stay and the transfer of certain hospital treatments to more patient-friendly and also less costly, day-hospital or specialist outpatient clinics. In 2000–2009, the number of acute hospital beds per 100,000 population dropped by 16% in Slovenia, on average, and by 18% in the EU. At the same time, access to acute hospital treatment improved in Slovenia (a shortening of waiting lists and an increase in the hospitalisation rate), which leads to the conclusion that the dynamics

[1] At the primary level, general practitioners also have a gatekeeping role, meaning that they reduce the extent of more expensive specialist outpatient health care services.

[2] The Act on Recognition of Professional Qualifications of Medical Doctor, Specialist Doctor, Doctor of Dental Medicine and Dental Medicine Specialist (OG RS, No. 107/2010) expedites procedures for recognition of professional diplomas obtained in countries which are neither EU Member States, EEC Member States nor the Swiss Confederation.

[3] According to data of the Institute of Public Health, 4.333 nurses and 12,423 medical technicians were employed in Slovenia at the end of 2010.

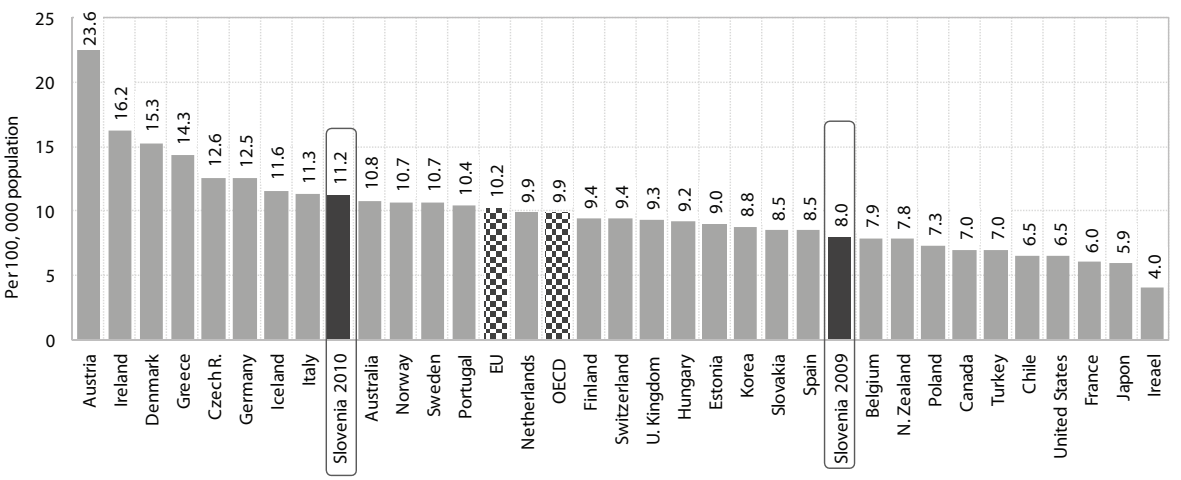
of the decline in acute hospital beds was appropriate. In 2009, Slovenia recorded 372.8 acute hospital beds per 100,000 population (in 2008, 385.4), while the EU average was 308.2.

Table: **Human resources in the health care system in Slovenia[1] and EU Member States**

	Practicing physicians per 100,000 population			General practitioners per 100,000 population		Practicing dentists per 100,000 population	Practicing nurses per 100,000 population		Nurses to physicians ratio
	2000	2008	2009	2000	2009	2009	2000	[6]2009	2009
EU-27[1]	**292.8**	**326.6**	**330.5**	**82.1**	**87.4**	**66.2**	**732.6**	**823.6**	**2.5**
Austria	384.9	458.5	467.1	136.4	155.0	55.2	728.6	775.0	1.6
Belgium	282.5	290.9	291.3	119.5	113.3	70.6	583.8	659.5	3.1
Bulgaria	337.8	361.3	370.0	N/A	65.4	85.8	437.0	466.0	1.3
Cyprus	258.0	285.6	N/A	41.3	: N/A	93.2	422.5	436.0	1.5
Czech Republic	337.1	352.7	355.5	72.7	70.1	67.5	805.7	845.9	2.3
Denmark[5]	290.5	341.6	N/A	64.6	66.9	80.1	1257.0	1.504.0	4.3
Estonia[4]	327.0	333.4	326.7	98.8	82.2	89.2	623.1	642.1	1.9
Finland	250.1	272.7	N/A	N/A	101.9	75.6	1436.0	1.004.6	3.5
France[3]	329.4	330.1	325.6	161.0	159.7	64.7	688.6	798.9	2.5
Greece[3]	432.8	602.1	610.6	N/A	27.6	130.7	309.0	364.0	0.5
Ireland	220.2	398.7	406.6	47.7	54.8	60.5	1400.5	1.274.1	5.0
Italy[4]	606.9	608.3	608.9	82.8	76.7	91.8	N/A	700.4	1.0
Latvia	286.3	311.3	300.4	40.9	58.5	67.2	479.0	486.1	1.8
Lithuania	364.0	370.6	366.2	52.2	69.1	70.5	805.3	726.2	2.0
Luxembourg	288.4	269.7	268.9	63.6	78.7	80.5	863.8	1.118.3	4.2
Hungary	364.0	309.3	302.3	N/A	35.4	49.1	579.2	638.9	2.1
Malta[4]	261.6	332.2	373.2	N/A	69.3	43.3	N/A	656.7	2.0
Germany	325.8	356.2	364.1	66.2	65.5	78.6	939.7	1.122.2	3.0
Netherlands[4,5]	301.4	366.6	N/A	61.0	71.2	58.9	N/A	853.3	3.9
Poland	222.3	216.1	217.0	7.7	20.5	31.9	553.2	583.4	2.4
Portugal[4]	316.8	366.3	376.9	153.3	190.1	72.0	353.2	N/A	1.5
Romania	192.8	221.5	225.9	N/A	83.1	58.0	530.1	566.2	2.9
Slovakia[5]	323.9	300	N/A	N/A	41.42	49.9	750.7	631.6	1.8
Slovenia[2]	**215.0**	**238.8**	**241.8**	**45.7**	**49.7**	**60.4**	**685.0**	**804.1**	**3.3**
Spain	331.8	352.2	354.8	N/A	73.8	58.1	658.2	493.8	1.4
Sweden[5]	308.3	371.5	N/A	52.8	61.9	80.5	1031.0	1155.0	3.0
United Kingdom	195.5	255.9	265.9	64.4	79.3	50.9	916.0	1.003.5	3.6

Sources: Eurostat; OECD Health Data 2011; WHO HFA–DB.
Notes: [1] Source for EU-27 average for physicians, general practitioners, dentists and nurses is WHO HFA-DB (the methodologies of data reporting for these categories were standardised with Eurostat and OECD). [2] Slovenia: the indicators in the text are for 2010. The table includes data for 2009, as these are the latest available data for the EU countries. [3]FR in GR: all professionally active physicians and dentists (including those working in management, research, education, etc.); [4] IE, IT, MT, NL, PL: all physicians and dentists with a licence to practice; [5] SK: physicians and dentists, year 2007; DK, NL, SE: year 2008; [6] DK, NL, FI, SE, SK, IT, GR, FR, CY, BE: year 2008; N/A - not available.

Figure: **Number of medical graduates per 100,000 population, 2009 (Slovenia 2010)**



Source: OECD Health at a Glance 2011; World Health Organisation HFA-DB (source for EU-27 average), Institute of Public Health of the Republic of Slovenia: Health Statistics Yearbook for 2010 (data for Slovenia for 2010).

Capacities of the education system

The number of children in preschool education is increasing, while it is declining in elementary (Isced 1,2) and upper secondary education. This trend is typical for the whole period of the implementation of SDS, including 2011. The number of class units in kindergartens is therefore increasing. Since 2005, it has grown by 40.7% and the number of enrolled children by 42.2%. Meanwhile, the number of class units in elementary and upper secondary schools is declining. In 2005/2006–2009/2010, the number of pupils enrolled in elementary education dropped by 4.6% and the number of class units by 3.8%. The number of pupils attending upper secondary schools declined by 16.0% in the same period and the number of class units by 12.1%.

The ratio of children to teachers (i.e. educators and assistant educators) in preschool education is very favourable. In the first age period (children aged 1–2), it totalled 6.3 in 2011/2012. Due to an increase in the number of enrolled children, it has deteriorated by 0.5 since 2005. In the second age period (children aged 3 up to entering primary school), the ratio was 9.3 in 2011/2012, which is roughly the same as in all previous years (9.4) and one of the most favourable ratios in the EU. Although the average ratio in the EU improved in 2005–2009, the ratio in Slovenia was still much lower than the EU average.[1] The average number of children per class unit also remained at approximately the same level as in the preceding year. In the first age period, it was 12.5, in the second age period, 20.4. The number of children in class units is prescribed by the Kindergarten Act and should not exceed 12 children in the first and 22 children in the second age period. Exceptionally, it can be by (at most) two children higher, if so decided by the local community. In the period of the implementation of SDS, the average number of children per class unit increased somewhat (in younger children by 0.4 and older by 0.8), meaning that local communities did, to a certain extent, take advantage of the possibility of increasing the number of children to mitigate the lack of capacities.

The capacities of the education system at the elementary (primary and lower secondary) school level in Slovenia are also better, in general, than the EU average. The pupil/teacher ratio at Isced level 1, which covers the first six grades of elementary school in Slovenia, totalled 16.7 in 2009, having deteriorated significantly relative to the preceding year. At Isced level 2, which covers grades 7–9 in Slovenia, the ratio was much more favourable (7.9) and it improved in comparison with the previous year. A deterioration at the first level and improvement at the second is typical for the whole period of SDS's implementation, which otherwise coincided with the time of the introduction of the nine-year elementary school.[2] At Isced level 1, the 2009 ratio was much worse than in the EU as a whole (12.5) and at Isced level 2 much more favourable than in the EU (EU 11.6). We estimate that the gaps can be explained by differences in educational programmes allocated to both Isced levels (owing to differences in education systems), as well as shorter school days in Slovenia. The size of classes (i.e. the average number of pupils per unit) is another indicator of the capacity of the education system. Slovenia has 18.5 children per unit at Isced level 1, which is below the average of the EU countries (21 countries) that are OECD Member States (19.8). In both Slovenia and the EU-21, the ratios remained roughly unchanged relative to those in 2008, while relative to 2005, the ratio in Slovenia increased. The average number of pupils per class unit at Isced level 2 is also among the lowest in the EU (2009: 19.8; EU-21: 21.9). It has dropped further relative to 2008 and 2005 and is therefore much lower than the norm (28 children per unit). Looking at systemic reasons (the requirements are lower in classes that include Roma pupils, children with special needs, in combined-grade classes,[3] combined-grade classes in areas with special development problems), the low number is primarily impacted by subsidiary elementary schools with a large share of combined-grade classes. Specifically, in 2010/2011 around 42% of elementary schools in Slovenia were subsidiary schools, but they accounted for less than 10% of all pupils.

On the other hand, the pupil/teacher ratio in upper secondary schools was relatively less favourable. It deteriorated in 2009, totalling 14.3, which is worse than on average in the EU (11.2). Until 2005 the ratio had been fairly similar to the EU average; in 2005–2009 it improved somewhat (by 0.2), but less than in the EU (by 2.3). Amid a decline in the number of pupils of secondary-school age and hence in the number of class units in the period of the implementation of SDS, the average number of pupils per unit also dropped. In 2009/2010, it averaged 24.3. New Rules on Norms and Standards for the Implementation of Educational Programmes and a Schooling Programme in Secondary Education adopted in 2010 lowered the

[1] Internationally comparable data are available only for the second age period.

[2] In Slovenia, Isced level 1 covered the lower level of primary school, i.e. grades 1–4, and Isced level 2 the upper level, grades 5–8.

[3] According to the Primary School Act from 1996, pupils from two or more grades can be placed in a combined-grade class unit.

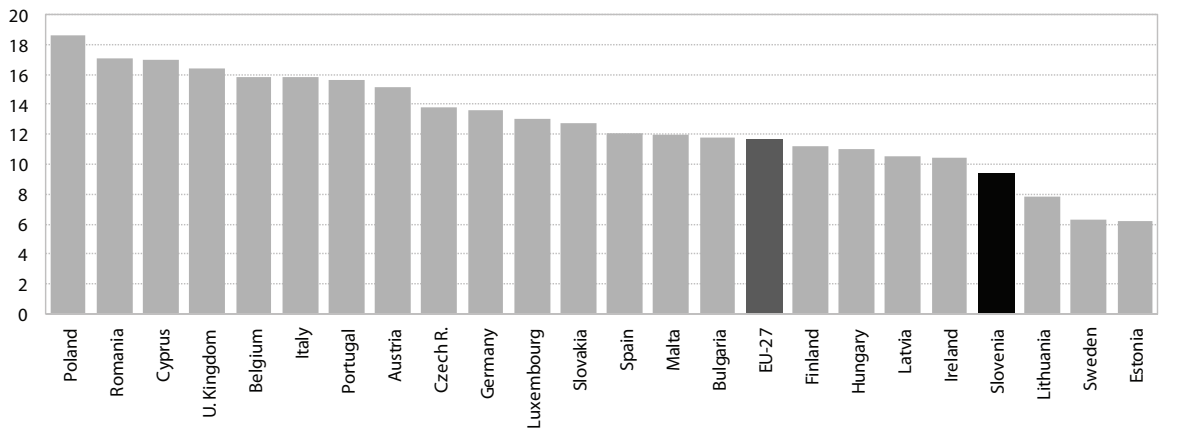
norms in upper secondary vocational and technical schools and in general upper secondary schools, which would mean a further decline in the average number of pupils per unit.

Table: **Pupil-teacher ratio, EU, 2000–2009**

	Isced 1[1]				Isced 2[1]				Isced 3[1]			
	2000	2005	2008	2009	2000	2005	2008	2009	2000	2005	2008	2009
EU	**16.1**	**14.8**	**12.3**	**12.5**	**14.3**	**13.7**	**11.2**	**11.6**	**13.6**	**13.5**	**10.9**	**11.2**
Austria	N/A	14.1	12.9	12.6	N/A	10.6	9.9	9.6	N/A	11.3	10.5	10.2
Belgium	N/A	12.8	12.6	12.5	N/A	9.4	8.1	8.1	N/A	9.9	10.8	10.2
Bulgaria	16.8	16.3	16.1	17.4	12.1	12.6	12.0	12.5	11.6	11.9	11.5	12.0
Cyprus	18.1	17.9	15.0	14.5	N/A	11.9	10.8	10.2	12.7	11.5	10.6	10.2
Czech Rep.	21.0	17.5	18.1	18.4	15.6	13.5	11.8	11.5	13.4	12.8	14.0	12.2
Denmark	10.7	11.9	10.1	9.9	10.6	N/A	N/A	N/A	12.1	N/A	N/A	N/A
Estonia	14.9	N/A	16.4	16.2	11.2	N/A	16.0	15.7	10.1	N/A	12.4	16.8
Finland	16.9	15.9	14.4	13.6	10.7	10.0	10.6	10.1	17.0	18.0	15.9	16.6
France	19.5	19.4	19.9	19.7	14.7	14.2	14.6	14.9	10.4	10.3	9.4	9.6
Germany	19.8	18.8	18.0	17.4	15.7	15.5	15.0	15.1	13.9	14.0	14.0	13.9
Greece	13.4	11.1	N/A	N/A	10.8	7.9	N/A	N/A	10.5	8.8	N/A	N/A
Hungary	10.9	10.6	10.6	10.7	10.9	10.4	10.9	10.8	9.9	12.2	12.3	12.8
Ireland	21.5	17.9	17.8	15.9	15.8	N/A	N/A	N/A	15.8	15.6	12.9	12.6
Italy	11.0	10.5	10.6	10.7	10.4	10.5	9.7	10.0	10.5	12.0	11.8	11.8
Latvia	18.0	12.2	12.8	11.4	12.7	11.2	9.2	8.7	13.3	12.1	11.9	11.5
Lithuania	16.7	11.3	9.7	9.7	11.7	8.8	7.7	7.6	N/A	N/A	N/A	N/A
Luxembourg	N/A	N/A	12.1	11.6	N/A	N/A	9.0	18.4	N/A	9.0	N/A	9.2
Malta	19.1	12.1	10.6	9.4	9.0	8.4	7.1	6.5	16.2	17.4	15.3	15.8
Netherlands	16.8	15.9	15.8	15.8	N/A	N/A	N/A	N/A	17.1	16.2	15.8	16.1
Poland	12.7	11.7	10.5	10.2	11.5	12.7	12.9	12.9	16.9	12.9	12.2	12.0
Portugal	12.4	10.8	11.3	11.3	10.4	8.2	8.1	7.6	8.5	N/A	7.3	7.7
Romania	N/A	17.4	16.3	16.4	15.0	12.4	12.5	12.2	12.8	16.0	14.8	14.4
Slovakia	18.3	18.9	18.6	17.7	13.5	14.1	14.5	14.0	12.8	14.3	15.1	15.1
Slovenia	**13.4**	**15.0**	**15.8**	**16.7**	**13.8**	**11.1**	**8.9**	**7.9**	**13.1**	**14.5**	**13.5**	**14.3**
Spain	14.9	14.3	13.1	13.3	13.7	12.5	10.3	10.1	9.7	8.1	8.7	9.3
Sweden	12.8	12.2	12.2	12.1	12.8	12.0	11.4	11.3	15.2	14.0	14.7	13.2
UK	21.2	20.7	20.2	19.9	17.6	17.0	15.0	16.1	19.3	N/A	12.4	12.3

Source: Eurostat Portal Page – Population and Social Conditions, 2012.
Note: [1] 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 second stage of basic education and Isced 3 (upper) secondary education.

Figure: **Ratio between the number of children enrolled in organised forms of early childhood education and the number of teaching staff, 2009**



Source: Eurostat Portal Page – Population and social conditions, 2012.

Life satisfaction

Life satisfaction is the most important synthetic and multi-dimensional indicator of quality of life and personal well-being. It is included in all main surveys that monitor well-being around the world and in Slovenia, such as the UN Human Development Report, the OECD Better Life Index and Gallup's Subjective Well-Being Index. For quite some time now it has also been analysed in the publications of IMAD (Development Report, Slovenian Human Development Report, Social Overview). It is measured by various public opinion polls asking people how satisfied they are with their lives.[1] Since they differ with regard to the countries covered and the time when they are carried out, direct comparisons between the surveys are not possible.[2]

Life satisfaction in Slovenia declined in 2011 ('very satisfied' and 'satisfied' combined). According to the Eurobarometer survey, 83% of respondents were satisfied with their lives in 2011 (85% in 2010). Slovenia was thus 12th among EU countries in 2011. It fell from 10th to 12th place relative to the preceding year, but it still has the highest proportion of satisfied people among all new EU Member States and a higher proportion than the EU as whole and some old EU Member States (Spain, Italy, Portugal and Greece). However, the share of people who were satisfied with their lives in 2011 was lower than in all 12 measurements in the eight years since Slovenia joined the EU and has been included in the survey.

In terms of the average life satisfaction over a longer period of time, Slovenia is among countries with a relatively high share of satisfied people. At the same time, it is also in the group of those in which life satisfaction has been continuously falling since 2007. According to the eight-year[3] average (87%), Slovenia is placed 9th in the EU. It is also among the countries where the proportion of satisfied people, even if still relatively high, has generally been falling since the beginning of recession, and was in 2011 equal to or below the eight-year low. Almost half of EU countries saw a reverse trend in 2011, with life satisfaction exceeding the eight-year average, while six of them not only reached the pre-recession level but also had the highest share of satisfied people in the last eight years.

According to the OECD survey in 2010,[4] Slovenians expect that they will be more satisfied in the future. The survey shows a significantly lower proportion of satisfied people in Slovenia than the Eurobarometer survey, but it uses a different methodology. At the time of the survey, only 38.6% of people were satisfied with the lives they lead, and 47.7% believed that their lives would be satisfying in the future. Slovenia comes 28th among the analysed countries in terms of satisfaction with life, but will fall to 33th place if the expectations of Slovenians regarding their future come true, as in 20 other countries survey respondents have a more positive attitude towards their lives in the future than in Slovenia. In general, a greater improvement is expected by respondents in countries that are not in the OECD or the EU. In Slovenia, both the present and anticipated levels of life satisfaction are below the OECD average.

[1] This indicator is based on data from the Eurobarometer survey. The Eurobarometer life satisfaction question reads: 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 since accession to the EU onwards). Data for Slovenia have thus been available since 2004.

[2] We find that Eurobarometer results are broadly in agreement with other international surveys (however, all of them are based on older data). For example, UNDP data in HDR 2011 indicate that the average rating of life satisfaction in 2006–2010 ranks Slovenia 16th among EU countries, behind Spain and the Czech Republic, and before Slovakia and Greece (see also the Human Development Index indicator).

[3] 2004–2011 and 13 measurements.

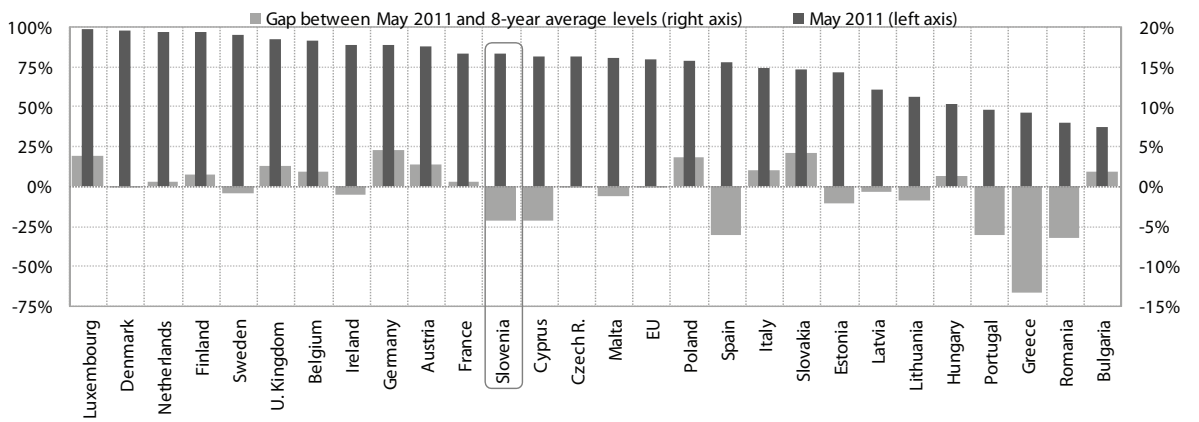
[4] OECD Factbook 2010: Economic, Environmental and Social Statistics. OECD 2010. The study covered 40 countries, including some non-OECD members. Satisfaction was measured in 2009 or later.

Table: **Overall satisfaction ('satisfied' and 'very satisfied') in EU countries, in %**

	2005 average	2006 average	2007 average	2008 average	2009 average	June 2010	May 2011	2004–2011 average
EU-27	**81**	**82**	**80**	**77**	**78**	**78**	**79**	**79**
Austria	85	84	86	81	84	85	87	84
Belgium	89	91	90	87	90	88	91	89
Bulgaria	29	31	37	39	39	38	37	35
Cyprus	85	87	86	88	83	82	81	85
Czech Republic	82	82	82	83	82	78	81	81
Denmark	98	97	98	96	98	98	97	97
Estonia	69	74	78	75	73	73	71	73
Finland	94	94	95	95	96	95	96	95
France	82	85	84	79	83	83	83	83
Greece	65	69	68	59	51	42	46	59
Ireland	91	91	90	88	87	88	88	89
Italy	75	76	73	64	71	72	74	72
Latvia	61	63	65	63	56	60	60	61
Lithuania	56	62	64	59	56	50	56	58
Luxembourg	94	93	93	93	96	96	98	94
Hungary	55	53	52	47	43	50	51	50
Malta	83	80	83	85	77	76	80	81
Germany	81	82	85	84	85	84	88	84
Netherlands	96	95	97	97	96	95	96	96
Poland	70	73	77	76	76	79	78	74
Portugal	58	59	59	49	52	44	48	54
Romania	46	46	51	50	47	36	40	46
Slovakia	64	69	71	71	71	75	73	69
Slovenia	**89**	**88**	**89**	**87**	**86**	**85**	**83**	**87**
Spain	85	89	88	85	75	77	77	83
Sweden	96	96	97	96	96	96	95	96
United Kingdom	89	89	90	87	90	92	92	89

Source: Eurobarometer; own calculations.

Figure: **Overall satisfaction in EU countries, May 2011 and the difference with regard to the 8-year average (2004–2011)**



Source: Eurobarometer; own calculations.

THE FIFTH PRIORITY:

Integration of measures to achieve sustainable development

- Greenhouse gas emissions
- Emission-intensive industries
- Energy intensity
- Renewable energy resources
- Share of road transport in total freight transport
- Environmental taxes
- Agricultural intensity
- Tree-felling intensity
- Age-dependency ratio
- Life expectancy and healthy life years
- Fertility rate
- Migration coefficient
- Regional variation in GDP per capita
- Regional variation in the registered unemployment rate
- Book production and public libraries

Greenhouse gas emissions

Greenhouse-gas emissions declined substantially in 2009, which moved Slovenia somewhat closer towards its Kyoto Protocol targets, while most EU countries had already been on track to reach their targets before the economic crisis. By ratifying the Kyoto Protocol, Slovenia committed to reducing greenhouse-gas (GHG) emissions by an average of 8%[1] in 2008–2012 compared with baseline emissions in 1986. In 2008–2009 GHG emissions in Slovenia were 0.5% higher on average than in the base year (excluding carbon sinks[2]), in contrast to the average GHG emissions in more developed Member States (EU-15), which were 9.5% lower.[3] 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. The increase in GHG emissions in Slovenia after the transition period was due to faster economic growth than in the EU as a whole, coupled with a slower improvement, i.e. decline, in emission intensity[4] in recent years. Slovenia generated 11.1% more emissions per unit of GDP in PPS than the EU average in 2005, and 18.7% more in 2009.

In 2010 GHG emissions remained at a similar level as in 2009, but the decline in the emission intensity of the Slovenian economy slowed significantly in the 2008–2010 period. After peaking in 2008, GHG emissions in Slovenia decreased substantially in 2009 as a result of the crisis. With economic activity remaining weak, GHG[5] emissions in 2010 remained similar to those in the previous year (up 0.2%). Emissions in 2010 were down 4.1% on the base year of the Kyoto Protocol, while emissions during 2008–2010 were down 1.0% overall. Over the entire 1986–2010 period, the structure of emissions underwent significant changes, with an increase in emissions from expanding road transport (up 163%) cancelling out the benefits of any reduction in emissions in other sectors. The share of transport emissions stood at 10% in 1986, but climbed to 27% in 2010. In 2010 transport emissions fell for the second consecutive year.[6] The consumption of diesel fuel rose as a result of the recovery in international trade and hence the increased need for freight transport, but the increase was smaller than the fall in petrol consumption. Emissions from most other sources also declined relative to the previous year. Emissions from the energy sector, which is the largest source of emissions (accounting for 32% of the total), increased most in 2010. Energy-related emissions are almost entirely due to thermal power plants. In 2010 output rose by 2% and emissions by 2.1%. At the level of the total economy, GHG emissions remained nearly unchanged amid modest growth in GDP, and consequently, the emission intensity of the economy dropped somewhat compared with 2009 (by 1.1%). In the whole period since 2008 Slovenia has thus made only slow progress towards improving the emission intensity of the economy.

Meeting the 2020 targets will be critically dependent on transport emissions. Within the Climate and Energy Package, the EU set a target of at least a 20% reduction in GHG emissions by 2020, which is also part of the EU 2020 Strategy. For those involved in the EU Emissions Trading System (EU ETS), the target is determined for the EU as a whole (a 21% reduction by 2020 compared with 2005). The EU ETS primarily includes larger installations from the energy and manufacturing sectors, which accounted for about 42% of total emissions in Slovenia in 2010, and which, according to our calculations, reduced emissions by 6.9% compared with 2005. For emissions by sectors not included in the ETS (transport, buildings, agriculture and waste), targets are set for each country separately; for Slovenia a 4% increase is allowed. In 2010, these emissions were 1.9% lower than in 2005, but it was precisely these emissions that had been growing fastest before the crisis. The European Commission estimates[7] that, taking into account the adopted measures and previous trends, the emissions from sectors not included the EU ETS will be 30% higher in Slovenia in 2020 than in 2005. Despite certain positive shifts in the last few years, Slovenia will have to focus more on measures in these areas, and their effectiveness will to a large extent depend on a successful reduction of transport emissions.

[1] If Slovenia demonstrates proper forest management, it could also include sinks in the amount of 1.32 Mt CO2 equivalent from the increase in the growing stock (6.5% of total base-year emissions) in meeting the Kyoto commitments. In addition, countries have the option of purchasing part of the required reduction that they cannot achieve at home from other Member States via the so-called flexible mechanisms.

[2] Including sinks, total GHG 2008–2009 emissions in Slovenia were on average around 2% higher than the Kyoto target.

[3] SThe common EU-15 target is an emission reduction target of 8% compared to the base year of 1990, but the targets for individual countries differ. Most new EU Member States have the same GHG reduction target, about 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.

[4] 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.

[5] Data from the Slovenian Environment Agency (ARSO), 2012.

[6] After a 13.3% decline in 2009, by a further 1.2%.

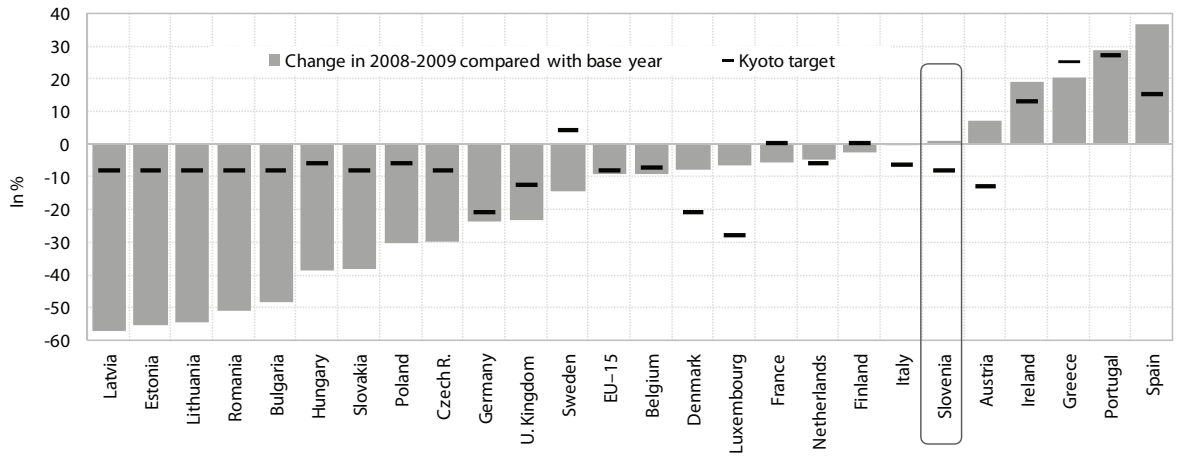
[7] Analysis of options beyond 20% GHG emission reductions: Member State results, 2012.

Table: **Greenhouse gas emissions (in kt CO_2 equivalent), Slovenia, 1986–2010**

	1986*	2000	2005	2006	2007	2008	2009	2010
TOTAL	**20,354**	**18,880**	**20,341**	**20,580**	**20,709**	**21,431**	**19,477**	**19,522**
Transport	2,008	3,763	4,442	4,652	5,227	6,152	5,337	5,272
Energy	6,729	5,498	6,325	6,379	6,596	6,388	6,091	6,219
Fuels in industry	4,406	2,269	2,486	2,593	2,346	2,305	1,918	1,900
Industrial processes	1,328	1,063	1,373	1,433	1,447	1,327	973	971
Fuels in households	2,366	3,051	2,583	2,358	1,912	2,277	2,187	2,228
Agriculture	2,334	2,137	2,006	2,023	2,078	1,965	1,996	1,963
Waste	566	683	713	729	692	619	583	577
Other	618	417	413	412	409	397	393	392

Source: ARSO. Report on GHG emissions, 2012.
Note. * Base-year emissions under the Kyoto Protocol.

Figure: **Greenhouse gas emissions[1] compared with the Kyoto base year, 2008–2009 average, and targets[2]**



Source: UNFCCC, 2011.
Note: [1] Excluding emissions related to LULUCF, sinks and emissions in aviation and maritime transport. [2] The gap between the average GHG emissions in 2008–2009 and the Kyoto targets is only an approximate estimate of meeting the Kyoto Protocol commitments, as it excludes sinks and flexible mechanisms, and takes into account the actual emissions in EU ETS sectors.

Emission-intensive industries

After lagging behind for two years, in 2010 emission-intensive industries once 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[1] in Slovenia grew faster than the output of other manufacturing industries. The gap vanished in 2008, when there was a decline in emission-intensive output, primarily as a result of lower aluminium production, while production in other industries increased. The decline in the output of emission-intensive industries deepened in 2009, as did the decline in other industries. With a general increase in output in 2010, there was an above-average increase in emission-intensive output again for the first time in two years,[2] while the share of value added (VA) of emission-intensive industries in total manufacturing increased to 24.2%. Slovenia has one of the highest shares of emission-intensive industries in value added in manufacturing in the EU[3] (see Figure). 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 is likely to have a greater effect[4] 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 reducing energy intensity and to proceed with technological restructuring in emission- and energy-intensive industries.

In 2010, Slovenia recorded a larger decline in energy intensity in manufacturing than in the previous year, but with regard to the substantial reduction in 2006–2008, the 2010 results remain modest. Decomposition[5] analysis of energy consumption in manufacturing shows that the higher consumption of energy in 2010 mainly resulted from higher output. In a year of a renewed increase in production activity, the positive contribution of this factor was to be expected (in 2009 this contribution was strongly negative). The increase in energy consumption in 2010 was again partly the result of a structural effect (an increase in the share of value added of sectors that consume more energy per unit of value added). The increase in energy consumption due to the structural change in manufacturing is attributable to high production activity in the energy-intensive manufacture of basic metals in 2010 (26.1% growth in value added, compared with a 7.4% increase in value added in manufacturing as a whole). In 2007–2009, the structural effect made a negative contribution to energy consumption in manufacturing, largely owing to low production activity in the manufacture of other non-metallic mineral products, a sector strongly tied to construction activity. The decline in energy consumption in 2010 was only due to lower energy intensity within individual industries, which is an important indicator of qualitative changes. The impact on the improvement (i.e. decline) in the energy intensity of individual industries was relatively modest compared with the 2006–2008 period, albeit much more favourable than in 2009. Given that lower energy intensity in manufacturing is, in most cases, linked to the replacement of old technology by more efficient technology, which requires investment, the slowdown in 2009 and 2010 can also be attributed to the lower possibilities of such investment in a time of financial and economic crisis; moreover, a portion of energy consumption is fixed. Final energy consumption[6] per unit of value added in total manufacturing (reflecting both the effect of energy intensity of individual industries and the structural effect), which declined at an average annual rate of 1.3% in 2001–2004, actually increased in 2005 (by around 2%). A favourable shift was then recorded in 2006–2008, with energy intensity declining by around 7.5% on average each year. In 2009 and 2010 the decline in final energy consumption per unit of value added in manufacturing slowed: it dropped by 0.9% in 2009 and by 2.6% in 2010.

[1] According to the World Bank methodology and the categories in the Standard Classification of Economic Activities, emission-intensive industries include: 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.

[2] The increase in the output of emission-intensive industries in 2010 was based on strong growth in the manufacture of basic metals and in the chemical industry. In the manufacture of other non-metallic mineral products (lime, plaster, etc.), output continued to shrink due to low demand from the construction sector, while the manufacture of paper, similar to that in the EU, recorded more modest growth than the manufacturing sector as a whole.

[3] In 2009, these industries generated 22.8% of total value added in manufacturing in Slovenia (compared with the EU average of 18.8%); in addition, in Slovenia manufacturing also has a higher share in total value added in the total economy (19.6%; compared with the EU average of 14.8%). The share of the chemical industry is particularly high compared with the EU average. The shares of the manufacture of non-metallic products and the paper industry are also higher.

[4] The adopted climate and energy package and the emission 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.

[5] 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 output level, change in output structure and change in energy intensity within individual industries.

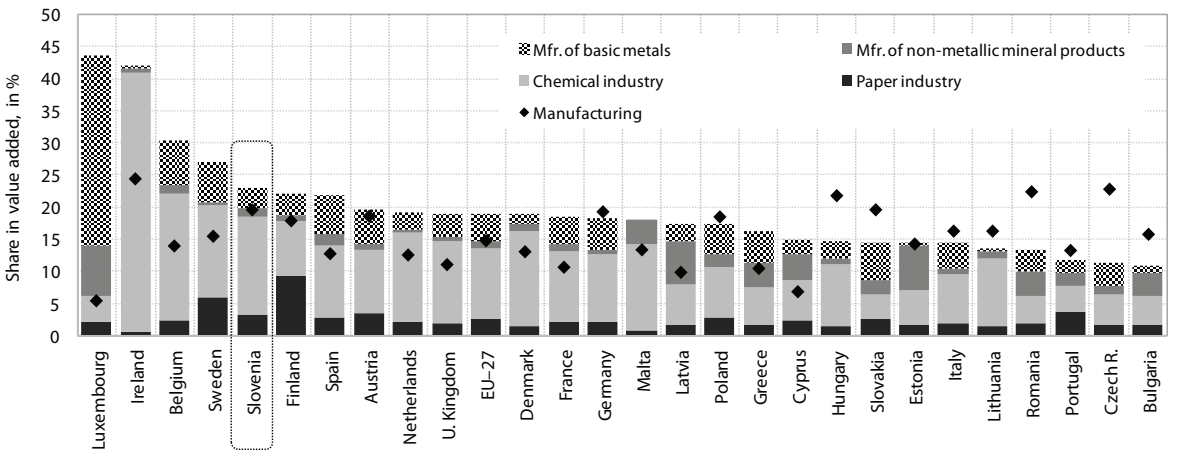
[6] Energy consumption by activity, in TJ (SORS).

Table: **Indices of growth in output and value added in manufacturing and emission-intensive industries**

Real growth index	2000	2005	2006	2007	2008	2009	2010	2011
Value added in manufacturing	109.8	103.5	107.4	108.4	100.2	83.0	107.4	102.9
Output in manufacturing	107.1	104.0	106.2	108.5	102.6	81.3	106.6	102.6
Output in emission-intensive industries	108.2	104.2	112.1	114.3	93.7	81.2	108.9	102.7
Manufacture of pulp, paper and paper products	105.1	102.5	99.0	98.5	89.8	89.8	101.3	100.7
Manufacture of chemicals, chemical products and man-made fibres	110.4	107.6	113.0	121.7	101.0	85.8	114.7	102.4
Manufacture of other non-metallic mineral products	96.4	93.1	106.2	105.8	102.5	72.4	98.7	93.5
Manufacture of basic metals	111.9	103.2	119.6	106.7	68.6	70.3	109.5	111.1
Output in manufacturing excluding emission-intensive industries	106.8	103.9	104.8	107.1	104.7	81.3	106.1	102.6

Source: SI-STAT Data Portal – National accounts and Mining and manufacturing (SORS), 2012; calculations by IMAD.
Note: industrial-production indices were calculated from volume data until 2004, and from value data from 2005.

Figure: **Share of emission-intensive industries in manufacturing and share of manufacturing in value added of the total economy, EU Member States, 2009**



Source: Eurostat Portal Page - Economy and Finance – National Accounts, 2012; calculations by IMAD.

Energy intensity

In terms of energy intensity, Slovenia ranked worse than most EU Member States in 2010 and its gap with the EU average was wider than in 2005. With regard to energy intensity calculated as energy consumption per unit of GDP in purchasing power standards (PPS),[1] Slovenia was ranked 16th among EU Member States in 2005, and three places lower in 2010. On this indicator, Slovenia's energy intensity was 19.2% higher than the EU average in 2010 (in 2005, 12.7%). The differences between countries result from both the structure of the economy (the share of service activities, energy-intensive industries, transport volume, etc.) and differences in energy efficiency within industries. Generally, new Member States are more energy intensive than the older members, but the gaps with the EU average are closing.[2] In previous years similar developments had also been seen in Slovenia, but in 2007–2009 this trend came to a halt, as in 2009 energy intensity deteriorated, or improved more slowly than in the EU as a whole, where it continued to decline. Energy intensity then rose in both the EU and Slovenia in 2010 (by 1.2% and 0.8%, respectively). With GDP recording somewhat lower growth than energy consumption, energy intensity in Slovenia is also estimated to have deteriorated slightly in 2011.

The increase in total energy consumption in 2010 (2.2%) mainly resulted from higher demand for energy by households and industry. The consumption of energy for transformation (transformation losses) declined by 0.9% in Slovenia in 2010, while final energy consumption rose by 3.7%. The most notable growth was recorded by final energy consumption by households, at 5.4%, with nearly half of the increase being covered by higher consumption of wood. In industry (particularly in the metal industry and in the manufacture of machinery and equipment), energy consumption expanded by 4.9%, largely due to increased consumption of electricity and gas. Final energy consumption in services and road transport grew as well, by 2.6% and 1.5%, respectively, but these two sectors made a smaller contribution to the increase in total energy consumption in Slovenia in 2010.

Total energy consumption in Slovenia increased in 2005–2010, primarily due to further strong growth in energy consumption in road transport, while it declined in the EU. In the period including the crisis year of 2009, total energy consumption in Slovenia grew at a 0.3% annual rate, in contrast to that in the EU, which declined by 0.6%. Final energy consumption in road transport, which did not increase in the EU, was still rising in Slovenia by an average of 4.5% per year. The latter can mainly be explained by higher growth rates before the crisis, though this trend slowed somewhat in 2009 and 2010. Nevertheless, energy consumption in road transport in 2010 was 22.4% higher than in 2005, and 35.8% higher than in 2003, i.e. before the last major enlargement of the EU, when external trade flows through Slovenia soared. Moreover, energy consumption in road transport was also attributable to prices of automotive fuels being lower than in neighbouring countries, resulting in increased fuel purchases by vehicles in transit.

The higher energy intensity in Slovenia also reflects the industrial structure of the economy. Slovenia is still among the EU Member States where manufacturing accounts for a high share of total value added in the economy (19.4% in 2010; 14.9% in the EU overall). Energy consumption per unit of value added in manufacturing is also higher than in the EU as a whole. With the restructuring of the economy towards a higher share of less energy-intensive service activities, and by improving energy efficiency in manufacturing, we can expect the downward trend in energy intensity to continue in the future. More pronounced changes will however depend on the speed of technological development and a wide array of measures to promote energy efficiency.

[1] For methodological purposes, GDP in purchasing power standards (PPS) is used in the international comparison for a given year.

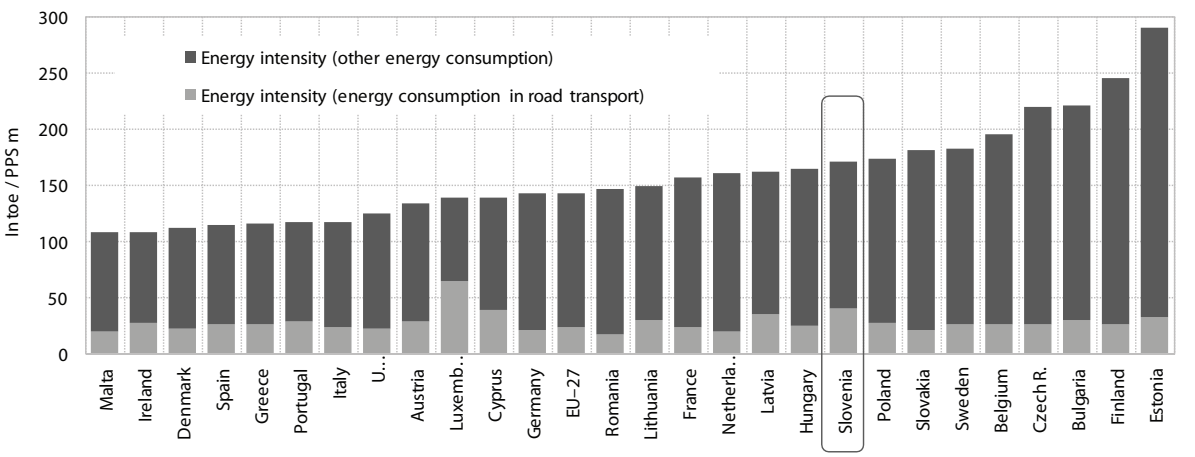
[2] In the time comparison, the indicator of comparison of primary energy consumption per unit of GDP at constant prices is taken into account.

Table: **Energy intensity (primary energy consumption per unit of GDP), toe/EUR m, 2000 prices,** 2000 exchange rate

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**209.0**	**187.4**	**180.6**	**174.9**	**167.9**	**166.6**	**164.6**	**166.7**
Austria	153.1	140.0	151.8	146.8	140.2	139.0	136.7	142.4
Belgium	246.8	234.5	215.8	207.9	197.4	204.5	205.1	212.2
Bulgaria	1638.8	1332.9	1095.6	1057.6	977.6	910.4	842.5	853.8
Cyprus	242.0	240.5	216.0	215.5	214.2	217.7	216.2	207.2
Czech Republic	716.4	647.3	581.2	555.6	525.0	498.0	488.8	503.1
Denmark	134.5	114.0	107.0	110.6	106.5	100.4	108.7	105.2
Estonia	1243.2	806.0	639.1	566.1	588.3	591.7	622.2	701.3
Finland	282.7	249.0	232.9	243.3	228.5	218.7	225.7	234.3
France	191.6	179.1	177.4	170.9	165.4	166.6	163.7	166.7
Greece	203.2	204.9	186.7	177.9	172.9	174.5	173.9	169.3
Ireland	165.7	134.6	113.1	109.5	107.3	110.1	110.8	112.7
Italy	149.4	146.7	149.8	145.3	141.6	140.5	138.5	140.8
Latvia	706.8	443.7	358.1	332.2	312.1	311.3	356.6	375.1
Lithuania	947.0	575.1	485.3	442.0	435.2	424.3	453.8	360.1
Luxembourg	202.9	164.9	183.3	171.8	157.9	156.8	155.8	161.8
Hungary	603.5	502.6	448.8	428.6	419.8	413.8	419.9	424.9
Malta	267.0	186.2	216.0	197.3	201.1	192.2	184.4	181.2
Germany	183.3	167.8	164.0	159.5	150.4	150.2	150.7	149.6
Netherlands	213.7	183.2	184.9	173.8	179.2	171.9	173.3	181.5
Poland	700.8	483.6	430.6	426.3	397.4	384.1	363.9	373.6
Portugal	199.7	197.2	206.5	190.9	190.7	183.0	186.4	179.7
Romania	1095.8	906.0	733.0	704.8	659.1	612.8	575.1	588.0
Slovakia	962.4	815.4	681.6	623.6	533.8	518.4	497.8	502.0
Slovenia	**348.2**	**298.4**	**283.8**	**269.2**	**252.2**	**257.4**	**256.3**	**258.4**
Spain	198.2	196.8	195.2	187.9	183.8	176.7	168.5	168.5
Sweden	223.0	177.7	168.9	157.9	152.3	152.4	147.0	156.3
United Kingdom	165.7	144.7	126.5	121.6	113.4	113.2	112.2	112.4

Source: Eurostat Portal Page – Environment and Energy and Economy and Finance, 2012; calculations by IMAD.

Figure: **Energy intensity (calculated from GDP in PPS) in EU Member States in 2010**



Source: Eurostat Portal Page – Environment and Energy and Economy and Finance, 2012; calculations by IMAD.

Renewable energy resources

In 2009 and 2010, the consumption of renewable resources strengthened substantially, which was mainly attributable to one-off factors. Between 1995 and 2008 the share of renewables in total energy consumption in the EU as a whole rose faster than in Slovenia, but this trend temporarily came to a halt in 2009. According to Eurostat's data, the share of renewables rose by over 3 p.p. in Slovenia in 2009, reaching 14.2%, compared with 9.0% in the EU overall (an increase of 1 p.p.). Both shares strengthened further in 2010, to 14.7% and 9.8%, respectively (in Slovenia consumption of renewables grew by 6.4% and total energy consumption by 2.2%). In addition to low economic activity and hence limited total energy consumption, a major factor in Slovenia's high share in both years was the above-average water level and thus higher hydro-energy consumption (more than 25% higher than the average between 2000 and 2008). Another factor in the increase in the share of renewables in Slovenia was the improved capture of data on the consumption of biomass and waste and the inclusion of geothermal and solar energy consumption in statistical monitoring. Based on the ELES data on hydroelectric power output, hydro-energy consumption declined by roughly a fifth in 2011. As economic growth remains weak, growth in total energy consumption is expected to have been low, and the share of renewables is estimated to have dropped once again in 2011 (to below 14%).

In Slovenia, wood and hydro-energy still account for the largest shares in the total consumption of renewables, while the breakdown of renewables in the EU is more varied. Traditional resources, i.e. wood and hydro-energy, accounted for over 88% of total renewables in Slovenia in 2010, compared with less than 67% in the EU. Slovenia stands out particularly in its consumption of hydro-energy; its share in total renewables (over 36%) was the second highest in the EU,[1] and the extensive consumption in 2010 was mainly due to the high water level of rivers. In addition to weather conditions, which cause fluctuations in the consumption of certain renewables from year to year, the volume and breakdown of renewable energy resources mainly depend on each country's natural resources. Renewables account for just a few percent of total energy consumption in the UK and Benelux countries, while Latvia and Sweden generate nearly one third of their total energy from renewables. The consumption of renewables in Slovenia increased by 6.4% in 2010. Most of this growth came from wood and wood waste (54.7%), geothermal energy (34.4%), biofuel (23.4%) and biogas (12.5%). Solar energy contributed very little to the growth in renewables consumption in 2010, while the contribution of hydro-energy was negative.[2] The consumption of renewables in the EU increased more than in Slovenia in 2010, by 12.7%, primarily as a result of (as in Slovenia) increased consumption of wood, hydro-energy and biogas. The consumption of certain renewables has been growing strongly for quite some time, but they still account for a relatively low share in total renewables (for example, photovoltaic energy, 1.1%).

As a result of favourable hydrological conditions, the share of renewables in electricity consumption in Slovenia actually exceeded the energy strategy target in 2010, but it dropped substantially in 2011. In 2009 electricity from renewables accounted for 18.2% of total electricity consumption in the EU, and for a high 36.8% in Slovenia. Even though the hydrological conditions were still relatively favourable, the share declined to 34.4% in 2010 because of higher economic activity and hence higher electricity consumption, but it remained above the target of 33.6% (Resolution on the National Energy Programme / ReNEP, 2004). According to ELES data, production in hydroelectric power plants declined by 20.9% in 2011, while electricity consumption rose by 3.6%. The share of renewables thus dropped significantly, according to our estimate (to around 26%).

Under the EU targets, Slovenia must achieve at least a 25% share of renewable in gross final energy consumption by 2020 (EU-27: 20%).[3] This share increased from 19.0% in 2009 to 19.9% in 2010 in Slovenia. The relatively high growth in 2010 was also the result of the aforementioned one-off factors. Reaching the target of 25% will necessitate an additional increase in incentives for energy efficiency and use of renewables, and continuous adjustment to these incentives. In view of the faster-than-forecast reduction in costs of the construction of photovoltaic devices, the government actually slightly limited the level of support for this energy resource at the end of 2011.

[1] The share of hydro-energy in total energy consumption was the fifth highest in the EU. In most EU countries, including Slovenia, the main renewable energy source is wood (and wood waste).

[2] Despite roughly the same production as in 2009, the contribution of hydro-energy was negative (-17.0%) because some of this energy was produced at the Avče pumped-storage power plant, which is taken into account separately in the energy balance.

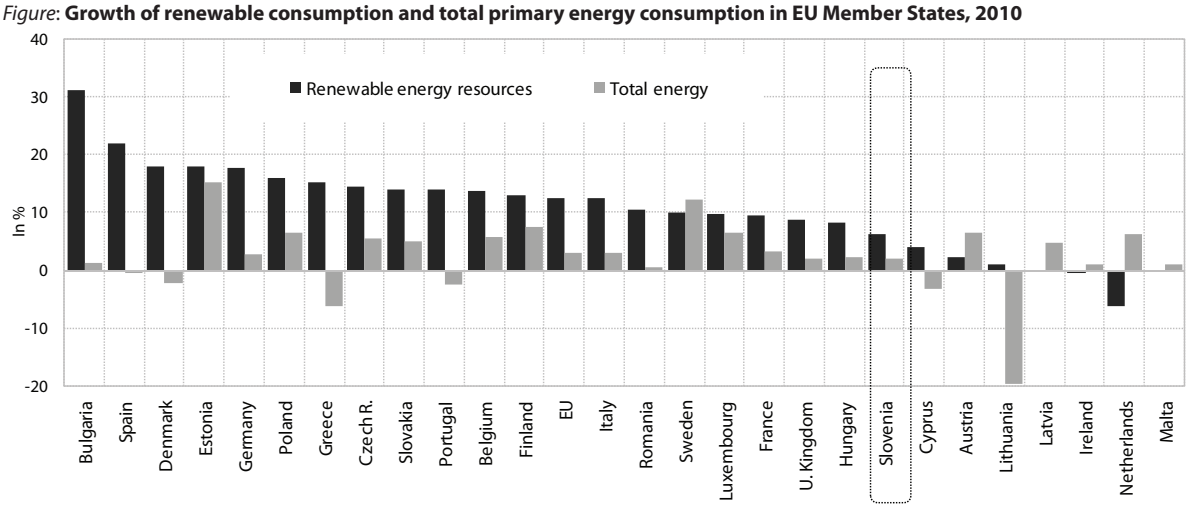
[3] Directive/28/ES. Contrary to the criteria of appropriate allocation and consideration of different positions and potentials of Member States, this directive stipulates a mandatory 10% share of renewables in transport for every Member State. Based on the EU targets, the government adopted the National Renewable Energy Action Plan 2010–2020 (NREAP) in July 2010, specifying sectoral targets and measures for achieving them.

Table: **Share of renewable energy resources in total primary energy consumption, in %**

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**5.0**	**5.6**	**6.4**	**6.8**	**7.4**	**8.0**	**9.0**	**9.8**
Austria	21.6	22.5	20.6	21.6	23.6	24.7	27.3	26.2
Belgium	1.0	1.1	2.0	2.3	2.7	3.1	3.9	4.1
Bulgaria	1.8	4.1	5.5	5.5	4.7	4.8	6.2	8.0
Cyprus	2.3	1.9	2.1	2.1	2.6	3.2	3.5	3.7
Czech Republic	2.8	3.3	3.9	4.2	4.6	4.9	5.7	6.2
Denmark	6.5	9.2	14.5	13.7	15.6	16.8	16.8	20.2
Estonia	6.3	10.3	10.6	9.8	9.9	11.0	13.5	13.9
Finland	20.7	23.5	23.1	22.7	22.9	25.0	23.3	24.5
France	7.1	6.2	5.6	5.8	6.2	6.9	7.4	7.8
Greece	5.4	5.0	5.2	5.6	5.5	5.4	6.1	7.5
Ireland	1.4	1.6	2.4	2.7	3.0	3.6	4.4	4.4
Italy	4.7	5.8	6.2	6.7	6.5	7.5	9.4	10.3
Latvia	27.2	31.8	32.9	30.9	29.6	30.0	36.2	34.6
Lithuania	5.7	9.4	10.0	10.8	10.3	10.9	12.3	15.5
Luxembourg	1.1	1.1	1.5	1.6	2.7	2.8	2.8	2.9
Hungary	3.3	3.3	4.3	4.5	5.1	5.9	7.2	7.7
Germany	1.8	2.6	4.8	5.7	7.7	7.8	8.5	9.7
Netherlands	1.2	1.6	2.6	2.9	2.8	3.4	3.9	3.4
Poland	3.9	4.2	4.8	4.8	5.0	5.6	6.6	7.2
Portugal	16.1	15.0	12.7	16.4	17.1	17.2	19.3	22.5
Romania	5.9	11.0	12.6	11.7	11.7	13.2	14.8	16.3
Slovakia	2.8	2.7	4.2	4.4	5.4	5.4	7.2	7.8
Slovenia	**9.0**	**12.3**	**10.6**	**10.5**	**10.0**	**11.0**	**14.2**	**14.7**
Spain	5.4	5.6	5.8	6.3	6.8	7.4	9.5	11.6
Sweden	25.5	30.9	28.7	28.5	30.4	31.3	34.6	33.9
United Kingdom	0.8	1.0	1.7	1.8	2.1	2.5	3.0	3.2

Source: Eurostat Portal Page – Environment and Energy, 2012.
Note: N/A – not available. Data for Malta not available.

Figure: **Growth of renewable consumption and total primary energy consumption in EU Member States, 2010**



Source: Eurostat Portal Page – Environment and Energy, 2012; calculations by IMAD.

Share of road transport in total freight transport

The share of road freight transport declined in 2010, interrupting its rapid upward trend seen in previous years. In the previous decade, the share of road freight transport[1] rose faster in Slovenia than in the EU overall. By 2005 it had already exceeded the EU average, and was nearly 6 p.p. higher a year later (82.3%). In 2010 the volume of rail freight transport increased more (21.4%) than the volume of road freight transport (7.9%), which was partly related to a larger decline in the former in the crisis year of 2009. The volumes of both types of transport thus drew fairly close to the pre-crisis levels, and the share of road transport also returned to a comparable level. In 2010 the share of road freight transport also shrank in the EU as a whole, with both types of transport recording lower growth rates than in Slovenia (road transport 3.9%; rail transport 8.5%). In the first three quarters of 2011, rail freight transport continued to grow somewhat faster than road freight transport, so that the share of road freight transport in total freight transport in Slovenia dropped even further, to 81.3%.

The volumes of both road and rail freight transport per capita in Slovenia are among the highest in the EU. In 2003 the tonne kilometres per capita recorded by transport operators registered in Slovenia were still approximately the same as the EU average, but by 2010 their figure had doubled[2] (89% higher than the EU average; only operators registered in Luxembourg recorded a higher figure). This rapid growth is largely attributable to Slovenia's transit location at the crossing of the trans-European corridors V and X, where transport has increased significantly with the two most recent enlargements of the EU, and partly to low fuel prices. In addition to the above-average volume of road freight transport, Slovenia also recorded a large volume of rail freight transport per capita (114% higher than the EU average in 2010).

From the aspect of sustainable transport policy, the rapid increase in road freight transport is unfavourable, and Slovenia has thus far made no visible progress in modernising its rail infrastructure. The volume of road freight transport in Slovenia in 2010 was 44% higher than in 2005, which is an even smaller increase than in eastern European countries from the EU-10 group (53%). In the same period the volume of road transport in the EU-15 shrank by close to a tenth, so that the volume of road transport in the EU-25 as a whole decreased by 0.5%. Rail freight transport in the EU-25 dropped by around 4% in 2005–2010. In Slovenia rail freight transport was 5% higher relative to 2005, recording a much smaller increase than road transport, on account of the relatively well-developed road infrastructure in that period. Freight transport by railway (and waterways) is much more acceptable from the perspective of sustainable development, and it should thus be encouraged with a view to ending the upward trend in road freight transport. Faster modernisation of railway infrastructure and improved access to the Port of Koper would increase the attractiveness of railway transport. A total of EUR 450 m in EU funding was earmarked from the Cohesion Fund for Slovenia to invest in railway infrastructure in the 2007–2013 period; by the end of 2011, only 15% of the earmarked amount had been allocated for railway projects, and only 4.8% had actually been disbursed.[3]

[1] In total freight transport (roads, railways, inland waterways), in tonne km. In road freight transport, the statistics cover domestic carriers (the volume of carriage by road freight vehicles registered in the country) operating at home and abroad, while in rail transport, the figures indicate the volume carried in the national territory regardless of the operator's country of origin.

[2] Slovenian operators provide a large volume of transport abroad, as is typical for operators from smaller countries.

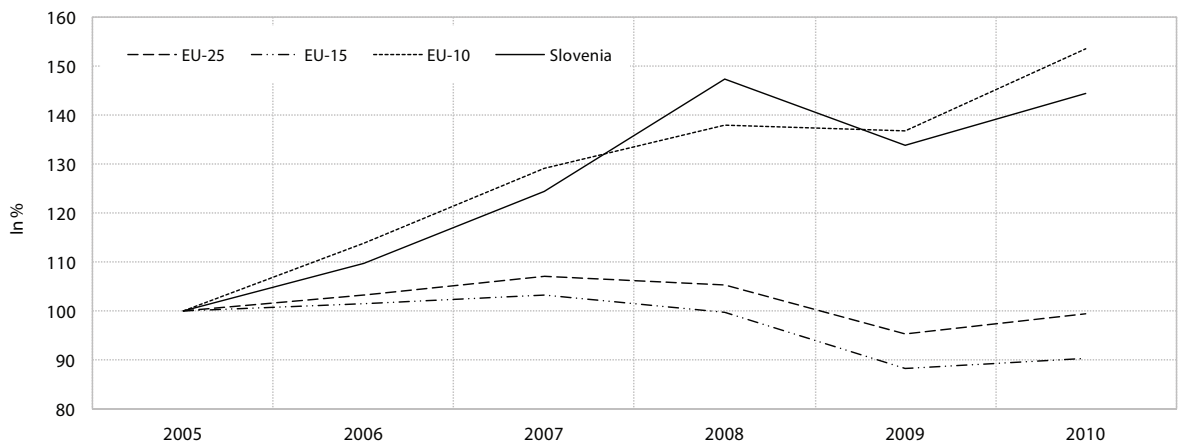
[3] Source: Slovenian Government Office for Local Self-Government and Regional Policy, 2012.

Table: **Share of road transport in total freight transport in tkm (%)**

	1995	2000	2005	2006	2007	2008	2009	2010
EU	**N/A**	**73.7**	**76.4**	**76.2**	**76.2**	**76.2**	**77.5**	**76.5**
Austria	63.5	64.8	64.1	63.2	60.9	58.6	59.5	56.3
Belgium	77.4	77.4	72.4	71.1	69.7	68.5	72.9	70.7
Bulgaria	N/A	52.3	70.8	69.0	70.0	66.9	67.4	68.1
Cyprus	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Czech Republic	57.5	68.0	74.4	76.1	74.7	76.7	77.8	79.0
Denmark	91.8	92.1	92.2	91.8	92.2	91.3	90.8	87.0
Estonia	28.7	37.3	35.4	34.7	43.2	55.3	47.3	45.8
Finland	72.3	75.8	76.5	72.8	73.9	73.3	N/A	75.0
France	76.5	76.0	80.5	80.9	80.9	80.7	81.0	82.2
Greece	97.7	np	97.5	98.1	97.1	97.3	97.8	98.6
Ireland	90.1	96.2	98.3	98.8	99.3	99.4	99.4	99.2
Italy	88.2	89.0	90.3	88.5	87.6	88.3	91.0	90.4
Latvia	15.8	26.5	29.8	39.0	41.9	38.7	30.2	38.1
Lithuania	41.6	46.6	56.1	58.4	58.5	58.0	59.9	59.1
Luxembourg	85.9	87.8	92.3	91.5	93.8	94.2	94.6	93.5
Hungary	58.3	68.1	69.2	71.6	74.5	74.7	78.8	75.1
Malta	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Germany	63.9	65.3	66.0	65.9	65.7	65.5	67.0	64.9
Netherlands	63.6	63.4	63.6	63.1	59.4	59.9	63.4	62.1
Poland	42.6	56.9	69.0	70.4	73.5	75.9	80.5	81.2
Portugal	90.3	92.5	94.6	94.9	94.7	93.9	94.3	88.4
Romania	42.0	42.9	67.3	70.5	71.3	70.2	60.0	49.2
Slovakia	63.7	53.0	70.3	68.8	71.8	73.8	77.9	74.8
Slovenia	**64.9**	**71.9**	**77.3**	**78.2**	**79.2**	**82.2**	**84.0**	**82.3**
Spain	90.3	92.8	95.2	95.4	95.9	95.9	96.6	96.3
Sweden	62.0	63.9	64.0	64.2	63.6	64.7	62.5	60.7
United Kingdom	92.3	90.0	87.8	85.8	86.6	86.5	86.7	88.7

Source: Eurostat Portal Page – Structural Indicators in Transport, 2012; calculations by IMAD for 2010.
Note: N/A – not available.

Figure: **Volume of road freight transport (tkm) in Slovenia and the EU, 2005–2010**



Source: Eurostat Portal Page – Transport, 2012; calculations by IMAD.
Note: Data for Malta not available.

Environmental taxes

Slovenia receives above-average revenues from environmental taxes, which is primarily the result of large energy consumption in transport. In 2009 revenues from environmental taxes amounted to 3.6% of GDP in Slovenia, while the EU average was 2.4%. The difference can be attributed to higher revenue from taxes on energy. In addition to tax rates, revenues from environmental taxes are also affected by the structure of the economy and the efficiency of the use of resources. A high share of revenue from energy taxes can thus be a reflection of greater energy consumption per unit of GDP or the higher energy intensity of the economy. In Slovenia this is mainly a result of high fuel consumption in transport,[1] which resulted in higher revenues from energy taxes over the entire period analysed. In 2009 an additional contribution came from substantially higher excise duties on automotive fuels. As oil prices on global markets fell and the need for fiscal revenue increased, excise duties were raised by over 30% and came close to the EU average.[2] The implicit tax rate on energy consumption therefore rose as well, from EUR 121.8 per toe in 2008 to EUR 163.2 per toe, which is similar to the EU average (EUR 161.5 per toe). Revenues from transport taxes in Slovenia remain below the EU average (Slovenia: 0.41% of GDP; EU: 0.53% of GDP), despite the above-average ownership of means of transport.[3] As in most other EU Member States, taxes on pollution and the use of natural resources account for a relatively low share of revenue relative to GDP (Slovenia: 0.15% of GDP; EU: 0.1% of GDP). Denmark is notable for its high fiscal revenue from these taxes, because of higher revenues from taxes that are also collected in Slovenia and because of a broader set of taxes.

The share of revenues from environmental taxes in 2010 remained at the level of the previous year. Revenues from environmental taxes rose by 2.3% in nominal terms in Slovenia in 2010, meaning that with a simultaneous increase in economic activity, their ratio to GDP remained around 3.6%.[4] Broken down by individual categories of environmental tax, the largest contribution to the increase came from energy taxes, largely due to higher electricity taxation.[5] Excise duties on diesel fuel did not track the increase in excise duties on petrol. The differences in taxation between the two types of fuel thus increased further,[6] even though from the perspective of the harmful effects on the environment and public health it would be more sensible to increase taxation of diesel fuel. Excise duties on automotive fuels, which accounted for close to 80% of revenues from environmental taxes in 2010, primarily pursue macroeconomic goals, which lessens the effectiveness of this tax as an environmental policy instrument. While taxation of energy increased in 2010, final energy consumption also rose, so that the implicit tax rate on energy consumption declined somewhat according to our estimate, to around EUR 160 per toe. It should be noted that prices of automotive fuels and electricity in Slovenia remained below the EU average, despite the pronounced increases in energy taxation in 2009 and 2010. Revenues from taxes on pollution and the consumption of natural resources relative to GDP also remained nearly unchanged in 2010 (from 0.15% of GDP in 2009 to 0.17% of GDP). Revenues from taxes on water pollution and charges for water consumption increased, while the rates of local utility charges have been left unchanged for several years. In contrast, revenues from taxes on transport and the ownership and use of means of transport continued to decline in 2010, mainly due to lower revenues from registration fees on vehicles paid by legal entities. A small decline was also recorded by revenues from taxes on new motor vehicles.[7] Since March 2010, the rates of this tax have been determined with a view to encouraging the purchase of vehicles that put less burden on the environment, which has proved effective according to the preliminary data.[8]

[1] Among EU Member States, only Luxembourg and Cyprus recorded larger contributions of fuel consumption in road transport to energy intensity. In addition, the tax burden on automotive fuels is usually higher than on other energy products. Revenue thus also depends on the structure of the tax base, in addition to its size.

[2] Changes in excise duties on automotive fuels have a significant impact on energy taxes, as excise duties account for more than 90% of energy taxes in Slovenia.

[3] In 2009 Slovenia had 521 cars per 1,000 inhabitants. Only four EU Member States recorded a higher figure.

[4] IMAD's estimate based on SORS and MF data.

[5] A contribution for energy efficiency was introduced in 2010, while excise duties on electricity were raised in August. In addition to higher electricity taxation, the increase in revenue was also the result, albeit to a lesser extent, of higher electricity consumption in 2010. Excise duty on petrol was also raised slightly in 2010 (by around 3%), but had no significant impact on revenue due to the comparably lower consumption.

[6] Disregarding excise duty refunds under the excise duty refund scheme for commercial diesel fuel, the excise duty on petrol was 13% higher than the excise duty on diesel fuel in 2010 as a whole. The gap in taxation between the two types of fuel widened further in 2011, to 22%.

[7] The largest transport tax revenues were generated from registration fees on vehicles paid by individuals. These revenues rose in 2010, but the increase was smaller than the decline in registration fees for legal entities and the tax on sales of new motor vehicles.

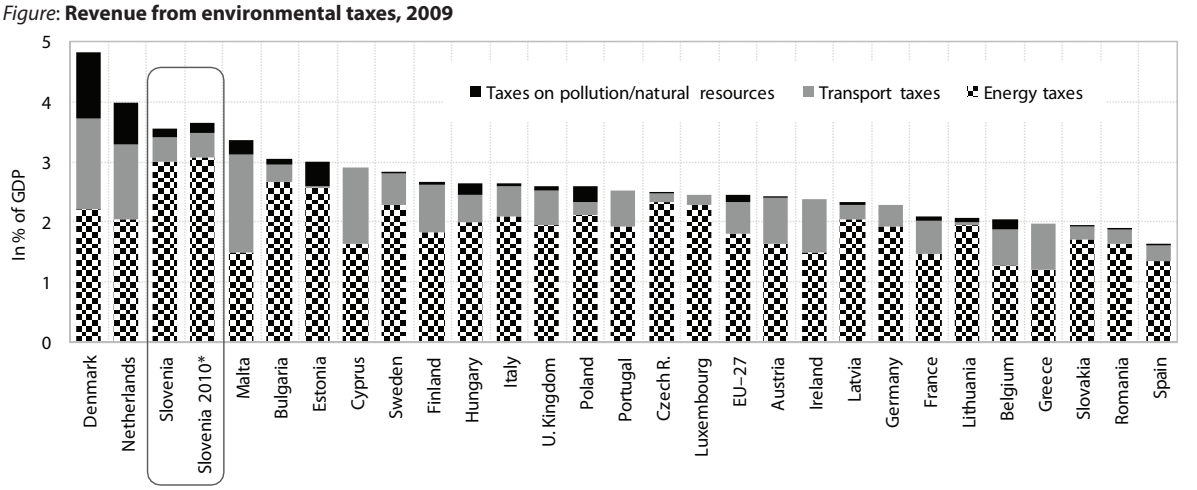
[8] In the structure of new motor vehicles the shares of more-efficient vehicles (in emission terms) and petrol-driven cars increased significantly in 2010.

Table: **Implicit tax rate on energy consumption,[1] in EUR/toe**

	1995	2000	2005	2006	2007	2008	2009
EU-27	**159.6**	**171.1**	**163.9**	**162.7**	**163.7**	**155.4**	**161.5**
Austria	128.5	141.6	145.9	142.5	148.2	148.7	149.7
Belgium	97.9	92.4	106.9	103.0	112.0	96.4	103.3
Bulgaria	429.9	40.6	51.9	50.4	66.2	71.7	72.0
Cyprus	30.6	43.1	129.4	126.7	123.1	110.4	113.8
Czech Republic	50.0	55.2	93.0	98.9	108.1	126.9	125.1
Denmark	219.3	301.0	290.2	278.8	272.2	267.1	285.6
Estonia	9.6	31.6	63.8	67.4	69.2	72.4	89.9
Finland	103.1	108.7	110.6	104.4	101.8	111.8	118.4
France	177.6	174.2	163.8	163.5	161.0	153.2	158.3
Greece	206.1	117.3	100.4	96.5	102.3	99.5	105.8
Ireland	136.5	140.7	154.0	150.1	163.8	152.0	176.5
Italy	268.7	245.8	201.7	202.7	196.8	187.2	207.8
Latvia	13.7	48.2	54.8	52.6	49.9	48.9	51.9
Lithuania	14.9	57.9	78.4	74.5	77.5	78.5	94.9
Luxembourg	173.8	164.4	174.0	161.8	161.2	166.0	166.2
Hungary	111.6	79.7	85.0	82.8	93.5	92.8	N/A
Malta	78.8	180.8	128.5	138.6	189.1	146.9	170.3
Germany	172.4	192.7	202.2	198.1	198.5	190.7	202.8
Netherlands	121.0	153.4	182.1	192.7	183.8	193.0	201.7
Poland	34.7	59.0	84.5	87.6	97.6	105.3	83.8
Portugal	191.4	111.8	149.2	148.3	150.4	143.8	np
Romania	160.3	58.2	24.7	26.2	32.2	25.2	26.6
Slovakia	40.1	42.4	64.7	67.2	76.5	84.2	80.3
Slovenia	**180.2**	**118.6**	**114.6**	**113.6**	**123.8**	**121.4**	**163.2**
Spain	147.5	137.9	119.3	119.9	117.6	114.7	122.7
Sweden	140.3	179.7	196.8	199.2	196.5	188.6	178.6
United Kingdom	152.3	245.8	211.5	208.5	216.7	178.7	177.4

Source: Eurostat Portal Page – Sustainable Development Indicators, 2012.
Note: [1] Revenue from energy taxation (deflated) per unit of final energy consumption in thousand tonne of oil equivalent (toe); N/A – not available.

Figure: **Revenue from environmental taxes, 2009**



Source: Eurostat Portal Page – Environment and Energy, 2012.
Note: * IMAD estimate.

Agricultural intensity

The consumption of all mineral fertilisers, including the consumption of NPK fertilisers[1], which is displaying a downward trend, rose in 2010. Consumption of mineral fertilisers in agricultural production in 2010 was up 10.7% on 2009 (consumption of NPK fertilisers was up 11.8%). Measured per hectare of utilised agricultural area (UAA), which increased in the analysed year,[2] this was 102.9 kg NPK fertilisers per hectare, 8.5% more than in the previous year. Having decreased in the preceding period, consumption in 2010 was around the same level as in 2008, yet approximately a third lower than in 2000. Fertilisation intensity does not only affect the quantity and quality of produce but is also important from the environmental perspective, as inexpert and excessive consumption of fertilisers may increase the intensity of pollution of aquifers and consequently, drinking water. Despite the relatively rapid downward trend, the consumption of NPK fertilisers in Slovenia is still much higher than in the EU as a whole. It is also higher than in Italy, Austria and Hungary, where it is below the EU average[3] (2009 figures: Slovenia 94.8 kg/ha, EU 76.9 kg/ha, Italy 67.1 kg/ha, Austria 36.0 kg/ha, Hungary 63.5 kg/ha).

Pesticide consumption continued to drop in 2010. The total quantity of active ingredients in pesticides sold in Slovenia, which are not used solely in agriculture, decreased by 2.5% in 2010, and was down almost a quarter on 2000. Measured per unit of UAA, this was a decline of more than 5% relative to the previous year. Sales of insecticides and herbicides continued to drop at a more rapid pace (10.8% and 8.0%, respectively), while sales of fungicides declined more slowly (0.7%).[4] 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.[5] However, a rough comparison of pesticide consumption per unit of UAA shows that countries with similar breakdowns of cultivated plants and similar conditions for agricultural production also have fairly similar pesticide consumptions. Pesticide consumption in Slovenia is higher than in Austria and Hungary, but lower than in Italy.

Agricultural efficiency measured by average yields of the two most important crops improved in 2010, while agricultural efficiency measured in milk yield per animal dropped again. Although for both crops the area sown was smaller than a year earlier, the harvest, which is also highly dependent on weather conditions, was one of the best in the whole period analysed. The yields per unit of area sown with wheat and maize increased by 21.2% and 9.0%, respectively. The yields in Slovenia are much lower than in the EU as a whole for both wheat (2009 figures: Slovenia 4.0 kg/ha, EU-25 5.8 kg/ha) and maize (2009: Slovenia 7.8 kg/ha, EU-25 8.5 kg/ha EU-25), which is an indicator of the relatively poor exploitation of natural resources. Conversely, Slovenia has a relatively high environmental load from livestock production measured by the number of animals per unit of utilised agricultural area. GHG emissions from this source are therefore relatively high, although in a downward trend.[6] At the same time the average milk yield per animal, one of the most important indicators of the efficiency of animal production in livestock farming, is fairly low.[7] After the relatively rapid increases in the previous years, it fell in 2010 for the third consecutive year, to 5.3 l. The average milk yield per animal in Slovenia is significantly below the EU average, and lower than in all neighbouring Member States (2009 figures: Slovenia 5.5 l/animal, EU-15 6.6 l/animal, Italy 6.2 l/animal, Austria 6.1 l/animal, Hungary 6.7 l/animal).

Organic and integrated farming increased in 2010, but relatively little compared with its growth in 2000–2007. The total areas under controlled sustainable (organic and integrated) farming rose by 3.1% in 2010; area cultivated with integrated methods was up 2.4%, while area cultivated organically, which is one of the most efficient ways of sustainably using natural resources, was up 4.5%. Overall 18.6% of UAA was under controlled sustainable farming, two thirds in integrated and one third in organic farming. The number of agricultural holdings with organic farming also increased again, including the number of newly registered holdings shifting to organic farming. In the last few years the increases have no longer met the targets set in the Rural Development Programme 2007–2013 (64 thousand hectares by 2013) and the Action Plan for Organic Farming (20% of UAA by 2015). Only 30.7 thousand hectares of land were organically

[1] NPK fertilisers are mineral fertilisers that contain the three most important plant nutrients: nitrogen, phosphorus and potassium.

[2] Utilised agricultural area expanded by 3.1% in 2010, from 468 thousand to 483 thousand hectares.

[3] Comparison with neighbouring countries that have similar conditions for agricultural production.

[4] Insecticides are chemical agents used for pest control; herbicides are used for weed control and fungicides for plant disease control.

[5] Slovenia uses a significant amount of older types of pesticides. They are biologically weaker and have to be used in greater quantities, but place a lower load on the environment.

[6] According to data and calculations by the Agricultural Institute of Slovenia.

[7] A higher milk yield is desirable, as it would imply a lower environmental load per unit of milk production (Agricultural Institute of Slovenia, 2011).

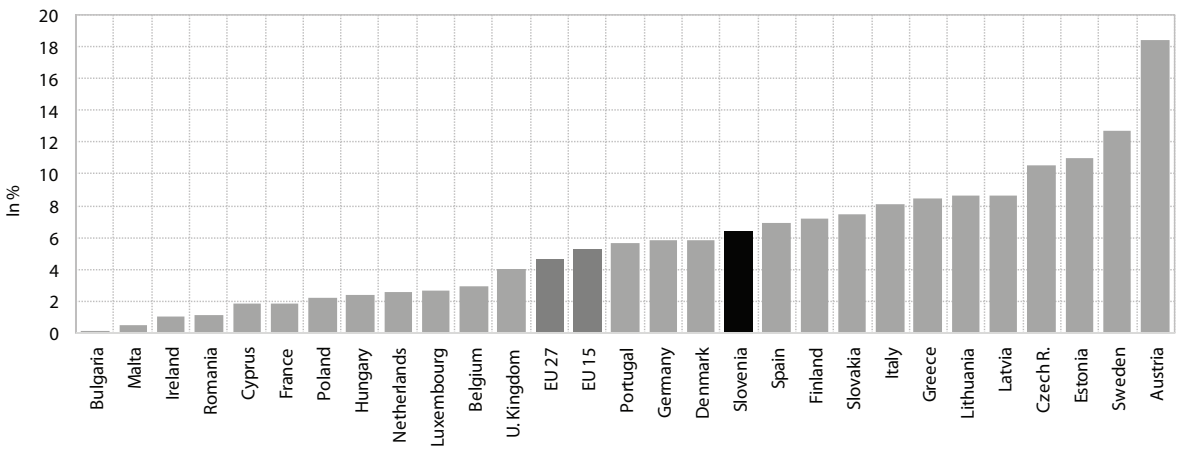
farmed in 2010, which is 6.4% of UAA. In view of the substantial increases in the early period, the share of controlled areas with organic farming in Slovenia is higher than in the EU as a whole, and higher than in Hungary, yet lower than in Italy and much lower than in Austria (2009 figures: Slovenia 6.3%, EU 4.7%, Italy 8.1%, Austria 18.5%, Hungary 2.4%).

Table: **Selected agricultural intensity indicators in Slovenia, 1995-2010**

	1995	2000	2005	2006	2007	2008	2009	2010
NPK fertiliser use								
Use per unit of utilised agricultural area, kg/ha	134.6	146.8	115.3	119.6	115.6	104.9	94.8	102.9
Pesticide sales								
Pesticide sales – total, active substance, thousand t	N/A	1.47	1.41	1.28	1.16	1.22	1.16	1.13
Production intensity								
Average yield of wheat, t/ha	4.2	4.2	4.7	4.2	4.2	4.5	4.0	4.8
Average yield of maize, t/ha	6.3	5.9	8.3	6.9	7.5	7.3	7.8	8.5
Number of livestock units per hectare, no./ha	N/A	1	0.9	N/A	0.9	N/A	N/A	N/A
Average milk yield per animal, t/cow	N/A	4.5	4.9	5.3	5.9	5.6	5.5	5.3
Sustainable production								
Controlled areas with organic farming, in thousand ha	-	5.4	23.2	26.8	29.3	29.8	29.4	30.7
Controlled organic farms, in thousand	-	0.6	1.7	1.9	2.0	2.1	2.1	2.2
Controlled areas with integrated farming, thousand ha	-	-	44.6	49.9	56.9	57.6	57.5	58.9
Controlled integrated farms, thousand	-	-	5.5	5.8	6.0	5.9	5.6	5.5

Sources: SI-STAT Data Portal – Environment and natural resources – Agriculture and fishing, 2011; calculations by IMAD.
Note: N/A – not available.

Figure: **Share of organic farming areas in Slovenia and EU Member States, 2009**



Source: Eurostat, 2011; SORS, 2011.

Tree-felling intensity

After many years of increase, total forest area declined in 2010. At the end of 2010, forests covered around 1,185 thousand hectares in Slovenia, down slightly on the previous year. This was the first decline in total forest area after it grew rapidly in the previous century and then remained roughly unchanged in the few past years. These changes are in line with forestry policy, according to which its share in total area is no longer going to increase.[1] Forests have an important role to play, both from the economic perspective and with regard to climate, water protection and other environmental aspects. Nearly 60% of Slovenia's total area is covered with forest, which ranks Slovenia third in Europe in terms of share of forest land (behind Finland and Sweden). Changes at the local level are also important. In the past they were not favourable, as forests were mainly expanding in remote areas while shrinking in areas of intensive agriculture and especially suburban areas, where already there is little forest left.[2]

In 2010, tree felling remained at the level of 2009, which is not satisfactory with regard to potential felling. The lumber yield in 2010 was nearly equal to that in 2009. It had been increasing in the long term, and was nearly a tenth higher than a decade earlier. Because potential felling according to the forestry management plans increased even faster, the gap between actual felling and potential felling widened. Only 63% of potential felling was realised in 2010 (compared with 66% a year earlier). 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.[3] 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, increased by 8.8% last year, but still accounts for a relatively moderate share of total felling (close to 71%, compared with around 65% in 2009). Sanitary felling was relatively low, as in 2010 there were no natural disasters that could harm the forest stands and there were fewer problems with forest pests. Felling for forest clearance was relatively high compared with previous years. Unlawful forest activities declined somewhat after an increase in the previous year, so that their share dropped from 2.2% to 2.0%.

The intensity of tree felling,[4] having been relatively low in the entire period analysed, continued to decline in 2010. With an increase in the wood increment and unchanged felling, the intensity of tree felling declined by 0.7 p.p. to 41.6%. Tree-felling intensity in Slovenia is among the lowest in the EU. It was 17 p.p. less than the EU average in 2005.[5] A simulation by the Slovenian Forestry Service shows that by 2040 the allowable tree felling intensity could rise to around 90%, i.e. more than double. Primarily as a result of the sharp growth in stock, the potential lumber yield will increase rapidly in the coming years, and with no change in trend it will continue to do so in the future. With improved forest management, felling could be increased, which would also be sensible from the aspect of improving the (economic) exploitation of this important renewable resource.

Given no change in felling, roundwood production was also approximately the same as in the previous year. Roundwood production grew only slightly in 2010, by 0.5%, but its breakdown, already fairly unfavourable in previous years, deteriorated further. The volume of roundwood for saw logs and veneers, i.e. the highest-quality wood with high value added, dropped again (by 4.1%) after a more than 10% decline in the previous year. The volume of pulpwood and stackwood decreased even more notably, by 14.6%. In contrast, the production of lower-quality wood, i.e. wood for industrial processing and heating, increased by 12.5%. Roundwood production in the EU as a whole almost reached the level of 2008, after a substantial decline in the previous year, and its structure was on average much better. In Slovenia only around two thirds of wood was used for industrial processing in recent years (a third was used for heating), compared with around four fifths (and a fifth for heating) in the EU as a whole. Net exports of roundwood are also growing extremely fast in Slovenia, while exports of wood products are decreasing. Roundwood exports nearly doubled in the past five years, having grown by a tenth in 2010 alone. As raw material exports mean less value added and untapped development potential, this is not a favourable trend.

[1] Source: Forest Development Programme of Slovenia, 1996 (OG RS, No. 14/1996).
[2] Source: Resolution on the National Forest Programme, 2007 (OG RS, No. 111/2007).
[3] Some analysis (Kranjc, Piškur, 2006) shows that 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.

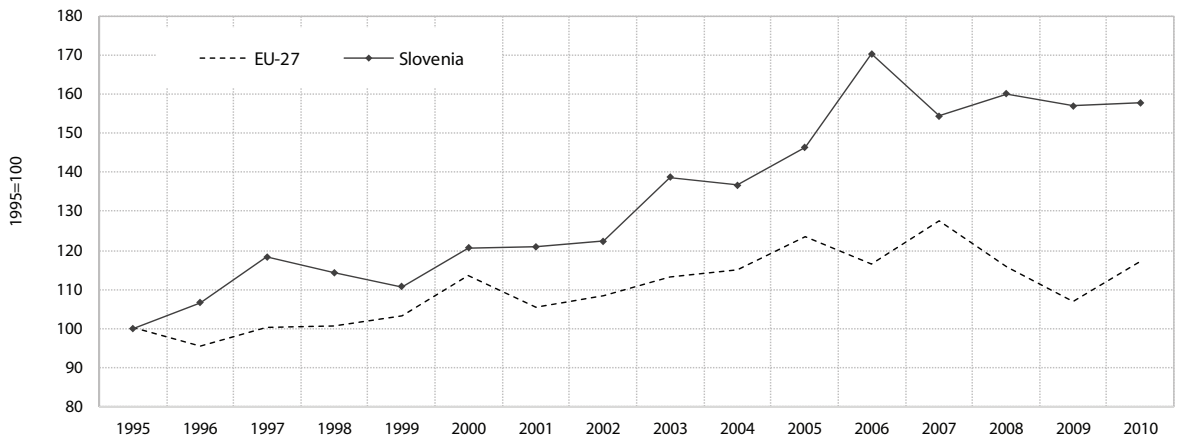
[4] Ratio of annual felling to annual wood increment.
[5] Latest available data. For more see Development Report 2009.

Table: **Forest area, wood increment, growing stock, felling and felling intensity in Slovenia, 1995–2010**

	1995	2000	2005	2006	2007	2008	2009	2010
Forest area, thousand ha	1,098	1,134	1,169	1,174	1,183	1,185	1,186	1,185
Annual increment, thousand m^3	5,995	6,872	7,569	7,652	7,822	7,869	7,985	8,117
Growing stock, thousand m^3	228,493	262,795	300,795	307,689	318,107	322,195	327,459	330,982
Annual felling, thousand m^3	2,092	2,609	3,236	3,718	3,242	3,427	3,374	3,374
of which: tending	1,325	1,849	1,873	2,288	1,966	2,100	2,196	2,389
regeneration	12	19	17	18	13	9	12	16
protection - sanitation	589	553	1,212	1,224	1,080	1,128	929	698
for infrastructure	15	40	49	50	48	61	64	64
clearance	35	53	65	86	87	68	82	122
unlicensed	113	91	35	49	38	48	74	68
other	2	3	2	1	9	12	16	16
Felling intensity[1], %	34.9	38.0	42.8	48.6	41.4	43.6	42.3	41.6

Source: SI-STAT Data Portal – Environment and natural resources – Agriculture and Fishing, 2012; the Slovenian Forest Service, 2011; calculations by IMAD.
Note: [1] Ratio of annual removal levels to the annual wood increment.

Figure: **Growth in roundwood production in Slovenia and the EU, 1995–2010**



Source: Eurostat Portal Page – Statistics – Agriculture and Fisheries – Forestry, 2012; calculations by IMAD.

Age dependency ratio

The total age dependency ratio[1] is rising due to increasing life expectancy and fertility. The old-age dependency ratio has been continuously increasing since 1987. Slovenia had 23.9 older persons per 100 working-age people in 2011,[2] 0.1 more than in 2010 and 2.0 more than in 2005. The young-age dependency ratio also rose for the fourth year in a row. At the beginning of 2011 Slovenia had 20.5 children per 100 working-age people, 0.3 more than in 2010 and 0.1 more than in 2005. Consequently, the total age dependency ratio is also increasing, totalling 44.3, up 0.3 on a year earlier and up 2.1 on 2005.

The ageing index declined in 2011 due to higher fertility, but it remains around 117 due to longer life expectancy. As a result of a higher number of births,[3] the share of children in the total population grew for the third consecutive year since 2004 (having declined from 14.4% to 13.9% between 2005 and 2008, it rose again to 14.2% in 2011). In 2011 the share of older people remained the same as a year earlier (16.5%, 1.2% higher than in 2005) due to the very weak inflow of the generation of people born in 1945. The number of people aged 65 and over in 2003 was higher than the number of children for the first time ever. The ageing index, which is the ratio between these two population groups, exceeded 100. It rose to 117.7 by 2010, while in 2011 it declined to 116.5 owing to a larger increase in the number of children relative to the increase in older population. The share of the working-age population was rising until 2004. In 2005 (when it was still 70.3%), it began to decline, falling to 69.3% by 2011,[4] despite high positive net migration,[5] which otherwise increases this population group.

The old-age dependency ratio in Slovenia is still below the EU average, but the gap is closing. Most of the large EU Member States have higher life expectancies than Slovenia.[6] The ratio of old people to total population in the EU as a whole is therefore also higher. However, all countries face similar problems regarding the declining shares of children and working-age population, despite positive net migration. The average old-age dependency ratio in the EU is therefore higher than in Slovenia. In 2010, it rose to 26.0 older people per 100 working-age population, which was 2.3 p.p. more than in Slovenia. The gap, which had been slowly closing in previous years, even increased somewhat in 2010. The old-age dependency ratio remains highest in Germany, Italy and Greece, the countries which also have the largest shares of older people in total population.

[1] 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 (which has an internationally comparable definition as the population aged 15–64); 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 old populations to the working-age population.

[2] The age dependency indicators were previously calculated with regard to the population as at 1 July (or 30 June) of a given year, as the situation in the middle of the year should be a more suitable approximation of the annual average of the population than at the beginning (or end) of the year. As Eurostat releases detailed data on the population by age only for the situation as at 1 January, we are also starting to analyse the age composition of Slovenia's population as at 1 January.

[3] See the indicator *Fertility rate*.

[4] This decline was also partly due to the change in the statistical definition of the permanent population in 2008, which does not include persons who have lived in Slovenia or have been absent from Slovenia for less than one year. However, the impact of the change is not significant. In 2008, the last year for which data is available according to both definitions, the share of the working-age population in the total population was 70.0% according to the previous definition, and 69.7% according to the new definition, which does not include foreigners with temporary residence.

[5] See the indicator Migration ratio.

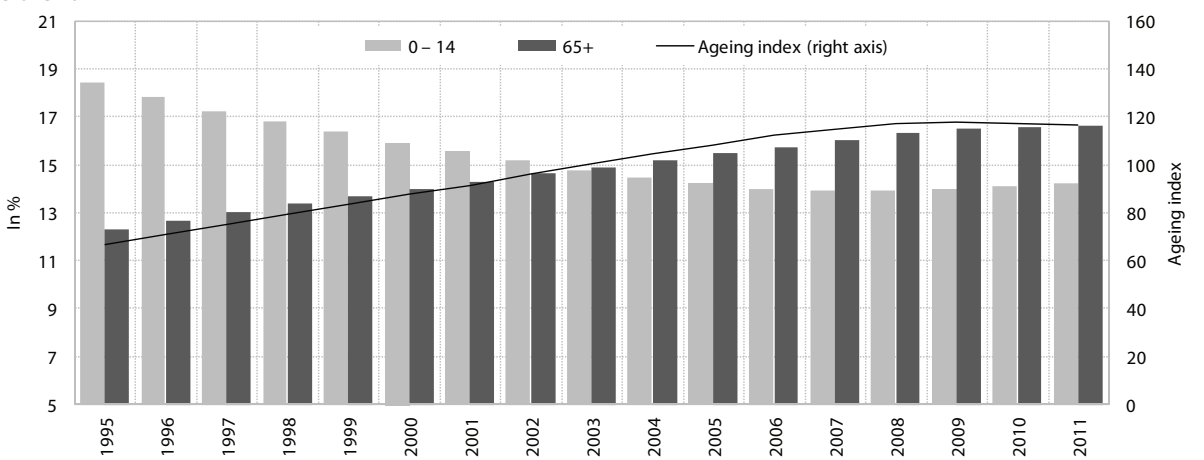
[6] See the indicator *Life expectancy and infant mortality.*

Table: **Age-dependency ratio of the population aged 65+ in selected EU-27 Member States, in %**

	1995	2000	2005	2006	2007	2008	2009	2010	2011
EU-27	**21.9**	**23.2**	**24.7**	**25.0**	**25.1**	**25.4**	**25.6**	**26.0**	**N/A**
Austria	22.5	22.8	23.4	24.2	25.0	25.3	25.8	26.1	26.0
Belgium	23.9	25.6	26.2	26.2	25.9	25.9	25.9	26.1	N/A
Bulgaria	22.2	23.9	24.7	24.9	25.0	25.0	25.1	25.4	25.8
Cyprus	17.2	17.0	17.3	17.2	17.6	17.8	18.1	18.7	N/A
Czech Republic	19.3	19.8	19.7	19.9	20.2	20.5	21.0	21.5	22.1
Denmark	22.7	22.2	22.7	23.0	23.1	23.6	24.2	24.8	25.7
Estonia	20.2	22.5	24.2	24.5	25.1	25.3	25.1	25.2	25.1
Finland	21.1	22.1	23.9	24.0	24.8	24.8	25.1	25.6	26.5
France	22.9	24.6	25.3	25.5	25.3	25.5	25.7	25.9	26.1
Greece	22.3	24.3	26.8	27.5	27.7	27.7	27.9	28.3	29.1
Ireland	17.8	16.7	16.3	16.1	15.9	15.9	16.2	16.8	17.4
Italy	24.0	26.8	29.4	29.8	30.2	30.3	30.5	30.7	30.9
Latvia	20.4	22.0	24.0	24.4	24.8	24.9	25.1	25.3	25.3
Lithuania	18.5	20.7	22.3	22.4	22.8	23.0	23.2	23.4	24.1
Luxembourg	20.5	21.4	21.0	20.9	20.7	20.6	20.6	20.5	20.3
Hungary	20.9	22.0	22.7	23.0	23.1	23.5	23.9	24.2	24.3
Malta	16.4	17.9	19.2	19.8	19.9	19.7	20.1	21.3	22.4
Germany	22.5	23.8	27.8	29.0	29.9	30.4	30.9	31.5	31.2
Netherlands	19.3	20.1	20.7	21.2	21.5	21.8	22.3	22.8	23.3
Poland	16.5	17.7	18.7	18.9	18.9	19.0	19.0	18.9	19.1
Portugal	21.8	23.6	25.2	25.4	25.7	25.9	26.2	26.8	27.3
Romania	17.5	19.3	21.2	21.2	21.4	21.3	21.3	21.3	N/A
Slovakia	16.3	16.6	16.3	16.3	16.5	16.6	16.7	17.0	17.2
Slovenia	**17.4**	**19.9**	**21.8**	**22.2**	**22.7**	**23.4**	**23.6**	**23.8**	**23.9**
Spain	22.2	24.4	24.5	24.3	24.3	24.1	24.2	24.6	25.2
Sweden	27.5	26.9	26.4	26.5	26.5	26.6	27.2	27.7	28.5
United Kingdom	24.4	24.3	24.2	24.2	24.1	24.2	24.6	25.0	25.2

Source: Eurostat Portal Page – Population and social conditions – Population, 2011.
Note: N/A – not available.

Figure: **Old (65+) and young (0–14) population as a percentage of the total population and ratio between them (ageing index), Slovenia**



Source: Eurostat Portal Page – Population and social conditions – Population, 2010.

Life expectancy and healthy life years

Life expectancy in Slovenia continues to increase, somewhat faster for men than for women. After a brief stagnation in the early period of transition, life expectancy has been constantly increasing since 1994. This can be attributed to advances in medicine and better health care, but also to other factors such as a higher living standard, healthier lifestyles, better education and greater access to health services. In 2010 life expectancy was 76.3 for men (up 0.5 on 2009 and up 2.2 on 2005) and 82.7 for women (up 0.4 on 2009 and up 1.4 on 2005). The gender gap is closing, and stood at 6.4 years according to the most recent data. The narrowing of the gap was partly due to smaller differences in lifestyle risk factors (such as smoking) and a decline in male mortality due to cardiovascular diseases.[1] In 2010 the mortality rate for men decreased in most five-year age groups, except for the age groups of 55–50 and 80–84 years where it rose, while female mortality increased for children and women aged 30–34 and 40–44. Life expectancy also continues to rise in most EU Member States. In 2010 life expectancy in Slovenia was again lower than in the majority of older Member States (with the exception of Denmark, and for the first time, Portugal) and higher than in most new EU Member States (except for Cyprus and Malta). Higher life expectancy was recorded by 17 Member States for men and by 10 Member States for women (one Member State, i.e. the Netherlands, had lower female life expectancy than a year earlier).

People in Slovenia can expect slightly more than 60 years of healthy life, which is around the EU average. The gender gap is insignificant and is narrowing. Eurostat defines the number of healthy life years as the number of years spent free of activity limitation. The indicator is calculated on the basis of the European Survey of Income and Living Conditions (EU-SILC). According to these calculations,[2] in 2009 the number of healthy life years at birth in Slovenia was 60.6 for men (up 1.2 years on 2008 and up 4.3 years on 2005) and 61.5 years for women (up 0.6 on 2008 and up 1.6 on 2005). The gender gap is considerably smaller than in terms of life expectancy, and narrowed over the period analysed. The number of healthy life years was 15.8 less for men and 21.6 less for women than total life expectancy that year. The difference is narrowing for men (in 2005 the number of healthy life years was still 18.2 less than life expectancy), while for women it is fluctuating around 21 (in 2005 the difference was 22.1). In both genders this indicator is approaching the EU average, which was 60.9 healthy life years for men and 61.6 healthy life years for women.

For life expectancy and the number of healthy life years to grow further, it would be necessary to increase the efficiency of the health care system and boost investment in health care. While higher life expectancy tends to be in close correlation with higher GDP per capita, healthy life years are not necessarily linked to GDP (*Health at a Glance: Europe 2010*, OECD). The OECD also points to a positive correlation between the two indicators and health expenditure per capita,[3] although in countries with very high expenditure this correlation is less pronounced.[4] It is nevertheless crucial in developed countries, particularly for the indicator of healthy life years and thus the narrowing of the gap between life expectancy and the number of healthy life years. According to OECD calculations,[5] improving the efficiency of health care systems could improve life expectancy at birth across the OECD by two years, at the given level of health expenditure.[6] However, at the same time the OECD also warns that to achieve higher life expectancy, which remains the main goal of health policies, health expenditure will also have to be increased in developed countries.

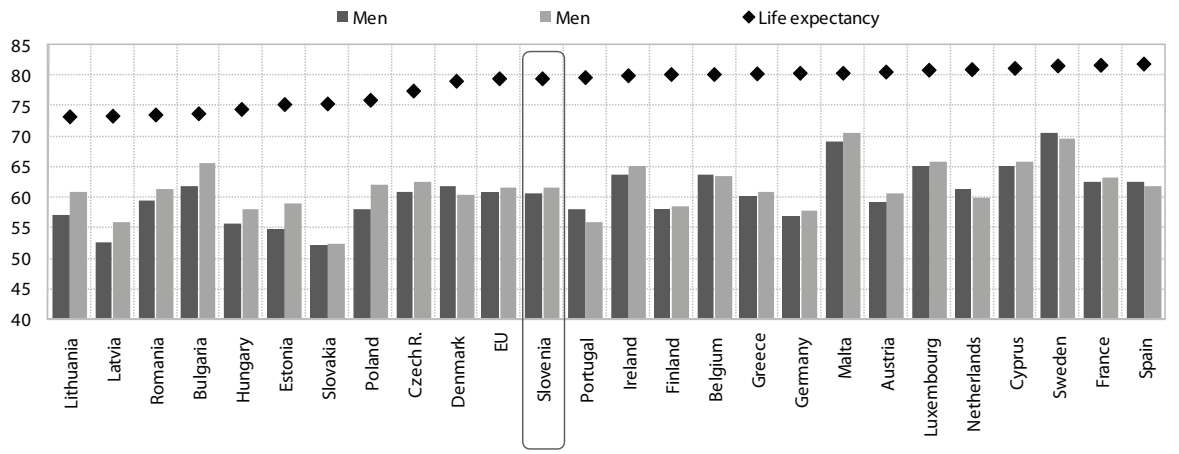
[1] OECD (2011), Health at a Glance 2011: OECD Indicators.
[2] Available at: Eurostat Portal page — Population and social conditions – Structural indicators on health.
[3] The OECD study (Health Care Systems: Efficiency and Policy Setting, 2010) estimates that a 10% increase in health expenditure per capita would increase life expectancy at birth on average across the OECD by three to four months.
[4] OECD (2011), Health at a Glance 2011: OECD Indicators.
[5] Health Care Systems: Efficiency and Policy Setting, 2010.
[6] Or, by individual countries, from one year in Australia up to four years in Hungary (Slovenia was not included in the survey).

Table: **Life expectancy in Slovenia and the EU, 1995-2010**

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**N/A**	**N/A**	**78.5**	**79.0**	**79.2**	**79.4**	**N/A**	**N/A**
Austria	76.9	78.3	79.5	80.1	80.4	80.6	80.5	80.8
Belgium	77.0	77.9	79.1	79.5	79.9	79.8	80.1	N/A
Bulgaria	71.0	71.6	72.5	72.7	73.0	73.3	73.7	73.8
Cyprus	77.4	77.7	78.9	80.3	80.1	80.8	81.1	N/A
Czech Republic	73.3	75.1	76.1	76.8	77.0	77.3	77.4	77.7
Denmark	75.3	76.9	78.3	78.4	78.4	78.8	79.0	79.3
Estonia	67.7	70.8	72.8	73.1	73.1	74.3	75.2	76.0
Finland	76.7	77.8	79.1	79.5	79.6	79.9	80.1	80.2
France	78.1	79.2	80.4	81.0	81.3	81.4	81.6	N/A
Greece	77.5	78.0	79.2	79.5	79.4	80.0	80.2	80.6
Ireland	75.5	76.6	79.4	79.7	79.7	80.2	79.9	81.0
Italy	78.3	79.9	80.9	81.5	81.6	81.9	N/A	N/A
Latvia	N/A	N/A	71.0	70.9	71.2	72.5	73.3	73.7
Lithuania	69.1	72.2	71.3	71.1	70.9	72.0	73.2	73.5
Luxembourg	76.8	78.0	79.6	79.4	79.5	80.7	80.8	80.8
Hungary	70.0	71.9	73.0	73.5	73.6	74.2	74.4	74.7
Malta	77.2	78.4	79.4	79.5	79.9	79.7	80.3	81.4
Germany	76.7	78.3	79.4	79.9	80.1	80.2	80.3	80.5
Netherlands	77.6	78.2	79.6	80.0	80.4	80.5	80.9	81.0
Poland	72.0	73.8	75.0	75.3	75.4	75.6	75.9	76.4
Portugal	75.4	76.7	78.1	78.9	79.1	79.4	79.6	79.8
Romania	69.3	71.2	72.1	72.6	73.2	73.4	73.5	N/A
Slovakia	72.4	73.3	74.1	74.4	74.6	74.9	75.3	75.6
Slovenia	**74.7**	**76.2**	**77.5**	**78.3**	**78.4**	**79.1**	**79.4**	**79.8**
Spain	78.1	79.3	80.3	81.1	81.1	81.4	81.8	82.2
Sweden	79.0	79.8	80.7	81.0	81.1	81.3	81.5	81.6
United Kingdom	76.7	78.0	79.2	79.6	79.8	79.9	80.5	N/A

Source: Eurostat Portal Page – Population and social conditions – Population, 2011.
Notes: N/A – not available.

Figure: **Healthy life years at birth relative to life expectancy in Slovenia and the EU, 2009**



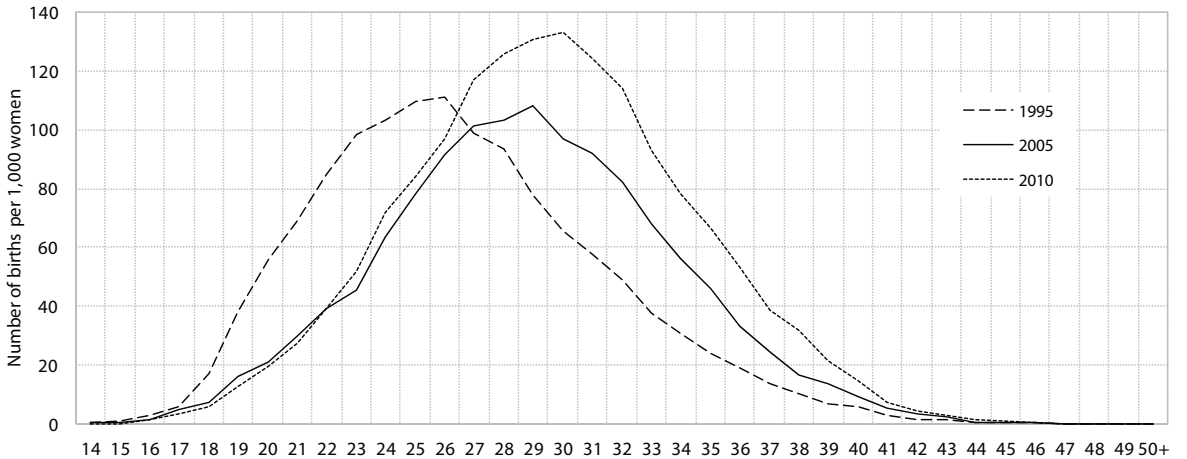
Source: Eurostat Portal Page – Population and social conditions – Population, 2011.
Note: For the EU life expectancy in 2008 is taken into account.

Fertility rate

The number of births in Slovenia increased slightly again in 2010, as did the total fertility rate. A total of 22,343 children were born in 2010, 487 more than in the previous year, while the total fertility rate[1] increased to 1.57 and thus approached the EU average (see Table). With the exception of 2000, until 2003 the total fertility rate fell uninterrupted from 1980, when it last stood at a level (2.11) that still enabled stable population renewal. Since recording its low in 2003 (1.20), it has increased slightly. According to the data currently available, in the first two quarters of 2011 the number of births in Slovenia declined somewhat relative to the same period of the previous year.

The mean age of women at birth continued to rise in 2010. It rose to 30.3, 0.2 more than in 2009 and 0.9 more than in 2005. The mean age of women at first childbirth also increased (by 0.2 to 28.7). The decline in the fertility rates of women aged under 26, which has been underway for over 25 years, continued in most age groups. By contrast, fertility rates continued to increase, particularly for women aged 27 to 32. The fertility rates of women aged over 27 (31 to 36 in particular) have been in an upward trend since 1990, which led to a continuous rise in both the mean age of women at birth and the mean age of women at first birth. The mean age of women at childbirth in Slovenia is thus higher than the EU average (29.8, according to the latest data for 2009).

Slika: **Age-specific fertility rates, Slovenia, 1995, 2005 and 2010**



Source: SORS, 2011.

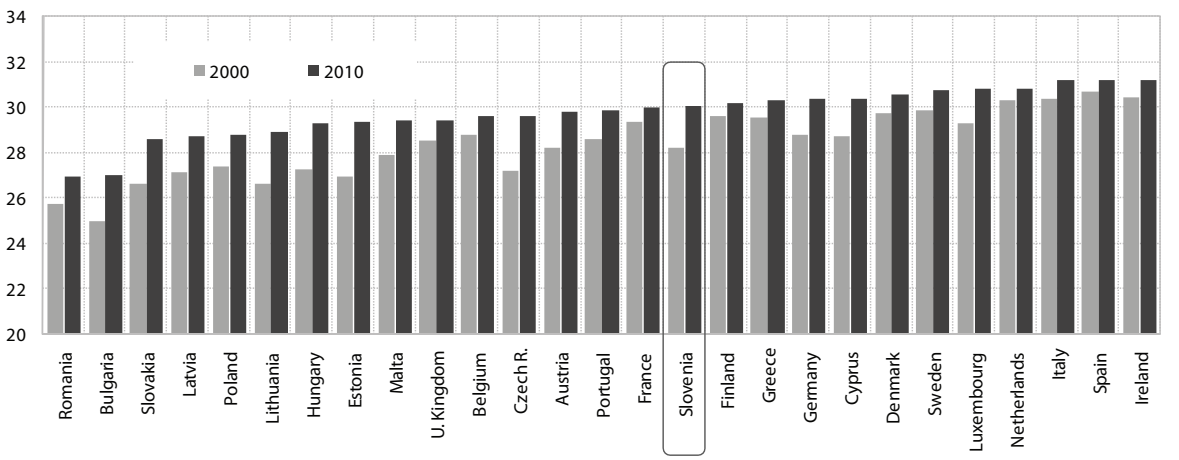
[1] The total fertility rate is the sum of age-specific general birth rates in a calendar year. It indicates the number of live births per woman if during her entire childbearing age the age-specific fertility rates were to remain unchanged from the given calendar year.

Table: **Total fertility rate in EU Member States, 1995–2010**

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**N/A**	**N/A**	**1.51**	**1.54**	**1.56**	**1.60**	**1.59**	**N/A**
Austria	1.42	1.36	1.41	1.41	1.38	1.41	1.39	1.44
Belgium	1.56	1.67	1.76	1.80	1.82	1.86	1.84	N/A
Bulgaria	1.23	1.26	1.32	1.38	1.42	1.48	1.57	1.49
Cyprus	2.03	1.64	1.42	1.45	1.39	1.46	1.51	N/A
Czech Republic	1.28	1.14	1.28	1.33	1.44	1.50	1.49	1.49
Denmark	1.8	1.77	1.80	1.85	1.84	1.89	1.84	1.87
Estonia	1.38	1.38	1.50	1.55	1.63	1.65	1.62	1.63
Finland	1.81	1.73	1.80	1.84	1.83	1.85	1.86	1.87
France	1.71	1.89	1.92	1.98	1.96	1.99	1.99	N/A
Greece	1.31	1.26	1.33	1.40	1.41	1.51	1.52	1.44
Ireland	1.84	1.89	1.86	1.92	2.01	2.07	2.07	2.07
Italy	1.19	1.26	1.32	1.35	1.37	1.42	1.41	N/A
Latvia	1.27	N/A	1.31	1.35	1.41	1.44	1.31	1.17
Lithuania	1.55	1.39	1.27	1.31	1.35	1.47	1.55	1.55
Luxembourg	1.7	1.76	1.63	1.65	1.61	1.61	1.59	1.63
Hungary	1.57	1.32	1.31	1.34	1.32	1.35	1.32	1.25
Malta	N/A	1.70	1.38	1.39	1.37	1.44	1.43	1.38
Germany	1.25	1.38	1.34	1.33	1.37	1.38	1.36	1.39
Netherlands	1.53	1.72	1.71	1.72	1.72	1.77	1.79	1.79
Poland	1.62	1.35	1.24	1.27	1.31	1.39	1.40	1.38
Portugal	1.41	1.55	1.40	1.36	1.33	1.37	1.32	1.36
Romania	1.41	1.31	1.32	1.32	1.30	1.35	1.38	np
Slovakia	1.52	1.30	1.25	1.24	1.25	1.32	1.41	1.40
Slovenia	**1.29**	**1.26**	**1.26**	**1.31**	**1.38**	**1.53**	**1.53**	**1.57**
Spain	1.17	1.23	1.35	1.38	1.40	1.46	1.40	1.39
Sweden	1.73	1.54	1.77	1.85	1.88	1.91	1.94	1.98
United Kingdom	1.71	1.64	1.78	1.84	1.9	1.96	1.94	N/A

Source: Eurostat Portal Page – Population and social conditions – Population, 2011.
Note: N/A – not available.

Figure: **Mean age of women at childbirth in selected EU Member States, 2000 and 2010***



Source: Eurostat Portal Page – Population and social conditions – Population, 2010.
Note: * Belgium, France, Italy, Cyprus, Romania and UK: 2009.

Migration coefficient

Having dropped to about zero in 2010, the migration coefficient[1] in Slovenia was again slightly positive in the first half of 2011. After reaching the highest level on record in 2008 (9.2 per 1,000 inhabitants according to the new definition of migration[2]) and then decreasing to 5.6 per 1,000 inhabitants in 2009 (which was still among the highest coefficients in the EU), the migration coefficient in Slovenia dropped to around zero in 2010. The reason for the zero net migration was a significant decline in immigration. According to SORS data, 15,820 people immigrated to Slovenia (down almost a half on the previous year) and 15,727 people (down 16%) emigrated from Slovenia in 2010. Eurostat's data, which is corrected for statistical errors, reveals that in 2010 the migration coefficient in Slovenia was actually slightly negative, at -0.3 per 1,000 inhabitants. In the first half of 2011 the number of people who immigrated to Slovenia was again slightly higher than the number of emigrants, so that the migration coefficient was again slightly positive, at 0.6 per 1,000 inhabitants. Over the 1995–2004 period Slovenia's migration coefficient was low (around 1.2 on average), but it grew rapidly between 2005 and 2008. Having averaged 6,500 per year between 1995 and 2000, the number of immigrants exceeded 30 thousand in 2008 and 2009. The number of emigrants also rose: after averaging around 4,100 per year between 1995 and 2000, it had risen to 18,788 by 2009 (excluding seasonal migrants).

The decline in the migration coefficient in the last three years was the result of the economic crisis and stricter conditions for obtaining a residence permit. The accelerated increase in the migration coefficient between 2004 and 2008 was to a large extent the result of economic growth after Slovenia's accession to the EU. Companies increasingly hired foreign workers, particularly as a result of a shortage in certain professions, most notably in construction, so that the number of foreigners working in Slovenia doubled in that period. In 2008 immigration also increased as a consequence of Slovenia's accession to the Schengen Agreement. That year also saw numerous abuses, such as foreigners who obtained a residence permit in Slovenia moving to other countries that are parties to the Schengen Agreement to work, apply for asylum or register as jobseekers. In addition to the deterioration in the economic situation, which reduced employment of foreigners,[3] the decline in net migration, which began in the second quarter of 2009 and accelerated in 2010, was also the result of the stricter conditions for obtaining residence permits for foreign nationals living in Slovenia that were introduced by the Government at that time.

Most immigrants still come from the former Yugoslav republics, although their average educational qualifications improved in 2010. Only for foreign nationals does the number of immigrants exceed the number of emigrants; the net migration of Slovenian citizens has been slightly negative since 2000.[4] The majority of immigrants still come from Bosnia and Herzegovina, but in the last two years their number has dropped by almost a half. Immigration from other EU Member States remains low. Around 70% of immigrants come looking for work, but only 85% of them managed to find a job in Slovenia in 2010. Most of them still work in construction, but their share (and the number) declined again in 2010. This was also reflected in the average education level of foreign workers in Slovenia, which shifted towards secondary and higher education.

[1] The migration coefficient is the ratio of net migration to average population in a calendar year; net migration is the difference between the number of immigrants and the number of emigrants in a calendar year.

[2] In 2008 SORS changed over to a new definition of permanent migration, which excludes migrants who have been present in the country or absent from it for less than a year. According to the previous definition, which included seasonal migrants, the migration coefficient in 2008 was higher, at 13.9 per 1,000 inhabitants.

[3] According to SRE data.

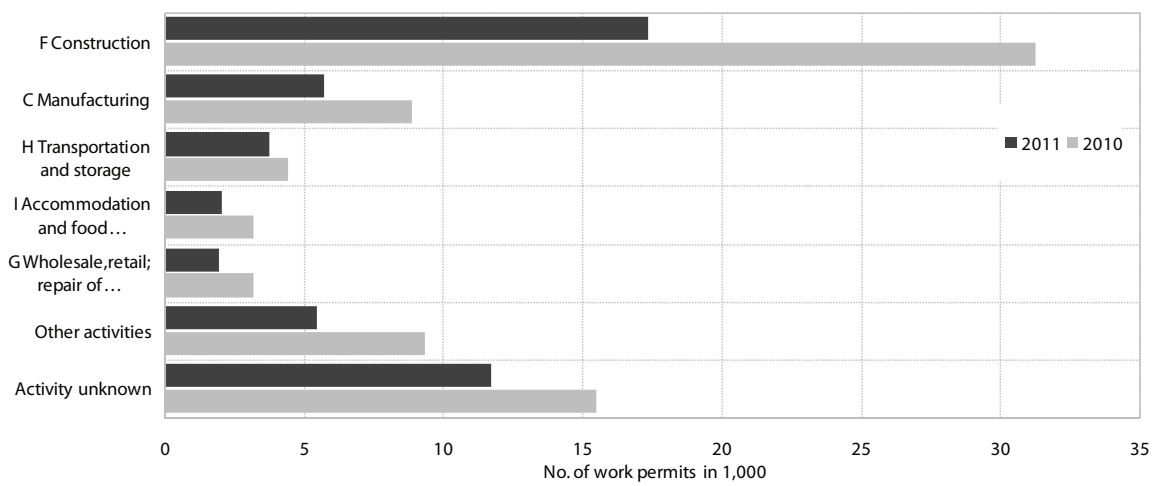
[4] The average migration coefficient of Slovenian citizens in the 2000–2009 period was -0.4 per 1,000 inhabitants.

Table: **Net migration (with statistical corrections), per 1,000 inhabitants**

	1995	2000	2005	2006	2007	2008	2009	2010
EU-27	**1.4**	**1.5**	**3.6**	**3.2**	**3.9**	**2.9**	**1.8**	**1.8**
Austria	0.3	2.2	6.1	3.0	4.1	4.1	2.5	3.3
Belgium	0.2	1.3	4.7	4.9	5.5	5.9	5.9	8.2
Bulgaria	0.0	0.0	0.0	0.0	-0.2	-0.1	-2.1	-3.2
Cyprus	9.2	5.7	19.0	11.2	9.4	4.5	2.3	-4.1
Czech Republic	1.0	0.6	3.5	3.4	8.1	6.9	2.7	1.5
Denmark	5.5	1.9	1.2	1.9	3.7	4.6	2.8	3.0
Estonia	-10.8	0.2	0.1	0.1	0.1	0.1	0.0	0.0
Finland	0.8	0.5	1.7	2.0	2.6	2.9	2.7	2.6
France	np	2.7	3.1	1.9	1.2	1.2	1.1	1.2
Greece	7.3	2.7	3.6	3.6	3.6	3.2	3.1	1.5
Ireland	1.6	8.4	15.0	15.6	10.6	0.7	-6.2	-7.5
Italy	0.5	0.9	5.2	6.4	8.4	7.1	5.3	5.2
Latvia	-5.5	-2.3	-0.2	-1.1	-0.3	-1.1	-2.1	-3.5
Lithuania	-6.5	-5.8	-2.6	-1.4	-1.6	-2.3	-4.6	-23.7
Luxembourg	10.6	7.9	13.1	11.3	12.5	15.8	13.2	15.1
Hungary	1.7	1.6	1.7	2.1	1.4	1.6	1.7	1.2
Malta	0.2	2.3	4.0	5.3	4.2	5.9	-0.4	5.4
Germany	4.9	2.0	1.0	0.3	0.5	-0.7	-0.1	1.6
Netherlands	1.0	3.6	-1.4	-1.6	-0.1	1.9	2.3	2.0
Poland	-0.5	-10.7	-0.3	-0.9	-0.5	-0.4	0.0	-0.1
Portugal	2.2	4.6	3.6	2.5	1.8	0.9	1.4	0.4
Romania	-0.9	-0.2	-0.3	-0.3	0.0	0.1	-0.1	0.0
Slovakia	0.5	-4.1	0.6	0.7	1.3	1.3	0.8	0.6
Slovenia	**0.4**	**1.4**	**3.2**	**3.1**	**7.1**	**9.2**	**5.6**	**-0.3**
Spain	1.8	9.7	14.8	13.7	15.6	9.0	1.1	1.3
Sweden	1.3	2.7	3.0	5.6	5.9	6	6.7	5.3
United Kingdom	1.1	2.4	3.8	3.2	3.5	3.1	3.3	2.6

Source: Eurostat Portal Page – Population and social conditions – Population, 2011.

Figure: **Work permits issued for foreigners in Slovenia, by sector, 2010 and 2011**



Source: SRE, Labour market in figures, 2011, available at http://www.ess.gov.

Regional variation in GDP per capita

In 2009 economic activity declined in all regions, the Osrednjeslovenska region recording the lowest decline, so that the gap by which the economically weaker regions trail the Osrednjeslovenska region and the national average increased. In 2009[1] the highest GDP per capita was recorded by the Osrednjeslovenska region (more than 42% higher than the national average), while the lowest was recorded by the Pomurska region (34.3% lower than the national average). As in previous years, the Obalno-kraška region was the only region other than the Osrednjeslovenska to exceed the national average in 2009 (by 9%). The two regions with above-average GDP per capita recorded the smallest declines in economic activity in 2009, and thus continued to increase their advantage over the national average. By contrast, the largest declines in GDP were recorded by the Koroška, Gorenjska and Jugovzhodna Slovenija regions, i.e. the regions with relatively high shares of manufacturing in GVA, which was most affected by the crisis in 2009. In 2009 the economically weakest Pomurska region managed to narrow the gap by which it trails the national average for the first time since 2000.

The gap by which Slovenian regions trailed the European average widened in 2009. The statistical regions had been fairly successful in narrowing their gaps to the European average, particularly after 2006, but in 2009 this came to a halt. The Osrednjeslovenska and Obalno-kraška regions are the only regions to still exceed the European average, by almost 25% and 5%, respectively, but their leads decreased. The gaps by which other regions trail increased, particularly those of the Gorenjska region, Jugovzhodna Slovenia and the Koroška region. The Osrednjeslovenska region also recorded the largest improvement in its position relative to the European average (by 14 p.p.) over the longer term (between 2000 and 2009), in contrast to the Zasavska region, whose position deteriorated the most (by -5 p.p.).

The ratio between the two regions with the highest and lowest GDP per capita, which has remained unchanged since 2006, is relatively low. In 2009 GDP per capita in the Osrednjeslovenska region was 2.2 times that of the economically weakest Pomurska region. This was the same figure as in the previous year, and slightly higher than in 2000, when the GDP per capita in the Osrednjeslovenska region was 1.9 times higher. Taking into account the differences in purchasing power across regions, the actual ratio is probably even lower. This is also indicated by the lower ratio between the highest and lowest net disposable income (1:1.3), which has been practically unchanged since 2000.[2] The ratio of GDP per capita between the two regions with the highest and lowest figures at the NUTS 3 level in Slovenia is among the lowest in the EU. In 2009[3] it stood at 2.2 in Slovenia, compared with the highest figure of 10.5 in the United Kingdom and the lowest figure of 1.4 in Malta.

Regional disparities in GDP per capita increased slightly in 2009, but remain among the lowest in the EU. The relative dispersion[4] of GDP per capita, which is also one of the indicators of regional disparities, increased by 1.3 p.p. relative to 2008 to 22.9% according to our calculations. Although this is the largest increase since 2003, regional disparities at the NUTS 3 level in Slovenia are still among the lowest in the EU. According to our calculations, this indicator of dispersion averaged 32.8%[5] in 2009 in the EU as a whole; it was highest in Bulgaria (46.6%) and lowest in the Netherlands (17.7%). While the differences between the EU Member States are narrowing, this is mostly not the case for differences within the countries themselves. Since 2000 the largest decline in disparity with the EU average has been recorded primarily by the countries that joined the EU in or after 2004, but at the same time the regional disparities within these countries have mainly increased. This also holds true for Slovenia, where dispersion rose by 2.3 p.p., which is still the lowest among these countries. Regional disparities are mainly a consequence of higher growth in one or two regions, usually the region with the capital city. This is also what happened in Slovenia, though this process was less pronounced.

[1] The latest available data.

[2] Between 1.3 and 1.4.

[3] IMAD's calculations for 2009.

[4] $$RD_{Rt} = 100 \sum_{r} \left(\frac{P_{rt}}{P_{Rt}}\right) \left|\left(\frac{BDP_{rt}}{BDP_{Rt}}\right) - 1\right|$$

where t = year,
P_r = population of the region,
P_R = population of Slovenia,
BDP_r = GDP per captia of the region,
BDP_R = GDP per capita of Slovenia, expressed in percent.

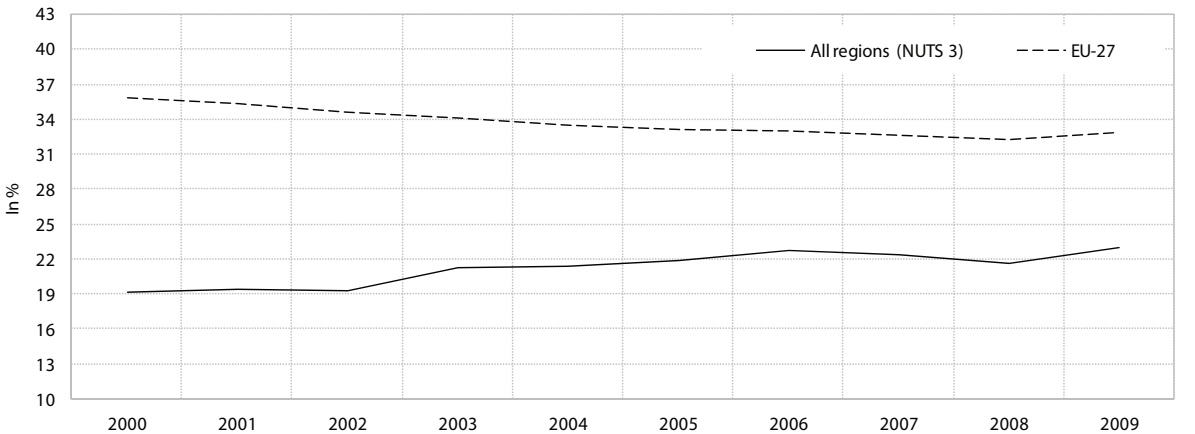
[5] The calculation does not include Cyprus and Luxembourg, which do not have regions at the NUTS level 3, nor Spain, for which data for NUTS 3 level regions is not available.

Table: **GDP per capita, indices, SLO=100, EU–27=100**

Cohesion region / Statistical region	2000	2005	2006	2007	2008	2009	EU-27=100 2009	GVA structure 2009, %	Real GDP growth 2009/08, %
Slovenia	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**87**	**100.0**	**-8.0**
Zahodna Slovenija	**118.2**	**120.3**	**120.8**	**120.6**	**119.5**	**120.0**	**105**	**56.3**	**np**
Obalno-kraška	107.8	105.6	106.6	106.7	107.7	109.0	95	5.9	-6.0
Goriška	97.8	94.4	93.4	95.5	95.7	94.6	82	5.5	-10.0
Gorenjska	88.9	87.7	86.4	86.2	85.4	82.0	71	8.1	-11.8
Osrednjeslovenska	137.3	142.5	144.0	143.1	140.7	142.6	124	36.8	-5.7
Vzhodna Slovenija	**84.6**	**82.7**	**82.2**	**82.3**	**82.9**	**82.4**	**72**	**43.7**	**np**
Notranjsko-kraška	80.7	72.6	71.7	72.0	72.2	72.4	63	1.8	-7.9
Jugovzhodna Slovenija	93.0	93.3	94.9	94.8	94.9	92.4	80	6.4	-10.0
Spodnjeposavska	87.8	84.9	82.9	83.5	84.6	85.6	75	2.9	-8.4
Zasavska	78.5	69.9	67.2	66.2	66.7	66.4	58	1.5	-9.8
Savinjska	89.8	89.0	87.5	87.4	89.5	89.0	78	11.3	-9.0
Koroška	83.8	79.8	77.8	77.9	77.6	74.9	65	2.7	-12.1
Podravska	82.5	82.6	83.3	83.8	84.0	83.6	73	13.2	-8.9
Pomurska	72.7	67.0	65.4	65.0	64.9	65.7	57	3.8	-8.4

Source: SI-Stat Data Portal – Economy – National accounts – Regional gross domestic product, 2011, Eurostat – general and regional statistics, 2012.
Note: GVA – gross value added.

Figure: **Dispersion of regional GDP per capita in PPS at the NUTS 3 level in the EU-27 and Slovenia, %**



Source: SI-STAT data portal, 2011.

Regional variation in the registered unemployment rate

In 2011 unemployment increased in all regions other than the Pomurska region, which has the highest registered unemployment rate. The most heavily populated Osrednjeslovenska region, where unemployment increased at an above-average rate relative to 2010, accounts for over a fifth of total unemployment. Similar developments were also recorded by the Obalno-kraška, Notranjsko-kraška, Jugovzhodna Slovenija and Goriška regions. In the last the number of unemployed people has more than doubled since 2008,[1] the largest increase among all regions. The only region to see unemployment fall in 2011 was the Pomurska region, but the number of unemployed people was nevertheless 44% higher than before the outbreak of the crisis.[2]

The registered unemployment rate also rose in all regions in 2011, except the Pomurska region. The regions with above-average registered unemployment rates have been the same for a number of years, and are in the cohesion region of Vzhodna Slovenija. Despite a 1% decline in registered unemployment, the Pomurska region still has the highest registered unemployment rate (18%), which exceeds the national average by a factor of 1.5, but this region also narrowed its gap to the national average most in 2011. The lowest rate (8.8%) was recorded by the Gorenjska region, while the Obalno-kraška region, which had seen the lowest unemployment rate a year earlier, recorded the largest increase. With registered unemployment rates increasing across almost all regions, the gap to the national average was mainly reduced by regions with above-average rates. Regional disparities in Slovenia therefore declined, but the burden of unemployment is still fairly unevenly distributed.

Regional disparities in registered unemployment rates declined in 2011. The measure of absolute dispersion,[3] with which regional disparities are measured, was 2.1 in 2011 (down 0.3 on 2010). The highest regional disparities were recorded in 2003; since which they have been falling gradually, except in 2009 and 2010. In 2011 the registered unemployment rate rose in all regions other than the Pomurska region. The decline in regional disparities is attributable to a faster increase in the registered unemployment rate in regions with below-average rates. With the registered unemployment rate falling in the Pomurska region and increasing in the region with the lowest rate (Gorenska in 2011), the ratio between the two regions with the highest and lowest rates declined to 1.9 (compared with 2.4 in 2010), the lowest ratio since 2000.

The unemployment categories that recorded the largest increases in terms of number and share in 2011 were long-term unemployed, older unemployed (aged over 50) and those with at least higher education. The number of unemployed persons seeking work for more than a year is still growing. In some regions they already account for more than half of all unemployment (the Pomurska, Koroška, Spodnjeposavska, Savinjska regions). The current labour market situation is also unfavourable for older unemployed people. In the Goriška and Notranjsko-kraška regions their number more than doubled relative to 2008. This category of unemployment accounts for the largest share (nearly 43%) in the Gorenjska region, where it also increased most notably compared with 2010. The number of unemployed people with at least higher education also rose, by a quarter overall, most notably in the Pomurska region (by just over 30%), although this region has the lowest share (9%) of unemployed people from this category. The largest shares of unemployed people with higher education are in the Osrednjeslovenska and Goriška regions (over 15%), where the share of the general population with high education is also above average.

[1] The number of unemployed people in the Goriška region rose by 125% or 2,906 persons.
[2] By 2,932.
[3] The measure of absolute dispersion:

$$AD_{Rt} = \sum_{r} \left(\frac{A_{rt}}{A_{Rt}}\right) |SB_{rt} - SB_{Rt}|$$

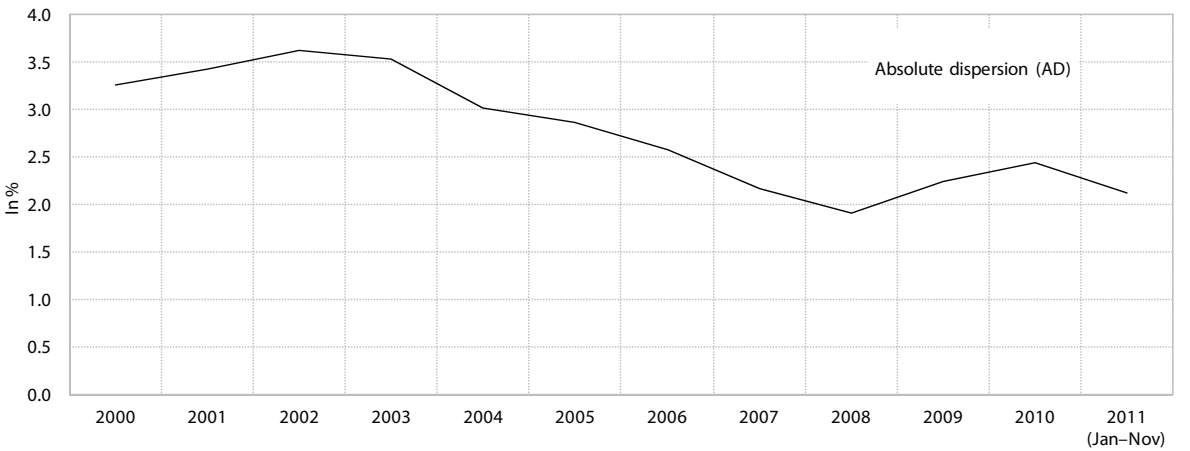
where t = year,
A_r = active population of the region,
A_R = active population of Slovenia,
SB_r = registered unemployment rate of the regione,
SB_R = registered unemployment rate of Slovenia.

Table: **Registered unemployment rate by region, in %**

	2000	2005	2006	2007	2008	2009	2010	2011
Slovenia	**11.8**	**10.2**	**9.4**	**7.7**	**6.7**	**9.1**	**10.7**	**11.8**
Osrednjeslovenska	8.8	7.6	7.2	5.9	5.0	6.8	8.5	9.9
Obalno-kraška	8.8	7.5	7.2	6.3	5.2	6.9	7.9	9.6
Gorenjska	9.7	7.3	6.4	4.9	4.4	6.9	8.1	8.8
Goriška	5.9	6.5	6.2	4.9	4.3	7.1	8.6	10.0
Savinjska	13.1	12.7	11.6	9.4	8.0	10.3	11.8	12.7
Jugovzhodna Slovenija	10.4	8.8	8.6	7.0	6.3	8.9	10.0	11.6
Pomurska	16.7	17.1	15.7	13.4	12.2	15.9	19.0	18.0
Notranjsko-Kraška	10.4	7.9	7.0	5.4	4.9	7.1	8.5	10.0
Podravska	18.1	13.5	12.7	10.4	9.1	11.9	13.5	14.5
Koroška	9.9	10.6	10.1	8.1	7.3	10.9	13.1	13.3
Spodnjeposavska	13.4	11.5	10.5	8.9	7.7	10.2	12.2	13.4
Zasavska	14.9	13.8	12.0	9.7	8.2	11.0	11.9	13.3

Source: SORS, 2012.

Figure: **Dispersion of the registered unemployment rate at the NUTS 3 level, Slovenia, 2000–2011 (I–XI)**



Source: SORS; calculations by IMAD.

Book production and public libraries

In 2010, the number of published titles of books and brochures declined for the second consecutive year. The favourable development in the area of literature also came to an end. After growing since the beginning of the implementation of SDS (i.e. since 2005), the number of books and brochures[1] published declined for the second consecutive year in 2010. It totalled 5,621, down 8.4% on the previous year. The favourable developments in the area of literature also came to a halt in 2010. After several years of growth, the number of literature titles dropped by 10.7% in 2010 to 1,315. Broken down by country of origin, Slovenian literature recorded a particularly unfavourable change, as the number of published titles fell by 15.0%, which ended the favourable trend seen in previous years. The number of foreign literature titles published continued to rise. All types of literature recorded ad decline in the number of titles published,[2] except children's and youth poetry and dramas, which recorded increases. The sharpest declines in the number of titles published were recorded by short stories in relative terms and by poetry in absolute terms. Although the movements were largely unfavourable, the number of titles of all types of literature other than short stories was higher in 2010 than at the beginning of the implementation of SDS.

Growth in the number of units of library material[3] slowed in 2009. Library material in public libraries is an indicator of the range of products and services offered by libraries and the availability of books, audiovisual and pictorial material, etc. For a number of years, the number of library material units has been growing, but in 2009 its increase slowed considerably (see Table). Given the small increase in the number of library material units, their number per capita[4] also grew only slightly in 2009, but this was nevertheless the highest figure since data have been available.

Visits to public libraries declined significantly in 2009, thereby ending the favourable trend seen in previous years. In 2009 24.8% of the general public were members of a public library, down somewhat on the previous year. Library membership thus declined for the third consecutive year, reaching its level of 2000, the lowest level in the entire period since the implementation of SDS. The number of visits to public libraries also dropped in 2009, by 8.1% to 9.208 m, but was still higher than in 2005. The significant decline in visits was also reflected in a decline in the number of borrowed units of library material (by 6.3%), and in turn in a decline in the average number of borrowed units per capita (to 11.7 units). Such developments do not necessarily imply that people are reading less, as they may also result from more extensive use of new technologies for reading e-books. In addition, expenditure on book purchases per household member also increased in 2009.[5]

[1] A brochure has between 5 and 48 pages, a book has 49 pages or more.

[2] Novels, poetry, children's and youth poetry, dramas, short stories, children's and youth short stories and other.

[3] Library material is all material that has been professionally processed (inventoried, catalogued, classified) and is available to users. Library material includes book material (books and brochures, serial publications), other library material (audiovisual materials, microforms, maps, images, etc.), standards and patents. Between 2000 and 2009 library material in public libraries did not include standards and patents.

[4] As at 30 June or 1 July.

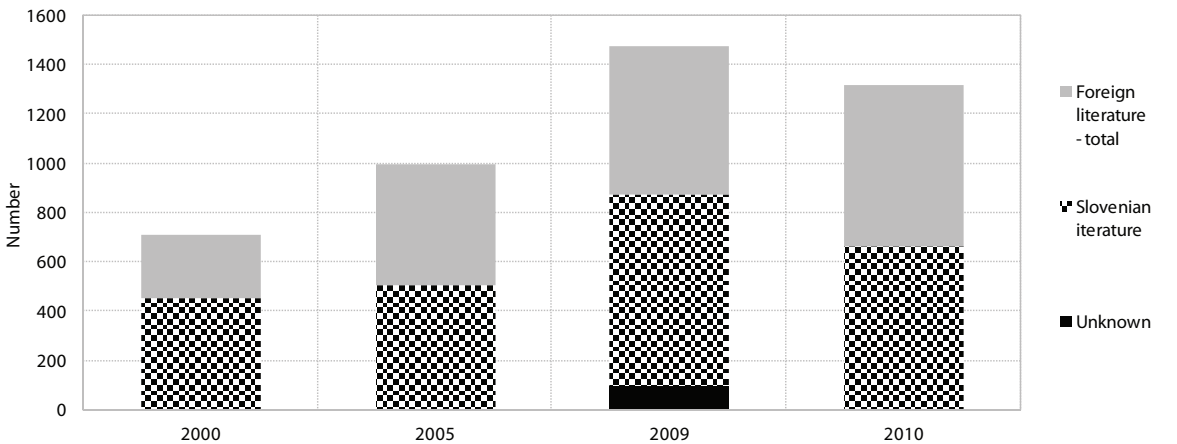
[5] Source: SORS, Household Budget Survey.

Table: **Library material,[1] membership and lending at public libraries, Slovenia, 1995–2009**

	1995	2000	2005	2006	2007	2008	2009
Number of units of library material, thousand	6,323	7,383	8,588	9,054	9,415	10,249	10,340
Library members as % of population[2]	21.5	24.7	25.7	26.8	26.0	25.0	24.8
Average number of borrowed units of library material per capita	6.4	9.7	10.4	12.4	12.7	12.7	11.7

Source: SORS, National and University Library, 2011.
Note: [1] Library material is all material that has been professionally processed (inventoried, catalogued, classified) and is available to users. Library material includes book material (books and brochures, and serial publications), other library material (audiovisual materials, microforms, maps, images, etc.), standards and patents. [2] Population as at 30 June or 1 July.

Figure: **Number of published titles[1] of literature by country of origin, 2000, 2005, 2009 and 2010**



Source: IZUM, National and University Library, SORS.
Note: [1] Books and brochures.

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III.
appendix

Calculation of a synthetic estimate of Slovenia's development according to the priorities of SDS

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.

A synthetic estimate of development according to individual SDS priorities and problem sets has been calculated by employing a standardised continuous scoring system.[1] This means that the value of the considered indicator is standardised by the mean[2] and standardised deviation and multiplied by ten. To reduce the influence of extreme values, points are limited to 3 standard deviations (±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 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 2005–2010[3] and is presented in comparison with other European Union Member States. 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. Hence, Bulgaria, Cyprus, Malta and Romania were excluded from the analysis due to incomplete data, while Luxembourg was excluded due to its specificity. 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,[4] 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.

[1] Expressed as an equation: ((indicator value – EU average)/ 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).

[2] Unweighted average of indicator values for selected countries.

[3] Because for a number of indicators data for 2011 are not available for all EU countries.

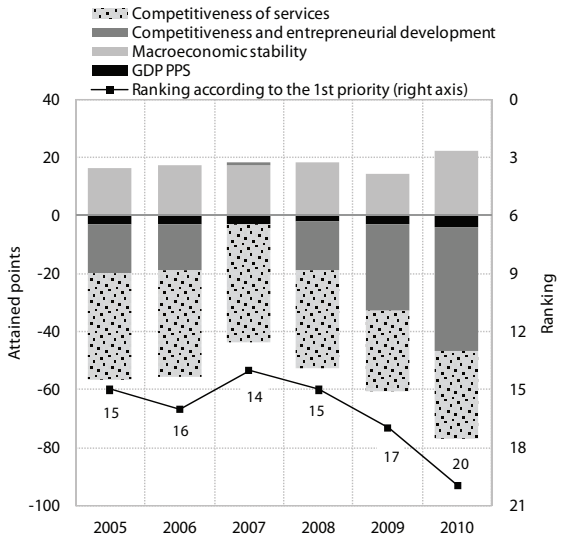
[4] To cover as broad a dimension of development as possible, we also used some indicators that may not necessarily show a priority's development, but come closest to this from among the available sets of data.

Table: **Synthetic estimate of development by priorities and problem sets within each priority, and the number of points assigned to individual indicators, Slovenia, 2004–2009 (with 10 points meaning one standard deviation from the EU average)**

		2005	2006	2007	2008	2009	2010
	1st priority	**-41**	**-39**	**-26**	**-35**	**-47**	**-54**
	Level of economic development	**-3**	**-3**	**-3**	**-2**	**-3**	**-4**
1	GDP per capita in PPS	-3	-3	-3	-2	-3	-4
	Macroeconomic stability	**16**	**17**	**17**	**18**	**14**	**22**
2	Real GDP growth	1	3	8	12	-4	-2
3	Inflation	0	2	-2	-1	2	7
4	General government balance	0	-1	2	1	2	2
5	General government debt	8	8	8	10	9	9
6	Balance of payments	1	1	-1	-4	-2	-1
7	Gross external debt	6	6	5	5	5	5
8	Cyclically adjusted general government balance	0	-2	-3	-5	2	2
	Competitiveness and entrepreneurial development	**-17**	**-16**	**1**	**-17**	**-30**	**-43**
9	Labour productivity	-4	-4	-5	-5	-6	-7
10	Market share	2	3	8	-4	-2	-8
11	Exports and imports as a share of GDP	6	7	9	7	5	5
12	Unit labour costs	1	2	8	2	-10	-15
13	Share of high-tech products in total goods exports	-6	-6	-5	-4	-3	-4
14	Outward foreign direct investment	-7	-7	-7	-7	-7	-7
15	Inward foreign direct investment	-9	-11	-7	-6	-7	-7
	Competitiveness of services	**-37**	**-37**	**-41**	**-34**	**-28**	**-29**
16	Non-financial market services as a share of GDP	-9	-8	-8	-7	-7	-5
17	Total assets of banks	-9	-9	-8	-8	-7	-8
18	Insurance premiums	-3	-3	-3	-3	-3	-3
19	Share of other services in exports of goods and services	-8	-8	-7	-6	-6	-7
20	Market shares in network industries – mobile telephony	-30	-30	-30	-30	-19	-22
21	Market shares in network industries – electricity	2	1	-11	0	-1	-3
	2nd priority	**-37**	**-38**	**-47**	**-42**	**-38**	**-29**
	Education and training	**-3**	**-4**	**-14**	**-18**	**-18**	**-18**
22	Share of population with a tertiary education	-5	-4	-2	-5	-5	-5
23	Total public expenditure on education	4	5	0	-1	-1*	-1*
24	Expenditure on educational institutions per student	-1	-6	-12	-11	-11*	-11*
25	Participation in education	-1	1	0	-1	-1	-1*
	Research and development, innovation and use of ICT	**-34**	**-34**	**-33**	**-24**	**-20**	**-11**
26	Gross domestic expenditure on R&D	-1	0	-2	0	1	3
27	Number of researchers in FTE	-2	-1	0	1	2	2
28	Science and technology graduates	-6	-8	-8	-7	-7	-7
29	Number of patent applications (OHIM)	-11	-10	-6	-2	-5	-3
30	Internet use	-1	-1	-4	-5	-4	-2
31	ICT expenditure	-9	-9	-9	-7	-3	0
32	Number of patent applications (EPO)	-4	-5	-4	-4	-4	-4
	3rd priority	**-24**	**-17**	**-14**	**-9**	**-15**	**-33**
	General government expenditure						
33	General gov. expenditure according to economic classification – general government	-1	0	2	2	1	0
34	General gov. expen. according to econ. classification – capital transfers & investment	0	3	6	8	8	0
35	Economic structure of taxes and contributions – total burden of taxes & contributions	-1	0	1	1	-1	-1
36	Economic structure of taxes and contributions – tax burden on labour	-5	-4	-2	-1	-2	-2*
37	State aid – total	1	2	3	1	-7	-8
38	State aid for horizontal objectives as a % of state aid	2	1	-1	1	3	-1
39	General government subsidies	-6	-5	-5	-5	-10	-10*
	Institutional competitiveness	**-10**	**-8**	**-7**	**-5**	**-3**	**-13**
40	Institutional competitiveness	-10	-8	-7	-5	-3	-13
	Efficiency of the judiciary	**-6**	**-5**	**-6**	**-5**	**-3**	**-4**
41	Rule of law	-6	-5	-6	-5	-3	-4
	4th priority	**17**	**7**	**21**	**9**	**19**	**12**
	Labour market	**8**	**5**	**11**	**12**	**19**	**14**
42	Employment rate	2	1	2	2	4	3
43	Unemployment rate	6	5	8	10	10	7
44	Long-term unemployment rate	3	1	3	3	7	5
45	Part-time employment	-6	-5	-6	-6	-6	-5
46	Temporary employment	6	7	7	6	7	8
47	Share of self-employed people	-9	-7	-7	-8	-6	-5
	Social protection	**0**	**-2**	**3**	**-6**	**-5**	**-5**
48	Social protection expenditure	0	-1	-2	-4	-4	-4*
49	Public and private expenditure on health	0	-1	5	-2	-1	-1*
	Living conditions	**9**	**4**	**7**	**3**	**5**	**3**
50	Material-deprivation rate	4	4	3	0	1	2
51	Number of doctors and nurses	-12	-12	-12	-12	-12	-12*
52	Life satisfaction	7	6	7	6	6	5
53	Population in jobless households	10	6	9	9	10	8
	5th priority	**-11**	**-12**	**-1**	**9**	**8**	**-1**
	Environmental criteria	**-14**	**-16**	**-14**	**-17**	**-8**	**-7**
54	Implicit tax rate on energy consumption	-3	-3	-2	-3	4	4*
55	Energy intensity	0	0	0	-2	-2	-2
56	Renewable energy resources	1	0	-1	0	1	1
57	Share of road freight transport in total freight transport	-2	-2	-3	-4	-4	-4
58	Agricultural intensity – NPK fertiliser use	-4	-5	-4	-5	-3	-3*
59	Agricultural intensity – share of controlled areas with organic farming	-1	0	1	0	-1	-1*
60	Agricultural intensity – average yield of wheat	2	3	4	5	5	5*
61	Share of municipal waste that is not landfilled	-9	-10	-8	-8	-7	-6
	Sustained population growth	**-6**	**-4**	**6**	**21**	**14**	**3**
62	Old-age dependency ratio	4	4	3	2	2	2
63	Life expectancy (M)	0	0	0	1	1	1
64	Life expectancy (F)	0	3	3	4	3	4
65	Fertility rate	-10	-9	-7	-3	-3	-1
66	Migration coefficient	0	0	8	19	13	-1
	Culture	**9**	**8**	**7**	**5**	**2**	**3**
67	Household expenditure on culture	9	8	7	5	2	3

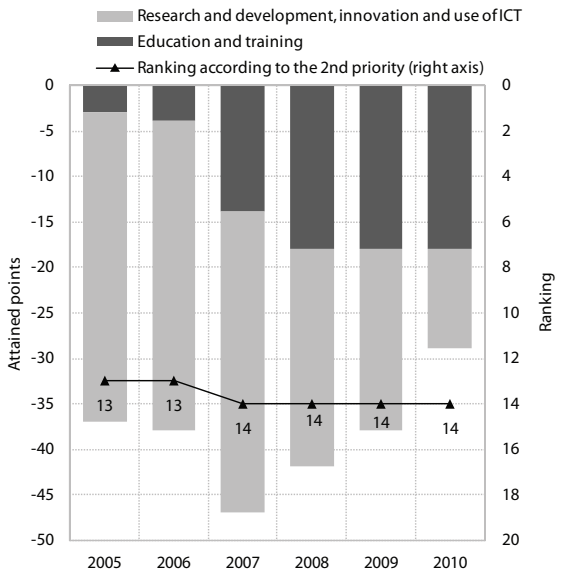
Source: Calculations by IMAD.
Note: Values marked with an asterix are calculations according to IMAD estimates based on data from previous years, while letters designate indicators combined into a new indicator in the calculation.

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, 2005–2010**



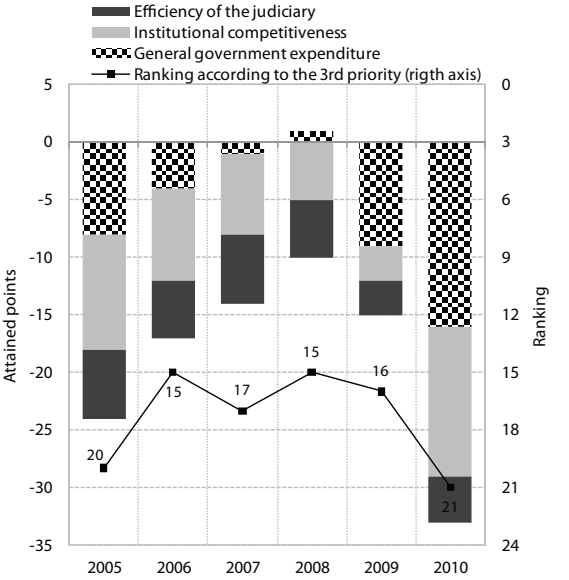
Source: calculations by IMAD.
Notes: The columns show the points (development estimate) attained according to individual components, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a component would therefore mean that 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, 2005–2010**



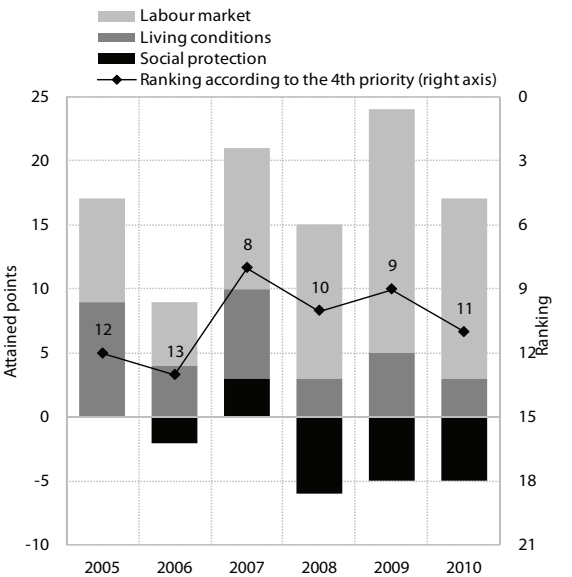
Source: Calculations by IMAD.
Notes: See Figure 1.

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, 2005–2010**



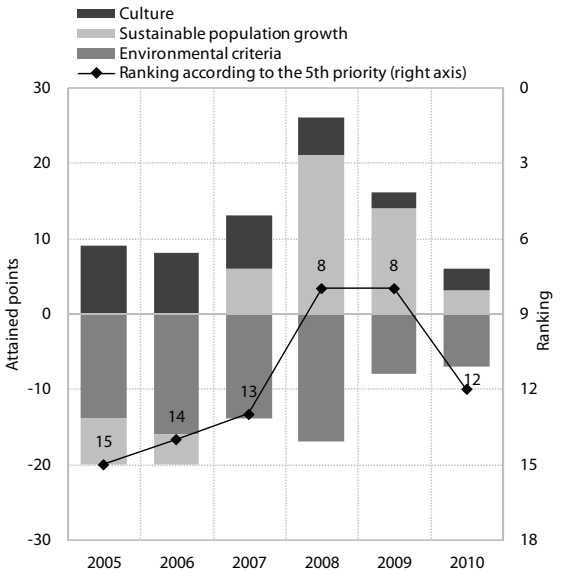
Source: Calculations by IMAD.
Notes: See Figure 1.

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, 2005–2010**



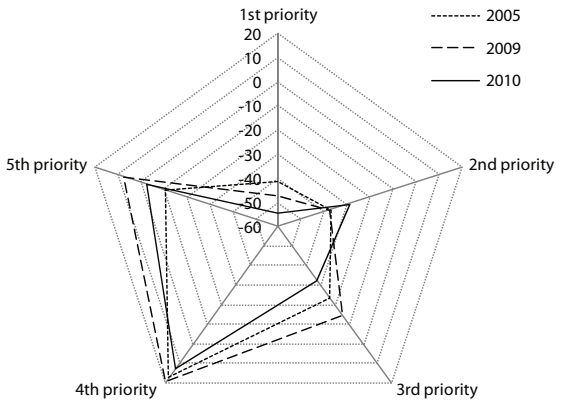
Source: Calculations by IMAD.
Notes: See Figure 1.

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, 2005–2010**



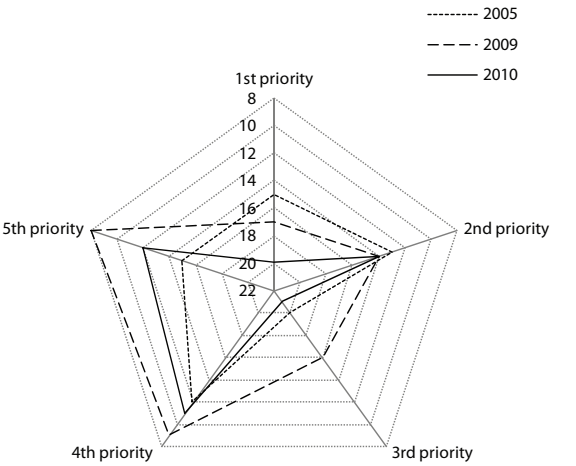
Source: Calculations by IMAD.
Notes: See Figure 1.

Figure 6: **Synthetic development estimate according to SDS priorities, 2005, 2009, 2010**



Source: Calculations by IMAD.

Figure 7: **Slovenia's ranking among 22 EU Member States according to the five priorities of Slovenia's Development Strategy, 2005, 2009, 2010**



Source: Calculations by IMAD.

development report 2012

ISSN 1581-6907