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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 years¹; (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 of 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&D, 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

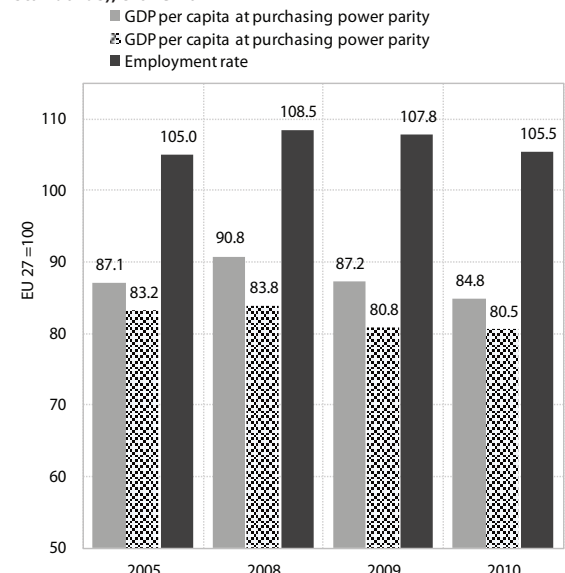
SDS guidelines: A competitive economy and faster economic growth is one of the five development priorities of SDS, and encompasses the following objectives: ensuring macroeconomic stability¹, promoting entrepreneurial development and increasing competitiveness, and increasing the competitiveness of services. 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

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.

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 partners² 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,

² See indicator Real growth of GDP.

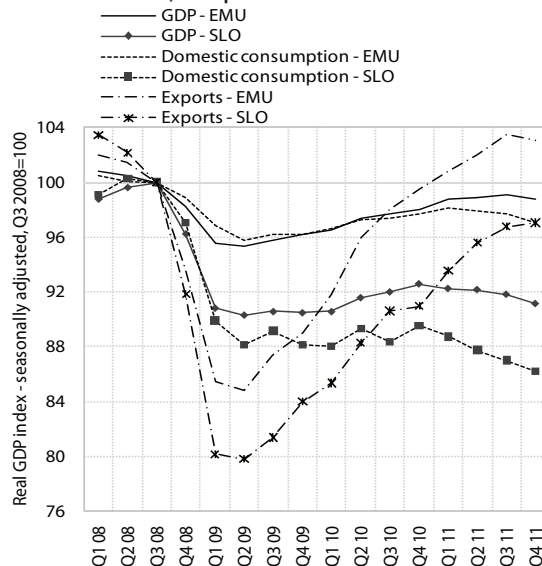
together with a considerable lag in terms of material productivity. Services, particularly knowledge-intensive services, which enhance the competitiveness of the entire economy through their roles in the production processes of other sectors, have difficulty following the rapid development of more advanced 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 deficit³. 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 year⁴(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 market⁵.

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 period⁶. 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 2009⁷, under the conditions of low economic activity and a changed structure of the employed⁸ the growth of wages in the private sector was influenced mainly by the rise in the minimum wage in the past two years⁹. 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

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.

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 extraction of the total factor productivity cyclical component.

Box1: 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 sector¹. 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 frozen². 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 measures¹⁰ in the public sector, which have continued to be adopted with amendments ever since 2009¹¹ 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 to 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 companies¹² and economic trends prospectives¹³ 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 GDP¹⁴). In the event of a new potential economic crisis, rapid debt growth increases the risk of exceeding the threshold of 60% of GDP¹⁵; 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).

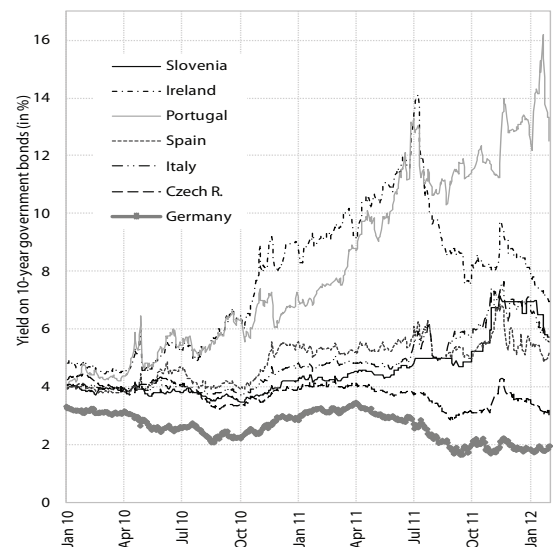
¹⁴ European Economic Forecast – Autumn 2011 (European Commission), 2011.

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 GDP¹⁶. 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 system¹⁷, slow fiscal consolidation and a deterioration in competitiveness¹⁸. 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's¹⁹ 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.

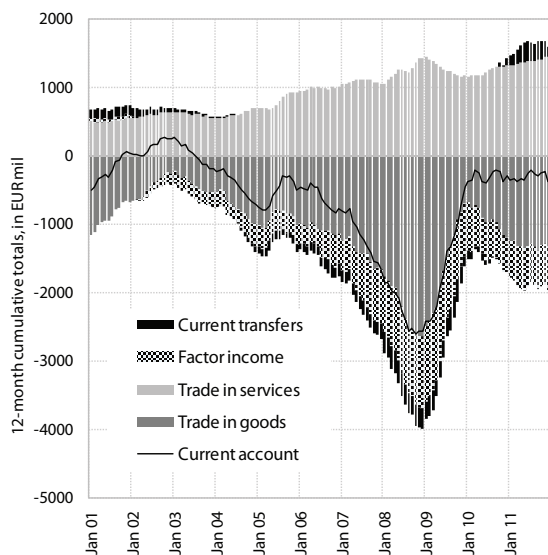
¹⁷ See Chapter 1.3.2: Financial Services.

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 partners²⁰. This loss accounted for a good half of the increases made during the preceding seven-year period of incessant growth²¹. 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 market²². 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 end²³, 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 services²⁴. 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 groups²⁵. 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.

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.

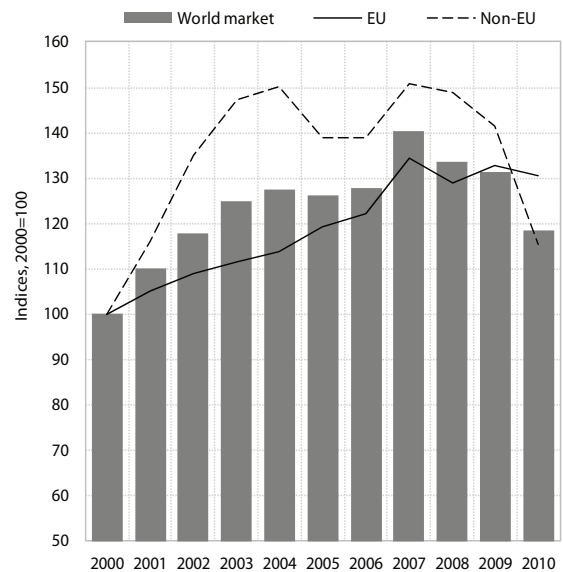
²² During the period 2008–2009, a drop in its export market share meant Slovenia ranked eighth among 17 EU Member States; in 2010, a deterioration in its export competitiveness meant Slovenia ranked fourth among EU Member States.

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.

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.

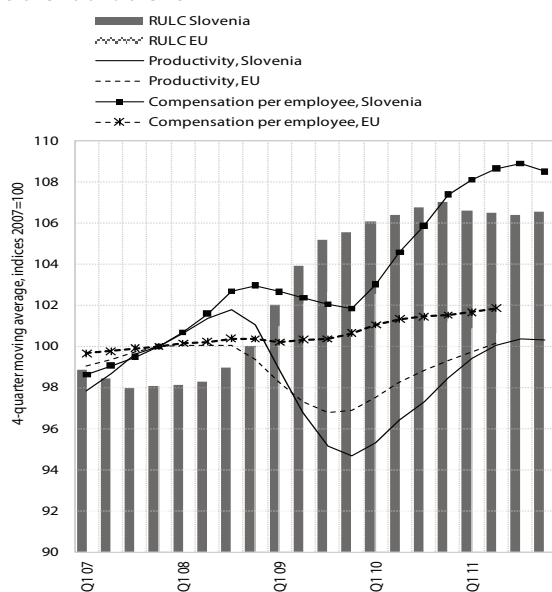
Over the past few years, the decline in Slovenia's export market share on the world market, which was accompanied by a fall in competitiveness, largely occurred under the influence of structural effects in association with the geographical orientation of Slovenia's exports. After 2008, Slovenia's export 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).

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 rate²⁶ 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 level²⁷. 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 growth²⁸. 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 productivity²⁹ 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).

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 industries³⁰ 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 industries³². Since the onset of the crisis, manufacturing

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).

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.

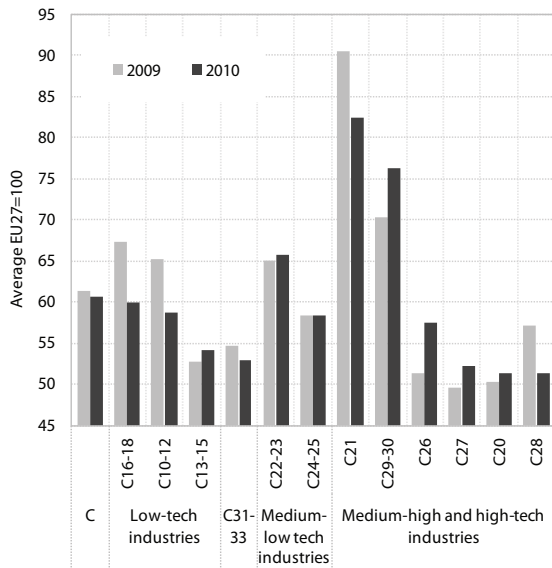
²⁹ The increase in productivity over 2010 and 2011, in contrast with the EU, resulted to a greater extent from the reduction of employment; economic growth was lower than in the EU.

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.

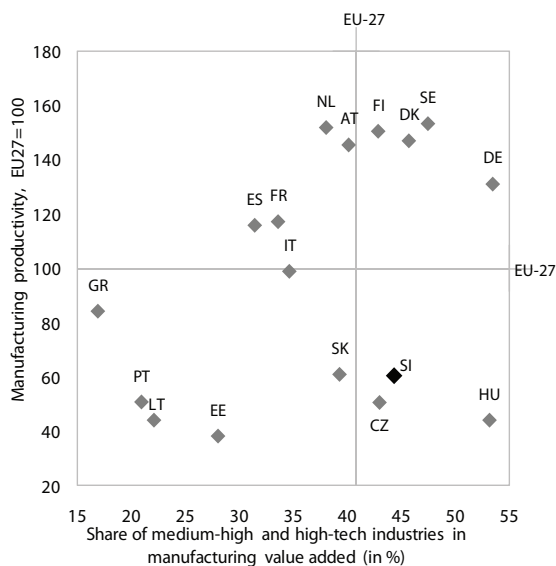
Figure 7: Manufacturing productivity (measured by value added per employee) by industry, in comparison with the EU average



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, 2010¹



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

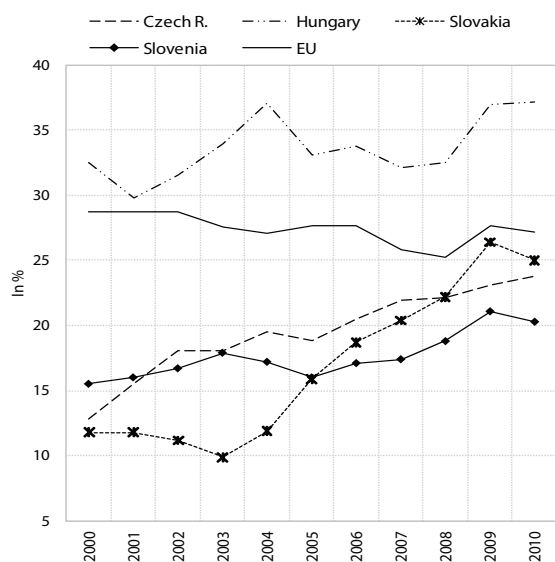
countries. As a consequence, in 2010, in addition to Malta, the Slovenian level of productivity was slightly exceeded also by Slovakia.

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 products³³. 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 processes³⁴. 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 products¹ in goods exports

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

Note: ¹Product 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 year³⁵. 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 halt³⁶. 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 activity³⁸, 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

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.

³⁵ See indicator Share of exports and imports in relation to GDP.

³⁶ See FDI 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 system³⁹ 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 services⁴². 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 data⁴³) and slightly increased by 2007 (the latest available data for Slovenia⁴⁴). 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 services⁴⁶ 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 services⁴⁷. 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 services⁴⁸. 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 significant⁵⁰, however, effective investment in innovation is equally important. The results of the study based on the survey⁵¹ 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 enterprises⁵², 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 industries⁵³ that stand out in international comparisons in terms of mark-ups⁵⁴ 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 five⁵⁵. 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 high⁵⁶, which is, to a certain extent, also the result of the small size of the Slovenian market⁵⁷. 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).

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).

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.

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 telephony¹ 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 services², and 11.1% and 16.1% below the EU average in the medium and large basket of services respectively. In fixed telephony³, 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 1646⁴ 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 17,782⁵ 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 shares¹ of the largest providers in electronic communications markets expressed as a percentage

	Month	Slovenia					EU					EU-3 ²
		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: ¹In 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.

²The 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 slowly⁵⁸. 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.

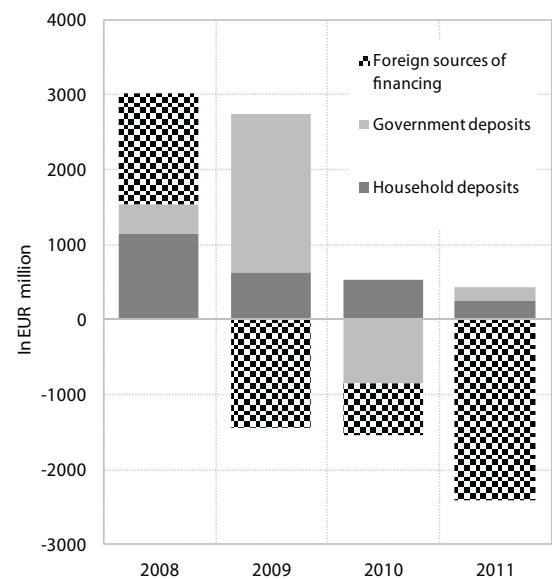
1.3.2. Financial services

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.

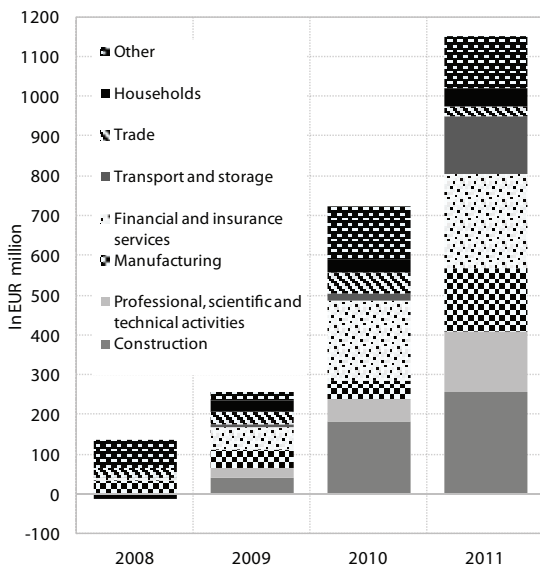
The quality of bank assets also rapidly deteriorated during the past year. The share of bad debts accounted for as much as 11.2% of the total banking system exposure, or EUR 5.5 billion. In the last few months of the year, the increase in C-rated loans⁶⁰ came to a halt, which was, in our opinion, primarily 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 place⁶¹ 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.

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 state⁶².

In addition to the aforementioned lack of financial resources, one of the reasons for the modest lending volumes⁶³ 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 2010⁶⁴. 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 capital⁶⁵, 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

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



Source: Bank of Slovenia, calculations by IMAD.

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.

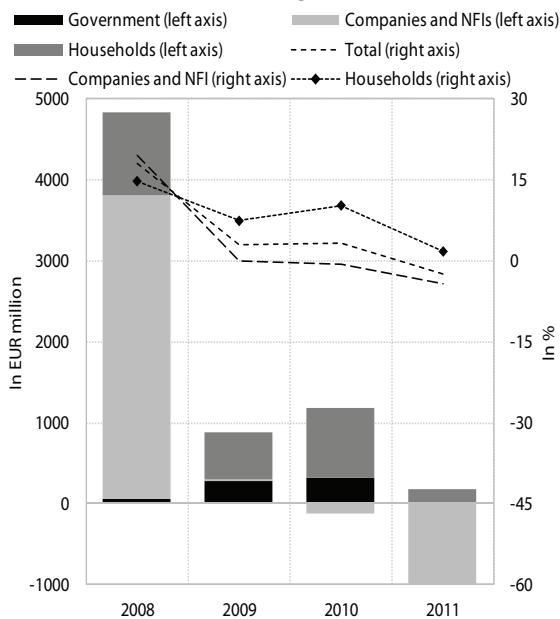
⁶³ Our net lending estimate is based on a comparison of the lending volumes in two different time periods.

⁶⁴ The decrease is partly also due to 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 low⁶⁶. 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-currency⁶⁷ 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 liabilities⁶⁸. The capital adequacy of the Slovenian banking system also remains relatively low⁶⁹ 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 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).

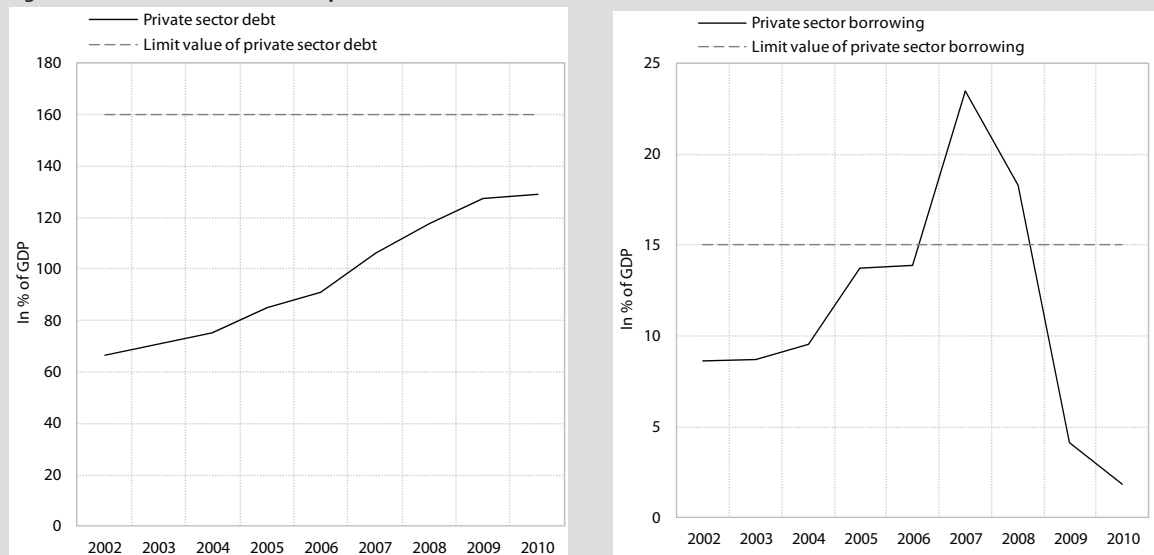
Box 5: Private sector borrowing and debt (internal imbalance indicators in excessive imbalance assessment procedures in the EU) - continue

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) estimated⁷⁰ 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

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

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 people⁷¹. 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 years⁷²; (ii) the insufficient number of science and technology graduates; (iii) poor efficiency of investment in education; and (iv) structural imbalance in graduate demand and supply⁷³.

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 rate⁷⁴. 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

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).

implementation⁷⁵, 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 Survey⁷⁶ Slovenia was ranked among those countries in which vocational education had the least favourable image⁷⁷. 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 low⁷⁸.

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 graduates⁷⁹ has increased, but Slovenia still lags behind the EU average in terms of their number per 1,000 inhabitants aged from 20 to 29 years⁸⁰.

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

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.

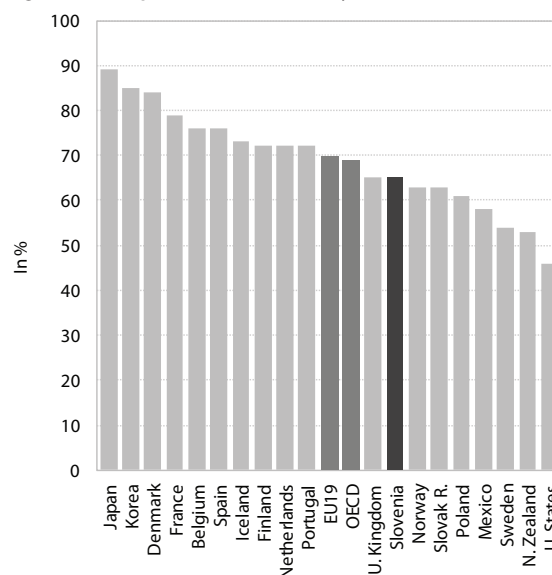
⁷⁸ The share of respondents who believe that individuals participating in vocational education and training acquire the skills required by employers, are given access to modern equipment (computers, machines, etc.), and have confidence in teacher competence, is among the lowest in EU Member States. The 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.

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 EU⁸¹. 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 education¹, 2008



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

Note: ¹The 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.

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 adults⁸⁴ 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 years⁸⁵. 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 learning⁸⁶ 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

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.

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.

people has been recorded for the second year in a row. In Slovenia, age-related drop in participation is much faster than 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 education⁸⁷ 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 average⁸⁸ 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 average⁸⁹ and has seen a decreasing trend 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 GDP⁹⁰. 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 relief⁹¹ 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 reliefs⁹² 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.

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.

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.

The Resolution on Research and Innovation Strategy of Slovenia 2011–2020 envisages the public sector to earmark 1% GDP⁹³ for R&D in 2012.

Favourable trends in the number of researchers⁹⁴ 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 researchers⁹⁵ 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 developed 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 companies⁹⁶. 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 active⁹⁷, 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 companies⁹⁸ 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 investments⁹⁹. 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

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).

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 sector¹⁰⁰. 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 EPO¹⁰² by Slovenia in 2010 exceeded the figures from the previous year, but a substantial lag behind the EU average¹⁰³ 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

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 environment¹⁰⁴; 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 OHIM¹⁰⁵ 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 GDP¹⁰⁶ 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 Index¹⁰⁸ 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 countries¹⁰⁹ (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.

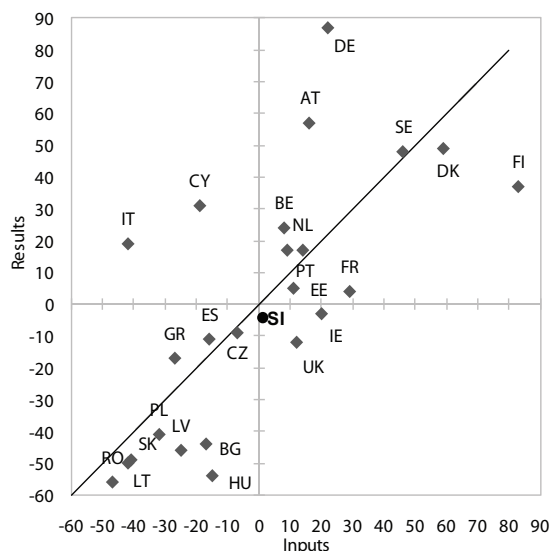
Since the beginning of SDS's implementation, Slovenia has recorded a significant increase in the investment in various innovation activity factors, which contributed to positive indirect effects, e.g. an increase in the income from patent export, an increase in the number of international publications 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 performance¹¹⁰ 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 average¹¹¹. 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.

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.

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 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

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 expenditure¹¹² 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 GDP¹¹³, 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 2005¹¹⁴. 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 faster¹¹⁵. On account of fiscal consolidation measures, there has been a downturn in the volume of expenditure in the EU in relative terms¹¹⁶, 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 2010¹¹⁷, 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 sector¹¹⁸. 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 institutions¹¹⁹. 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 favourable¹²⁰. 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 2010¹²¹ 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 expenditure¹²² 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 EU¹²³, which also depends on the way in which activities between the public and private sectors are financed¹²⁴.

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 function¹²⁵, 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 kind¹²⁶ 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 response 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 States¹²⁷, 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.

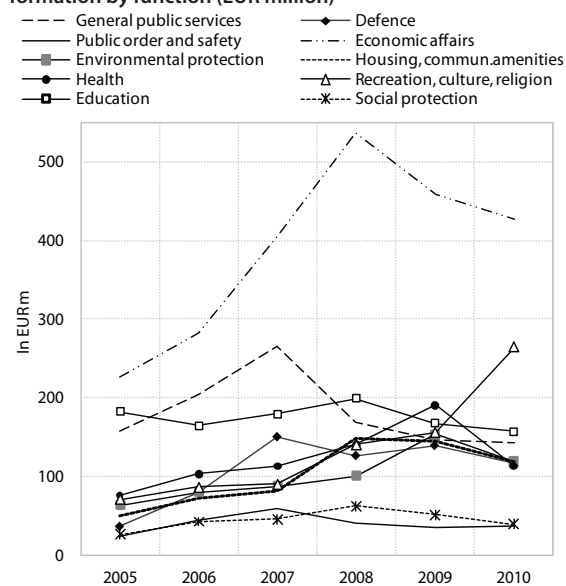
¹²⁶ The COFOG methodology has been applied. In the area of social benefits in cash and kind, there are also other methodologies.

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.

Figure 15: 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 through 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 aid¹²⁸ 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* measures¹²⁹ that are not classified as state aid.

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

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 recipients¹³⁰ 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

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, the *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 trend¹³². 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 rate¹³³ 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-25¹³⁵ 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 investments¹³⁶; strategic

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.

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

investments were envisaged in 48 companies, portfolio investments in 31¹³⁷. The Strategy's dynamics of selling these shares in 2011 envisaged the selling of capital investments totalling EUR 12.6 million only¹³⁸. 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 credible 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.

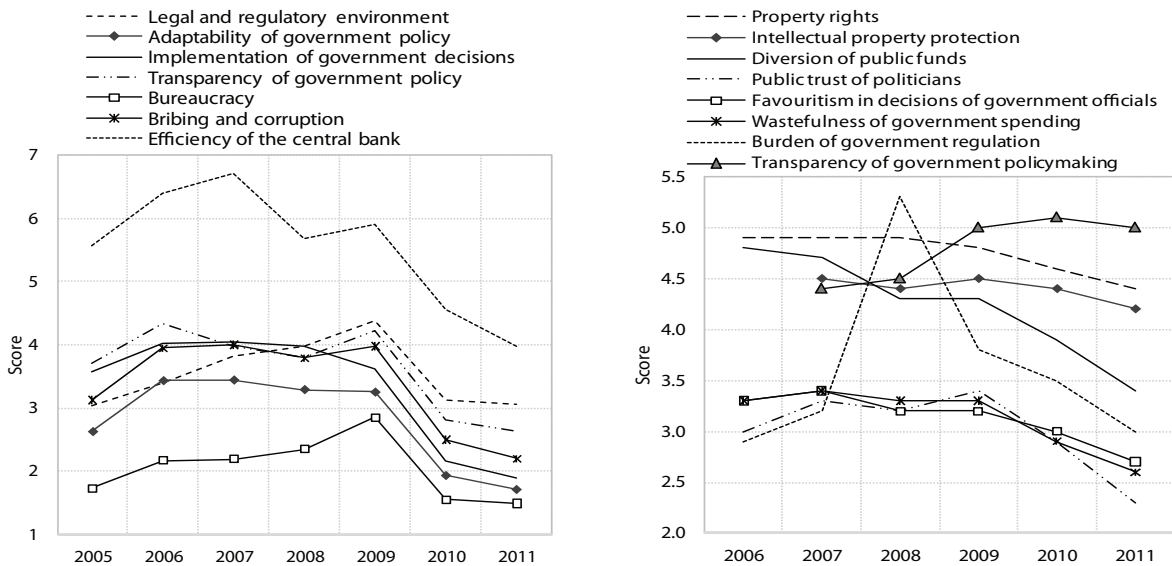
The activities for better regulations included the adoption of the Resolution on Legislative Regulation in 2010, providing for mandatory public participation in drafting regulations and assessing the impacts of regulation on the economy, the environment, and social affairs; consequently, the Rules of 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 stages¹³⁹. 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 corruption¹⁴⁰ 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 substantially¹⁴¹. 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 referendum. 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).

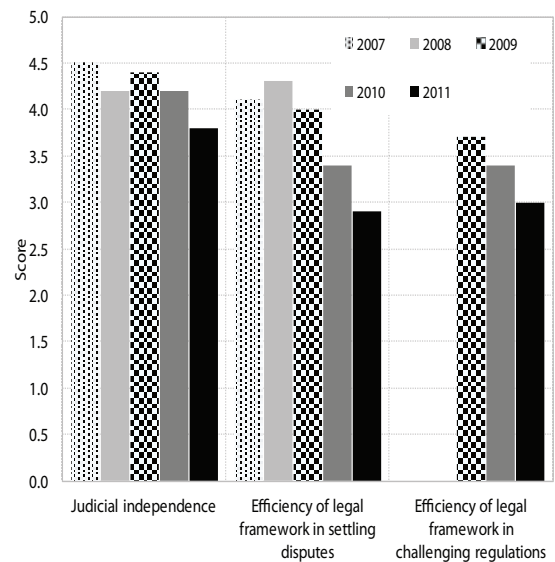
Public-private partnerships in infrastructure investments and public services have not yet been established. Despite a regulatory framework for public-private partnership, the state and municipalities only grant concessions for provision of services while there are few complex forms that would include 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 unchanged¹⁴². 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

Figure 17: 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?

by 3.6% in labour and social courts. On 31 December 2011, pending cases accounted for 30.5% of the entire caseload¹⁴³ (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 unchanged¹⁴⁴. 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%.

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 2010¹⁴⁵. 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 2010¹⁴⁷. 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

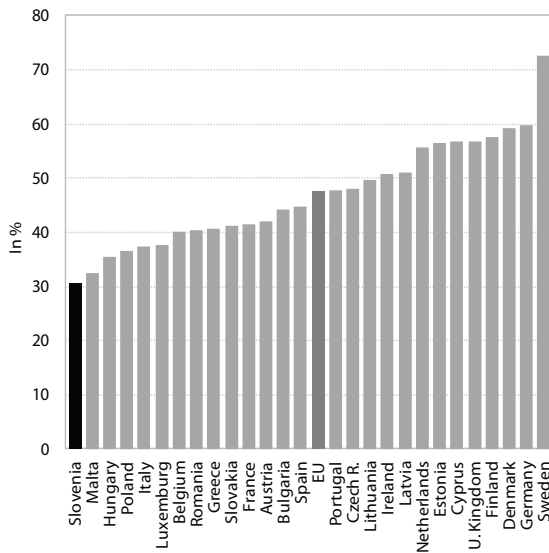
Source: Statistical Register of Employment (SORS), 2012; calculations by IMAD.

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.

Figure 18: 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 work¹⁴⁸ and a smaller volume of work performed by young people through student employment services¹⁴⁹. 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 legislation¹⁵⁰. 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

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.

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 increased¹⁵², 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 Act¹⁵⁴. 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 2011 both 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.

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 low¹⁵⁵. The issue of increased labour market segmentation poses a great challenge in the labour market policy and the promotion of flexibility. 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 expenditure¹⁵⁶ 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 programmes¹⁵⁸, 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 years¹⁵⁹. 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 pensions¹⁶⁰ 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 GDP¹⁶¹. As from 2008, the expenditure started to grow faster, primarily due to a faster increase in the number of pensioners¹⁶², 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 women¹⁶³, 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.

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.

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 row¹⁶⁴ 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 increasing¹⁶⁵. 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 trends¹⁶⁶, 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 conditions¹⁶⁷ in our country, only approximately one

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

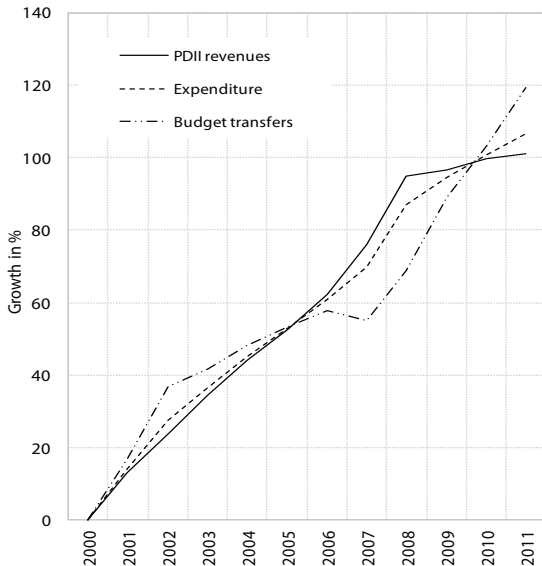
¹⁶⁵ In 2000 the share of fiscal transfers in the PDII total revenue was 29.6% and rose to 31.7% by 2002. By 2008 it had then dropped to 26.7% and, during the crisis, rose to 31.4% in 2011. Alongside funds for covering the difference between the revenue and expenditure of the pension budget, the calculation 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.

Figure 19: 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 2011¹⁶⁹ 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 2011¹⁷⁰. This was, in fact, the first year that supplementary pensions were paid. However, due to low¹⁷¹ 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 prices¹ 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 than 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 average² (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 expenditure¹⁷² 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 wages¹⁷⁶, (ii) reducing funds for depreciation, material costs and tertiary activities¹⁷⁷; (iii) decreasing expenditure for medicaments by reducing prices and promoting interchangeable

medicinal products; (iv) transferring a certain share of expenditure to complementary health insurance schemes¹⁷⁸; (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 million¹⁷⁹). 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 expenditure¹⁸⁰ 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 expenditure¹⁸¹. 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 expenditure¹⁸². 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 healthcare 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 same⁴ 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 capacities⁵ 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 basis⁷.

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 indicators¹⁸³ were influenced by the tax system, social security contributions, social benefits 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 12th¹⁸⁴ 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 year¹⁸⁵. 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 dimensions¹⁸⁷. 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 terms¹⁸⁸ 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 adjustments¹⁸⁹, 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 kind¹⁹⁰ 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 funds¹⁹¹ 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 2000¹⁹², 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 bracket¹⁹³. 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 competitiveness¹⁹⁴ 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 terms¹⁹⁶. Correspondingly, the ratio to the net wage also decreased for all three types of pensions over the last two years¹⁹⁷. 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 occupied¹⁹⁸. While the overcrowding of dwellings¹⁹⁹ 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 condition²⁰⁰. In addition, households find it increasingly hard to pay their housing costs²⁰¹. 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 deprivation²); 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 consumption²⁰³ 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 2009²⁰⁵ 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 average²⁰⁶.

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.

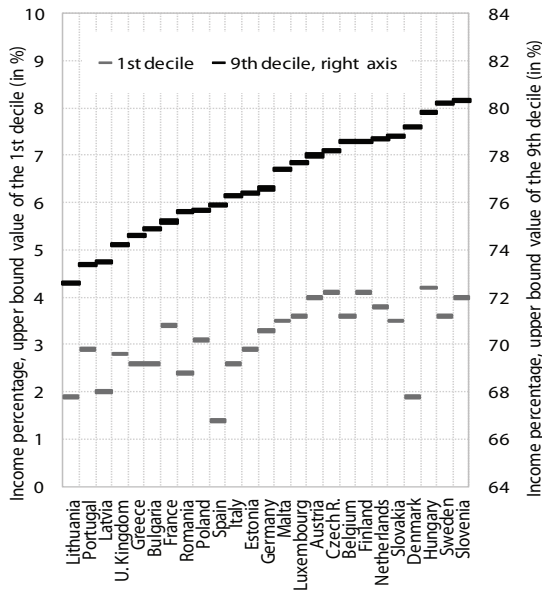
²⁰⁵ In calculating indicators for 2010, income for 2009 is taken into account.

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 EU²⁰⁷. 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 inequality²⁰⁸ 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 wages²⁰⁹, which had until then been increasing ever since 2005²¹⁰, 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 activities²¹¹. 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 jobs²¹². 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 year²¹³, 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.

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).

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

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 staff²¹⁵ 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 high²¹⁶.

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

The results of the 2009 international education study PISA²¹⁷ 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 abilities²¹⁸ 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.

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 5.7²²¹. The self-evaluation of health is also on the rise²²².

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 modest²²³. The share of users aged 80 and over has been increasing rapidly²²⁴. 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 activities²²⁵.

However, certain social climate indicators reveal negative trends. Trust between people decreased between 2008 and 2010²²⁶; the prevailing opinion is also that people usually look out for themselves.²²⁷ Trust

in institutions²²⁸ 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 ranked 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

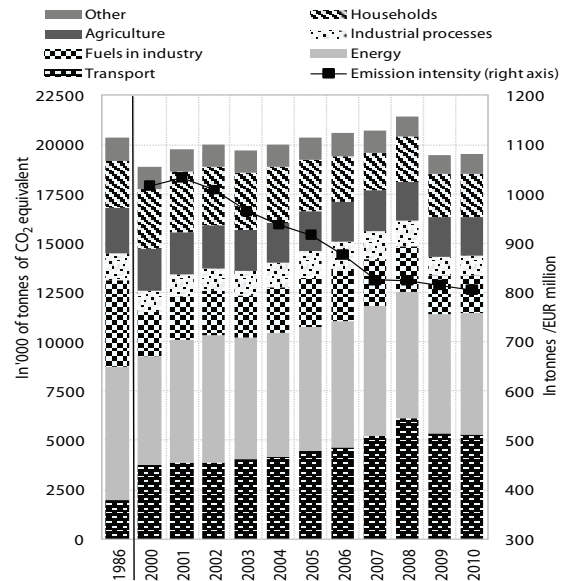
SDS guidelines: The priority Integration of measures to achieve sustainable development covers development in the areas of the environment, sustained population growth, regional and spatial development, and culture. The environmental objectives of SDS involve reducing energy intensity and increasing 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 generation²³¹, 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 2010²³². 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 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.

²²⁹ GHG emissions per unit of real GDP.

the share of RES rose to 14.7% in 2010²³³, 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 2010²³⁵). 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 intensity²³⁶. 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 2010²³⁷, 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 transport²³⁸ 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 Slovenia²³⁹. 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 analysis²⁴⁰ 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 2010²⁴² 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 industries²⁴³ 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 than 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-kilometres²⁴⁶ 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.

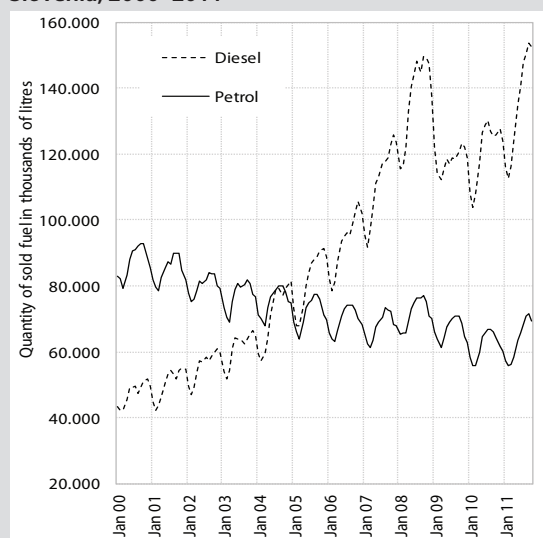
In 2008, public passenger traffic in Slovenia constituted only 13.8% of the total passenger transport, which is much less than in the majority of EU Member States²⁴⁷. The high level of individualised forms of transport in Slovenia is corroborated by a higher share of passenger vehicles per inhabitant (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 2000–2011¹. 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 border². 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 onwards³.

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 diesel⁵, 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 settlement²⁴⁸, 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 2011²⁴⁹. 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 most²⁵⁰ (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 high²⁵¹; 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 taxation²⁵². However, relatively high

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,

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.

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 duty²⁵³ 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 environment²⁵⁴; 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 framework¹, standards, and the like, as well as direct support for R&D investments, are important.

Government budget appropriations for environment and energy-related R&D² 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.

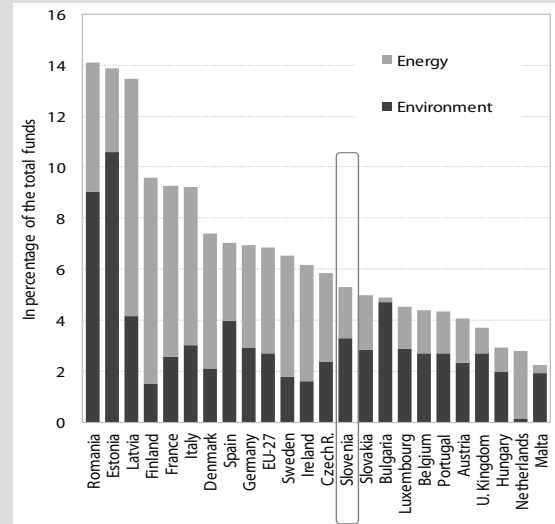
²⁵³ Motor fuel excise duties constitute approx. three quarters of revenues from environmental taxes, but in fact they mostly pursue other macroeconomic goals (inflation, public finance revenues, etc.)

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 2005–2008⁴ Slovenia filed only 11 first green patent⁵ 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 2010²⁵⁵. The planned introduction of a CO₂ tax²⁵⁶ 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 products²⁵⁷. 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 vehicles²⁵⁸ and, since 2010, environmental criteria²⁵⁹ 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 CO₂, PM and NO_x 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 documentation²⁶², 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 general²⁶³. 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

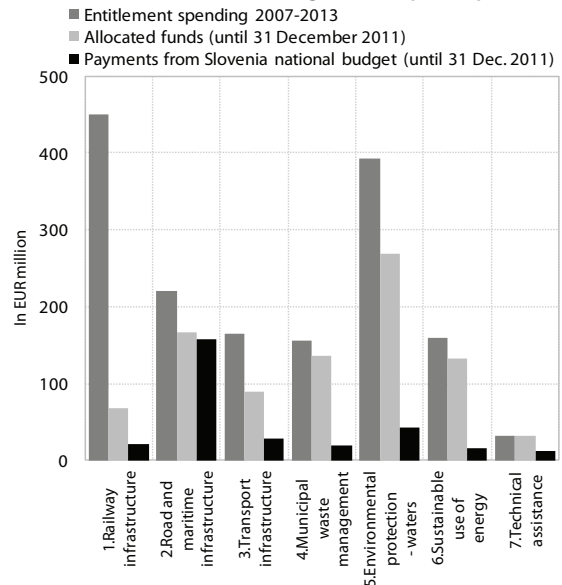
²⁶⁰ Funds from the Cohesion Fund and European Regional Development Fund.

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.

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.

still lags far behind the EU average in terms of household waste management. In 2010, approximately 6.6 million tonnes of waste²⁶⁴ 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 improving²⁶⁵. 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 annually²⁶⁷), 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 waste²⁶⁸ has contributed to an improved

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).

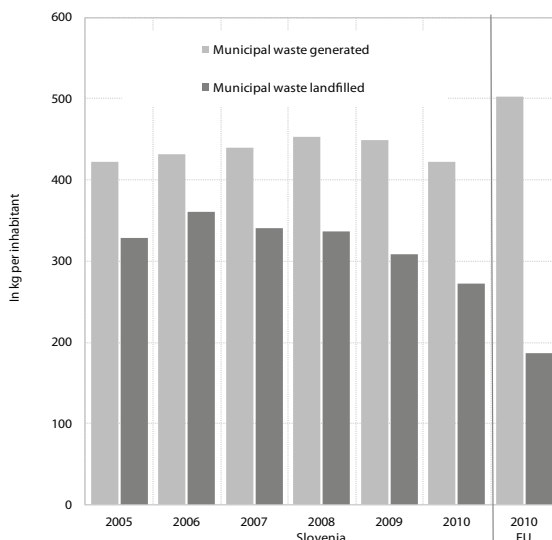
²⁶⁸ The condition for a reduced quantity of landfilled waste is a larger share of separately collected fractions.

municipal waste management, but Slovenia is still far from achieving the targets set for 2012²⁶⁹. 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 manner²⁷¹. 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 EU²⁷²; moreover, certain states use additional tax instruments to encourage the reuse of raw materials²⁷³.

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 country²⁷⁴. In Slovenia, material productivity in 2009²⁷⁵ 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 costs²⁷⁶. 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 minerals²⁷⁷. 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

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



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

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).

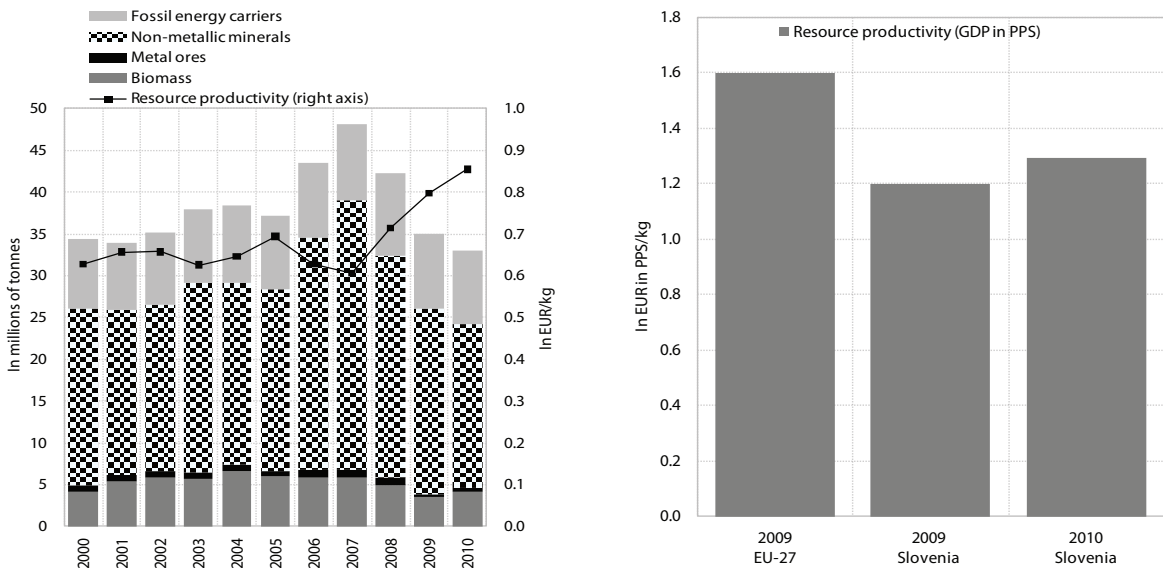
²⁷⁴ GDP/DMC. Domestic material consumption (DMC) is defined as exploitation of domestic raw materials, plus net import of materials (import – export of materials).

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 network²⁷⁸. 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 comparisons²⁷⁹, 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 substances²⁸⁰ 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 programme²⁸¹, 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 desirable²⁸². 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 fitofarmaceutskimi 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 development²⁸³, 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 procurement²⁸⁴, 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

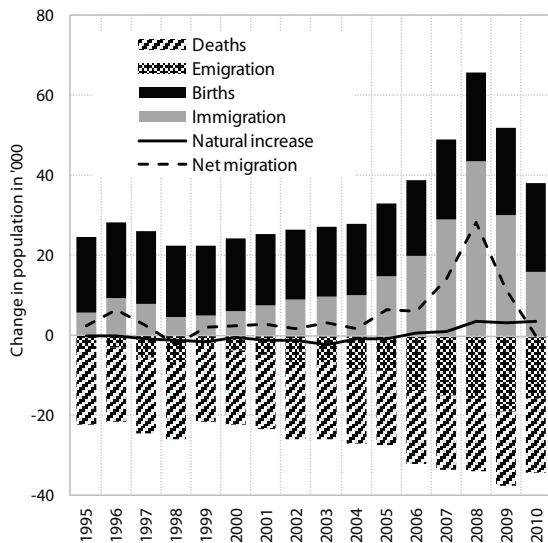
The population in Slovenia increased further in 2011, while net migration, which was the main reason for population growth during the period 2005–2009, has dropped significantly in the past two years. By 1 July 2011, the population had increased to 2,052,496 (an increase of 3,235 on the previous year). 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 EU²⁸⁶.

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 system²⁸⁷, 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 average²⁸⁸. In the field of labour, the quality of family life significantly depends on measures easing parents' reconciliation of work and family life²⁸⁹. 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 men²⁹⁰, 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-age²⁹¹ (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 projections²⁹², 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 systems²⁹³.

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.

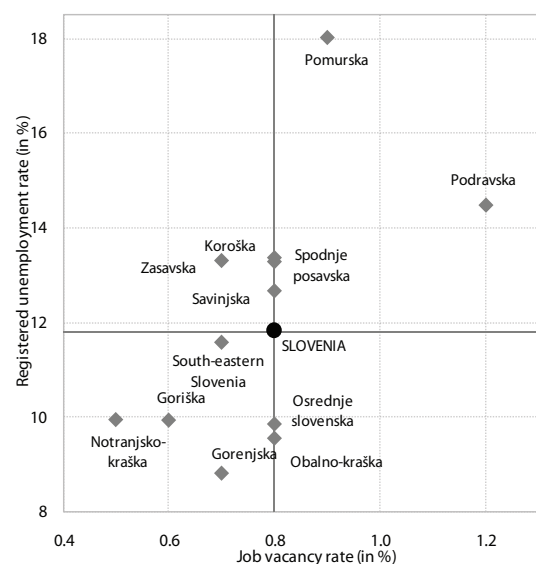
²⁹³ In 2010, the at-risk-of-poverty rate for people over 65 was 20.2%, which is higher than the EU average (15.9%) and much higher than the average at-risk-of-poverty rate in the country (12.7%). Older women have a particularly high at-risk-of-poverty rate (27.1%). The life of older people is revealed 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 average²⁹⁴ 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 Spodnje posavska 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 Notranjsko-Kraška, Goriška and Gorenjska regions have recorded the lowest imbalances over the same period. In some regions (the Obalno-Kraška, Goriška, Gorenjska, Notranjsko-Kraška, Spodnje posavska 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 region²⁹⁵, 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 region²⁹⁶ is also confirmed by migration flows. In 2010, the Osredjeslovenska region recorded the highest net migration rate²⁹⁷ (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 2008²⁹⁸. 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 concentration²⁹⁹ 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 0.271³⁰⁰, 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 Osredjeslovenska region (0.285). In the Osredjeslovenska 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 wages³⁰¹. 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 time³⁰².

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 2010–2015³⁰³ (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 jobs³⁰⁴ 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 Osredjeslovenska 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 y_i represents the job share in region i in the country, a_i 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 expenses³⁰⁵ and 307 taxpayers took advantage of tax reliefs for investments³⁰⁶. 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

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 eligible 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

cohesion policy funds³⁰⁸ 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 2007–2013³¹⁰ 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 project³¹² and an OECD study³¹³. 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

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 težav 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 32³¹⁶. According to the OECD findings related to Slovenia³¹⁷, 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 potential³¹⁹ 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 težav 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 Act³²³ (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 reintroduces³²⁴ 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 2011³²⁷, 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 imbalances³³¹. This is an annual change in the relative³³² 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

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.

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.

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 culture³³³ 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.

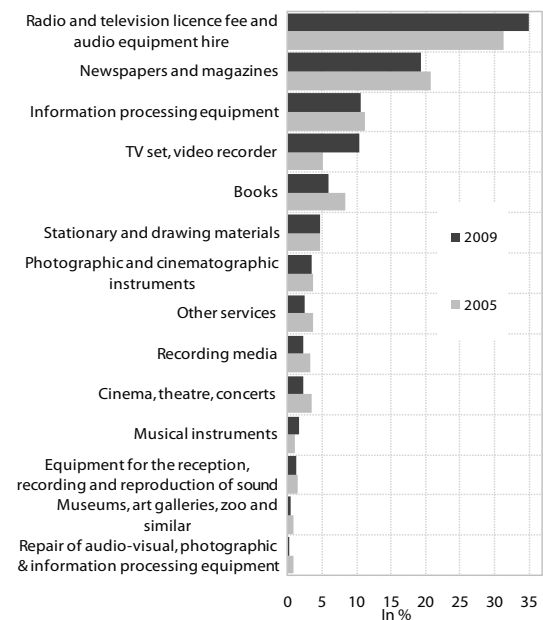
³³⁸ In 2009, the number of people who watched Slovenian films amounted to 51,800, while the number of foreign film viewers amounted to 2,720,200. The high increase in the number of Slovenian film viewers was mainly the result of viewing one particular film.

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 hyperproduction 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 contents³⁴⁰ 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 recreation³⁴¹, 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.