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Introductory remarks

The Development Report is a document that monitors the realisation of Slovenia's Development Strategy, which was adopted by the Slovenian Government in June 2005. SDS sets out the vision and objectives of Slovenia's development until 2013, classifying them into five development priorities with action plans. This year, the report presents an overview and an estimate of the implementation of the strategy from its adoption up to 2008, except in cases where the latest data are only available for earlier years (2007, and rarely, 2006). Given that this is an annual report, the emphasis has been placed on changes that occurred in the last year for which data were available. The Slovenian Government took note of the Development Report at its 23rd regular session of 23 April 2009 and accepted it as the expert groundwork for its economic and development policies.

The Development Report 2009 is divided into two parts: part I presents an overview of SDS' implementation in the five development areas; part II documents the progress by means of indicators of Slovenia's development. The findings in the report are mostly based on the 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 data shortage. The appendix contains a quantitative aggregate assessment of development, which supplements the expert approach of the report, yet at the same time cannot replace the comprehensive assessment of progress in individual areas owing to the time and geographic limitations in terms of the availability of the necessary data. The analysis in the report is based on the official statistical data of domestic and foreign institutions that were available by the beginning of April 2009. In the analysis, Slovenia was mostly compared with the 27 countries of the EU. In some rare cases where data for the last new EU Member States, Bulgaria and Romania, were not yet available, the EU-25 average was used. The terms "European average" or "EU average" thus refer to the group of the EU-27 countries; the term "old Member States" refers to the EU-15 group, whereas the EU-12 countries (or EU-10) that joined the European Union with the latest two enlargement rounds in 2004 and 2007 are referred to as the "new Member States".

Main findings

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

¹ As at the time of SDS adoption, 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 refers to 2013.

In the period of favourable economic conditions, Slovenia achieved considerable results in terms of economic and social development, yet did not take sufficient advantage of that period to implement the structural changes needed to attain the strategic development goals. In the period of favourable economic trends (2005–2007), the negative impacts of structural drawbacks, such as unfavourable structure and, consequently, insufficient competitiveness of the economy and non-modernised systems of social protection, were not visibly reflected. Under conditions of global economic recession, however, given the structural weakness of its economy, Slovenia is expected to experience major difficulties in revitalising the economy and preserving the population's welfare. In addition to the measures necessary for an immediate mitigation of the negative impacts of the economic crisis, it is therefore crucial that more radical structural adjustments be made to allow the process of real convergence to continue. These adjustments should also be designed so as to respond to future challenges, particularly in terms of the ageing of the population, energy and environmental protection.

*By 2008, Slovenia had made significant progress in reaching the average development level of the EU, which is the **central economic objective of SDS**, yet economic growth insufficiently depended on structural shifts that are indispensable for a more durable increase of competitiveness and better economic resistance to external shocks. According to Eurostat's preliminary estimate, gross domestic product per capita in purchasing power parity totalled 92% of the EU average in 2008, 9 p.p. more than in the base year 2003. Until 2007, Slovenia was characterised by accelerated economic growth, which slowed considerably in 2008 mostly owing to the deteriorating international economic environment. The analysis of sources of economic growth indicates that its acceleration prior to 2008 was mainly due to the favourable economic situation rather than structural changes, while in line with SDS guidelines, a higher development level should have been achieved by a considerable increase of total factor productivity, particularly by transition to a knowledge-based society, better state efficiency, and development-oriented restructuring of public finance. In most of these areas, however, insufficient progress was made in the last few years,¹ particularly in terms of the volume, structure and efficiency of R&D expenditure, innovation activities, efficiency and quality of tertiary education, foreign direct investments, and restructuring of public finance sources and expenditure. Important results were achieved mainly in the educational level of the population, the use of information and communication technologies, and labour taxation. On the other hand, the past years' insufficient consolidation of factors relating to the knowledge-based society was reflected in the low share of high-technology and knowledge-based industries and, as a consequence, low competitiveness of the economy. Given the deterioration of international economic trends, in 2008 Slovenia also experienced lower cost competitiveness and lower market shares. Following a period of continuing macroeconomic stability the external and public finance balance deteriorated, while a more positive trend was observed in general government indebtedness and inflation.*

*The area of the quality of living and the welfare of Slovenian inhabitants, which is the main **social objective of SDS**, has been characterised by relatively favourable trends, although unachieved systemic changes particularly in deteriorated economic conditions suggest future problems. In the last few years, the living conditions of most of the population have gradually improved, as evidenced by real growth of the most important incomes, as well as by the increasing housing stock and housing standard. The relatively high rate of social cohesion is demonstrated by the latest (2007) data on poverty and income inequality, which were among the lowest in the EU. Labour market trends have been very favourable as well. Here, the consequences of slower economic*

¹ For most areas the latest figures are available until 2007, and for innovations only until 2006.

growth began to show with some time-lag only at the end of 2008, and more explicitly at the beginning of 2009. Labour market flexibility was influenced by the supplemental labour law at the end of 2007, which enabled greater internal flexibility in enterprises; other than that, no systemic changes to encourage the development of flexicurity were seen. Less favourable trends were observed in individual population groups: particularly 2007 saw higher at-risk-of-poverty rates in some groups (unemployed, single-parent families with dependent children, tenants), while the share of low-income employees has been growing since 2005. Income inequality rose slightly as well. Despite the improving accessibility of most services of general interest, waiting times for health care services and access to long-term care services for the elderly still raise concern. The greatest challenge under the social objective of SDS, however, remains the modernisation of the social protection systems, as 2008 again did not see implementation of the necessary and long-planned adjustments of the pension and health insurance system and of long-term care. Under conditions of strong economic growth, social protection expenditure as a share of GDP had been decreasing over previous years, but the changed economic situation in 2008 caused a shift in these trends which, without the necessary system changes, will be reflected in increasing public finance problems and, consequently, difficulties in the provision of services and incomes important for the population's welfare.

*In the application of the principle of sustainability, which is the **intergenerational and sustainable goal of SDS**, the priority issue is to reduce environmental pressures; in this context, some improvement has been achieved through the lower energy intensity of the economy, although minimising greenhouse gas emissions and increasing the use of renewable energy still remain a great challenge.* An encouraging development in terms of environmental pressures is that for the second consecutive year the increase in energy consumption in 2007 (latest available data) was very slow, despite the high economic growth. This was the result of a significant decline of energy intensity in manufacturing and lower energy consumption of households, whereas energy use in transport, recording very high growths in 2005 and 2006, increased even further in 2007 owing to domestic and international road transport and greater transit traffic. Despite the low growth of energy consumption, however, the share of renewable energy fell in 2007, reaching its lowest level since 2000. For this reason and owing to high energy use in transport, the first available data indicate that greenhouse gas emissions in 2007 increased again. In waste management, 2007 saw some improvement, yet considerable progress toward sustainable development is still needed in the segment of municipal waste. Regarding sustained population growth, the period since 2005 has been characterised by a rise in the number of inhabitants, although despite the gradually increasing fertility, this has been mainly due to extremely strong net migration. Given the low fertility rate and increased life expectancy, the share of the elderly population continues to climb. Although this process is still slower than in the EU for now, it is projected to speed up in the future. In regional development, although increasing slightly over the last few years,² regional disparities in development and unemployment rates have been relatively stable and moderate compared with those in the EU. Less favourable is the continuing process of concentration of population in the Osrednjeslovenska region and the related suburbanisation, which has negative consequences in terms of environmental pressures and weakens individual regional centres. In spatial development, legislation on spatial planning was amended in 2007 and needs to be implemented as soon as possible in order to provide for effective spatial management.

Heavily deteriorated economic conditions in times of global economic crisis underline the necessity of implementing the SDS objectives. In times of crisis, the structural weaknesses of Slovenia's economy are much more pronounced than in times of favourable economic trends. Therefore, reaching the SDS objectives calls for effective implementation of measures to mitigate the impacts of the crisis, as well as for radical changes toward improving economic competitiveness, particularly by consolidating the main factors of the knowledge-based society, modernising the social state and restructuring general government expenditure. Environmental objectives need to be met more consistently, as well. Below are the main recommendations deriving from the implementation of SDS thus far:

- Future economic development will vitally depend on improved total factor productivity. The latter requires stricter economic policy measures as the only way to achieve economic growth, improve competitiveness and create high-quality jobs.

² Data on GDP per capita by region are available only until 2006 and on the unemployment rate until 2008.

- In providing the appropriate amount of public funds to accelerate transition to a knowledge-based society, emphasis needs to be placed on improving the efficiency of spending. In the promotion of research and development and innovation activities, this means more funds for R&D, more concerted policies and enhanced mechanisms to transfer knowledge from the public research sphere to the private sector. In education, particularly in terms of public financing of tertiary education, activities should focus on promoting quality and efficiency and closer relations with the entrepreneurial sector.
- To allow enterprises to take full advantage of support mechanisms, it is necessary to continue simplifying administrative procedures and take account of the staff limitations of small and medium-sized enterprises when designing the necessary measures.
- At the same time, flexibility of enterprises and employees should be increased by accelerated development of flexicurity on the labour market.
- In order to maintain population welfare and provide sustainability of public finance, it is vital to adjust social protection systems to demographic trends and to the various forms of activity, since as a result of the changed economic conditions and their negative impacts on public finance sources, we are going to face difficulties in financing these services at a much earlier time.
- In order to preserve social cohesion, it is necessary to reduce the social risks of the more vulnerable population groups, particularly in this period of economic crisis.
- Greater efforts to mitigate environmental pressures are needed in terms of reducing greenhouse gas emissions, increasing the use of renewable energy and ensuring energy efficiency. In order to achieve the Kyoto objective and the complex long-term goals under the EU climate and energy package, it is particularly necessary to enhance the transport and energy policies.
- Implementing SDS objectives in all three priority areas (economic, social, environmental) while maintaining public finance within long-term sustainable levels will only be possible if supported by a changed structure of public finance sources and by a development-oriented restructuring of public spending, which should be based on the strategic goals and development priorities of the state and on efficient programmes of public finance expenditure.

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 are the foremost development priority of SDS, which encompasses the following objectives: ensuring macroeconomic stability,¹ promoting entrepreneurial development and increasing competitiveness, and increasing the competitiveness of services. The first SDS objective, *ensuring macroeconomic stability*, focuses on three core tasks: to increase the adaptability of fiscal and income policies, ensure the long-term sustainability of public finances, and maintain price stability. The second SDS objective, *increasing competitiveness and promoting entrepreneurial development*, focuses on the development of areas where Slovenia has a competitive advantage, entrepreneurship and the development of SMEs, the promotion and development of an innovative environment and innovativeness, and internationalisation and competition in the network industries market. The third objective, *increasing the competitiveness of services*, prioritises the need to boost the factors of effectiveness in services and simplify the administrative framework for their provision. A special emphasis is placed on those services most closely linked to business operations (business, financial, distributive and infrastructural services) because they have the greatest impact on the economy's productivity and competitiveness.

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 is therefore more sensible to set the preservation of macroeconomic stability as our goal.

In all the years of implementing Slovenia's Development Strategy, Slovenia has been narrowing its gap behind the average development in the EU as measured by **gross domestic product per capita in purchasing power parity**. According to Eurostat estimates, gross domestic product per capita in purchasing power parity reached 92% of the EU average in 2008, while since 2003, which was determined in Slovenia's Development Strategy (SDS) as the base year for monitoring the fulfilment of the central economic objective,³ it drew closer to the EU average by 9 percentage points.⁴ Compared to the

³ In ten years (starting with 2003, for which the latest data were available when SDS was adopted) the central economic objective of SDS is to catch up with the average development of the EU measured by GDP per capita in PPP.

⁴ Progress compared to 2003 is the same (6 p.p.) even if the average of the EU-25 (25 Member States of the EU at the adoption of SDS in 2005) is taken into account.

countries of similar development levels in 2003, in that period Slovenia decreased its lag behind the EU average the most. The decrease of development gap was in line with strong development growth in Slovenia compared to the EU in that period. In 2006 and 2007, when Slovenia recorded GDP growth rates more than twice as high as the EU average,⁵ the decrease in its gap behind the EU average in terms of GDP per capita in PPP was relatively lower, since that period also saw a considerable change in the general price level compared to the EU average.⁶ In 2008 Slovenia drew closer to the average EU development level by as many as 3 p.p. according to Eurostat estimates. Despite the decrease relative to 2007, the difference between economic growth in Slovenia and the EU remained relatively high, while inflation drew closer to the EU average again in 2008, after wider gaps in 2006 and 2007.⁷

The analysis of sources of economic growth in the period of implementing SDS shows that especially in the period of the pronounced acceleration, economic growth was, contrary to strategic orientation, mainly based on labour contribution. It can be thus concluded that the contribution of factors of the favourable economic environment to economic growth was higher than the contribution of structural factors. In line with SDS, the acceleration of economic growth and the resulting catching up with the average development level in the EU should be predominantly based on an increase in the contribution of total factor productivity, where Slovenia has the greatest gap compared to the EU.⁸ According to our estimates of aggregate production functions for the period after 2003, the strengthening of economic growth derived to a large extent from the increased labour contribution, especially in 2006 and 2007, when it accelerated the most, and according to first estimates also in 2008, when it slowed down. After 2004 the contribution of total factor productivity increased significantly compared to the previous three-year period, but this was probably also related to the economic cycle.⁹ Modest progress regarding the contribution of total factor productivity is reflected in a relatively slow catching up with developed countries in terms of productivity level. In the analysed period (2003–2007) the lag behind the EU average

⁵ See the indicator *Real growth of gross domestic product*.

⁶ See the indicator *Gross domestic product per capita in PPS*.

⁷ See the indicators *Real growth of gross domestic product and Inflation*.

⁸ Among factors speeding up the growth of total factor productivity, SDS pointed out especially stimulating innovation and entrepreneurship, increasing investment in research and development, supporting economic internationalisation, improving the education of population, increasing institutional competitiveness and government efficiency, and development restructuring of public finance (Bednaš [ed.], Kajzer [ed.], 2005).

⁹ The calculation of total factor productivity is made from the data on employment and capital, which according to our estimate do not reflect greater utilisation of capital and labour in the period of economic growth.

productivity level decreased less than the lag of GDP per capita,¹⁰ despite a greater gap.

1.1. Macroeconomic stability

In 2008 economic growth slowed, public finance and external balance deteriorated, and wage growth exceeded productivity growth, but the situation regarding general government indebtedness improved and consumer price growth slowed drastically at the end of the year. Economic growth slowed significantly in 2008. In the first half of the year the moderation was modest, but after a significant slowdown in the third quarter, gross domestic product decreased in the last quarter for the first time since 1993, particularly on account of the deepening financial crisis and its ever stronger transfer to other sectors of the economy. Inflation was mostly affected by external factors, and after growing at an accelerated pace in the first seven months of 2008, it decreased towards 2% by the end of the year. In 2008, the public finance surplus turned into a deficit, which was the result of both cyclical and structural factors. Public debt relative to GDP nevertheless continued to decline, partly also due to the active management policy. Amid the accelerated wage growth and much slower productivity growth, the ratio between wage growth and productivity growth deteriorated significantly. The worsening of the external balance continued as a result of a gradual decrease in exports, higher import prices and increasing interest payments. With stricter borrowing conditions on international financial markets, the growth of gross external debt slowed down significantly in the third and especially the last quarter of the year. Net external debt increased even more than in 2007.

Compared to 2007, economic growth almost halved in 2008, which was in the third and especially the last quarter the result of the ever greater impact of the deepening international financial crisis. With a gradual slowdown in the first three quarters and a decline in the last quarter, economic growth almost halved in 2008 (3.5%) relative to 2007 (6.8%). In the first half of the year, real GDP growth remained relatively high (5.5%), but was already much lower than the average of 2007 (6.8%). Amid the gradual slowdown in the international economic environment, the growth in exports of goods already slowed significantly. The growth of investment in machinery and equipment was also lower than in the previous year. Export and investment activities nevertheless remained the most important factors of economic growth. Investment in construction remained relatively high, whereas the growth in services exports was slightly higher than in 2007. With a somewhat slower private consumption growth and still modest government consumption growth, final consumption growth was also lower than in 2007. In the third quarter,

economic growth in Slovenia started to decelerate faster due to a considerable stagnation of economic growth in most of Slovenia's main trading partners (due to the spillover of the impact of the financial crisis into other sectors of the economy, some of them had already fallen into recession). The growth of exports of goods and of gross fixed capital formation, especially investment in machinery and equipment and investment in residential construction, continued to decline. Value added in manufacturing activities declined for the first time since the first quarter of 1999. The growth of value added in most market services, which was maintained at a relatively high level in the first half of the year, also started to gradually decline. With the deepening of the financial crisis, the spillover of its impact into other sectors of the economy strengthened in the last quarter of 2008. Export and investment activity decreased in real terms year-on-year, mostly as a result of lower orders and problems with financing and operation. Final consumption growth was positive amid the modest growth of private consumption and accelerated growth of government consumption, but as in the third quarter, much lower than in the first half of the year. Amid such trends, gross domestic product declined in real terms year-on-year (by 0.8%) for the first time in 16 years. The greatest real drop in value added was observed in manufacturing. Value added also decreased in business services, while in construction and trade its growth posted a significant slowdown.

The deficit of the current account of the balance of payments increased further in 2008, as in 2007, due to a wider trade deficit and higher interest payments. The current account deficit amounted to EUR 2.1 bn (5.5% of GDP) in 2008 and was EUR 600 m higher than in 2007. The further deterioration of the external balance was to the greatest extent the result of a higher deficit in merchandise trade (EUR 956 m), since with the lower growth of foreign demand, the nominal growth of exports slowed faster than the growth of imports. The latter was to a large extent also due to the higher growth of import prices than export prices in the first ten months of the year; in 2008, the deteriorated terms of trade¹¹ contributed more than two thirds to the growth of the merchandise trade deficit. The surplus of services balance increased by EUR 588 m and mitigated the deterioration of the external position; the main part of the increase was contributed by the surplus in trade in transport services, while the surplus in other services, including various predominantly knowledge-based services, decreased as well. The growing deficit in factor incomes (EUR 134 m higher), which was the result of the growing net interest payments due to further borrowing abroad and on average higher interest rates, had the opposite effect. A deficit was also observed in the balance of current transfers, but was, compared to 2007, EUR 85.3 m lower.

The growth of gross external debt slowed in 2008, but the increase was still higher than the current account

¹⁰ See the indicators *Gross domestic product per capita in PPS and Productivity*.

¹¹ Calculated on the basis of external trade statistics.

deficit. Gross external debt in 2008 increased by EUR 4.3 bn, reaching EUR 39 bn or 105.3% of GDP at the end of the year (at the end of 2007 it was 100.8% of GDP). Compared to 2007, the growth of gross external debt slowed. If we eliminate the impact of Bank of Slovenia liabilities towards the Eurosystem on the growth of gross external debt in both years,¹² last year's slowdown was mostly the result of a smaller volume of bank borrowing abroad. In 2008, bank borrowing abroad amounted to EUR 1.7 bn (in 2007 EUR 5.2 bn), as a result of tougher lending conditions and lower availability of financing on international financial markets, where the conditions, which had been worsening since August 2007, deteriorated significantly with the rapid acceleration of the financial crisis in mid-September 2008. Increasing lack of trust on inter-bank markets influenced access to long-term loans already in the first half of the year, and short-term indebtedness of banks abroad relatively increased. The share of short-term debt was thus rising until November, when after a major repayment (EUR 821 m) it decreased again. In 2008, the borrowing of companies and non-monetary financial institutions (NFI) abroad was slightly higher than a year before. Namely, companies and NFI managed to obtain more favourable conditions for larger loans abroad than in Slovenia. Borrowing of affiliated entities also increased, which was most probably the consequence of the lower availability of resources on financial markets. The share of public and publicly guaranteed debt in total debt in 2008 remained at the level of 2007 (23.3%): the Government again issued a government bond in the amount of EUR 1 bn, while publicly guaranteed debt increased by about EUR 450 m. In addition to debt liabilities, Slovenia's gross external assets in debt instruments continued to rise in 2008, but at a slower pace, which resulted in a net external debt increase from 18.0% to 25.4% of GDP.

By the end of the year, inflation, which in 2008 was again marked by external factors, decreased significantly from the high levels recorded in the first eight months of 2008. After hovering between 6% and 7% in the first eight months of 2008, year-on-year inflation dropped to 2.1% by the end of the year. The key impact on the dynamics of year-on-year inflation was, similar to 2007, that of external factors. The strong acceleration of inflation in the first half of 2008 was driven by changes in the prices of oil, food and other primary commodities on global markets, while its staying above the estimated equilibrium level of 3% was also the result of strong economic growth. In the second half of 2008, when prices of oil, food and other primary commodities on global markets started to rapidly decrease, this was strongly reflected in lower growth of domestic prices of food and motor fuels. In other commodity groups, price growth has not yet slowed, which is partly a result of external factors (secondary effects or the pass-through of higher energy prices into

the structure of the price of individual commodity groups, which shows with a delay). We estimate that this is also partly a result of the past high economic activity, as well as the rigidity of the pass-through of lower energy prices into the price structure. Due to specific characteristics of the Slovenian market, the impact of external factors on inflation was stronger than in the whole euro area, which first contributed to a relatively stronger acceleration and then to a faster slowdown of inflation. In the second half of 2008, the growth of service prices also started to slow, which can be linked to the moderation of economic activity. However, the relatively faster growth of service prices compared with the EU average was still a result of the Balassa Samuelson effect. The combination of key macroeconomic policies and the trends in macroeconomic relations in 2008 was less restrictive than in 2007. The public finance balance worsened, and so did the relationship between the growth of wages and productivity growth, which otherwise has a significant impact on inflation only in the long run. The price policy orientations remained unchanged, since in line with the Plan of Administered Prices Adjustment for 2008 and 2009, the growth of administered prices fell behind the rise in free market prices even more than in 2007.

The fiscal position worsened in 2008, since as a result of both cyclical and structural factors the surplus turned into a deficit. With successful management of the general government debt, its share relative to GDP decreased further. With slower economic growth, the general government surplus turned into a deficit last year (0.9% of GDP, 1.4 p.p. more than in 2007). In addition to cyclical impacts amid slower economic growth, this was also the result of structural factors: on the expenditure side, higher investment, increased volume of funds for social transfers and higher wages upon the introduction of the new wage system in the public sector with a simultaneous increase in the number of employees, and on the revenue side, changes in taxation (increase in general tax relief within the change to the personal income tax system, gradual phase-out of the payroll tax and decrease in the income tax rate). With further active management in 2008, the general government debt increased by EUR 402 m, while its share relative to GDP decreased by 0.6 p.p. to 22.8%, which is the second largest fall since 2007, when the debt also decreased in nominal terms. The absorption of funds from the EU budget declined further in 2008, as the inflow was less than half what was planned (60% in 2007). With higher payments into the EU budget than planned,¹³ Slovenia closed the year 2008 with an even worse net budgetary position towards the EU budget (EUR 64.7 m; in 2007 EUR 8.6 m). The drawing of funds for implementing the agricultural policy was, similar to previous years, realised almost in full. Compared to the previous year, absorption from the cohesion fund improved, reaching 69% of the planned

¹² In 2007, EUR 3.6 bn or 35% of the increase in gross external debt was the consequence of Bank of Slovenia liabilities towards the Eurosystem after Slovenia entered EMU.

¹³ Higher payments than planned based on the gross national income and value added tax were the result of the new evaluation of statistical aggregates for Slovenia.

level (32% in 2007). On the other hand, absorption from structural funds worsened, as it reached only 12.4% of the planned level (24% in 2007). Several years of modest drawing of funds from structural funds points to a low absorption capacity, which is attributable to complicated administrative procedures for the registration of projects and partly also to the quality of projects, and to the specific method of paying and repaying these funds.

In the short term the fiscal position will be importantly influenced by changes in the macroeconomic situation and measures adopted to soften the impact of the financial and economic crisis. As these measures can also have potential long-term effects, it is very important to provide their consistency with the planned structural reforms and long-term sustainability of public finance. Due to the functioning of automatic fiscal stabilisers, the anticipated worsening of macroeconomic conditions in 2009 will contribute to the worsening of the government financial position. The higher deficit will also be a result of measures to soften the impact of the crisis. By the end of February 2009, the Government had prepared two packages of measures to soften the impact of the crisis, which follow the basic guidelines of the European Recovery Plan.¹⁴ The first package was adopted at the end of 2008 and includes measures for increasing trust in financial institutions¹⁵ and fiscal incentives for slowing down the decline in economic growth. This package includes measures for improving the liquidity of companies, for keeping jobs and stimulating competitiveness by increasing expenditure on research and development and on education and training. The second package brings concretisation and upgrading of the first and includes more development-oriented measures. Consistency of short-term and long-term measures, taking into account the openness of the Slovenian economy, will be of key importance for achieving positive effects on economic activity. Consistency of short-term anti-crisis measures with the planned structural changes will also be vital for providing long-term sustainability of public finance. Both adopted packages represent a fiscal incentive that exceeds 2% of GDP.¹⁶ In addition to higher direct expenditure, the future higher government expenditure will be indirectly influenced by the changed conditions on financial markets; the margins on interest rates of government securities, which the countries issue to finance the measures, have recently greatly increased for more risky and smaller countries, including Slovenia. Potential liabilities of the state budget related to the measures are guarantees (in the total allowed amount of EUR 12 bn), to which a large part of the adopted measures for stabilising the financial market operations and crediting the economy is linked.

¹⁴ European Recovery Plan (European Commission), November 2008.

¹⁵ For more details, see Chapter 1.3.2. Financial services.

¹⁶ Economic measures adopted in connection with the second package of measures that slightly soften the pressure on general government expenditure are also taken into account.

The key risk factor for long-term sustainability of public finance is expenditure related to population ageing. The latest projections of public expenditure which is the consequence of population ageing, made on the basis of EUROPOP2008 population projections,¹⁷ show that expenditure is increasing and that after 2015 its growth will increase rapidly if the systems to ease the pressure on public finance are not adjusted. In the future the accelerated growth of pension expenditure will have an important impact on the increase in government debt and its more rapid approach to the allowed 60% threshold.

1.2. Increasing competitiveness and promoting entrepreneurial activity

In an open economy such as Slovenia's, the competitiveness of the business sector is significantly determined by the results achieved in foreign markets. Performance in foreign markets is mainly measured by the growth of a country's market shares. Among the factors with a short-term effect on competitiveness, this chapter analyses the trend of unit labour costs, while among those with long-term and more indirect effects we observe the technological intensity of production and exports, the development of entrepreneurship, internationalisation of Slovenia's economy and liberalisation of network industries¹⁸ according to the SDS guidelines.

In 2008, the long-term improvement of export competitiveness, measured by market share in trade in goods, stopped. After Slovenia's share of goods exports in imports from major trading partners was constantly increasing in the seven years until 2007, it decreased from 0.612% to 0.591% in 2008. A detailed analysis of market share trends in the EU markets shows that its 2008 fall was not only the consequence of the decline in export competitiveness. The decline was namely to a large extent a result of the increase in imports of goods from the EU under the influence of higher prices of energy products,¹⁹ while at the same time its fall was also under a significant impact of the fall of road vehicle exports, which was partly the result of high growth a

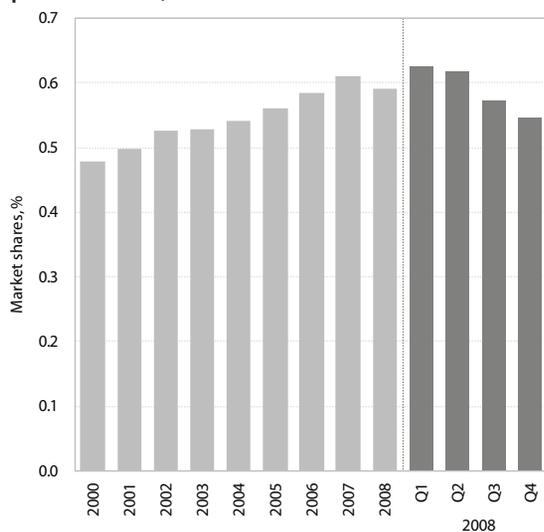
¹⁷ Population projections published in the spring of 2008 by Eurostat are used as the obligatory data basis for calculating projections of general government expenditure in EU Member States (Joint EC–EPC report on the 2009 projections of age-related expenditure [2007–2060] for the EU-27 MS, 2008).

¹⁸ Competitiveness is also affected by a number of other factors, such as knowledge, investment in R&D, innovation, and government efficiency, which are analysed in other chapters of the Development Report.

¹⁹ By eliminating oil and oil products (SITC subsector 33), the fall of the market share in the EU was 1.3 p.p. lower (2.9% instead of 4.2%), and eliminating mineral fuels and lubricants (SITC sector 3) as much as 2.9 p.p. lower.

year before. However, a pronounced decrease in the market share in the second half of the year, especially in the last quarter (see Figure 1), was mostly the result of the decline in export competitiveness. The decrease in market share in 2008 was seen in all main markets, both in the EU and outside the EU. The impact of the slow technological restructuring in the past on the export competitiveness of the Slovenian economy is reflected in the changes in market share by product. Last year Slovenia recorded growth (albeit slow) of the share in the two most important groups of industrial products in the EU market (machinery and transport equipment²⁰ and chemical products), while the market share of other important groups, which mostly cover technologically less demanding products, decreased.

Figure 1: Market shares in the 2000–2008 period and by quarter in 2008, in %



Source: SI-STAT data portal – Economy (SORS), 2009; calculations by IMAD.

The **cost competitiveness** of the Slovenian economy deteriorated considerably in 2008. In 2008, the real effective exchange rate,²¹ which slightly appreciated already in 2007, grew by 4.9%. The main reason is the growth of relative nominal unit labour costs, which started to accelerate already in the last quarter of 2007. As regards the growth of the real effective exchange rate in the first three quarters of 2008, Slovenia was ranked in the middle of EMU countries. In mid-2008 real unit labour costs also started to rise; in 2008 they increased by 3.7%, while the average growth in the EU was much lower (1.6%). The decline in cost competitiveness of Slovenia's economy

was the consequence of a significant slowdown in labour productivity growth with a simultaneous accelerated rise in labour costs per employee. In 2008, the worsening of the international economic climate led to a rapid moderation in economic activity, which was followed by employment trends only towards the end of the year. Labour costs moved in the opposite direction. Partly due to the adjustment for high inflation and productivity in the past, especially in the private sector, and partly also due to the start of eliminating wage disparities in the public sector, labour costs increased even more in 2008 than in the previous year. The relation between labour costs and value added worsened the most in manufacturing. A longer-lasting deterioration in cost competitiveness could have a significant negative impact on the position of companies in the export-oriented part of the economy, so it is important to adjust the growth of labour costs to slower economic activity as soon as possible, while in the long run it is vital to continue implementation of reforms to increase productivity.

In the period of favourable economic trends, **restructuring in terms of technologically more intensive industries and export** was relatively slow. Strong productivity growth in manufacturing was mainly typical of 2006, while in 2007 it slowed to the level of the past ten years due to higher employment. In both years it was largely stimulated by high domestic and foreign demand. Its decomposition shows that in both years the relative contribution²² of effects of intersectoral structural change on productivity growth significantly decreased (see Table 1). On the one hand, this was the result of accelerated productivity growth in some low-technology industries,²³ which under the influence of high demand significantly increased their value added as well as lowered the number of employees. On the other hand, technologically more intensive industries did not use the favourable climate for a breakthrough in the level of productivity, since productivity growth in these industries remained at approximately the same level as in previous years; the level of productivity in these industries was still at a mere 56% of the EU average. The gradual nature of restructuring is also shown in the slow increase in technological intensity of merchandise exports. After the decrease in the 2003–2005 period, the share of high-tech products in merchandise exports increased again in 2006 and 2007, although it was still below the level achieved in 2003. At the same time, in 2006 and 2007 the share of low-tech products in Slovenia's merchandise exports increased again. Technological intensity of exports thus remains at a much lower level than the EU average, even though the gap narrowed significantly in 2007, especially on account of a large drop in the share of high-tech products in the EU average.²⁴

²⁰ The growth of the market share of machinery and transport equipment in 2008 continued at a lower level (1.3%, in 2007 17.9%) despite the fall of the market share of road vehicles (by 2.2%, in 2007 27.2% growth), since at the same time the growth of the market share of other products in this sector continued to be relatively high (7%, in 2007 9%).

²¹ Deflated by nominal unit labour costs (nominal compensation of employees per employee at current prices divided by gross domestic product per employee at constant prices).

²² After a slight decrease in 2006, in 2007 the absolute contribution was almost halved.

²³ Especially the textile, food processing and furniture manufacturing industries.

²⁴ See the indicator *Structure of merchandise exports according to factor intensity*.

Table 1: **Decomposition of productivity growth in manufacturing, Slovenia, 2000–2007**

	2000	2001	2002	2003	2004	2005	2006	2007
Real productivity growth, in %	9.4	3.8	7.3	7.9	5.4	5.8	9.2	6.9
Intrasectoral (non-structural) effect,* in %	99	90	92	87	87	85	92	96
Intersectoral and interaction (structural) effect,** in %	1	10	8	13	13	14	8	4

Source: IMAD calculations based on SORS data (National Accounts, 2008).

Notes: *increase in productivity which would have been achieved if the employment structure had remained at the level of the baseline year (previous year); ** increase in productivity due to the shift of production resources from low- to high-level productivity sectors and increase in productivity due to the reallocation of resources to sectors with rapid productivity growth.

In 2008, **entrepreneurial activity** significantly improved and for the first time exceeded the average of 15 Member States included in the survey. It should be noted that the data were collected with the survey²⁵ conducted in the first half of the year and thus do not cover the period of economic slowdown that followed the deepening of the international financial crisis in autumn 2008. Early-stage entrepreneurial activity²⁶ increased for the fourth consecutive year in 2008, by as much as 1.6 p.p., achieving its highest level (6.4%) in the 2002²⁷–2008 period. For the first time, Slovenia thus exceeded the weighted average of 15 EU Member States (5.3%) included in the survey in 2008. The structure of entrepreneurs included in early-stage entrepreneurial activity improved for the third consecutive year. The share of those who started a business to pursue a perceived business opportunity again increased the most, which was expected in the period of favourable economic climate up to the second half of 2008. After three years of stagnation, last year the level of necessity-driven entrepreneurial activity slightly improved. The overall entrepreneurial activity also rose last year, partly due to a higher share of people included in early-stage entrepreneurial activity and partly due to a higher share of people in established entrepreneurial activities. In addition to the positive impact of the favourable economic climate and simplification of procedures to start a business, the rise in entrepreneurial activity in the past years could partly be attributed to the attempts of companies to lower their operating costs by removing some activities to newly established businesses. In the five-year period of rebounding entrepreneurial activity (2004–2008), entrepreneurs stated the lack of financial discipline as the most frequent obstacle to their activity,²⁸ the importance of which was declining from year to year, but again started to rise in 2008. In the second half of 2008, amid the more noticeable signs of the global financial crisis, decline in sales also started to appear as an important obstacle to entrepreneurial activity.

After several years of rapid increase, last year the level of **internationalisation of Slovenia's economy** slightly decreased in terms of openness to external trade, while as

regards inward foreign direct investment it remains low. Several years of increasing external trade integration of Slovenia's economy, measured with the trade-to-GDP ratio, stopped in 2008 mostly due to a drop in the share of merchandise exports, which posted significantly slower growth in the conditions of slowing global economic activity. Trade in services continued to strengthen.²⁹ Mostly on account of methodological changes in monitoring FDI³⁰ by the Bank of Slovenia, in 2007 the flows and stocks of inward and outward FDI increased significantly. However, the elimination of the impact of methodological change shows that in inward FDI the increase in FDI stock in 2007 was relatively low, while in outward FDI the trend of a rapid increase in investment of Slovenia's enterprises abroad continued.³¹ The data for 2008, which are available only for FDI flows, show an increase in inflows, which were, however, mostly the result of companies borrowing abroad from affiliated entities, while in outflows a decline was observed after several years of growth. In 2008 Slovenia was thus for the first time since 2004 a net recipient of FDI. Given the significant original gap with the EU, inward FDI is nevertheless still very low in relative terms. On one hand, Slovenia's economy shows an above average export-import intensity compared with the EU average, which is to a large extent also due to its being small, and the gap was widening in Slovenia's favour until 2007. On the other hand, Slovenia shows a much lower intensity in internationalisation through inward and outward FDI, with the gap behind the EU on the side of inward FDI constantly increasing until 2006, while its decrease in 2007³² was mainly a consequence of methodological changes in monitoring FDI in Slovenia. In addition to Slovenia's market being small and labour costs high, the main obstacles for inward FDI stated by foreign investors³³ are in the domain of the economic system and politics (high taxes, non-payment, inefficient judicial system, difficulties with dismissing employees, lack of

²⁹ See the indicator *Exports and imports as a share of GDP*.

³⁰ See the indicator *Foreign direct investment*.

³¹ More than half of Slovenia's foreign direct investment traditionally goes to countries of the former Yugoslavia.

³² To 13.2 p.p. (Slovenia 27.7%, EU 40.9%). As regards the share of stocks of outward FDI in GDP, due to its lower development Slovenia's lag behind the EU average is much higher, 33.9 p.p. (Slovenia 14.2%, EU 48.1%).

³³ Results of the survey (Rojec M. et al., 2008) that included 180 companies with foreign capital in Slovenia. Surveying took place between 13 October and 10 November 2008.

²⁵ Global Entrepreneurship Monitor (GEM) (Rebernik et al, 2009).

²⁶ The share of people engaged in entrepreneurial activity (people who created a company or entrepreneurs paying wages less than 42 months).

²⁷ The data for Slovenia since 2002.

²⁸ Entrepreneurial Climate in Slovenia, 2008.

properly qualified labour force, ineffective competition protection), while their lowering would also have a positive effect on domestic entrepreneurial activity. With a low level of foreign direct investment, Slovenia missed the opportunity for a more rapid technological restructuring of its economy.

In network industries, competition in telecommunications continued to gradually rise in 2008, while according to the latest data for 2007, the market structure in the energy sector did not change much. In telecommunications, especially the broadband Internet access market – which was still highly concentrated in the xDSL connections segment until 2005, when the ISDN–ADSL loop was unbundled – has developed rapidly in recent years. The deconcentration of this market was halted in 2008, and the largest provider still controls more than two thirds of the market.³⁴ However, in the area of broadband connections, competition has recently been developed among the parallel networks (xDSL, cable Internet, optic connections³⁵). The market share of the dominant fixed telephony operator (in terms of the number of connections) has recently dropped significantly, from 96.6% in the first quarter of 2007 to 85.6% in the last quarter of 2008, although it is still among the largest in the EU. Such a large share is a result of the slow elimination of obstacles to competition in the past and associated late entry of alternative providers to the market (in 2006). The share of the dominant operator is falling mostly due to the development of IP telephony, which already represents a 22.6% share of all telephone connections in Slovenia. In the past two years greater progress was also noted in mobile telephony,³⁶ where the share of the dominant operator (59% at the end of 2008) is also significantly higher compared to the EU average (where it is below 40%). Within the energy sector, changes in the market structure are slower. The major recent changes entail the establishment of the

second pillar³⁷ in electricity production, the introduction of a market-oriented auction method of assigning cross-border transmission capacities and the separation of the public utility service of the distribution network system operator from other functions of distribution companies (supply, ownership). The market share of the largest electricity producer was in 2007 only around 50% (in the EU in 2006 almost 60%), but its market power in the wholesale market was actually higher (because the largest producer has at its disposal a large share of the electricity of the second-largest producer). On the retail market 14 suppliers with more balanced market shares³⁸ were active. On the retail market for household consumers, which was liberalised last (in 2007), more competitive conditions started to gradually appear in which consumers can freely choose among suppliers that already offer different prices. The share of the main provider in the natural gas wholesale market still stands at almost 100%. Competition is stronger³⁹ in the retail market of supply to medium-sized and small gas consumers. The structure of these markets has remained almost unchanged in the past few years.

1.3. Increasing the competitiveness of services

In the structure of Slovenia's economy, services still represent a much lower share than the EU average. From the point of view of competitiveness, the main problem is the lag in the share of market services (G–K), which otherwise declined significantly after 2005, but decreasing least in the field of knowledge-based services such as financial, business, communication and information services. Apart from their direct effects on the expansion of the economy due to their high and rapidly growing share in gross domestic product, their indirect impact on competitiveness through the intermediate consumption of services in the manufacture of goods and other services is becoming increasingly important. In the structure of its economy, Slovenia also has, compared to the EU average, a lower share of public services (L–P). The gap in this area was relatively narrow until 2005, but widened somewhat by 2007,⁴⁰ mostly due to relatively weak growth in the value added of public services in Slovenia related to the slowdown in employment growth and the low growth of wages in the public sector.

³⁴ In the first quarter of 2007, the market share of the largest provider of broadband Internet access through the xDSL connection was at 74.1%. It dropped to 67.9% in the first quarter of 2008 and after some fluctuation in 2008 stopped in the fourth quarter of 2008 at the same level as in the beginning of the year, i.e. 67.9% (Report on the development of the electronic communications market for the fourth quarter of 2008, APEK, 2009).

³⁵ From the beginning of 2007 to the end of 2008 the shares of xDSL (decrease by 5.2 p.p. to 67.0%) and cable technology (-3.5 p.p. to 22.3%) decreased mostly on account of optic connections (+8.8 p.p. to 10.4%). Because at the beginning the largest provider of telecommunications services did not invest in the optical network, the market shares of alternative providers increased. Taking into account all technologies, the market share of the largest provider of broadband Internet access in the 2007–2008 period decreased by 4.5 p.p. to 49.1%.

³⁶ After the market share of the largest provider fluctuated slightly above 70% during 2002–2006, in the last two years it dropped significantly: from 69.0% (according to the number of active users) in the first quarter of 2007 to 58.9% in the fourth quarter of 2008 (Report on the development of the electronic communications market for the fourth quarter of 2008, APEK, 2009).

³⁷ Within electricity production in Slovenia, the first production pillar includes producers integrated within the HSE group (Dravske elektrarne Maribor, Soške elektrarne Nova Gorica, Termoelektrarna Šoštanj, Premogovnik Velenje and Termoelektrarna Trbovlje), while the second pillar is made up of producers of the GEN group (Nuklearna elektrarna Krško, Savske elektrarne Ljubljana and Termoelektrarna Brestanica).

³⁸ Report on the situation in the energy sector in Slovenia in 2007 (AGEN-RS), 2008.

³⁹ No provider holds a dominant position.

⁴⁰ In line with the guidelines of Slovenia's Development Strategy, the problem of public services is analysed in Chapter 4. A modern welfare state.

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 p.p.,* 2000, 2005–2007**

	2000	2005	2006	2007
Services (G–P)	-8.7	-8.6	-8.5	-8.4
Market services (G–K)	-6.7	-6.1	-5.8	-4.8
Trade, hotels and restaurants, transport (G–I)	-1.1	0.2	0.2	1.2
Financial and business services (J–K)	-5.6	-6.3	-6.0	-6.0
Public services (L–P)	-2.0	-2.5	-2.7	-3.6

Source: Eurostat portal page – Economy and Finance – National accounts by 6 branches, 2009.

Note: * The negative sign means that the share of the industry in Slovenia is lower than the EU average.

1.3.1. Non-financial market services

Closing the gap towards the EU average in terms of the **share of non-financial market services** in the structure of the economy, which came to a halt in 2006, continued in 2007. Favourable structural shifts were observed again after two years. The share of non-financial market services in total employment also increased (33.2%). In the last year for which the data are available (2007), the gap between Slovenia and the EU average in terms of the share of non-financial market services in value added narrowed to the lowest level ever (3.8 p.p.). Higher growth of the share in value added compared to the EU average was in 2007 achieved by all industries of non-financial market services. In the structure of Slovenia's economy the shares of trade, transport, and hotels and restaurants are comparable to the EU average, and the structural gap is mainly the result of a lower share of business services.⁴¹ The year 2007 saw a positive shift in this area, after two years of standstill. The lag behind the EU average is nevertheless still relatively high (5 p.p.) and, despite the decrease in the last year, higher than in 2004, when it was lowest.⁴² The positive fact is that among business services, knowledge-based business services⁴³ (especially various consultancy, research and computer-related services) improved the most. Their share in the value added structure of the Slovenian economy climbed to 10.2%, whereas in line with the SDS scenario it should have reached around 12% by 2013.⁴⁴

The competitiveness of Slovenia's services on foreign markets, which is evaluated by movements of Slovenia's market shares in the imports of services from main trading partners, increased significantly in 2007. In the period since accession to the EU (2004–2007), Slovenia

has been recording increased competitiveness in the markets of Austria, Italy, France and the United Kingdom, which together with Germany⁴⁵ are the main importers of Slovenia's services in the EU. The growth of market share in the services imports of major trading partners was in this period much higher than in the group of new Member States.⁴⁶ The greatest increase after the slowdown in 2006 was achieved in the last year (2007) for which data are available (see Table 3). After a break of one year, a favourable structural shift was observed again, since in 2007 the growth of the market share of the group of other services,⁴⁷ including various mainly knowledge-based services, accelerated. With the high growth of exports in this group of services, their share in total services exports increased significantly, but it is still almost two times lower than in the EU.⁴⁸ As in the entire period, in 2007 transport services increased their market share the most, while the market share of travel exports further decreased. The growth of Slovenia's market share in services imports of main trading partners in recent years was on the one hand the consequence of the free movement of services in the internal EU market (particularly transport services) and on the other hand of the favourable international conditions in the mentioned period. Since Slovenia was much more successful in increasing the market shares of services than other new Member States, it can be concluded that the competitiveness of Slovenia's services improved after accession to the EU, especially in the last year.

Table 3: **Growth of Slovenia's market share in the import of services from main trading partners in the EU¹, 2004–2007, in %**

	Increase in the 2004–2007 period		Increase in 2007	
	Slovenia	EU-10 ²	Slovenia	EU-10 ²
Services	44.7	20.7	23.8	5.2
Transport	169.8	50.9	58.2	15.2
Travel	-22.5	6.2	-13.9	-3.2
Other services	54.6	24.1	27.2	8.2

Source: Eurostat portal page – Economy and Finance – Balance of payments by country, 2009.

Notes: ¹ Austria, Italy, France and the United Kingdom. No data for Germany. ² New EU Member States excluding Bulgaria and Romania.

Innovation activity in services is gradually improving, even though it is still far behind the level in developed EU Member States. In the period for which data are available (2004–2006), in services almost 27% of companies were innovation active, which is a significant improvement

⁴¹ See the indicator *Share of non-financial market services in GDP*.

⁴² Of all non-financial services, in 2007, business services increased their share in the total employment of the Slovenian economy the most (to 11.4%).

⁴³ NACE activities 71–74 (renting machinery and equipment, computer and related activities, research and development, other business activities).

⁴⁴ See Bednaš (ed.), Kajzer (ed.), 2005.

⁴⁵ Data for Germany are not available.

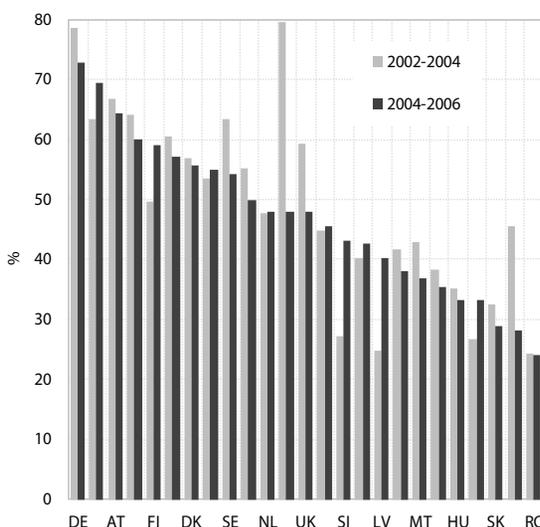
⁴⁶ Excluding Bulgaria and Romania.

⁴⁷ The growth of the market share was significant in 2007; however, the decline in 2006 has to be taken into account. Compared to 2005 (0.146), the market share in 2007 was thus only slightly higher (0.149).

⁴⁸ The growth of the share of other services continued in 2008, when their share in service exports reached 32.2% (the EU average in 2007 was 55.3%).

over the previous three-year period (2002–2004), when only 16% of enterprises were innovation active. Between the two aforementioned periods Slovenia's lag behind the EU average thus decreased by 11.8 p.p. In the 2004–2006 period the share of innovation active companies from knowledge-based business services increased significantly.⁴⁹ Despite the progress, it should be noted that old EU Member States had a much higher level of innovation activity in this area already in the 2002–2004 period. As regards innovation activity in services, a special role is also played by non-technological (organisational) innovations, which include the introduction of new business practices, new knowledge management systems, new methods of workplace organisation or new methods of organising external relations. Therefore the lag of service companies behind industrial companies is much smaller in organisational innovations than in technological innovations. In the 2004–2006 period organisational innovations were introduced by 38% of service companies and by 43% of industrial companies.

Figure 2: Innovation activity in knowledge-based business services,* EU Member States, 2002–2004 and 2004–2006



Source: Eurostat Portal Page – Science and technology – Community innovation survey, 2008.

Note: * Included are the following NACE classification activities: 72 – Computer and related activities, 74.2 – Architectural & engineering activities & related technical consultancy, 74.3 – Technical testing and analysis.

In most of the large service industries where signs of a lack of **competition** are being observed, the concentration has decreased in the past years, while in 2007 a shift was also observed in retail trade. The analysis of market concentration at the sectoral level enables only a rough evaluation of the share of industries with visible

signs of a lack of competition. The analysis shows that the share of industries⁵⁰ with a high concentration rate measured by the Hirschman-Herfindahl index of market concentration⁵¹ in total turnover of all non-financial market services increased again in 2007. Such a trend has been characteristic of the entire period since 2000, as in this period some large, highly concentrated industries (especially in retail trade and telecommunications) experienced above-average growth. It is, however, positive that most of the larger⁵² industries⁵³ with high concentration are experiencing shifts towards lower concentration. In telecommunications, where the market has been liberalised since 2000, the level of concentration has been gradually decreasing in all years, while in some highly concentrated trading industries the decline was seen in the last year or two. In terms of the turnover share, retail trade in non-specialised stores selling predominantly food (super- and hyper-markets) should be pointed out, where after a jump in 2000–2006,⁵⁴ the concentration rate slightly decreased for the first time in 2007.⁵⁵

Favourable structural shifts recorded in 2007 in the area of non-financial market services confirm the closing of the development gap of these services between Slovenia and the EU. In the future it will be important for Slovenia to focus also on enhancing service efficiency. Enhancing the efficiency of non-financial market services to a large extent depends on their innovation activity, where Slovenia is late compared to the more advanced EU Member States, which have prepared – or are preparing – programmes for promoting service innovations.⁵⁶ These programmes cover both horizontal measures for enhancing special knowledge, skills and interdisciplinary education and training, and special measures for encouraging investment in research in service activities, greater use of information and communication technologies in services, and stimulating non-technological innovations and innovations in service

⁵⁰ These are activities at the four-digit level of NACE. The share of highly concentrated industries in total turnover of non-financial market services was 23.4% in 2000, 36.3% in 2006 and 37.1% in 2007.

⁵¹ High concentration means that the HHI value equals or is higher than 1,800.

⁵² Only those generating at least 0.5% of total turnover of non-financial market services in the domestic market were taken into account.

⁵³ Such industries are found in wholesale and retail (NACE G) and transport (NACE I).

⁵⁴ The four largest companies in this industry generated 47% of total turnover in 2000; by 2006 their share grew to 89%, while in 2007 it fell to 86% of net turnover in the domestic market. The HHI value changed similarly; in 2000 it showed a low level of concentration, in 2002 it showed a moderate level of concentration, while in 2005 it broke the barrier of high concentration and in 2006 climbed to 3,387. In 2007 it decreased to 2,972.

⁵⁵ In 2007 the decline in the number of companies in this industry continued.

⁵⁶ For example, Germany, Finland, Ireland, the United Kingdom (Total Innovation Report – NESTA, 2008).

⁴⁹ 72 – computer and related activities, 74.2 – architectural and engineering activities and related technical consultancy, 74.3 – technical testing and analysis; see also the indicator *Innovation activity*.

functions.⁵⁷ Given that such measures are not only important for stimulating innovation activity in services but also for stimulating innovation processes in the entire economy, Slovenia should complement its innovation policy measures accordingly.

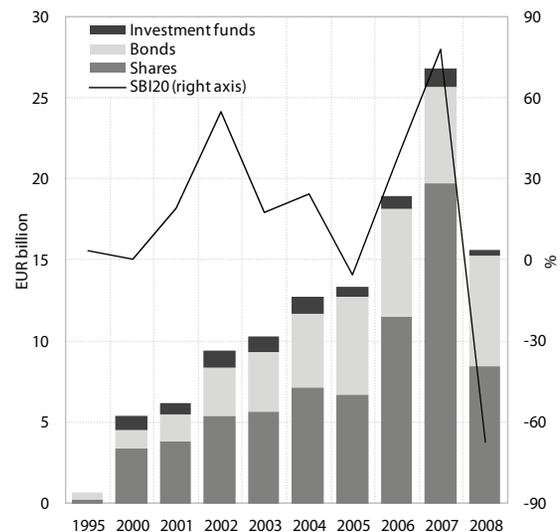
1.3.2. Financial services

After high growth of most of the **indicators of the financial sector's level of development** in the past two years, in 2008 their growth significantly slowed due to the rapid spread of the international financial crisis; market capitalisation even decreased. After several years of high growth rates, market capitalisation fell by 57%, which is much more than in developed capital markets.⁵⁸ As a result, the value of the indicator decreased significantly and with 22.8% of GDP reached the same level as about five years ago. The relative lag behind the EU average increased to almost one half, from 33.6% a year before. The total assets of banks increased further in 2008, since in the first half of the year the banking sector, except the maturity structure of resources, did not feel the limited resources in international inter-bank markets. Even though growth was lower than in the previous year, we estimate that the large development gap in this area did not widen much last year because due to the financial crisis the lending activity also slowed notably in the EU. In the area of insurance, according to the latest available data for 2007 the volume of premiums increased by about a tenth, which was slightly below the ten-year average. Life insurance, which is a more developed form of financial services, grew faster in 2007 as well.

The main reason for the strong decrease in market capitalisation is the fall of the **Slovenian stock exchange index SBI20**, which after two years of constant high growth fell by 67.5% in 2008, which is the greatest fall ever. The reasons for the negative trends on the Ljubljana Stock Exchange can be divided into four groups: (i) the international financial crisis, which broke out in the second half of 2007 and just over a year later started to rapidly spread to other sectors of the economy; (ii) the very high growth in the past, which, however, was not only the result of favourable economic trends (large inflow into mutual funds, interest of foreign investors), since according to estimates,⁵⁹ many securities on the

Ljubljana Stock Exchange were overvalued with regard to other comparable securities in other capital markets; (iii) greater insecurity regarding the continuation of the privatisation process; and (iv) low liquidity, which is characteristic of all less developed capital markets. In 2008, the volatility of the SBI20 index greatly increased. The average daily gain was thus at the level of 1.3% and the average daily loss at the level of 1.6%, which is about three times the 2000–2007 average.

Figure 3: Market capitalisation on the Ljubljana Stock Exchange and year-on-year SBI20 index growth, 1995–2008



Source: Annual statistical report (Ljubljana Stock Exchange), 2009.

Due to tough conditions in international inter-bank markets as a result of the deepening financial crisis, **the lending activity of banks** slowed in 2008. After several years of steep growth (on average by 24.3% per year in the 2005–2007 period), it increased by 18.1% last year. A stronger slowdown of lending activity was seen in the last two months of the year, when the conditions in international inter-bank markets strongly deteriorated. Specifically, the maturity structure of foreign loans of banks has rapidly deteriorated since the outbreak of the international financial crisis in August 2007. At the end of 2008 it did improve⁶⁰; however, this was not due to the greater availability of long-term loans but mostly because an important part of short-term loans borrowed in 2008 fell due for payment in the same year. Further tightening of conditions had a strong impact on lowering the lending activity of banks, since not enough resources of acceptable maturity were available in international inter-bank markets to refinance matured loans. Banks thus again became more dependent on the savings of their clients, who in the past few years had lost importance compared to other resources. The reasons

⁵⁷ It is important to mention that business services are much more important for the economy than shown by the national accounts data on business services (NACE K). According to the OECD, in 2002 on average about 40% of all persons employed in manufacturing in OECD countries were employed in occupations that could be considered as service-related (researchers, lawyers, managers, accountants; Summary report of the study on globalisation and innovation in the business services sector, 2007). Most probably the share in Slovenia is even higher due to a lower level of externalisation of services than in more developed countries.

⁵⁸ Market capitalisation in the EU fell by 48.0%.

⁵⁹ See Muller, Boris, 2007.

⁶⁰ In 2008, long-term loans represented more than three quarters of total net flows of foreign loans, and in 2007 just over 60%.

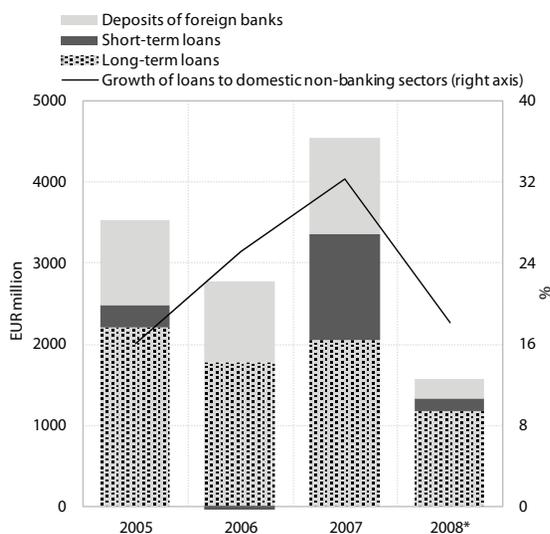
for this are easier access to foreign sources of financing in the past few years and a greater supply of other savings products with higher expected returns. On the one hand the loans-to-deposits ratio⁶¹ thus deteriorated notably in recent years, while on the other hand the exposure⁶² of the Slovenian banking sector to the rest of the world⁶³ increased.

In addition to problems on the side of sources of financing, banks are also increasingly exposed to credit risks. To a large extent, banks' lending activity used to be based on the financing of companies and NFI,⁶⁴ which in the last three years borrowed EUR 11,975 m net or 77.6% of the total net non-banking debt. In the period of high economic growth, companies financed the increase in their operations, investment and takeovers by borrowing. Because towards the end of 2008 the consequences of the global financial crisis started to be reflected in the real sector⁶⁵ operations, a further shrinking of economic activity would worsen the ability of companies and NFI to repay loans. There is thus an increased risk that the

quality of domestic banks' assets might deteriorate, along with a higher risk of further decline in the financial system's stability.

The Government has prepared several **measures** to mitigate the consequences of the financial crisis. After the standstill in lending activity and the spillover of the financial crisis to non-financial sectors in the last months of 2008, the Government adopted measures in response to the crisis in order to preserve trust and stability and strengthen the financial system. One part of the measures is aimed directly at speeding up the borrowing of the business sector. All measures follow the policies at the EU level and thus do not differ much from the measures adopted by other EU Member States.

Figure 4: Foreign sources of financing Slovenian banks and year-on-year growth rate of credits to domestic non-banking sectors, 2005–2008



Source: Monthly Bulletin of the Bank of Slovenia, 2009; calculations by IMAD.

Note: The decrease in foreign sources of financing in 2006 is related to the fact that in 2006 banks gained liquidity also by Bank of Slovenia bills falling due.

⁶¹ In 2004, non-banking sector deposits exceeded the value of non-banking sector loans, whereas at the end of 2008 their share fell to 61.2%, which was 25.3 p.p. less than the EU average (86.5% at the end of December 2007).

⁶² All foreign liabilities and claims of banks compared to total banking assets.

⁶³ While in 2004 the exposure of banks to the rest of the world was less than half of banks' total assets and was lower than the EU average, by 2007 it has jumped to almost two thirds and exceeded the average value in the EU and EMU.

⁶⁴ Non-monetary financial institutions.

⁶⁵ See Chapter 1.1. Macroeconomic stability.

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

SDS guidelines: The 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

Following an ongoing trend of improvement in the **education structure of the population**, the latest results of the Labour Force Survey indicate that in 2008 the share of population with a tertiary education decreased, whereas the average number of years of schooling remained unchanged for the third consecutive year. Considering the ratios between the number of tertiary education students and graduates observed in the past years, the decline in the population with tertiary education is surprising and has not been confirmed by data from the registers which, on the contrary, show a growing number and share of the working population with tertiary education in 2008. Therefore we estimate that the labour force survey results do not reflect the actual situation but are rather a consequence of the changed survey pattern and assessment of the number of population. Despite the decrease compared to the previous year, however, the share of population with tertiary education was much higher than in 2000, albeit lower than in the EU average and in some Northern and Western European countries, which record the highest shares of population with tertiary education.⁶⁶ According to IMAD's estimates, the average number of years of schooling in the working population in 2008 remained at the same level as in the previous two years (11.7 years),⁶⁷ also owing to the structure of economic and employment growth. Over the past few years, employment figures increased mostly in construction, employing mainly a less educated labour force.

With 54.8% in the academic year 2007/2008, the participation of the generation at enrolment age in tertiary education practically achieved the SDS target (55%); also high was the **participation of youth in upper secondary**

and tertiary education. After 2000, the share of young people aged 20–24 enrolled in tertiary education increased considerably,⁶⁸ and according to the latest available international data, with a share of 45.1%, in 2006 Slovenia ranked first in the EU, where the average was 28.8%. Also highest among European countries and well above the EU average⁶⁹ was the share of population aged 15–19 enrolled in secondary education, showing a further increase in 2000–2006. According to IMAD's estimates, the higher enrolment rate in tertiary education was linked to the following factors: (i) higher share of children enrolled in upper secondary education programmes enabling enrolment in tertiary education; (ii) increase of enrolment vacancies; (iii) high costs of transfers to households⁷⁰; and (iv) the level of (expected) income, since the incomes of persons with tertiary education are on average higher than those earned by persons with secondary or basic education, as confirmed by the estimated private rates of return of tertiary education.⁷¹

The ratio of students to teaching staff⁷² as an important indicator of teaching process quality improved slightly in 2000–2007, but was still rather unfavourable. Although the number of students to teaching staff (2007/2008) declined in the last year due to a growing number of teaching staff and a declining number of students enrolled in tertiary education,⁷³ it was high, as in the whole period since 2000, which has as a rule a negative impact on the quality of the teaching process. The ratio of students to teaching staff in Slovenia is higher than in most European countries for which data are available (OECD members).⁷⁴ Such an unfavourable ratio in Slovenia's tertiary education is also linked to relatively low annual expenditure on educational institutions per participant in tertiary education, and may partly be attributed to young people participating in education merely because of the benefits offered by the status of being a student. As a rule, the European countries with higher expenditure on educational institutions per participant in tertiary education have a better ratio of students to teaching staff.⁷⁵

The Slovenian system of financing higher education institutions has not yet been altered in the sense of stimulating the quality of study programmes and institutions, and

⁶⁸ The share of young people aged 20–24 enrolled in tertiary education increased by 12.9 p.p. in 2000–2006, whereas the corresponding share in the EU increased by 4.2 p.p.

⁶⁹ The share of young people aged 15–19 enrolled in secondary education in 2006 totalled 79.5% (EU-27: 57.0%).

⁷⁰ Transfers to households comprise scholarships, child benefits, allowances for travel, meals, textbooks, etc.

⁷¹ Ahčan, Polanec and Kozamernik (2008) note that in 1999–2004 private rates of return rose on all levels of tertiary education, except in PhD studies.

⁷² At the international level, the ratio of students to teaching staff is often used as an indicator of quality in tertiary education; a lower ratio implies a higher quality.

⁷³ See the indicator *Ratio of students to teaching staff*.

⁷⁴ See the indicator *Ratio of students to teaching staff*.

⁷⁵ For details see Čelebič, 2008.

⁶⁶ See the indicator *Share of the population with a tertiary education*.

⁶⁷ See the indicator *Average years of schooling*.

international mobility of students is modest as well. The quality of studies may also be encouraged through a system of financing higher education institutions whereby part of the funds intended for such institutions is allocated based on the number of research projects, inter-university cooperation, international mobility of students and teaching staff, etc.⁷⁶ Unlike some other European countries, Slovenia has not (yet) introduced the above criteria in its higher education financing system, nor altered the financing system in the sense of remunerating research in connection with users, as envisaged by Slovenia's Development Strategy. Quality of higher education programmes will need to be included as a criterion for their financing.⁷⁷ International student mobility, which is one factor stimulating the quality of the teaching process, has been gaining importance in Slovenia over the last few years, but is still rather modest compared with other European countries.⁷⁸

In order to improve and monitor the quality of education, it would be reasonable to enhance the monitoring of student employability and career counselling. Slovenia does not have sufficient and up-to-date information about the employability of graduates, which is often used in international analyses as an indicator of the quality of the outcomes of education. It is therefore necessary to further develop and consolidate a systematic monitoring of graduate employability at the level of higher education institutions and study programmes, and to enhance career counselling during studies. Graduate mobility and employability feature as important elements of the Bologna reform, which, however, Slovenia is implementing at an excessively slow pace. The reform of study programmes has been sluggish and, above all, formal rather than content-related. Slovenia also lacks a national structure of higher education qualifications and a national quality assurance agency for higher education, and has not yet joined the European Association for Quality Assurance in Higher Education. Certain positive moves forward have nevertheless been made as regards the promotion of quality,⁷⁹ yet measures are carried out too slowly and will need to be consolidated in the future, since besides participation, the quality of tertiary education is also important from the viewpoint of economic development.

⁷⁶ Čelebič, 2008; Education at a Glance 2008, 2008; Higher education governance in Europe, 2008.

⁷⁷ The Resolution on the National Programme of Higher Education of the Republic of Slovenia 2007–2010 foresees the introduction of a study programme/institution quality factor, but an independent agency to assess quality needs to be established first.

⁷⁸ In 2006 (academic year 2005/2006), for which the latest international data are available, the share of foreign students in Slovenia was 1.2% and was one of the lowest in comparison with other European countries. In the academic year 2006/2007 it rose to 1.3% and in 2007/2008 to 1.5%.

⁷⁹ Promoting the development of career centres and a tutorial system.

Public expenditure on education as a share in GDP decreased considerably in 2007, although according to available international data (2005) it was still above the European average, mainly owing to the high participation of young people in education. Following a few years' period when it was rather high, public expenditure on education fell drastically to 5.17% of GDP in 2007. Parallel to the accelerated economic growth, public expenditure on education in 2007 in fact slowed considerably.⁸⁰ Expressed in relative terms, Slovenia's education expenditure is well above the European average, but still lags behind certain economically more developed Northern European countries. Its relatively high level is to a great extent related to the high participation of young people in education. In recent years, the structure of total expenditure saw a decline in the share of expenditure for transfers to households; this share nevertheless still exceeds the European average, with the widest gap in tertiary education, where the share has recently decreased as well. Compared with other European countries, Slovenia allocates a significant share of public expenditure mostly for scholarships and transfers to households.⁸¹ Also high is total expenditure on educational institutions per participant, which, however, does not apply to tertiary education, where Slovenia lags behind the European average owing to high participation and a high ratio of students to teaching staff.

The share of private expenditure on tertiary education is relatively high, even though it was lower in 2007 than in 2000. In total expenditure on tertiary education, private expenditure accounted for 22% in 2007, and was, although decreasing since 2000, among the highest in the EU.⁸² The reason for this high share of private financing lies in the fairly high tuition fees for part-time students in Slovenia, while in certain European countries tuition for full-time students has been introduced in recent years. The experience of other countries proved the effectiveness of the system of deferred tuition fees, which had no negative impact on participation in tertiary education.⁸³

The efficiency of studies is low. The share of repeat students enrolled in full-time undergraduate study programmes⁸⁴ in the first year of study is slowly declining, but in some higher education institutions it is still fairly high. In some institutions, the total share of repeat students is also high. With 6.8 years,⁸⁵ the average duration of studies is among the highest in

⁸⁰ See the indicator *Total public expenditure on education*.

⁸¹ Among the EU countries that are also members of the OECD, a greater share is recorded only in Denmark, which – unlike Slovenia – also offers long-term student loans. Such loans may be taken by students to pay for tuition fees or cover the costs of accommodation during studies.

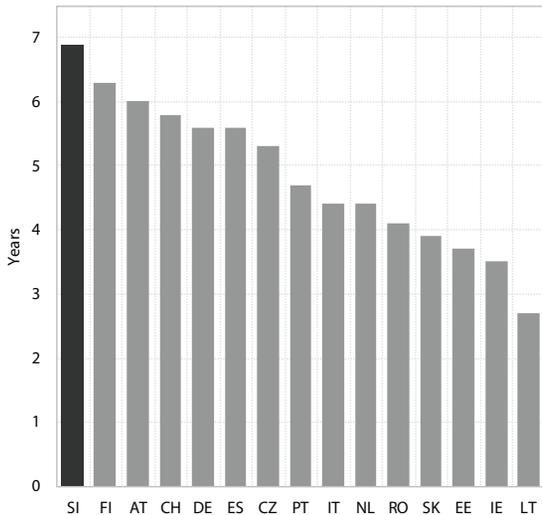
⁸² See also Chapter 4.2. Modernising social protection systems.

⁸³ Vossensteyn, 2007; OECD, Tertiary education for the knowledge society, 2008.

⁸⁴ 14.7% in 2007/2008.

⁸⁵ For undergraduate university graduates in 2007.

Figure 5: Average duration of higher education study in selected European countries in 2006 (2007)*



Source: Data reporting module EUROSTUDENT III (2005–2008), 2008.

Note: *Data for European countries refer to 2006 or 2007. For Slovenia, data refer to average duration of studies of undergraduate university graduates in 2006.

Europe⁸⁶ and continues to record elevated levels. The average duration of studies is not only affected by student efficiency, but also by the duration of individual programmes. The completion rate⁸⁷ is also lower than in most European countries for which data are available (OECD members).⁸⁸ The reason for such inefficiency of studies is, among other things, the extension of student status in order to utilise its benefits (possibility of work through student employment brokerage service, health insurance, etc.). Compared with certain other European countries, Slovenia has not introduced financial incentives to encourage faster completion of studies (special additional contributions for students exceeding the foreseen duration of studies).

Adult participation in lifelong learning⁸⁹ is relatively high, although decreasing gradually in recent years. Participation in lifelong learning improves the individual's

⁸⁶ Eurostudent survey (2005–2008).

⁸⁷ The ratio between the number of graduates in a given tertiary education course and the number of freshmen enrolled N years ago, expressed as a percentage.

⁸⁸ In 2006, the completion rate in tertiary education amounted to 65% (OECD average: 69%).

⁸⁹ The indicator measures the participation of the population aged 25–64 in education and training in the four weeks preceding the survey. It is calculated on the basis of data for the second quarter, as annual data (annual average) were not yet available at the time of drawing up this report. The European Commission has called attention to the methodological faults of the indicator. The measurement of participation in education and training in the final weeks preceding the survey is particularly problematic, which means that results strongly depend on the time of surveying. In 2003 the indicator calculation method changed, which means that Slovenia's values have been comparable since 2003

flexibility and employment possibilities, and is important also in terms of economic development. According to the Labour Force Survey, participation in lifelong learning in the second quarter of 2008 was 15.9% in Slovenia and had been declining for a few consecutive years, yet it was still well above the European average (2008: 10.1%). Although Slovenia ranks in the upper quarter of European countries, it still lags considerably behind certain Northern European states. Despite the relatively favourable position of Slovenia, the modest participation of the less educated and elderly raises concern. Given that participation in tertiary education among the elderly is growing more slowly than among the young, the difference between the share of population with tertiary education aged 25–34 and those in older age groups increased in 2000–2008.⁹⁰

In terms of labour market needs, the structure of enrolment in secondary schools and tertiary education is unfavourable and leads to structural problems on the labour market. After 2000 both the share and the number of students enrolled in lower and upper secondary vocational programmes dropped, translating into a deficit of certain occupation profiles on the labour market. At the level of tertiary education, the structural problem of enrolment is seen as imbalance between the number of students enrolled by field of study and the demand for human resources, as the enrolment structure mainly includes students of social sciences where supply exceeds demand, and only a minor share of students of science and technology subjects, where the demand is above the supply. According to the latest available international data for 2006, Slovenia lags behind the EU average both in terms of the share of science and technology students⁹¹ and in terms of the number of graduates in science and technology per 1,000 population aged 20–29. Despite higher enrolment in science and technology fields in the last few years⁹² and certain activities intended to promote enrolment (e.g. offering consultations for students attending the last year of secondary school), these activities need to be supplemented.⁹³ Considering that early interest in science and technology plays an important role in the future selection of occupation, pupils' interest in these studies should be encouraged already at the primary and upper secondary school levels (vocational counselling, scholarships). The existing situation is indeed unfavourable, which is also indicated by the

⁹⁰ In 2000, the difference between population with tertiary education in the 25–34 age group and population in the 35–44 age group was 3.9 p.p. (2008: 8.8 p.p.), the difference between age groups 25–34 and 45–54 years was 4.5 p.p. (2008: 10.0 p.p.), and the difference between age groups 25–34 and 55–64 years was 6.9 p.p. (2008: 14.3 p.p.).

⁹¹ Slovenia 21.1%, EU 25.5%.

⁹² See the indicator *Science and technology graduates*.

⁹³ The new Scholarship Act entered into force in September 2008 and its impact cannot yet be assessed. Among other things, the act encourages enrolment depending on the actual needs for human resources.

Timss international survey,⁹⁴ whereby in Slovenia the share of primary school children who dislike science studies is considerably higher than the international average. Since 2000, disproportions in the structure of tertiary education students have been reflected in a higher number of registered unemployed with tertiary education. In terms of accessibility of education it is wise to increase participation in tertiary education, but the efficiency and quality of studies need to be taken into account as well.

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

In 2007, expenditure on research and development (R&D) stagnated in real terms, whereas it dropped to the 2005 level as a share of GDP. Gross domestic expenditure on R&D⁹⁵ went down to 1.45% of GDP in 2007 (2006: 1.56% of GDP). The public sector posted a modest increase in expenditure on R&D, whereas the business sector recorded a fall in R&D investments in real terms.⁹⁶ This means that the business sector did not take advantage of the favourable economic trends and good business results attained in 2007 to increase investments in R&D, thus reducing its chances for faster restructuring. Unfavourable trends are also observed in the EU as a whole, as since 2000, the average EU expenditure on R&D expressed in relative terms has been stagnating, which is contrary to the Lisbon Strategy goals.⁹⁷ However, some Member States have considerably increased the share of R&D expenditure in GDP after 2000, for example Austria and the Czech Republic. The latter did better than Slovenia in 2007, thus taking the lead among the new Member States. Compared with these countries, Slovenia's progress is slow and indecisive; yet particularly in times of economic crisis the rise in public expenditure on R&D will be crucial, which is also emphasised by the European Economic Recovery Programme.⁹⁸

⁹⁴ The Trends in International Maths and Science Survey 2007 covered population aged 10–14 years (Svetlik et al., 2007).

⁹⁵ Research & development, Slovenia, 2007 – final data (SORS), 2009.

⁹⁶ In accordance with Slovenia's Development Strategy (2005) and the Barcelona target, by 2010 the business and public sectors together should reach a 3% share of expenditure for R&D in GDP. By adopting the Action plan to implement integrated recommendations in 2008, the Government extended the deadline for achieving this goal by 2013. This points to the fact that the goal was overambitious – Slovenia is also the only new Member State (in addition to seven highly developed old Member States) to have set such high goal in its strategic documents. Finland and Sweden set an even higher objective – investing 4% of GDP in R&D (CEC, 2009).

⁹⁷ See the indicator *Gross domestic expenditure on research and development*.

⁹⁸ A European Economic Recovery Plan, 2008.

The business sector remains the most important source of R&D financing; its share, however, shrank in 2007, although it increased in terms of the total number of researchers. Following the decline in investment, the share of the business sector in total expenditure on R&D fell to 58.3%. Similar trends were also reflected in slower growth of existing tax relief for R&D. The reduction of expenditure on R&D in 2007 is a shift from the envisaged greater role of the business sector in total investment, which (with 0.85% of GDP) remains far from the 2% target to be achieved by 2013. The impact of tax relief on investment in R&D is positive, but this instrument alone will not suffice for a more radical and durable R&D investment increase. In Slovenia, the volume of venture capital – considered an important support of R&D and innovation in companies in developed countries – is very modest.⁹⁹ The public venture capital fund intended to increase the offer has not yet started to operate due to complex establishment procedures. On the other hand, the number of researchers employed in the business sector grew again, reaching 41% of all researchers in 2007,¹⁰⁰ which has contributed to strengthening the economy's capacity to generate and absorb innovations in the future, even though only 10% of business sector researchers hold a PhD. Slovenia's gap behind the EU average (where the number of researchers in the business sector accounts for 50%) is huge, but is diminishing.

In 2000–2004 Slovenia considerably increased the number of first patent applications at the European Patent Office (EPO), thus narrowing the gap relative to the EU average and maintaining 13th place among EU countries in 2005 according to Eurostat's estimates. Based on the methodology used since 2007 by Eurostat for short-term estimates of patent statistics, EPO received 32.2 first patent applications per million population from Slovenian applicants in 2005,¹⁰¹ while the EU-27 average was 105.7. Based on final data for 2004, Slovenia thus ranked 13th,¹⁰² higher than all new Member States and also above some old Member States (Spain, Portugal and Greece), which spent a smaller share of GDP on R&D than Slovenia. According to OECD studies, there is a strong positive correlation between the number of (triadic¹⁰³) patents and business sector R&D expenditures.¹⁰⁴ This further consolidates the need for accelerated investment

⁹⁹ In order to reduce the gap, the Slovenian Chamber of Commerce and Industry together with certain enterprises established a venture capital firm to encourage development of promising firms; however, its assets are relatively low.

¹⁰⁰ Expressed as a full-time equivalent.

¹⁰¹ As the Eurostat's estimates of patent applications are purely informative and normally rounded up, it is not sensible to compare the 2005 estimate with 2004 data (55 first patent applications). For details see Slovenian Economic Mirror, 2/2009.

¹⁰² Based on final data for 2004, Slovenia ranked 13th in the EU-27, filing 55 first patent applications per million population.

¹⁰³ Patent families, consisting of patent applications filed at the European Patent Office (EPO), the Japanese Patent Office (JPO), and patents granted by the U.S. Patent and Trademark Office (USPTO).

¹⁰⁴ Compendium of Patent Statistics, 2008.

of the Slovenian business sector in R&D, particularly in high-technology sectors where the level of patentability is higher. On the other hand, it needs to be taken into account that in several activities patents are not the best tool to protect intangible knowledge, and policies should thus respond more rapidly to the new methods of protecting and appropriating benefits from innovation, and develop adequate mechanisms of support.¹⁰⁵ In the area of Community trademarks and designs, Slovenia is making progress but still lags considerably behind the EU average.¹⁰⁶

*Slovenia made substantial progress in 2004–2006 as regards the level of **innovation activity**, yet significant drawbacks are still present in this area.* The greatest improvement regarding innovation activity in 2004–2006 was recorded in services, where the share of innovation-active enterprises rose to 26.8% (by more than 10 p.p. compared to the last three years).¹⁰⁷ Progress, although more modest, was also recorded in industry, where the share of innovation-active enterprises is the largest. The highest levels of innovation activity were achieved by enterprises producing machines and appliances and those producing electrical and optical equipment (54.6%), which are, however, notably more innovation-active in certain other EU Member States.¹⁰⁸ Given Europe's stagnation in 2004–2006, Slovenia considerably reduced its gap behind the average EU innovation rate, bringing it down to 3.8 p.p. (2002–2004: 12.6 p.p.). As in previous years, the greatest disproportions are observed between small and large enterprises. While less than a quarter of Slovenian large enterprises are innovation-inactive, among small enterprises this share exceeds 72%.¹⁰⁹ This might be the consequence of a failure in adjusting the existing measures to small enterprises, particularly to their limited human resources, as it is hard to expect that small enterprises will be able to keep track of various tenders and prepare the relevant documentation. Innovation policy measures should be therefore aimed at promoting innovation in small enterprises. Moreover, the low level of innovation in small enterprises might be a result of their structure, since most of them operate in services (mainly trade and business services), or of their insufficient involvement in cooperation with large enterprises and supply chains.¹¹⁰ Generally speaking, providing adequate human potential is crucial in order to enhance innovation activity and increase the share of high-technology production on a

long-term basis. Considering the increasing importance of services in the economy and the specific features of innovation in services, the relevant policy and its instruments should take better account of and encourage also non-technological or organisational innovations. A faster introduction of new innovation models, such as innovation based on open platforms or public-private partnerships in innovation, and greater cooperation with end users already pursued by certain companies, is a step forward to bringing innovation to a higher level. These forms offer a host of opportunities for innovation in the public sector as well.¹¹¹

*The enrolment and number of **science and technology graduates** have increased over the last few years, but are still insufficient in terms of supply of these graduates on the labour market.* In 2007/2008, enrolment in science and technology rose, showing a continuation of positive trends that started as early as 2000. However, their share in the total number of students enrolled has not recorded significant growth and is lower than in most other European countries. Slovenia lags considerably behind the European average also as regards the number of science and technology graduates per 1,000 inhabitants aged 20–29; this indicator equalled 9.8 in Slovenia (2007) and 13.0 in the EU (2006).¹¹² The slow growth in the number of science and technology graduates and the gap behind the EU average pose a problem in terms of supply to the labour market, and no early improvement can be expected given the low levels of enrolment in this area of education.¹¹³ In addition to skilled science and technology staff, interdisciplinary knowledge combining ICT and engineering skills with modern organisational and management knowledge and skills plays an important role in strengthening innovativeness. Such a combination is crucial particularly in designing new services and solutions to improve the efficiency of complex production and business systems, whether in manufacturing, the energy industry or health care.

*Slovenia's progress regarding the **use of the Internet** slowed in 2007 and 2008, thus increasing the gap behind the EU average after a few years of positive trends.* The share of the population using the Internet in the first quarter of 2008 rose to 56% of the population aged 16–74 compared to the EU average, where it accounted for 61% (the difference in 2006 was only 1 p.p.). The slower growth of Internet use in Slovenia is also shown by the fact that in 2008 Slovenia was overtaken by five new Member States, which can be explained by data on the use of the Internet by age group. The gap between Slovenia and the EU average is largest in the oldest group (over 55)¹¹⁴ and is not declining. In the share of households with

¹⁰⁵ E.g. in trademarks, business models, copyright, protection of business secrets.

¹⁰⁶ In 2007 Slovenia presented 68.7 Community trademarks (EU average 124.6) and 50.5 Community designs (EU average 121.8) per million population (European Innovation Scoreboard, 2009).

¹⁰⁷ See also Chapter 1.3. Increasing the competitiveness of services.

¹⁰⁸ See the indicator *Innovation active enterprises*.

¹⁰⁹ In Germany, which is the country with the highest rate of innovation activity, the share of non-innovative large and small enterprises is less than 13% and around 43%, respectively.

¹¹⁰ Jaklič et al., 2006.

¹¹¹ An example of generating innovation based on an open platform is the Bank of Tourism Potentials of Slovenia, a special bank networking innovative ideas in tourism and the demand for their implementation (<http://www.btps.si/>).

¹¹² For details, see the indicator *Science and technology graduates*.

¹¹³ See also Chapter 2.1. Education and training.

¹¹⁴ See the indicator *Internet use*.

Internet access (59%), Slovenia lagged behind the EU average for the first time since 2004, although recording a higher share of households with broadband Internet access. The main reason why households do not have Internet access is either that they do not need it or do not have the necessary knowledge to use it. For quite a few years, Slovenia has been showing progress in availability of e-government services, which is among the highest in the EU. Less distinct are the results in the use of e-government services by the population, where Slovenia lags behind the EU average. With the increasing importance of e-services in various areas of business and private life that affect the quality of living, a large share of the population is unable to use these services (around 40% of the population does not use the Internet¹¹⁵). Insufficient knowledge is a serious obstacle to greater use of the Internet among the elderly and less educated, which indicates that certain measures to encourage the use of the Internet need to be better adjusted to these population groups. Investments in ICT are gradually increasing and in 2006 accounted for 5.7% of GDP, 3.6% of which was allocated for telecommunications. Although Slovenia keeps up with the EU average, some old and new Member States allocate a much greater share of GDP for investments in ICT.¹¹⁶

An overview of the indicators of progress in research and development, innovation, and information and communication activities reveals that the past years' development has been insufficient for a major breakthrough to improve competitiveness of the economy. Moreover, it points to certain shortcomings caused by loose and insufficiently coordinated policies in individual areas, weakening the effects of the otherwise successfully conducted measures.¹¹⁷ On balance, Slovenia's achievements are rather modest, particularly considering the favourable economic situation in the past few years, allowing for a substantial increase in R&D investment in the business and public sectors, which did not happen and may be regarded as a missed opportunity. The European Innovation Scoreboard (2009) confirms that Slovenia falls in the category of moderate innovators¹¹⁸ both in terms of innovation performance in 2008 and rate of improvement.¹¹⁹ For

a more radical progress in innovation, Slovenia should consistently meet the set objectives and efficiently implement the adopted measures, including their permanent monitoring and evaluation. In some areas, measures and policies have to be supplemented, particularly in terms of a closer cooperation between the business and public sectors, in order to achieve a better use of structural funds. Supplementing measures and policies should be accompanied by the promotion of non-technological innovations (promoting design, innovative marketing approaches, organisational innovations), an important factor of productivity growth and economic competitiveness that has so far been neglected. According to the INNO-Policy TrendChart (2008), Slovenia needs concerted policies, both in terms of planning and transparency of instruments, as well as in terms of coordination of rules and administrative procedures, to implement the adopted measures. Some government measures to mitigate the consequences of the international financial crisis adopted in early 2009 are in fact intended to eliminate the identified drawbacks. In this regard, it is necessary to point out the significant increase in resources for R&D activities in companies¹²⁰ amid efficient absorption of EU funds, establishment of a comprehensive supportive environment for innovation, higher relief for investments in equipment and intangible assets, staff mobility and interdisciplinary groups, increase in funds to encourage technological development and R&D projects in companies, and launching of a venture capital firm.

¹¹⁵ In the most developed EU countries this share is around 20%.

¹¹⁶ Latvia 9.9%, Estonia 9.7%, Sweden 7.3%.

¹¹⁷ Financing young researchers is a successful measure contributing to a significant increase of highly skilled human resources necessary for the creation of new knowledge and its absorption in the business sector. Nevertheless, after completing their studies many young researchers cannot find employment in higher education or research institutions because there is no systemic support for their integration and for the establishment of independent research programmes. If they move and stay abroad, the state's investment in their education has no effect on the increase of human capital.

¹¹⁸ EIS 2009 covers a larger group of indicators (33) divided into three dimensions (enablers, firm activities, outputs). Most data refer to 2007.

¹¹⁹ Calculated on the basis of trends in the summary innovation index in 2004–2008.

¹²⁰ From EUR 50 m allocated by the Ministry of the Economy and the Ministry of Higher Education, Science and Sport to R&D in 2008, to a total of EUR 150 m in 2009.

3. An efficient and more economical 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 disburdening labour, promoting competitiveness and employment, and simplifying the system. Second, increasing the institutional competitiveness and efficiency of the government, which includes 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 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

General government expenditure relative to GDP decreased by 1.7 p.p. in 2005–2008, which is consistent with the SDS objectives (2 p.p. by 2013); however, this decline derived entirely from the period before 2007, while in 2008 general government expenditure rose by 1.2 p.p. of GDP. The most significant decrease was recorded in 2007,¹²¹ when it was also well below the EU average.¹²² In relative terms, in 2007 general government expenditure fell mostly in social benefits in cash and kind, and compensation of employees, whereas the 2008 rise to 43.6% of GDP was mainly due to enhanced spending programmes aimed at minimising the consequences of higher inflation for the lowest population incomes, new spending programmes and wage growth in the public sector. In addition, the impacts of the world recession in the second half of 2008 (particularly in the last quarter of the year) deteriorated the economic situation and rather than in a reduction of general government spending resulted in an increase, mainly on account of new programmes.

No particular **trends to increase development-oriented expenditure** were recorded before 2008. The structure of expenditure by economic and functional classification (indirectly also through subsidies and state aid) reveals that the share of development-oriented expenditure within total expenditure is rising too slowly to have a noteworthy impact on development. Such structure results from

insufficient integration of national development policies and the related expenditure, as well as from the relatively weak absorption of EU funds.¹²³

The economic classification of expenditure in 2005–2008 shows a reduction in expenditure for social benefits in cash and kind and compensation of employees, while expenditure on gross fixed capital formation increased. The heavy contraction of the share of expenditure on social benefits in cash and kind (2005–2007: by 1.3 p.p.) was due to a decline in expenditure on pensions and the 2007 introduction of a mechanism to harmonise other transfers to individuals and households with inflation. In 2008, the share of this expenditure rose again, by 0.3 p.p., mainly owing to the adjustment of transfers twice a year, high valorisation of pensions (according to the existing model of adjustment to wage growth, which surpassed productivity growth), the one-off pension allowance and other higher transfers (higher child benefits, child care benefits in kindergartens and meals in secondary schools). In 2005–2007, the share of the compensation of employees fell by 0.9 p.p., mostly in 2007, although it had already been declining in the whole period since 2004. In 2008, this share grew by 0.2 p.p. following an increase in the number of employees in the public sector (1.4%) and the elimination of the first quarter of wage disparities. Gross fixed capital formation as a share of GDP had also been increasing since 2005, most notably in 2008 (by 0.4 p.p.). Slightly higher capital transfers expressed in relative terms hardly reached the 2005 level in 2008. As the share of subsidies has also remained unchanged since 2005, it may be assumed that funds deriving from structural and cohesion policies are mainly used for implementing government investment programmes rather than programmes of market operators, which use these additional funds to carry out their activities. By increasing the share of expenditure in 2008, all economic measures relating to intermediate consumption and other current transfers lost effect, while the share of expenditure relative to GDP almost returned to the level of 2005.

In terms of the functional structure of general government expenditure,¹²⁴ no significant structural shifts toward SDS development priorities and EU funds absorption occurred in 2005–2007. A relative decline in expenditure as a % of GDP was achieved only in two major functions (social protection and education), and over a longer period of time (2000–2007) also in health and general public services, while other expenditures remained unchanged. No relative increase was observed in economic affairs, environmental protection, housing and community amenities, which contribute to the absorption of EU funds the most. Expenditure for this group even decreased by 1.3 p.p. of GDP in 2000–2006 (mainly owing to the redirection of motorway construction financing to borrowing with state guarantees), but eventually stayed at the 2006 level

¹²¹ In 2007, expenditure fell to 42.4% of GDP, i.e. by 2.1 p.p. compared with 2006. In 2005–2007, it fell by 2.9 p.p.

¹²² See the indicator *General government expenditure*.

¹²³ See Chapter 1.1. Macroeconomic stability.

¹²⁴ See the indicator *General government expenditure according to COFOG*.

in 2007. Compared with the EU-25 average, Slovenia allocates a considerably smaller proportion of GDP to social protection and a much higher share to education. In expenditure on environmental protection, Slovenia ranks in the bottom third among EU countries. In relative terms, expenditure on economic affairs is close to the EU-25 average, yet Slovenia nevertheless ranks in the bottom third of the list. The restructuring of expenditure toward development priorities thus remains a priority, but monitoring of efficient spending by individual function is also gaining importance, given the world economic crisis and increasing downward pressures on general government expenditure.

In the area of industrial policy, the share of subsidies in GDP has not changed since 2005, and there have been no major structural shifts toward promoting development of high-potential enterprises. In 2007, subsidies accounted for 1.6% of GDP and were 0.3 p.p. lower than in 2000. A breakdown of subsidies by function shows that around 82% of all subsidies are allocated to economic affairs. In 2006 and 2007, subsidies thus equalled approximately 33% (2005: 30.4%) of total general government expenditure on economic affairs. According to IMAD estimates,¹²⁵ nearly 60% of all subsidies relate to agriculture and this proportion has been rapidly increasing ever since 2004. As a consequence, other subsidy functions are being reduced. Among these, the most important are subsidies in labour market and employment, transport, and generation and distribution of energy raw material. Other subsidies total only 15%. No improvement regarding high subsidy fragmentation, their relatively strong impact on the competition and the undefined impact on competitiveness¹²⁶ observed in 2003–2005 was recorded in 2006–2007.¹²⁷ In this period, subsidies served as a survival mechanism for declining (mainly public) industries, rather than a mechanism for promoting the development of promising firms, which is also one of the objectives of SDS.

The extent of industrial policy measures having the nature of state aid is decreasing and less recommendable sectoral aids are gaining importance. In 2007, state aid in nominal terms remained almost unchanged compared to 2005,¹²⁸ but decreased considerably expressed as a share of GDP (2005: 0.95%; 2007: 0.80% of GDP). Although the reduction of state aid may be consistent with the Lisbon Strategy goals,¹²⁹ their orientation does not comply therewith. In

2007, aid earmarked for agriculture and specific sectors (transport, mining, rescue and restructuring), i.e. aid that was supposed to be reduced, eventually increased. Following the 2006 increase to 0.42% of GDP, aid to horizontal objectives – which is also much more desirable – was cut down to only 0.31% of GDP in 2007. The major reductions occurred in aid for small and medium-sized enterprises, employment and energy saving. More favourable were the increase of aid for R&D and training and the considerable strengthening of otherwise low aid for environmental protection. Total aid for R&D, training and small and medium-sized enterprises – i.e. the key development factors – almost halved in 2007 (down by 44.3%), while other horizontal aid decreased by 3.4%.

Reforms of the tax system are gradually reflected in relatively decreasing tax sources; at the same time, given the failed introduction of alternative sources particularly in times of economic recession, the problem of stability of general government revenue is becoming more and more serious. The relative burden on labour (relative to GDP) is still considerable, although decreasing with the gradual phasing out of the payroll tax. Likewise, despite a minimum increase of the burden on capital in 2007, the latter continues its downward trend thanks to the lowering of corporate income tax rates. Along with the gradual phasing out of payroll tax, amendments regarding personal income tax and reduced tax rates on corporate income, no other taxes (or extended tax bases) were introduced to make up for the losses in tax receipts.

The burden of taxes and contributions increased by 1.1 p.p. of GDP in 2000–2006, but fell by 0.4 p.p. in 2007 as a result of lower taxes on labour. In 2006 (the latest comparable data), the tax burden in Slovenia was below the EU average¹³⁰ (Slovenia: 39.1%; EU-27 39.9% of GDP), whereas the analysis of tax systems by country¹³¹ indicates that in Slovenia the share of taxes on consumption in total taxes and contributions was similar to the EU-27 average, while it posted higher taxes on labour (Slovenia: 52.9%, EU: 45.5%) and a lower tax on capital. The latter increased slightly in 2006 owing to the higher corporate income tax, but still accounted for a little more than 60% of the share reached by the EU average. Nevertheless, the analysis of implicit tax rates¹³²

¹³⁰ GDP weighted average.

¹³¹ The classification of taxes is based on ESA–95 and the uniform basic rules of classification. Taxes on consumption are defined as taxes on transactions between consumers and producers, and taxes on the final consumption of goods. Taxes on labour are directly linked to wages and are paid by employees or employers. Taxes on capital refer to taxes paid on capital, corporate income, household capital income (annuities, dividends, interests, other property revenue), capital gains, property, etc.

¹³² The implicit tax rate on consumption is the ratio between taxes on consumption and the final consumption of households in the territory of the state by the national accounts methodology. The implicit tax rate on labour is the ratio between taxes on labour and employee compensation by the national accounts methodology, increased by payroll tax.

¹²⁵ The estimate was made on the basis of subsidies denominated by programme classification in the annual financial statement of the state budget and by IMF methodology of 1986.

¹²⁶ Calculations are based on individual data on subsidies related to business effects and demonstrated in the companies' annual statements.

¹²⁷ Murn, 2008, p. 87–94.

¹²⁸ Data on state aid are comparable only for 2005–2007.

¹²⁹ State aid is not specifically defined in Slovenia's Development Strategy. Since it also supports the single EU market, more details are provided by the Lisbon Strategy and its subsequent amendments.

indicates that in Slovenia, taxes on consumption and labour are above the average, whereas taxes on capital are below the average. The 2007 tax reform, mainly in personal income tax and corporate income tax, and the changes in excise duties also altered the tax structure. The share of taxes on capital and consumption rose, while the share of taxes on labour decreased.

3.2. Institutional competitiveness

The withdrawal of the state from direct and indirect ownership in companies and financial institutions slowed in 2008 as a consequence of conceptual disagreements on this issue as well as the international financial crisis. The state thus remains one of the most important direct and indirect owners of Slovenia's economy. According to 2007 data, the public sector owns a 23% share in Slovenian joint stock companies, which is about the same as in previous years.¹³³ Among the 21 EU countries for which data are available, only Lithuania features a higher public sector share (26.5%¹³⁴). Following the guidelines of Slovenia's Development Strategy, in July 2006 the government decided that the state would withdraw from companies in which it was an indirect owner through SOD (Slovenska odškodninska družba – Slovenian Restitution Fund) and KAD (Kapitalska družba – Pension Fund Management).¹³⁵ Advisory panels were also appointed to prepare privatisation programmes for four leading Slovenian companies (Telekom, Triglav Insurance Company, NLB bank and NKBM bank). The state's withdrawal was nevertheless slow, particularly in direct state ownership shares in enterprises. KAD and SOD sold their portfolios at a faster pace, although this process also slowed in 2008 (see Tables 4 and 5) and lags behind the plans.¹³⁶ Both the state as the owner and KAD and SOD were mainly selling investments in non-listed and listed companies, whereas the withdrawal of the state from the most important strategic investments was notably slower.¹³⁷ The recent

slowdown in the privatisation process is indeed related to the international financial crisis, which reduces the interests and capabilities of potential investors, as well as to the change in the government at the end of 2008. All this brings some degree of uncertainty regarding the strategy of KAD and SOD thus far, and calls for reconsideration of their long-term role in company ownership.

Table 4: Pension Fund Management: Overview of cumulative sales and stock (as at 31 December) in 1999–2008

	1999	2000	2005	2006	2007	2008
Fully sold companies – cumulative	553	862	1127	1181	1226	1243
No. of companies in the year-end balance sheet*	735	458	210	160	112	95

Source: Pension Fund Management.

Note: *The decrease in the number of companies in the year-end balance sheets may differ from the number of sales in the same year due to free transfers, swaps, purchases or removals from the register of companies.

Table 5: Slovenian Restitution Fund: Overview of the stock of capital investments and sales in 2004–2008

End of year	STOCK		SALES		
	No. of investments	No. of active investments ¹	Year	No. of investments sold ²	Sales value of investments (EUR m)
31.12.2004	227	179	2004	43	76.1
31.12.2005	194	151	2005	37	111.7
31.12.2006	134	102	2006	57	85.2
31.12.2007	86	56	2007	47	225.8
31.12.2008	69	53	2008	7	167.6

Source: Slovenian Restitution Fund.

Notes: ¹ Capital investments in companies that are not involved in a bankruptcy procedure and capital investments in which no sales contract was signed. ² A sales contract was signed.

Although 2008 saw no major changes in relation to better regulation and regulatory impacts policy, new development steps for 2009 were launched. In particular, several minor moves forward were made (redesigning the guidelines for better regulatory drafting, drawing up a manual for planning, conducting and evaluating public participation, new methodology for evaluating regulations based on practices of other EU countries, and the legislative procedure project to serve as information support for improved legislative processes). Following the recommendations of the European Commission and the OECD, Slovenia is to take another important step forward in the sense of separating policy-making procedures from bill-drafting procedures and setting up a central institution responsible for better regulation and implementation of impact analysis among the proposers of regulations.

The three-part programme of measures to reduce administrative burden was not fully implemented in

¹³³ 23.3% in 2005, 24.0% in 2006.

¹³⁴ FESE, 2008, based on data provided by the Bank of Slovenia.

¹³⁵ KAD and SOD are to withdraw from active ownership management in non-listed companies within 30 months and in listed companies within 24 months. No deadline has been set for strategic investments (18 companies).

¹³⁶ In accordance with the programme of the withdrawal of KAD and SOD from active management of companies, both institutions should have sold their listed investments by the end of July 2008 and non-listed investments by the end of January 2009.

¹³⁷ On 31 December 2007, the state directly owned shares of more than 10% in 65 companies. In 2006–2008, it sold its ownership shares in only 4 companies in which it owned more than 10%. In addition, it sold its minimum (mostly less than 1%) ownership shares in another 79 companies. Altogether, in 2006–2008 the state sold its shares in companies in an amount of EUR 410.3 m. Within that, the sale of the 48.1% share in NKBM (Nova kreditna banka Maribor) was worth EUR 303.3 m and the sale of the 55.35% share in Slovenska industrija jekla (Slovenian Steel Group) brought EUR 105 m. In the last three years, there were therefore only two major deals in which direct ownership shares of the state were sold (Slovenian Steel Group and NKBM).

2008 and the outstanding activities were transferred to 2009. Under the first part – the programme of 44 measures to reduce administrative burden in 2008 and 2009 – slightly less than a third (8) of the envisaged measures (35) were implemented in 2008. Under the second part – the action plan for implementing measure 28/7 to reduce obligations for companies in the area of collecting statistical data – six out of ten measures were carried out. The action plan also included implementation of the pilot project to measure administrative costs by international methodology in the case of the Occupational Safety and Health Act. The project results confirmed that companies were heavily loaded with information obligations and administrative activities. Under the third part – the programme of cutting administrative costs by 25% by the end of 2009 – progress was achieved in the area of labour law. By the end of 2008, four laws were mapped¹³⁸ along with the relevant implementing regulations,¹³⁹ administrative costs were measured for two laws, while the phase of gathering proposals to simplify procedures is planned for 2009. All unrealised measures from the first two parts of the programme were transferred to the government work programme for 2009.

The use of **e-government and registers** increased in 2008 and indicators of quality and user satisfaction point to a higher quality of public services. In 2007, Slovenia had already made a remarkable range of e-government services available (ranking 3rd among EU countries), and activities to increase availability and to simplify e-government services continued in 2008. The simplification of company establishment and operation procedures on the Internet (e-VEM – one-stop-shop portal) was extended from sole proprietors to simple limited liability companies. The e-government portal offers public access to specific registers (National Register of Regulations, Court-Business Register, Cadastre, Land Register), the court and business registers were merged and the upgraded personal identity card register was put into use. Moreover, a real estate transactions database was established, providing greater transparency of the real estate market and the selling prices of all conducted transactions. A further rise was recorded in the use of data from the Central Population Register as the basic source of personal data, and the e-provision of data from e-CPR services is on the increase. Most of the 58 administrative units participate in quality management systems (ISO 9001:2000, CAF and PRSPO), while user satisfaction measured through a monthly quality barometer¹⁴⁰ has been showing improvement over the last two years.

¹³⁸ Overview of legislation to identify all information obligations and administrative activities legally prescribed for entities. This process runs in accordance with the uniform methodology to measure administrative costs (EMMAS, version 2.2, 31 December 2007).

¹³⁹ Occupational Health and Safety Act, Employment and Insurance against Unemployment Act, Pension and Disability Insurance Act, and Labour and Social Security Registers Act.

¹⁴⁰ E-government availability – supply side (Eurostat), 2007.

As regards the use of e-government services¹⁴¹ in 2008, Slovenian companies ranked in the top third of EU countries, while population (16–74 years) ranked in the upper second third; the use of e-government services is above the EU average in both groups.

*Given the positive development towards simpler registration procedures for companies, Slovenia's rank in terms of **ease of doing business** according to World Bank estimates¹⁴² improved in 2008.* In its "Doing Business" report, which monitors the efficiency of business regulations for limited liability companies and protection of property rights, the World Bank placed Slovenia one rank higher (from 55 to 54) among 178 countries in 2008. Progress was mainly due to the significant simplification of company registration (2008: 120th; 2009: 41st), which is a consequence of the above-mentioned success of the "one-stop-shop" project.

*Only minor projects take place according to the **public-private partnership** model.* Following the adopted regulatory framework for implementing projects through public-private financing (end of 2006 and first half of 2007), the number of minor projects increased, while major projects (mainly motorway network construction) have not yet been implemented according to this model.¹⁴³

3.3. Efficiency of the judiciary

*The **court backlog**¹⁴⁴ is gradually being reduced and shows satisfactory shifts towards realisation of the Lukenda Project goals by 2010.* Since 2005, when the project of eliminating court backlogs (Lukenda Project) was launched, the backlog¹⁴⁵ (excluding misdemeanour cases) contracted by 13.1%, most significantly in 2008 when it fell by 7.5%. In the entire period after 2005 as well as in the last year, the most significant reduction was observed in cases of major importance. The greatest reductions were achieved in higher courts, and the lowest in local courts (see Table 6). The number of pending cases has been declining as

¹⁴¹ E-government usage by individuals by gender (Eurostat), 2008 in E-government usage by enterprises (Eurostat), 2008.

¹⁴² Doing Business 2009, 2009.

¹⁴³ The report on concluded public-private partnerships in Slovenia in 2008 (Ministry of Finance, 2009) provides detailed information regarding concessions, but no data on projects are available, as these projects are mainly conducted at local levels.

¹⁴⁴ The analysis of data on court backlogs includes the backlog referred to in Article 50(4) of the Court Rules, i.e. including court backlog as a result of reviews of decisions (Court Rules, Official Gazette of the Republic of Slovenia No. 17/1995, and further amendments).

¹⁴⁵ Total reduction of backlogs in local, district and higher courts. The Court Rules introduced the monitoring of court backlogs at the Supreme Court, Administrative Court, Higher Labour and Social Court, and at labour courts and the social court in 2008; therefore a comparison between data for 2008 and 2007 is not possible for these courts; at the end of 2008 the total number of backlogs in these courts was 5,603 cases.

Table 6: Court backlog excluding misdemeanours (total and by major cases), Slovenia, 2005–2008

	End of year				Change in %			
	2005	2006	2007	2008	2006	2007	2008	2005-2008
Total court backlog								
Total	308.668	295.199	289.945	268.207	-4,4	-1,8	-7,5	-13,1
Higher courts	5.518	3.832	2.342	853	-30,6	-38,9	-63,6	-84,5
District courts	15.222	13.785	13.050	11.742	-9,4	-5,3	-10,0	-22,9
Local courts	287.928	277.582	274.553	255.612	-3,6	-1,1	-6,9	-11,2
Court backlog in major cases								
Total	46.939	42.973	38.071	33.412	-8,4	-11,4	-12,2	-28,8
Higher courts	5.518	3.832	2.342	853	-30,6	-38,9	-63,6	-84,5
District courts	14.311	13.242	12.387	11.560	-7,5	-6,5	-6,7	-19,2
Local courts	27.110	25.899	23.342	20.999	-4,5	-9,9	-10,0	-22,5

Source: Ministry of Justice.

Note: Court backlog as defined by Article 50(4) of the Court Rules.

well and decreased in 2008 in all courts by 10.9% in total in major cases including misdemeanour cases (by 2.6% excluding misdemeanour cases). A declining number of pending cases has been recorded for all courts, except for labour courts and the social court, where this number has increased due to a high number of complaints about the new wage system. In 2008, courts settled only 6.1% more cases including misdemeanour cases, or 8.7% more excluding misdemeanour cases. In 2008, the number of settled major cases including misdemeanour cases was slightly below the 2007 figure.

Looking at all cases excluding misdemeanour cases, 33 out of a total of 66 courts (all higher courts, all district courts and 18 local courts) fully realised the **Lukenda Project** goals in 2008. At the end of 2008, the pending cases in 50% of all Slovenian courts thus accounted for less than half of the yearly caseload, which is consistent with the Lukenda Project goals. In terms of all cases including misdemeanour cases, the goals of the project were achieved by 31 courts (47% of all Slovenian courts).

4. A modern welfare state and higher employment

SDS guidelines: Maintaining and improving the achieved level of social security and the 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 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, which will be achieved mainly through economic growth and investment in knowledge.

4.1. Increasing labour market flexibility

In 2008, unemployment and employment **trends** were still favourable on average, as the economic slowdown associated with the deepening of the international financial crisis only started to show **in the labour market** in the final months of the year. In 2007 and 2008, the situation in the labour market was more favourable than it had been since 2000, which is attributed to strong economic growth in recent years. The number of people in registered employment rose by 3% in 2008 and the number of the employed according to the Labour Force Survey by 1.1%¹⁴⁶ over the year before. The number of registered unemployed was 11.4% below the 2007 average.¹⁴⁷ In the last three months of 2008,¹⁴⁸ however, the registered unemployment rate rose as a result of the decline in economic activity in the second half of the year. The registered unemployment rate thus averaged 6.7% in 2008, but rose to 7% by the end of the year. The long-term unemployment rate continued to decline

in 2008, but the share of long-term unemployed is still high.¹⁴⁹ The overall employment rate rose to 68.8% in 2008, but the employment rate of the older population (55–64) remained low.

The prevalence of temporary and part-time employment dropped in 2008, but the share of young people in such forms of employment remained high. Flexible forms of employment had been increasing for many years, but last year the trend turned. Changes to the Labour Relationships Act, adopted in November 2007, combined with the slowdown in economic growth, are the likely reasons behind the reduction of part-time employment in total employment. Even though the share of temporary employment was lower year-on-year in the second quarter of 2008, it was still above the EU average.¹⁵⁰ Moreover, despite the lower prevalence of flexible forms of employment, the share of young people (15–24) with temporary or part-time jobs remained relatively high and hardly changed over the previous year.¹⁵¹ The high share of young people in flexible forms of employment in Slovenia is a consequence of work through student employment brokerage services, which is attractive for employers in that it allows them to adjust the scope of work, and due to the fact that such work is more lightly taxed. Excluding work through student employment brokerage services from temporary employment, the share of young people with temporary employment in 2007 (66.7%) drops significantly (to about 50%). The high share of part-time employment increases job uncertainty, which probably has an impact on the decision of young people to start a family. Those with temporary or part-time jobs are also at greater risk of poverty than people with permanent full-time jobs.¹⁵²

Despite the Lisbon guideline to seek a balance between labour market flexibility and security, there were no systemic changes in Slovenia in 2008 that would have a profound impact on **flexicurity**. The changes to the Employment Relationships Act adopted in 2007 paved the way in particular for greater internal¹⁵³ and external¹⁵⁴ flexibility

¹⁴⁹ An average of 51.1% of the registered unemployed in 2008 and 45.7% of the survey unemployed in the second quarter of that year.

¹⁵⁰ See the indicator *Temporary employment* for details.

¹⁵¹ See the indicators *Temporary employment* and *Part-time employment*.

¹⁵² In 2007, the at-risk-of-poverty rate in Slovenia was 4% for those with permanent jobs, 10% for people with temporary employment, 11% for those with part-time jobs and 4% for those employed full-time.

¹⁵³ New options were introduced allowing the hiring of a person for a certain type of job and longer overtime (improving the flexibility of working time).

¹⁵⁴ The possibilities for external flexibility improved with the expansion of flexible forms of employment (fixed-term employment), changes making it easier to terminate employment contracts (waiver of severance pay if the dismissed person is offered a new job with another employer, shorter notice period) and reduced costs of dismissal with the shortening of notice periods.

¹⁴⁶ IMAD calculation based on quarterly data by the SORS.

¹⁴⁷ On average, 63,215 people were registered as unemployed in 2008.

¹⁴⁸ It rose by 11.6% from September 2008, when the number of the unemployed was at the lowest level in the 2000–2008 period, to December.

and created incentives for faster re-deployment of workers.¹⁵⁵ There were, however, no systemic changes to improve the flexibility of contractual relations. Moreover, the active employment policy does not sufficiently support the expansion of flexicurity with education and training programmes for the unemployed and the employed, which is likely one of the reasons behind the drop in the share of adults in lifelong learning for the third year in a row.¹⁵⁶ Neither were there in 2008 any systemic changes in providing income security to the unemployed, which is one of the pillars of flexicurity. Greater attention was, however, being paid to the work-life balance.¹⁵⁷

*In terms of labour market flexibility, Slovenia has reserves particularly in **internal flexibility**, but work intensity is already high.* A European Commission analysis of flexicurity models¹⁵⁸ placed Slovenia in the group of countries¹⁵⁹ that have poorly developed flexicurity models. It highlighted the problem of human resource management in Slovenian companies, which do not make sufficient use of modern forms of teamwork, and it found that employees have low professional independence in their work. To tackle the low employment rate among the older population, Slovenia should promote the development of age management in human resources, which includes preventing age discrimination and negative stereotyping of older workers, and the adjustment of work conditions and employment opportunities to different age groups.

*According to a survey of the European Foundation for the Improvement of Living and Working Conditions,¹⁶⁰ **work***

¹⁵⁵ One change that improves the speed of re-deployment and flexicurity is the provision that the employer is not liable for severance pay in the event that the Employment Service or the employer offers a dismissed worker a new employment contract with another employer which the worker signs during the notice period.

¹⁵⁶ See Section 2.1.

¹⁵⁷ One important incentive for improving the work-life balance is the project of Family-Friendly Company certificates, which was carried out in Slovenia for the third year. By November 2008 these certificates had been granted to 43 companies.

¹⁵⁸ The analysis included 22 EU countries and looked at the following variables: (i) index of job protection as an indicator of external numerical flexibility; (ii) participation in education and training; (iii) expenditure on labour market policies; (iv) indicator of work intensity and "extraordinariness" of work schedules; (v) use of flexible working-hour arrangements and atypical employment; (vi) indicator of autonomy and complexity of work and work tasks as a criterion of functional flexibility; and (vii) indicator of changes in work tasks and teamwork (EiE, 2007). The analysis brings an interesting comparison between the countries by indicators of internal numerical flexibility (working time arrangements, prevalence of atypical work practices and indicator of work intensity) and internal functional flexibility (prevalence of work organisation practices such as job rotation, multitasking, teamwork, job autonomy, complexity of work, etc.).

¹⁵⁹ In addition to Slovenia, this group comprises Bulgaria, the Czech Republic, Estonia, Hungary, Lithuania, Poland and Slovakia.

¹⁶⁰ Fourth European Working Conditions Survey.

intensity in Slovenia is high, as are the impact of work on health and the rate of health-related absenteeism. The survey shows that work intensity¹⁶¹ in Slovenia is the highest in the EU. According to this data, Slovenia has the highest number of days of sick leave per employee in the EU, and the impact of work on health is far above the average.¹⁶² In contrast, satisfaction with work is below the EU average, and to a greater degree than in the EU this is a result of the fear of imminent job loss.

4.2. Modernising social protection systems

*In 2006, the latest year for which data are available, **social protection expenditure**¹⁶³ increased by 4.1% in real terms but dropped in relative terms to 22.8% of GDP.* The real growth rate was higher than the year before, in particular due to higher expenditure on old age and survivors, which together represent all pensioners' benefits. In the EU-25, social protection expenditure averaged 27.0% of GDP in 2006, which means that the gap in the share of social protection expenditures in GDP between Slovenia and the EU average widened.

*Also in 2008, **social protection systems** were not adapted to demographic change and increasingly diverse forms of employment.* Preparations for changes to the systems of pension insurance, healthcare and long-term care that would make them financially and socially sustainable in the long term, and which would improve the management of public funding and improve access to and quality of service, slowed or came to a complete standstill. Only measures designed to mitigate the impact of higher inflation were taken. However, some of these measures were not targeted only at the low-income population and they were often uncoordinated. Moreover, they increased public expenditure on social transfers.

*The results of the **pension reform** of 2000 are still positive, but further adjustments to the system seem to be increasingly urgent.* The average retirement age is no longer increasing, indeed it is even dropping for men,¹⁶⁴

¹⁶¹ The work intensity index was measured using pace of work, short deadlines and the time available for the completion of tasks.

¹⁶² The highest percentage of answers that work affects health (EU: 35.4%, Slovenia: 62.3%).

¹⁶³ Measured with the ESSPROS methodology.

¹⁶⁴ From 2000 to 2004 the average age of pensioners granted the right to an old age pension according to the general regulations was rising constantly (by 1 year and 2 months for women and 1 year and 6 months for men). But in 2005–2008 the increase slowed down (in 2008 the average age for women was 57 years and 6 months and for men 60 years and 9 months). In addition to the basic rule, which raises the age criterion for men and women, the effects of additional conditions that reduce the main criterion are already starting to show.

whereas the average pension-drawing period is rising faster than the average retirement age.¹⁶⁵ Since 2000, expenditure on pensions as a share of GDP had been shrinking, but in 2008 it started rising again.¹⁶⁶ Until 2007, expenditure on pensions as a share of GDP had been dropping due to the rule for determining adjustment coefficients based on wage growth, the equalisation of old and new pensions and the fact that wages grew more slowly than productivity.¹⁶⁷ If wages grow at the same pace as productivity, and in particular if they outpace it, which happened in 2008, pension expenditure rises so much under the current system that it increases as a share of GDP, due to the adjustment rule¹⁶⁸ as well as the fact that the number of pensioners is rising faster than the size of the active population which pays pension contributions. In fiscal terms this means that a growing share of pension and disability insurance expenditure will be covered with transfers from the budget, which means from general taxes. In addition to the currently diverging trends in the growth of wages, productivity, the number of pensioners and the number of payers of pension contributions, pensions as a share of GDP will also grow in the long term due to demographics – the ageing of the population. Keeping people in employment and postponing retirement is therefore the policy mix that reduces fiscal pressures and increases the economic and social security of the entire population.

Incentives in pension legislation to postpone retirement¹⁶⁹ are not low, but combined with the current tax system and the discrepancies between labour and pension legislation, they are not producing the desired results. The age of exit from the labour force is still low compared to the EU and Pension and Disability Insurance Institute data on retirement age suggest that the gap to the EU is greater for women.¹⁷⁰ Longer work activity must be financially stimulated and presented to the insured persons in a correct, appropriate and timely fashion. This condition has not been fulfilled, as the pension provider is not giving insured persons timely and ongoing information about the state of their pensions or their outlook for the future.

*The share of people included in **supplementary pension insurance** schemes, as well as the level of premiums and the achieved yield, are still too low to ensure social*

¹⁶⁵ The average pension-drawing period for women in 2000 was 17 years and 1 month, but by 2008 it had climbed to 20 years and 10 months. The average pension-drawing period for men in 2000 was 14 years and 9 months, and in 2008 16 years and 4 months.

¹⁶⁶ In the period 2000–2007 from 11.24% to 9.73% of GDP, and between 2007 and 2008 from 9.73% to 9.91%.

¹⁶⁷ In the period 2000–2006, with the exception of 2001, real wages rose slower than productivity.

¹⁶⁸ The principle that pensions should grow at the same rate as wages is inconsistently implemented in the adjustment rule, and in certain provisions it is inappropriate.

¹⁶⁹ The average age of exit from the labour market in 2006 was 1.4 years below the EU average.

¹⁷⁰ In 2008, men retired on average at 60 years and 9 months and women at 57 years and 6 months. The average retirement age for both genders rose by one month compared to 2007.

sustainability of the pension system in combination with pensions from the compulsory insurance scheme. In 2008, 54.65% of persons insured under the compulsory pension and disability insurance scheme were included in voluntary supplementary pension insurance.¹⁷¹ Until 2005, the figure had been growing, but since then the number of new insurance policies has been rising at a very modest pace. The premiums are too low¹⁷² for the policyholders to get sufficient supplementary pensions to offset the gap which will occur due to the relative decrease in pensions from the compulsory pension insurance scheme.¹⁷³

Supplementary pension insurance policies with capital guarantees were affected by the financial crisis in 2008. Pension funds were unable to reach the guaranteed yield, even though it is set quite low. The fund managers thus had to pay up additional capital and make higher provisions. But even when capital markets normalise, the low yields of supplementary pension insurance funds¹⁷⁴ will remain unattractive and will discourage people from opting for this form of old-age social protection. The guarantee schemes in pension insurance with capital guarantees will therefore have to be upgraded. They will have to acquire some of the guarantee elements that the state is introducing in the current financial crisis for other financial activities and products, and the pension plans will have to be diversified depending on years left until retirement.

Regulations for the payout of supplementary pensions, which is due to start in 2011, will also have to be put in place as soon as possible. In Slovenia (as well as elsewhere in Europe) the market for pension annuities is not sufficiently developed or transparent to leave the payouts entirely up to insurance companies. Such pension insurance has the characteristics of supplementary insurance (and hence performs a social role) and the conversion of the savings will have to be regulated with a special law.¹⁷⁵

*The rising **health expenditure** will require additional streamlining in the provision of healthcare services.* The

¹⁷¹ According to projections for the development of supplementary pension insurance, the participation rate is expected to exceed 70% by 2060.

¹⁷² The average monthly premium per policyholder is EUR 34.97 in insurance companies (gross premium), EUR 40.60 in pension funds (gross premium) and EUR 35.76 in mutual funds (net premium).

¹⁷³ Given the current average premium and an average 3% annual return, the replacement rate of annuities from supplementary pension insurance plans would be about 1.9% of the net wage at the beginning of payout, rising to 3.5% by 2060.

¹⁷⁴ The main reason for this is the rigid and restrictive arrangement of guarantees, because of which managers of supplementary pension insurance funds (which have a very low minimum annual yield prescribed by law) pursue very conservative investment policies. Moreover, there are no other measures to motivate these managers to achieve greater returns.

¹⁷⁵ Special arrangements for the payment of supplementary pensions are in place, for example, in Sweden and Poland.

structure of publicly funded programmes has been changing in recent years. The year 2008 saw another increase in funding for programmes with long waiting times, but some programmes required more funds owing to the ageing population, a trend which is changing the demand for healthcare services (more chronic conditions).¹⁷⁶ Managing costs for medicines and medical accessories has been one of the priority activities in the recent years, but in 2008 a significant reduction was also achieved in health-related absenteeism.¹⁷⁷ Total health expenditure as a share of GDP has been dropping in Slovenia in the last few years, in part as a result of cost-cutting measures and low wage growth (characteristic of the entire public sector). In 2006, total health expenditure dropped by 0.2 percentage points year-on-year to 8.3% of GDP¹⁷⁸ (EU: 8.2%) and in 2007 it slid to 8.1%¹⁷⁹ according to our estimate, largely as a result of very slow growth in public expenditure, which lagged behind GDP growth. However, rising labour costs associated with higher wages due to the elimination of wage disparities in the public sector reversed this trend in 2008. Coupled with demographically induced changes in demand for healthcare services and the urgency of development (introduction of new medical technologies and medicines), this will require additional streamlining of healthcare service provision as well as certain systemic changes or the health system is very likely to face major financial problems in the coming years. Total expenditure on long-term care also dropped, to 1.15% of GDP, which is on a par with the average level for the 19 European countries for which we have comparable data. In the period 2003–2006, total expenditure on long-term care in Slovenia rose nearly 19% in real terms.

Work incentives¹⁸⁰ increased marginally in 2008, mostly as a result of tax cuts. The tax burden on labour costs

¹⁷⁶ Health Insurance Institute data show that the programme of non-acute hospital treatment expanded by as much as 20% in 2008 and the programme of healthcare in social protection institutions by 6.9%.

¹⁷⁷ According to the Health Insurance Institute, the share of all lost work days dropped from 4.22% in 2007 to 3.68% in 2008, with the share covered by the Institute dropping from 1.91% to 1.69%.

¹⁷⁸ Health expenditure and sources of funding (SORS), 23 October 2008. Data obtained using the internationally comparable System of Health Accounts (SHA) methodology.

¹⁷⁹ The estimate includes public expenditure on health according to the COFOG classification (Classification of the functions of the government, SORS, 2008); data on private expenditure are taken from the estimate in the Business Report of the Health Insurance Institute for 2007.

¹⁸⁰ The indicators of work incentives: tax burden on labour costs, employment trap and low-wage trap. The tax burden on labour costs shows the combined effect of taxes, social security contributions and social transfers on labour costs. The calculation is made for a single childless person who receives 67% of the gross wage of the average employee. The unemployment trap shows the ratio between the net and gross income of a single childless person in transition from unemployment to employment, taking into account that the unemployed person receives unemployment benefits equivalent to 70% of the gross

dropped to 40.9% (2006: 41.2%). The unemployment trap was 80.7% (2006: 82.2%), whereas the low-wage trap was 51.0% (2006: 51.6%) for singles without children and 67% (2006: 67.4%) for a couple with one active spouse and two children. Comparisons with the EU show that Slovenia is lagging behind in these indicators (although the gap has been closing), except in the tax burden on labour costs, where it came very close to the EU average (2007: 40.5%). In 2006 and 2007, changes were introduced in the social protection system that tightened the entitlement criteria for unemployment and social assistance benefits, but the planned changes for promoting the employment of the unemployed and the postponement of retirement were not introduced; in 2008 there were no systemic changes in this field.

The public-private ratio in the financing and provision of social protection schemes and certain services of general importance has been gradually shifting. According to Slovenia's Development Strategy guidelines, the state's primary role in this field is to frame objectives, policies and rules of the game, whereas service provision should be increasingly transferred to a public-private network of organisations. Over the recent years public institutions have indeed ceased to be the sole providers of services, whereas the share of private providers, most of whom are part of the public network, has been increasing. In tertiary education and in a part of social protection, private providers have played a key role in increasing capacities and improving regional access to services, but in healthcare the increase in the number of concessionaires has by and large merely changed the structure of providers. In terms of financing, too, the share of private spending in total expenditure on healthcare, social protection and education is approximately the same (or even higher) than the average in the EU.

The share of private expenditure in total health expenditure has been increasing since 2001, and according to the latest data (for 2006) it reached 27.7%, which is on a par with the EU average (27.4%). Between 2001 and 2006, private expenditure on health grew faster than public expenditure, which increased the share of private expenditure in total health expenditure. Supplementary health insurance accounts for 47.0% of private health expenditure¹⁸¹ in Slovenia. Direct

wage of the employee who earns 67% of the gross wage of the average employee. The low-wage trap for a single person shows the ratio between net and gross income of an employed single person in 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, where one of the spouses is employed, shows the ratio between the net and gross wage of the employed person in a four-member household in transition to a better paid job (from 33% to 67% of the gross wage of the average employee).

¹⁸¹ According to OECD methodology, private expenditure also includes expenditure by companies, which in Slovenia accounted for 12% of all private expenditure (0.2% of GDP) in 2006, and expenditure by non-profit institutions, which with 0.1% of total private expenditure is probably still slightly undervalued.

household expenditure is low in Slovenia compared to the EU, accounting for 42.5% of private expenditure¹⁸² (almost 80% in the EU), but it has been outpacing the growth of expenditure on supplementary health insurance.

The share of private expenditure in total expenditure on long-term care was 21.3% in 2006. This is marginally higher than in 2005, but over the period 2003–2006, for which data are available, public expenditure contributed more than private expenditure to the growth of overall expenditure on long-term care.¹⁸³ The faster growth of public expenditure in effect shrank the share of private expenditure, in particular in the funding of long-term social care services. Long-term healthcare services are largely funded from public sources,¹⁸⁴ but the share of private sources has risen slightly since 2003.¹⁸⁵

Private expenditure accounted for 13.3% of total expenditure on education in 2007; according to the latest data it exceeded the EU average of 11.5% in 2006. This is slightly higher than in the year before, which reversed the falling trend registered after 2000. In the period 2000–2007, the share of private expenditure dropped at all levels of education save primary education, where it rose to 9.6% in the same period. The biggest contraction was registered in pre-school education (from 26.1% in 2000 to 19.1% in 2007), but the drops were also significant in secondary education (from 13.0% to 9%) and in tertiary education (from 27.6% to 22.0%).

Among healthcare service providers the share of private providers has been increasing the fastest in the public network, where the number of private practitioners is the highest among general practitioners. Data by the Health Insurance Institute show that over a quarter (27.6%) of general practitioners and more than a tenth (11.8%) of specialists in the public network were private providers in 2008. The number of private practitioners without a concession (192) has increased by only 20 since 2002 and most of them work in dental medicine. Data on the number of contracts with the Health Insurance Institute also show an expansion of private practice in the public

healthcare network in recent years.¹⁸⁶ This is reflected in growth in the share of private practitioners in funding for health programmes, which rose by 3.8 p.p. to 12.5% between 2000 and 2008.

In the public network of social protection service providers, private practice has been developing in particular in the areas old people's homes and occupational activity centres. Of all people in care in old people's homes, 13.3% were put up with private providers in 2007 (up from only 1% in 2000); the figure for occupational activity centres was 14.0%, up from 4.4% in 2000. The number of concessionaires managing old people's homes rose steeply after 2004, whereas the number of concessions granted for occupational activity centres had been rising until 2003, whereupon it slowed down substantially. Considering the large number of concessions granted in 2008, we estimate that the share of concessionaires jumped significantly last year.¹⁸⁷

The number of private primary and secondary schools remained low after 2000, as did the share of enrolments in private institutions. However, the number of private post-secondary vocational institutions and independent higher education institutions was rising rapidly. About half of all post-secondary vocational schools are private, but they generally admit only part-time students. Among independent higher education institutions, the largest increase was registered among those who received concessions for at least one study programme. The overall share of enrolments in private educational institutions is low. At the primary level it was only at 0.2% in the school year 2007/2008, having been at this low level since 2000; in secondary education it has risen marginally since 2000 to 2.2% by the school year 2007/2008. The share of enrolments in private primary schools is among the lowest in Europe, where it is also relatively low. As in Slovenia, the share of students enrolled in private schools at the secondary level is higher also in other European countries. However, Slovenia differs from most other European countries in the structure of enrolment in private secondary schools by type of programme (general, vocational programmes), as all private schools offer only general education programmes.¹⁸⁸ The share of private enrolments, at 11.5% in the academic year 2007/2008, is the highest at the tertiary level, but still significantly below the EU average (26.5%). The share of students in private institutions both with and without

¹⁸² In the last revision of the data series for national health accounts for the period 2003–2006 (SORS: Healthcare Expenditure, released on 23.10.2008), household expenditure on healthcare was revised downwards and aligned with the national accounts.

¹⁸³ In the period 2003–2006, public expenditure rose 20.8% in real terms and private expenditure by 12.9%. Public sources comprise funds from state and municipal budgets and compulsory health insurance and private sources mostly out-of-pocket payments – co-payments for food in old people's homes and other forms of institutional care.

¹⁸⁴ Health Insurance Institute funds earmarked for long-term care services in old people's homes, special social welfare institutions, extended hospital care and long-term home nursing, and Pension and Disability Insurance Institute funds for assistance and attendance allowance.

¹⁸⁵ See the indicator *Expenditure on health and long-term care*.

¹⁸⁶ The number of contracts with private providers rose on average by 65 a year in the period 2000–2008. The number of new concessionaires increased the most between 2005 and 2007 (by an average of 110 a year) and the least in 2008 (by just 29).

¹⁸⁷ In 2008, there were already 26 concessionaires for old people's homes (over a third of all homes) and 12 concessionaires for occupational activity centres (about 16% of all providers). The share of concessionaires in home care has been relatively constant (10.5%, or 8 providers in the first half of 2008).

¹⁸⁸ In 2006, all students in private secondary schools in Slovenia were enrolled in general programmes, but in about a half of European countries the share of enrolments in vocational programmes exceeded the share of those in general programmes.

concessions is low,¹⁸⁹ but it increased in both cases in academic years 2006/2007 and 2007/2008.

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

The Laeken structural indicators¹⁹⁰ for 2007 place Slovenia among countries with a relatively high **degree of social cohesion**. The long-term unemployment rate (2.2%; EU: 3.1%) and the share of young people (18–24 years) who dropped out of education (4.3%; EU: 15.2%) were down again in 2007. Additionally, the share of jobless households dropped further and stood at 8.9% in 2007 (EU: 9.3%). The risk of poverty and income inequality are among the lowest in the EU. The at-risk-of-poverty rate was 11.5% (EU: 16%) and the 80/20 quintile ratio was 3.3 (EU: 4.8) in 2007. The values of these indicators were dropping between 2000 and 2007 (except for income inequality, which rose slightly). This is in line with the trends in the EU overall, but in Slovenia the reduction was faster than in the EU.

Satisfaction with life¹⁹¹ was higher in 2007 than in 2003, the year of the data used in the previous survey. In 2007, Slovenia ranked among the half of EU countries with higher satisfaction ratings. The score 7.2 placed it at the level of the average for the old EU Member States and just above the average for the EU as a whole.¹⁹² Scoring 7.1, Slovenia was still below the EU-25 average in 2003, while in the four years between the surveys it caught up with Germany and overtook Cyprus, Austria and Italy.

¹⁸⁹ In the school year 2005/2006, private educational institutions with concessions accounted for 3.4% of all enrolments (2007/2008: 4.6%) and educational institutions without concessions for 5.8% (2007/2008: 6.9%).

¹⁹⁰ Seven indicators for monitoring social cohesion were adopted in Laeken, but the Slovenian statistical office publishes only five.

¹⁹¹ Satisfaction with life is a subjective, synthetic, multifaceted indicator of the quality of life and personal well-being. The latest available data are from the Second European Quality of Life Survey (2008) by the European Foundation for the Improvement of Living and Working Conditions. It was carried out for the second time in 2007 and enables a comparison with the survey from 2004 (2003). Satisfaction was measured with the question: »All things considered, how satisfied would you say you are with your life these days?«, on a scale from 1 (very dissatisfied) to 10 (very satisfied). In the previous reports, satisfaction with life was shown based on data from the European Social Survey (ESS), but that was not carried out in 2007. The ESS survey uses a scale from 0 (very unsatisfied) to 10 (very satisfied) for the »satisfaction with life« indicator, which renders a direct comparison impossible despite the identical question.

¹⁹² Slovenia ranks the highest among the new EU Member States in satisfaction with life. The most »satisfied« people in the EU are the Scandinavians (Denmark with 8.3), followed by North European countries. South European countries and, somewhat surprisingly, Austria are below the average. They are followed by other post-socialist countries, with Bulgaria at the very bottom.

Trust in other people and institutions (general trust) is low and indeed dropped over the previous years. Measured by this indicator,¹⁹³ Slovenia ranked just above the EU average in 2007, but as in most other EU countries, trust has been declining. In the four years (from 2003 to 2007) between the surveys, the general level of trust in Slovenia fell from 5.4 to 5.2. Slovenia nevertheless moved to the upper half of EU countries with an above-average level of trust, having overtaken Austria, Italy and Germany, given that general trust declined across the entire EU and the drop in Slovenia was smaller than in 20 other countries.

In 2007, **disposable income** increased the most after 2001, mostly due to high wage and employment growth. Total disposable income¹⁹⁴ rose by 5% in real terms in 2007 and disposable income per capita by 4.2%, reaching 67.1% of the per capita EU average (2000: 57.7%). Average net wage per employee was up 4.2% year-on-year in 2007 and exceeded real gross wage growth by 2 percentage points. Net wages outpaced the growth of gross wages due to changes in income tax legislation, whereby the effect on higher wages was greater. Data on disposable income for 2008 are not yet available, but data on wage trends suggest slower growth. In 2008, net wages grew at a real rate of 2.0% and gross wages by 2.5%; the 0.5 p.p. difference is a consequence of the increase in the average personal income tax rate.

Having dropped by 1.1% in real terms in 2007, the **minimum wage** rose 2.2% in 2008 following two adjustments that year. In the period 2000–2008 it grew at a real average annual rate of 2.3%. In the last three years¹⁹⁵ minimum wage growth was slower than the increase in the average gross wage, which is why the ratio between the minimum wage and the average wage in 2008 (41.1%) was 2 p.p. lower than in 2005 (43.1%). The ratio between the minimum wage and the average gross wage in the private sector put Slovenia in the upper half of EU rankings in 2008 (where the minimum wage is above 40% of the average gross wage in the private sector). The share of recipients of the minimum wage among all employees is relatively low, hovering at around 2.5% in recent years. However,

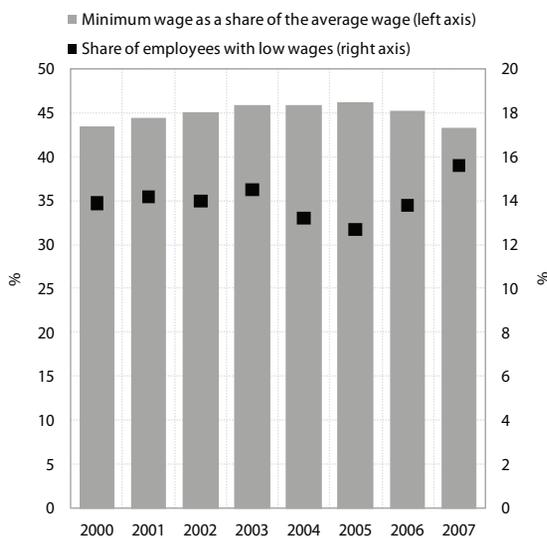
¹⁹³ For the same reason as the satisfaction with life indicator, this indicator is taken from the Second European Quality of Life Survey (2008) by the European Foundation for the Improvement of Living and Working Conditions. Trust was measured with the question: "Generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?", on a scale of 1 (you can't be careful enough) to 10 (most people can be trusted). The first results do not include data on "trust in institutions", which will be available in the spring of 2009.

¹⁹⁴ Disposable household income is defined as household income excluding social security contributions, taxes and other expenditure.

¹⁹⁵ This trend is a result of changes in the adjustment mechanism. Until 2004 the minimum gross wage was adjusted to inflation and additionally to real GDP growth. Although there were no additional adjustments to GDP growth in 2004 and 2005, the minimum wage nevertheless rose by more than inflation; since 2006, it has been only partially adjusted to inflation.

after 2005 the proportion of low-wage employees¹⁹⁶ has been increasing, largely as a consequence of the unfavourable mechanism for the adjustment of the minimum wage. In 2007, the proportion of low-wage employees was 15.6%, which is 2.9 p.p. higher than in 2005 (12.7%), the year when the proportion of low-wage employees was the lowest on record. In 2004 and 2005, the drop in the proportion of low-wage employees was to a large extent a result of wage policy in the private sector, as instead of a percentage, all wages increased by the same nominal amount. Before 2004, the proportion of low-wage employees was at around 14%.

Figure 6: Ratio between the minimum wage and the average gross wage in the public sector and the proportion of low-wage employees, Slovenia, 2000–2007



Source: Si-Stat data portal – Demography and social statistics – Labour market, 2009; IMAD calculations.

Gross-wage inequality increased marginally for the third year running in 2007. Measured by the interdecile ratio (9decile/1decile), this figure rose from 3.48 in 2006 to 3.61. In the private sector it increased from 3.36 to 3.44, with deterioration at the lower end of the wage distribution (5decile/1decile), as the interdecile ratio, which had been around 1.60 in previous years, increased to 1.66 in 2007. This deterioration was chiefly the result of the change in setting the minimum wage.¹⁹⁷ A similar trend was registered in the public sector, where inequality has also been rising at the lower end. Another indicator of wage inequality is the ratio between the lowest and

the highest gross wage by sector. In the period 2000–2008, real gross wages in the private sector rose by 2.4% a year on average; the highest wages (in financial intermediation) increased by an average of 2.6% a year over this period, whereas the lowest wages (in hotels and restaurants) rose by a mere 1.2%.¹⁹⁸ One indicator of wage inequality that improved in the 2000–2006 period is the gender pay gap. In 2006, women's wages were 6.9% lower than men's, down from 9.7% in 2000. The reduction in the gender pay gap was somewhat below average in the private sector (an improvement of about 2 p.p.), but it was more pronounced in the public sector (about 7 p.p.), with the exception of health and social services, where the differences actually increased.

The **average pension** rose slightly in real terms again in 2008. Average gross as well as net pensions rose by a nominal 8.3%¹⁹⁹ and a real 2.5%. Since the beginning of implementation of pension reform, the net replacement rate declined from 75.3% in 2000 to 67.1% in 2008. Until 2006, the net replacement rate declined as a result of pension reform measures. In 2006, the decline slowed due to the latest changes in the pension adjustment method, while the effects of the new personal income tax legislation on the net wage growth in 2007 contributed to the fact that in 2007 the decrease in the net replacement rate and, consequently, the deterioration of the relative situation of pensioners were among the greatest in the whole period of implementing pension reform.²⁰⁰ Due to the adjustment rule, the net replacement rate in 2008 remained unchanged relative to 2007, although it should drop marginally every year due to the equalisation of old and new pensions.

The **stock of tenant flats** remains relatively modest and most Slovenian households own or co-own their flats. The share of non-profit tenant flats in total flats amounts to 5%, and the share of all tenant flats 9.2%.²⁰¹ The acquisition of new non-profit flats has been slow, about 400 flats a year in the last two years. The total stock of flats, however, has been increasing very rapidly. A total of 8,357 new flats were completed in 2007, and at the end of that year, the total stock of flats was 5.5% higher than in the census of 2002 and 1% higher than in 2006. The average floor area and the housing standard also increased.²⁰²

¹⁹⁶ According to OECD methodology, these are employees whose wage is below or equal to two thirds of the median wage.

¹⁹⁷ This trend is a result of changes in the adjustment mechanism. Until 2004, the minimum gross wage was adjusted to inflation and additionally to real GDP growth. Although there were no additional adjustments to GDP growth in 2004 and 2005, the minimum wage nevertheless rose by more than the consumer price index; since 2006, it has been only partially adjusted to inflation.

¹⁹⁸ In 2000, wages in financial intermediation were 85% higher than in catering, but by 2008 the difference rose to 106%.

¹⁹⁹ Data from the Pension and Disability Insurance Institute.

²⁰⁰ The net replacement rate fell from 68.6% in 2006 to 67.1% in 2007. According to current regulations, the percentage of the pension increase is calculated from gross wages; in 2007, disparities in gross and net wage rises increased due to changes in personal income tax legislation. In 2007, gross wages rose by 5.9% and net wages by 7.9%.

²⁰¹ According to the latest data from the Housing Survey 2005.

²⁰² In 2007, the average floor area of all flats was 76.6 m² (2 m² more than at the 2002 census), while the average size of new flats already totalled 111 m². 20% of all flats were without central heating and 7% without a bathroom

4.3.1. Access to services of general interest

The share of children attending kindergarten has been rising and in 2006 (the latest international data) it came very close to the European average. In the school year 2007/2008, the share of children enrolled in organised forms of pre-school education rose to 43.7% in the age group 1–2 years, and 82.1% in the age group 3–5 years, which was a continuation of the positive trend since 2000. Compared to the school year 2000/2001, the share of children in kindergarten rose substantially in both age groups, by about 15 percentage points. Measured by the enrolment of children aged between 3 and 5 in organised forms of pre-school education in 2006,²⁰³ Slovenia almost reached the European average; the increase over the 2000–2006 period was even faster than in most other European countries. The financial accessibility of kindergartens has improved owing to legislation adopted in 2008 that waived payment for younger children if more than one child in the family was attending kindergarten.²⁰⁴ However, the local accessibility of kindergartens remains a problem in some parts of the country. In the period 2000–2006, public expenditure on pre-school education as a share of GDP increased slightly and is around the EU average,²⁰⁵ whereas private expenditure dropped. As a share of GDP, total expenditure on pre-school education is just above the average of the 19 European countries for which data are available, but expenditure per participant is significantly higher.

The share of young people enrolled in educational programmes is high and increasing. In 2006, the latest year for which data are available, the already high participation rate of young people (15–24)²⁰⁶ increased further. The total number of young people in secondary school has been dropping due to demographics, but the participation rate of the 15–19 age group is high and has been increasing since 2000. This trend is also related to higher enrolment in longer secondary programmes and lower enrolment in shorter lower and middle vocational programmes. The completion rates at secondary level are high,²⁰⁷ and in the academic year 2008/2009 the number

of applications for undergraduate programmes²⁰⁸ was lower than the number of available places for the first time since 2000. The number of admissions for full-time undergraduate programmes has been rising for several years. In the academic year 2007/2008, the total number of students in tertiary education dropped for the first time since 2000, which is largely a consequence of demographic changes (shrinking size of generations completing secondary school).

After gradually increasing for several years, the participation of adults in formal education remained level in the last year for which data are available (2006). Informal education is characterised by a very low participation rate of people with lower education. In 2006, the participation rate of adults (25–64) in formal education remained level compared to 2005, when it reached the highest value since 2000. The participation rate of adults in secondary education dropped slightly in the 2000–2006 period, which is probably to a certain extent a consequence of the high participation rate of young people in secondary education and the low share of early dropouts. The participation rate of adults in tertiary education exceeded that in secondary education and increased in the 2001–2008 period. Aside from formal education, participation in informal programmes is vital in terms of upgrading and expanding individuals' knowledge and improving flexibility. In the period 2003–2007, for which comparable data are available, the participation rate of adults in informal education improved marginally, but there are great differences in participation depending on attained formal education: the participation rate of those with low education is far behind that of people with tertiary degrees.

Several measures were implemented in the healthcare system in 2008 to improve access to health services in the public network, but the rising share of direct household expenditure on health services shows that an increasing number of people are improving their access with out-of-pocket payments. The share of people with compulsory health insurance has been growing and now covers almost the entire population. Through a measure implemented in 2008 and effective on 1 January 2009, socially deprived individuals who are often not included in supplementary health insurance schemes due to their low incomes have the right to ask that their supplementary insurance be covered by the national budget. There is still a shortage of medical staff, but the numbers are gradually rising. The number of physicians with concessions is particularly on the increase, but at the same time the number of physicians in public institutions is dropping. This shows that concessions do not have a major impact on the capacity of the public healthcare network. Access to healthcare services at the primary level improved in 2008 with better staffing.²⁰⁹

²⁰³ School year 2005/2006.

²⁰⁴ Act Amending Pre-school Institutions Act (ZVrt-D). OGRS, No. 25/2008.

²⁰⁵ In 2006, it was 0.52% of GDP. In 2005, it was equal to the European average with 0.48% of GDP.

²⁰⁶ In 2006, the latest year for which international data are available, the share of young people (15–24) enrolled in formal education was 69.7%, among the highest in Europe and significantly above the European average of 59.3%.

²⁰⁷ According to Education at a Glance, 2008, the completion rate in 2006 was 97%, which is above the average of the 19 EU countries that are members of the OECD (86%). The secondary education completion rate is the share of young people who have completed secondary education relative to the total population in the typical age of completion of secondary education. In Slovenia's case this age is 18–19 years.

²⁰⁸ Taking into account the first registration term; including full-time and part-time programmes.

²⁰⁹ Data from the Health Insurance Institute show that in 2008 funding was provided for additional staff in general outpatient clinics and children's outpatient clinics.

At the secondary and tertiary level additional funding has been provided to reduce waiting times,²¹⁰ but new regulations on the management of waiting lists, which were adopted in 2008 and will provide a more objective picture on actual waiting times, will only start to be used in 2009. Private expenditure on health is rising faster than public expenditure, in particular direct household expenditure, so-called “out-of-pocket” payments (from 2003 to 2006, the last year for which data are available, their share in the structure of private expenditure on health rose by 0.5 p.p.).

In 2007, there were no major changes regarding the accessibility of social services. The public network of institutions providing such services did expand, as new old people’s homes and occupational activity centres opened. However, considering that the number of rejected applications for admission has been rising every year, the expansion is still failing to meet demand. Getting a place in an old people’s home is still the hardest: the number of applicants turned down in 2007 actually exceeded the number of all people in care in old people’s homes. There are two main reasons for the current situation. Firstly, the expansion of capacities has slowed in recent years; coupled with the growing share of the older population, the share of people over 65 living in old people’s homes was only 4.2% in 2007, down from 4.5% in 2003 (the goal is to reach 5% in 2010). Secondly, other services for the elderly (home care, sheltered housing, day-care centres, etc.) have been expanding only slowly. However, the situation will improve slightly due to a significant number of new concessionaires which started operation in 2008.

The accessibility of and participation in various forms of pension insurance is not even. Almost all persons in employment are included in mandatory pension insurance, except students and those who opt out due to low income. Moreover, those who paid contributions but did not reach the minimum length of pensionable service²¹¹ are also not eligible for pensions. Participation is very low particularly in forms of insurance where a combination of employment and retirement could be a good instrument to raise labour market flexibility and to keep relatively able people employed after they have fulfilled the eligibility criteria for old-age pensions. There are 226 people in partial retirement and the number of those who formally combine retirement with additional paid activities is even lower.

²¹⁰ Waiting times were mostly shorter than six months, but the Business Report of the Health Insurance Institute for 2008 suggests that some waiting times were cut while others grew even longer.

²¹¹ 20 years of pensionable service for men aged 63–65 and women aged 61–63; 15 years after age 65 (men) and 63 (women).

5. Integration of measures to achieve sustainable development

SDS guidelines: The fifth priority 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, improving 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, halt the decline in biodiversity and enforce Slovenia’s natural spatial quality as a quality for the entire EU. 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 regional development programming to preserving population density, maintaining transport networks and boosting local economies. The planned measures are mostly aimed at strengthening the 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 establishing the ethical, social, economic and political aspects of culture.

5.1. Integrating environmental criteria with sectoral policies

In 2007, the process of enhancing the energy intensity of the economy improved more rapidly for the second year in a row. After a relatively slow reduction in energy intensity of the economy in the period 2002–2005, energy use per unit of gross domestic product decreased

²¹² According to SORS data (the Energy intensity indicator is based on Eurostat data).

by 5.4%²¹² in 2006, and by a further 6.1%²¹³ in 2007, also on account of electricity consumption growth, which practically ceased in 2007, after increasing notably throughout the period 2000–2006. The improvement was a result of the largest drop in energy intensity in manufacturing as well as in household consumption after 2000. Energy consumption per unit of value added in manufacturing improved in 2007 in all activities except production of other transport equipment, most significantly in the manufacture of basic metals and fabricated metal products, which consumes the largest part, i.e. almost a third of total consumed energy in manufacturing. The rise in electricity consumption in industry and construction was also very low in 2007.²¹⁴ Energy consumption by households and other users has been declining since 2004, most notably in 2007.²¹⁵ This was partly due to a mild winter, though data on energy consumption adjusted for average temperature²¹⁶ also indicate a substantial decline. After having recorded high growth in the previous two years, energy consumption in transport doubled in 2007 and substantially exceeded the average annual growth in the period since 2000.²¹⁷ This was also a consequence of strong economic growth in Slovenia and other countries, contributing not only to increased domestic freight transport but also increased transit freight transport across Slovenia.²¹⁸ The latter was additionally driven by cheaper tolls for motor vehicles in Slovenia compared with the neighbouring countries; the significant rise in fuel sales was also due to lower prices of fuels in Slovenia than in the neighbouring countries ever since 2005.²¹⁹

In 2007 and 2008, emission-intensive industries again recorded one of the fastest production growth rates among manufacturing industries. Production by

²¹³ See the indicator *Energy intensity*.

²¹⁴ Consumption dropped the most in the manufacture of basic metals and fabricated metal products. One third of this industry's drop was a consequence of abolishing production of primary aluminium in potline B, which was closed for good in December 2007.

²¹⁵ There was also a drop in consumption of households alone, which was on a constant rise since 2000, with the exception of 2005.

²¹⁶ Compared to the 16-year average of temperature deficit for Ljubljana (Source: IJS).

²¹⁷ In the period 2000–2006, average annual growth was 4.1%, in 2007 12.8%.

²¹⁸ A large share of freight transport in Slovenia is held by the transport by foreign carriers, which is not covered by the statistical freight transport data. According to the analysis made at toll stations in Slovenia, foreign freight vehicles account for 53% of total passes through toll stations, which largely represent transit traffic in Slovenia (Recorded freight vehicles in the period from 19 April 2008 to 26 April 2008 and from 4 May 2008 to 11 May 2008 passing through toll stations throughout Slovenia, DARS, 2009).

²¹⁹ See the indicator *Implicit tax rate on the use of energy*. In early 2009, excise duties on motor fuels in Slovenia rose significantly; in February, compared to neighbouring countries, the level of prices of motor fuels in Slovenia was lower only than prices in Italy and Austria (Oil Bulletin, AMZS, 2009).

emission-intensive industries²²⁰ has been rising faster than production by other manufacturing industries ever since 2000. The gap was most pronounced in 2007, but narrowed slightly again in 2008. In 2008 in particular, higher growth was exclusively fuelled by the rise in the manufacture of chemicals, which is the least energy-intensive of all these industries. As set forth by the European IPPC Directive,²²¹ an environmental protection permit needed to be obtained by 2007 for the construction and operation of all facilities with a substantial impact on the environment. Although these permits would have to be obtained by the end of 2007, only slightly more than a third of permits were issued by January 2009. At the end of 2007, such permit was also issued for aluminium production. As a result of adapting to these standards, the production of primary aluminium dropped by a quarter in 2008 and, consequently, the consumption of electricity shrank as well: in 2008, a mere 9% of total electricity consumed in Slovenia was used by this industry, compared to 12% in the past.

The share of the use of renewable sources shrank again in 2007. The shares of renewable energy sources (RES) in primary energy consumption and in electricity production oscillate depending on hydro-electric output and water levels²²² and have been on a downward trend since 2000. The share of renewable sources in primary energy consumption shrank in 2007 despite very modest growth in total energy consumption, which was a result of a decline in hydro-energy use due to extremely low water levels,²²³ as well as lower use of biomass. The latter was mainly a consequence of lower heat production from biomass in industry,²²⁴ while due to a mild winter, biomass use also dropped in other units of combined production of electricity and heat and in district heating units. The share of renewable sources thus slipped to 10.0% in 2007 (from 10.5% in 2006), which was the lowest level since 2000 (see Figure 7). Slovenia thus took another step back from its goal set out in the National Energy Programme as well as the European goal of renewable sources accounting for 12% of primary energy consumption.²²⁵

After stagnating for two years, the share of renewable sources in electricity production dropped further in 2007. Despite a small rise in electricity consumption in 2007, the share of renewable sources in electricity consumption dropped to 22.1%, largely owing to lower hydroelectric power plant production, which was down by almost a

²²⁰ Total chemical and paper industries, manufacture of metals (of metal industry), manufacture of cement, lime and plaster (of the manufacture of non-metallic mineral products) and manufacture of abrasive products and other non-metallic mineral products.

²²¹ Integrated Pollution Prevention and Control.

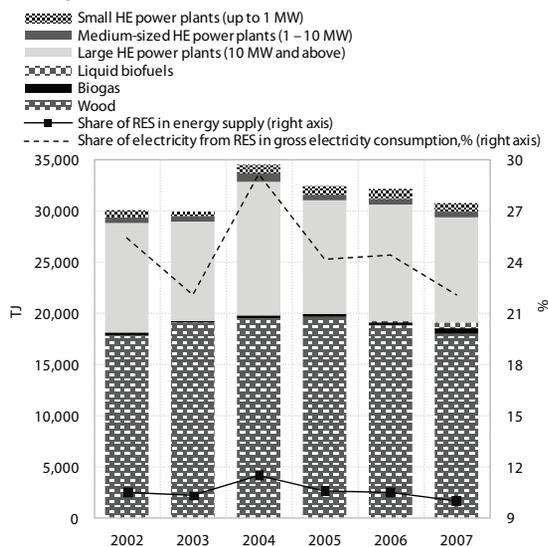
²²² See the indicator *Renewable energy sources*.

²²³ Since 1996, production of hydroelectric power plants has been lower only in 2003.

²²⁴ Because of closing down cellulose production in Vipava.

²²⁵ White paper on renewable energy sources (1997).

Figure 7: Use of renewable energy sources in Slovenia in the period 2002–2007



Source: SI-Stat – Environment and natural resources - Energy (SORS), 2009; calculations by IMAD.

tenth. On the other hand, a significant increase was recorded for electricity production from biogas, landfill gas and gas from waste treatment plants as well as from solar energy, which otherwise accounts for only a small share of electricity production from renewable sources. In 2000, the share of electricity produced from renewable sources in total electricity consumption accounted for as much as 31.7%, but has been on a downward trend ever since, fluctuating mainly due to increasingly frequent drought seasons (see Figure 7). Only in the drought year 2003 was it as low as in 2007. Given the higher water levels, this share is estimated to be slightly higher again in 2008, but it will be nevertheless very difficult to reach the national goal of 33.6% of electricity produced from renewable sources by 2010.

The system of promotion of the use of renewable energy sources and efficient production of electricity is planned to be revamped in 2009. Electricity production from renewable energy sources and in co-production with heating by qualified producers is being encouraged through the system of guaranteed purchase prices and premiums. In 2007, purchase prices remained unchanged, but rose slightly in mid-2008 (except for production from waste and biogas). In the second half of 2008, the market²²⁶ purchase price of electricity rose as well, which was an additional incentive for the majority of qualified producers which sell electricity independently and are eligible for premiums. In 2009, the system of purchase prices and premiums will be adapted to the EU rules on environmental protection state aid, and at the same time, the level of incentives will have to be set in such a way as to assure increasing production by qualified electricity producers.

²²⁶ Price at the EEX Stock Exchange in Leipzig.

Although the use of **biofuels** has been on the rise, it still failed to reach the set goals. Biofuels used for transport also belong to renewable energy sources. In 2007, the sales of biofuels increased markedly compared to the year before.²²⁷ The energy share of biofuels in total motor fuels sold was 0.83%, and thus still fell short of the goal set forth for that year (2%).²²⁸

The year 2007 saw a strong rise in **greenhouse gas emissions** from transport. According to provisional data, total greenhouse gas (GHG) emissions rose by 0.7% in 2007, exceeding the base year emissions by 1.8% (1986). This was the lowest increase since 2000 (except for 2003, when emissions dropped), but amid the extremely high rise in transport emissions (12.5%), their proportion in total emissions rose by as much as 3 p.p., to 26.1%.²²⁹ A significant contribution to the rise in total emissions also came from energy production, due to a notable increase in production from solid fuels. GHG emissions in other sectors decreased in 2007, most of all in households, or maintained the levels of the years before. Higher emissions have been largely a result of insufficient implementation of measures set out in the Operational Programme for limiting greenhouse gas emissions. Policies in the area of technological modernisation of thermo-electric power plants and transport will have to be strengthened, in particular, for Slovenia to be able to achieve the Kyoto goal.²³⁰

The trend of increasing road **transport** continued in 2008. In freight transport, strong growth of road transport continued,²³¹ whereas growth in rail transport stopped after the acceleration in 2007. In public passenger transport, the downward trend in road transport levelled off, growth in rail transport picked up slightly and air transport soared. As the data on road passenger transport by passenger cars are not available, a rise in the number of newly registered road vehicles indicates a further unfavourable trend in this type of transport, which also continued in 2008, after a sharp increase in 2007. Data on the use of motor fuels in the first three quarters of 2008 also indicate accelerated growth in the sale of automotive fuels. The latter was spurred not only by higher domestic passenger and freight transport and transit traffic, but also

²²⁷ The use of biofuels in the transport sector in the Republic of Slovenia in 2007 (MESF), 2008.

²²⁸ As a consequence of the negative impact of promotion of the use of biofuels from arable crops on food prices and on food security in general, on deforestation and biodiversity, the global trend is to focus on the production of second-generation biofuels, i.e. fuels produced from organic remains, and waste from agriculture and forestry.

²²⁹ Apart from the favourable economic situation at home and in the international environment (which affected not only domestic goods transport but also transit transport), the reason for a high rise was also a low level of prices of motor fuels in Slovenia (see also the paragraph on energy intensity at the beginning of this chapter).

²³⁰ Report on the implementation of the Operational Programme for limiting greenhouse gas emissions by 2012 (MESF), 2008.

²³¹ See the indicator *Share of road transport in goods transport*.

by higher sales of these fuels to foreigners, thanks to lower prices in Slovenia than in the neighbouring countries.²³² In 2007 and, by our estimate, also in 2008, the trend of modest investment in railway infrastructure and high investment in road infrastructure continued.²³³

Promotion of projects for efficient energy use and the use of renewable energy sources by public resources is still at a low level. Modest budgetary funds for the promotion of investment in RES and efficient energy use had been rising slowly since 2003 (up to EUR 3.9 m), but dropped again in 2007, and according to preliminary data also in 2008; funds remained below EUR 3.4 m in 2008. By contrast, the lending activity of the Eko Fund²³⁴ increased in 2008 (after a drop in 2007) to EUR 25 m,²³⁵ largely thanks to increased loans to households for measures related to efficient energy use, which doubled compared to 2007. The Action Plan for Energy Efficiency for the period 2008–2016 adopted in early 2008 to ensure 9% savings in final energy consumption, still largely lacks adequate financing. A third of the necessary public funds are still missing to allow for realisation of the investment along with the foreseen 50% private participation. In light of the high long-term goals regarding the reduction of GHG emissions¹²⁶ and the already jeopardised reaching of the Kyoto goals, it is crucial for Slovenia to strengthen implementation of measures promoting efficient energy use, which is the cheapest way of reducing GHG emissions. The basis for the implementation of measures is the amendments to the Energy Act adopted last year, which introduced compulsory energy saving at final consumers, and the Rules on efficient use of energy in buildings, which will have an important impact on the use of energy in newly built or renovated buildings.²³⁷

In the field of **waste**, some progress was achieved regarding municipal waste, where Slovenia is lagging behind its development goals. The year 2007 saw a slightly increasing trend in the amount of separately collected waste, although there is still considerable room for improvement, as only less than half of the municipal packaging waste is collected separately and a mere sixth of biodegradable waste. Although the share of landfilled municipal waste dropped in 2007, it remained exceptionally high.²³⁸ Municipal waste accounts for

around 15% of total waste. The largest share is industrial waste, whose management is in line with the goals.²³⁹ Waste packaging management is also consistent with the set goals.²⁴⁰

The impact of agriculture on the environment has been modest and even easing off over the last years, measured by the use of fertilisers and pesticides, average yields of crops, intensity of livestock breeding and the share of sustainable farming. The improvement has largely been a result of integrating environmental protection measures into agricultural policy, as producers must meet the prescribed standards in order to be eligible for subsidies. The year 2007 thus saw a further drop in the use of NPP fertilisers per unit of utilised agricultural area, as well as in pesticide sales. Production intensity of the two main crops differed: wheat production, which had been relatively less intensive, remained largely unchanged relative to the year before, whereas the intensity of maize production, which had been relatively high in the past, increased further due to favourable weather conditions. The livestock impact on the environment is relatively strong in Slovenia, due to a high share of livestock breeding in agriculture, but indicators show that in the long term the livestock impact on the environment is easing off. Moreover, the importance of sustainable farming continues to increase. Over 6% of agricultural area is used for organic farming, which is above the EU average; however, in view of the strategic targets and natural endowments, there is still significant potential for improvement in this area.²⁴¹

Forest area continues to expand and it is essential to improve the efficiency of forest management and increase value added in forestry and wood manufacturing. According to the latest data, the wood increment increased in 2007 again, whereas tree removal dropped after rising for the previous two years. The ratio of annual removal levels to annual wood increment, which had already been rather low, dropped further to 41.4%.²⁴² What is particularly problematic is the fact that a third of total tree removal is for sanitation reasons, in response to increased attacks by insects and disease, or damage caused by weather and fire. There is also a large lag behind in terms of removal of small wood, which is the main source of wood for energy purposes. In Slovenia, heating by wood biomass is rather modest, particularly in view of its great natural potential.²⁴³ Any greater exploitation of forest potential has been hampered by fragmentation of

²³² See also paragraph on *Energy intensity* at the beginning of this chapter.

²³³ 0.1% of GDP (investment less regular maintenance), in road infrastructure 1.8% of GDP (Value of construction put in place – SORS, 2008).

²³⁴ Environmental Fund of the Republic of Slovenia.

²³⁵ Because of the transfer of part of excess funds from financing priority dispatching, which emerged in the period 2002–2007.

²³⁶ In the framework of the climate and energy package, adopted at the EU level, Slovenia will have to cut emissions by 6% by 2020 compared to 2005.

²³⁷ The rules set out strict criteria for insulation and the compulsory share of the use of renewable energy sources in new buildings.

²³⁸ See the indicator *Municipal waste*.

²³⁹ In 2007, the share of recovered industrial waste increased from 69% in 2006 to 76%.

²⁴⁰ In 2006, 46% of total packaging waste was recovered; the goal for 2007 was to recover 50% to 65% (of which from 25% to 45% should be recycled) of the total mass of packaging waste.

²⁴¹ See the indicator *Agricultural intensity*.

²⁴² In 2007, recorded tree removal in Slovenia decreased, also due to changed monitoring methodology. See *Intensity of tree felling*.

²⁴³ The share of wood for heating represents around 30% of total tree removal, but what is worrying is the rapid increase in exports of this wood after Slovenia's accession to the EU.

forest property, inappropriate technological equipment and insufficient skills of private forest owners, as well as the lack of their cooperation and market orientation. In recent years, wood exports soared, in particular exports of logs, which however, does not contribute sufficiently to higher value added or job creation. In the Rural Development Programme for the period 2007–2013, part of the financial assistance is earmarked for increasing the economic value of forests and value added of forestry products. This goal, however, calls for an improved connection of the entire forestry and wood manufacturing chain, from production to processing of wood and also its marketing.

5.2. Sustained population growth

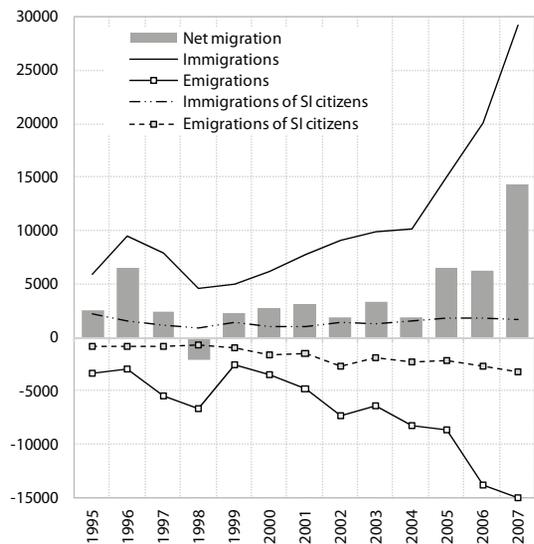
The **population** in Slovenia grew in 2008, again largely due to rising net migration, although the natural increase was also positive. In 2005, the population exceeded 2 million, reaching 2,039,399 by June 2008. The number of births, which dropped from 29,902 in 1980 (when the fertility rate of 2.11 still provided for undiminished population replacement) to 17,321 in 2003 (the fertility rate fell to 1.20), has been picking up again in recent years. It rose to 19,823 in 2007, with the fertility rate increasing to 1.38. The number of births was up also in the first half of 2008. The number of deaths, which in the period 1997–2005 exceeded the number of live births, was below the number of births in 2006 and 2007. In 2008, the population thus increased for the second year thanks to the natural increase, but even more due to positive net migration.²⁴⁴ The latter started to rise more notably in 2005, when increases were observed in both immigration and emigration; these trends also continued in the period 2006–2008. Immigration or emigration was mainly recorded for foreigners, whereas Slovenian citizens have been more inclined to emigrate than immigrate since 2000. The main reason behind increased immigration of foreigners in the period 2005–2008 was the favourable economic situation, particularly in construction, and a shortage of certain occupation profiles (also in construction). For this reason, the number of work permits for foreigners also surged in this period.²⁴⁵

The share of the **old-age population** is increasing due to the decline in births in the past and rising life expectancy; it is, however, still below the EU average. By 2007, life expectancy had increased to 75.0 for men and 82.3 for women. Thus, with the insufficient number of births, the population of Slovenia is ageing: the share of children, and slowly the share of the working age population as well, is contracting, whereas the proportion of the old-

²⁴⁴ In the period 1998–2005, the population grew exclusively due to positive net migration, as the natural increase was negative at that time.

²⁴⁵ From 38,500 on average in the period 2000–2004, to above 90,000 at the end of 2008.

Figure 8: Net migration in Slovenia, 1995–2007 (number of persons)



Source: SORS.

age population is growing. Although this process is still slower than in the EU on average (as in most EU Member States, life expectancy and consequently the proportion of the elderly to the total population is higher than in Slovenia), the problems of low fertility and hence the share of children are similar.

5.3. More balanced regional development

Although increasing slightly in 2006, **regional variation in gross domestic product per capita** has been rather stable since 2003. Disparities of regions at the NUTS 3 level, which have been roughly constant since 2003, increased somewhat in 2006 (by 0.6 p.p.), and were up by 2.8 p.p. compared to 2000. Regional variation was, however, still modest relative to the EU average.²⁴⁶ Concentration of economic activity is recorded for the Osrednjeslovenska region, which saw the largest increase in GDP per capita in the period 2000–2006. This is also confirmed by the review of investment activity²⁴⁷ by region, indicating a concentration in the Osrednjeslovenska region²⁴⁸ and in some other regional centres.

Regional variation in terms of unemployment and indirectly measured poverty of the population increased

²⁴⁶ See the indicator *Regional variation in GDP per capita*.

²⁴⁷ Ravbar, 2008.

²⁴⁸ In the period 2000–2006, as much as two fifths of the value of total investment in Slovenia was realised in the Osrednjeslovenska region and a third only in Ljubljana. Although the data on the number of investments by municipality reveals a relatively even distribution of investment across the country, these are largely investments of smaller value.

slightly in 2007 and 2008, but has been relatively stable over a longer period of time. The registered unemployment rate was thus down in all regions in 2006 and 2007, as well as in 2008. Relative regional disparities measured by the dispersion of the registered unemployment rate increased slightly for the second year in a row. Unemployment is an important factor of the population's poverty. As there are no data on poverty by statistical region, the proportion of the socially disadvantaged population can be inferred indirectly from the number of financial social assistance claimants. Amid the decline in the unemployment rate, the number of financial assistance claimants in regions dropped as well; however, as with unemployment,²⁴⁹ the relative dispersion between the regions in terms of the share of financial social assistance widened.

Expanding the higher education network and hence increasing the number of graduates in all regions positively contributes to balanced regional development. In the academic year 2006/2007 (latest data), at least one vocational college was set up in all regions but the Zasavska region, but most of them were in Ljubljana.²⁵⁰ In addition to expanding institutions, the number of tertiary level graduates in regions is also vital for more balanced regional development. In the period 2000–2007, this number increased in all regions, whereas in 2007 only in the Spodnjeposavska and Pomurska regions. In terms of this indicator, regional disparities are relatively small and continue to narrow. Reconciliation of the number of available jobs requiring tertiary education and the number of tertiary level graduates also plays a vital role in reducing regional disparities, but these data are not available.

Changes in population settlement across the regions are unfavourable, with further concentration of population in the Osrednjeslovenska region, and a strong process of migration from city centres to suburban areas. Population in Slovenia is concentrating in the Osrednjeslovenska region (a solid quarter), whereas the population in the peripheral regions is declining, which fails to contribute to more even settlement and economically weakens the regions. Jobs are also unevenly distributed across the regions (as much as 32% of jobs are in the Osrednjeslovenska region), which further adds to higher short- and long-distance daily mobility. At the same time, there has been a strong process of suburbanisation and deurbanisation, which weakens regional centres. The population tends to move out of large cities to the suburban areas,²⁵¹ and Slovenia is faced with the opposite process to that in the past when rural areas were emptying. This process is related to the real estate

market and spatial development,²⁵² and causes troubles not only in terms of the functioning of cities but also in maintaining the existing housing fund, which has been left to the elderly population. Migrations to suburban areas also exert pressure on agricultural land and the existing municipal and social infrastructure in the new settlements, which are usually not adapted to increasing numbers of inhabitants. At the same time, they increase daily mobility, usually by passenger cars, thus contributing to higher greenhouse gas emissions and other external costs of transport (traffic jams, accidents, lower quality of life, negative effects on health, etc.).

5.4. Improving spatial management

The impact of amended spatial management legislation has already been felt; nevertheless, more effort should be made for its implementation. The year 2008 saw the first effects of important changes in spatial management legislation,²⁵³ allowing for the amendment of old municipal spatial planning documents and thus the continuation of investment procedures (construction activity otherwise began to decline in 2008, due to the economic slowdown²⁵⁴), as well as accelerated work on new spatial planning documents. In line with the new legislation, the municipalities should draw up comprehensive municipal spatial plans by November 2009, which, however, is not likely to be realised. According to data from the Ministry of the Environment and Spatial Planning,²⁵⁵ many municipalities have not yet started to prepare the plans and some have yet to receive the guidelines and opinions from the ministries. Only a few municipalities have so far adopted comprehensive spatial plans. However, the legislation foresees no sanctions in this area. In the process of preparation of spatial plans, development needs are being coordinated with protection requirements. Another problem is that some ministries have adopted sector-specific protection regimes (e.g. for agriculture, water, environment, nature and cultural heritage) which cannot be coordinated in the course of spatial plan preparation (e.g. prohibition regimes on protected natural areas), or there is a need for a special assessment of the acceptability of impacts (assessment of acceptability of impacts on the environment, nature, natural resources and cultural heritage). Moreover, from the aspect of municipal economies, the ministries responsible for transport and energy mainly play a restrictive role – by protecting infrastructural corridors; the same holds true for the Ministry of Agriculture, which enforces protection of the

²⁴⁹ Relative dispersion in 2007 was 51.5%, and in August 2008 it was 53.9%.

²⁵⁰ 18 out of 50 active vocational colleges in Slovenia were located in Ljubljana that year.

²⁵¹ In the Municipality of Ljubljana alone, almost 12,000 people moved out to the neighbouring suburban municipalities in the period 1999–2005. Similar processes have also been recorded in other Slovenian cities.

²⁵² See Section 5.4. *Improving spatial management.*

²⁵³ In 2007, the Spatial Planning Act was adopted, replacing a large part of the content of the Spatial Management Act.

²⁵⁴ See the indicator *Issued building permits.*

²⁵⁵ Internal records of the Directorate for Spatial Planning at the Ministry of the Environment and Spatial Planning, December 2008.

best agricultural land. Implementing acts are not under state control and tend to be influenced by the interests of investors. In the long run, this can lead to further imbalances in spatial development. No amendments to the legislation were adopted in the area of spatial measures (such as expropriation or land consolidation), where the existing mechanisms have not been effective so far. Spatial policy should also be included to a greater extent in the tax system. Moreover, in order to be able to systematically monitor spatial development (realisation of the goals of the Development Strategy of Slovenia and the Strategy of Slovenia's Spatial Development), it would be necessary to develop adequate statistical indicators.

In 2008, transactions in the real estate market plunged and growth in prices of flats slowed. Last year's economic slowdown also resulted in a slump in the number of transactions in the real estate market: the transactions in flats were down by 27%, while the transactions in family houses slumped by 39% compared to 2007, with a further prospect of decline.²⁵⁶ Growth in prices of flats slowed as well. According to the Statistical Office's data, the year-on-year growth in the prices of flats was 5.2% on average in the first three quarters of 2008 in Slovenia as a whole,²⁵⁷ with a tendency to fall. Both developments signify an interruption in the upward trend recorded ever since Slovenia's independence. As prices failed to fully follow the drop in demand, the number of unsold flats increased.

The year 2008 saw improvement in certain conditions for the functioning of the real estate market. Particularly favourable was the improvement in the real estate market records, as the real estate transactions database and the real estate register started to be used, and the government took a decision that a mass valuation of all real estate should be carried out by May 2010.²⁵⁸ The transition to a new system of education and testing of real estate brokers in line with other occupational qualifications was delayed, whereas for some other real estate profiles (appraisers, architects) the licensing system has yet to be fully devised.

5.5. Culture as a factor in identity and development

Culture is a factor in the quality of life and, as such, a social value. With its influence on the value system, it contributes to achieving the goals related to social cohesion, sustainable development and development at large.

In terms of the indicators of participation in cultural activities, Slovenia is roughly at the European average. As in the whole period since 2000, the number of visitors

to museums, galleries and exhibitions was also rising in 2007. In contrast, the number of visitors to theatrical performances and cinemas, which had been rising since 2000, dropped in 2007. According to the available data,²⁵⁹ Slovenia exceeds the EU average in terms of the share of population who visited theatres, historic monuments or concerts at least once in the last 12 months, while in terms of visits to the ballet or opera performances, museums or galleries and cinema, Slovenia ranks slightly below the EU average. Although participation in cultural activities is at the European average, the proportion of those surveyed who believe that there are certain barriers to their cultural participation is higher in Slovenia than in most of other European countries. Slovenia deviates strongly from the European average²⁶⁰ as regards barriers such as a lack of time or lack of interest.

In Slovenia, visits to libraries exceed the European average and have been on the rise, as well as the number of units and the annual addition to library material, which is also partly related to a greater number of titles of published books. Reading has a positive impact on the level of functional literacy, expands horizons, strengthens mental capacity and enriches personal development. In 2006, the trend of increasing membership and visits to public libraries continued, and borrowing of library material surged.²⁶¹ There was also a further rise in the number of units of library material, partly as a consequence of a rising number of titles of published books, which has been on a constant upswing since 2000, thanks in part to co-financing of book print-runs and a higher book subsidy.²⁶² This is also indicated by data on the number of persons employed in publishing,²⁶³ which has been on an upward trend since 2002; according to an international comparison for 2006, growth in the number of employed in publishing in Slovenia has been above the EU average. Slovenia is also ranked above the EU average in terms of visits to public libraries²⁶⁴ and by

²⁵⁹ The share of those surveyed who attended any cultural event in the last 12 months (Eurobarometer, 2008).

²⁶⁰ In the Eurobarometer survey on European cultural values (2007) the respondents were asked the following question: Sometimes people find it difficult to access culture or take part in cultural activities. Which of the following, if any, are the main barriers for you? (lack of interest, lack of time, too expensive, lack of information, limited choice or poor quality of cultural activities in your area, lack of knowledge or cultural background, none, other (more than one answer was possible)). In Slovenia 52% of the respondents stated lack of time as a barrier to their participation in cultural activities (EU: 42%), 47% lack of interest (EU average: 27%), 33% too expensive (EU: 29%).

²⁶¹ Library material includes books, other library material (audio-visual material, micro forms, mapping material, pictorial material, etc.) and standards and patents.

²⁶² By a general estimate, 2 to 3 books are sold per person per year in Slovenia (Report on implementing the National Programme for Culture 2004–2007 (NPC) – for 2007, 2008).

²⁶³ Including the following activities of the SCA DE 22.11, DE 22.12 and DE 22.13 or publishing of books, newspapers and magazines, and other periodicals (Eurostat).

²⁶⁴ The share of respondents who visited a public library at least once in the last 12 months.

²⁵⁶ Calculations based on the quarterly reports of the Surveying and Mapping Authority of Slovenia on the Real Estate Transactions Database in 2008 and 2007

²⁵⁷ Economic Mirror, December 2008.

²⁵⁸ Government Decision 42200-2/2009/4 of 5.3.2009.

the share of people who read at least one book in the last 12 months.²⁶⁵ However, it lags significantly behind the northern European countries, which have the highest rates of public library visits in Europe.²⁶⁶

Household expenditures on culture dropped again in 2006. That year, households spent slightly less on culture in real terms than the year before, and the downward trend in real expenditures for this purpose continued (in the whole period 2001–2006, they were up in real terms only in 2004²⁶⁷). For the second year in a row, expenditures on books dropped, accounting for a mere 6.7% of total spending on culture (in 2000, 9.9%). On the other hand, household expenditures on visits to museums, galleries, zoos, cinemas, theatres and concerts rose for the third consecutive year. Including the expenditures on recreation (to allow international comparison), household expenditures on culture also dropped in 2007; in Slovenia, the share of this expenditure has otherwise been slightly higher than the EU average since 2000.

Protection of cultural heritage remains one of the top priorities in the new national programme for culture. As a result of the measures of the National Programme for Culture 2004–2007, positive effects have been recorded mainly in the performing arts, visual arts, libraries and books, while there is still room for improvement mainly in the promotion of Slovenian culture abroad and in planned and more systematic international cooperation. Despite the increase in financial resources in 2007, it is also necessary to improve protection of cultural heritage, which is to be achieved also in part with the help of the new Cultural Heritage Protection Act, which was passed in 2008. The year 2008 also saw adoption of the National Programme for Culture for the period 2008–2011, stating strengthening of cultural heritage protection, care for the language, the contribution of culture to development and employment, and freedom of media space as its main strategic goals.

²⁶⁵ Slovenia 72% (EU: 71%).

²⁶⁶ According to Eurobarometer (2007). In Slovenia the share of respondents who visited a public library at least once in the last 12 months was 53% (EU: 35%), in Finland, Sweden and Denmark it was around 70%.

²⁶⁷ See the indicator *Household expenditure on culture*.

Part II

Indicators of Slovenia's development

THE FIRST PRIORITY:

A competitive economy and faster economic growth

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

Gross domestic product per capita in PPS

As regards the GDP per capita in PPS indicator, Slovenia achieved 22,200 PPS¹ in 2007,² which is 89% of the EU-27 average (1 p.p. more than in 2006), or 81% of the EMU average. However, in 2007 Slovenia's GDP per capita in PPS reached 86% of the average of the EU-25, i.e. the group of countries that were EU Member States when the SDS³ scenario was prepared. Among the twelve new EU Member States, only Cyprus was more developed than Slovenia according to this indicator, while compared to the old Member States, Slovenia is still ahead of Portugal. Slovenia has advanced by 3 p.p. since it became a Member State. Catching up with the EU average in terms of this indicator was expected in that period in view of the high economic growth in Slovenia compared to the EU. Nevertheless, in 2006 and 2007, when Slovenia recorded more than twice the GDP growth rate than the EU average,⁴ the reduction of Slovenia's lag behind the EU average in terms of GDP per capita in PPS was relatively smaller (by 2 p.p.), as that period also saw a significant shift in the general price level compared to the EU average. Amid higher inflation in Slovenia than in the EU, the gap increased by 4 p.p. in the 2005–2007 period, to 77% of the EU average. According to Eurostat estimates, Slovenia reached 92% of the average GDP per capita in PPS in the EU in 2008, narrowing its gap with the average EU development level by 3 p.p. Despite the decrease relative to 2007, the gap between economic growth in Slovenia and in the EU remained relatively wide, while after a greater divergence in 2006 and 2007, inflation drew closer to the EU average again.⁵

Relative to 2003, the year for which the latest data were available when the SDS scenario was being prepared, Slovenia advanced the most in comparison with the countries that were at a similar development level at that time. Between 2003 and 2007, the development gap between Slovenia and the EU-25 average decreased by 6 p.p. In that period the greatest progress was recorded by Luxembourg (by 19 p.p.). Six of the 25 Member States made greater progress than Slovenia, five of them new Member States (Latvia 14, Estonia 13, Slovakia 11, Lithuania 10 and the Czech Republic 7 p.p.), which are less developed than Slovenia in terms of GDP per capita in PPS. However, the comparison of Slovenia's progress in that period with the progress of countries that were at a similar development level in 2003 shows that Slovenia was more successful in narrowing the gap with the EU average. In four years, Greece and Cyprus, which achieved 88% and 85%, respectively, of the EU-25 average in 2003, narrowed their gaps by a respective 3 p.p. and 2 p.p., while Malta and Portugal kept the same development level compared to the EU-25 average. In addition to Italy, which widened its gap the most (by 8 p.p.) in that period, other EU-25 Member States that worsened their position were Belgium, Denmark, France, the United Kingdom, Germany and Austria (between 1 and 4 p.p.).

¹ The Purchasing Power Standard (PPS) is an artificial currency unit that eliminates price level differences between countries.

² These data for 2007, 2006 and 2005, published by Eurostat, are based on revised purchasing power parities, and the latest GDP and population figures.

³ The central economic objective of Slovenia's Development Strategy (SDS) is to achieve by 2013 the average development level in the EU, which had 25 members at the time of SDS adoption (in 2005). Therefore, the EU-25 average was taken into account as the reference value in preparing the scenario of catching up with the average EU development level.

⁴ See the indicator *Real growth of gross domestic product*.

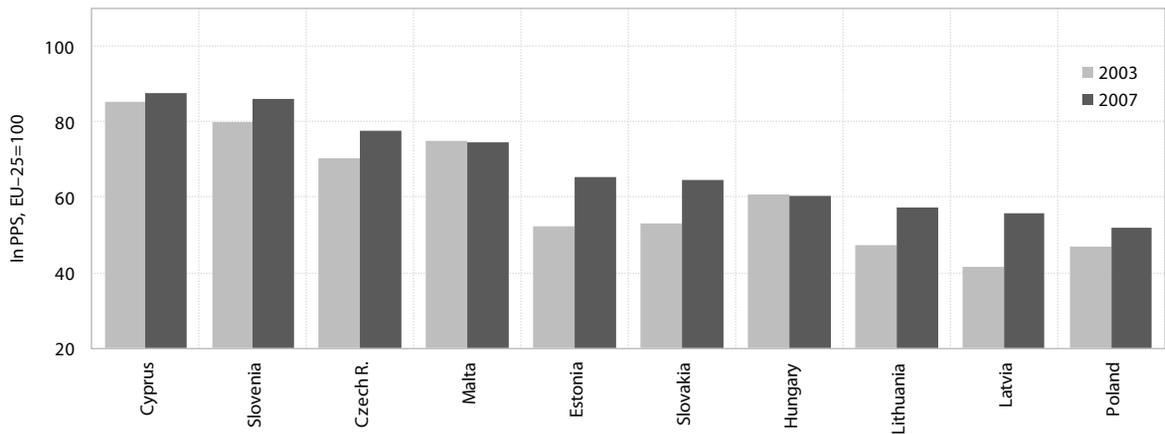
⁵ See the indicators *Real growth of gross domestic product* and *Inflation*.

Table: GDP per capita in PPS, volume indices, 1995–2008, EU-27=100

	1995	2000	2003	2005	2006	2007	2008 ¹
EU-25	105	105	104	104	104	104	104
EU-15	116	115	114	113	112	112	111
Austria	135	131	127	125	124	124	125
Belgium	129	126	123	119	118	118	118
Bulgaria	32	28	32	34	37	37	40
Cyprus	89	89	89	91	90	91	92
Czech Rep.	73	68	73	76	77	80	83
Denmark	132	132	124	124	123	120	120
Estonia	36	45	54	61	65	68	67
Finland	108	117	113	114	115	116	115
France	116	115	112	111	109	109	108
Greece	84	84	92	93	94	95	97
Ireland	103	131	140	144	147	150	144
Italy	121	117	111	105	103	101	101
Latvia	31	37	43	49	53	58	57
Lithuania	34	39	49	53	56	60	61
Luxembourg	223	244	248	254	267	266	269
Hungary	51	56	63	63	64	63	63
Malta	87	84	78	78	77	78	79
Germany	129	118	117	117	116	115	116
Netherlands	124	134	129	131	131	131	129
Poland	43	48	49	51	52	54	55
Portugal	75	78	77	77	76	76	76
Romania	N/A	26	31	35	38	42	46
Slovakia	48	50	55	60	64	67	71
Slovenia	74	80	83	87	88	89	92
Spain	92	97	101	102	104	105	104
Sweden	125	127	123	120	121	122	123
United Kingdom	113	119	122	122	120	119	118

Source: Eurostat Portal Page – National Accounts, 2009.
Note: ¹Forecast by Eurostat, N/A – not available.

Figure: GDP per capita in PPS in ten new EU Member States in 2003 and 2007, EU-25=100



Source: Eurostat Portal Page – National Accounts, 2008.

Real growth of gross domestic product

Following a period of accelerated economic growth, last year saw a stronger-than-expected slowdown (from 6.8% in 2007 to 3.5%) given that international economic conditions deteriorated notably in the second half of the year due to the deepening international financial crisis. After four years of accelerated economic growth linked to the favourable situation in the international environment, the positive effects of joining the EU and increased domestic spending (investment), the growth of economic activity slowed in 2008. Economic growth had already slowed in the first half of the year, but was still relatively high (5.5%). Greater moderation was recorded in the third quarter, while the last quarter saw a GDP fall by a real 0.8% year-on-year, the first since the second quarter of 1993. The slowdown in economic activity was the result of a fall in orders and lower availability of loans, while the business sentiment and consumer confidence indicators also plummeted due to the worsening of the international financial crisis. The main reasons for the substantial slowdown in real GDP growth were notably slower export and investment activities, while domestic final consumption growth also posted a significant drop.

In the conditions of a global financial crisis, in 2008 the growth of exports slowed significantly, as did the growth of investments. Exports and investment remained the main factors of economic growth, despite notably weaker growth. Amid a pronounced moderation in foreign demand, the real growth of exports slowed exceptionally in 2008 (from 13.8% in 2007 to 3.3%). Export activity started to slow significantly in the third quarter as a result of rapidly deteriorating conditions in the international environment, while in the last quarter merchandise exports declined in real terms for the first time since 1993 (by almost 10%). The ever greater slowdown of total export growth was offset by the high growth of exports in construction and merchanting services. The real growth of gross fixed capital formation also dropped last year, from 11.9% in 2007 to 6.2%. The growth of investment activity had already slowed significantly in the third quarter, both in investment in buildings and other construction as well as investment in machinery and equipment. Towards the end of the year, investment decreased, mainly as a result of low capacity utilisation and the negative effects of the financial crisis. The real growth of final consumption (2.6%) was lower than in 2007 (4.4%), mostly due to lower growth of private consumption, while the growth of government consumption was considerably higher than a year before. With a significant slowdown from the third quarter onward and a deterioration of consumer confidence indicators, the real growth of private consumption decreased to 2.2% (in 2007 5.0%). The real growth of government consumption (3.7%) strengthened (in 2007

2.5%) as a result of higher growth of the compensation of employees due to a greater number of employees in the public sector. The growth of expenditure on material costs related to Slovenia's Presidency of the Council of the European Union in the first half of the year, medical expenditure and expenditure on other transfers to households due to the measures adopted in May 2008 was also higher. Amid slowing investment activity and exports, and more modest growth of private consumption, import activity also slowed in the second half of the year. After a strong decline in the last quarter, the real growth of imports was significantly lower (3.5%; in 2007 15.7%). Compared to 2007 when it was -1.3 p.p., the negative contribution of net exports decreased to -0.2 p.p.

Real growth of value added decreased to 3.2% (from 6.8% in 2007) last year, mostly due to much slower growth in the most export-oriented part of the economy. The decrease in total value-added growth was mostly the consequence of lower growth in industrial activities (in the third quarter the contribution of manufacturing became negative) due to lower foreign demand. In the last quarter, growth in construction activity also slowed significantly, but construction remained the fastest-growing activity last year. Amid significantly deteriorated trends in manufacturing and slower growth in construction at the end of the year, the growth of value added in some market services (especially business services and transport, storage and communications, and in the last quarter also trade) also slowed last year.

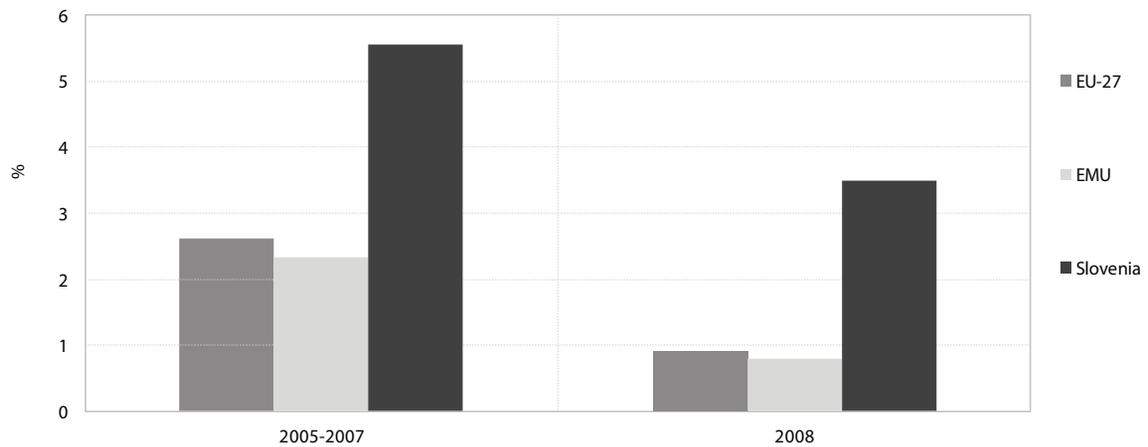
In 2008, economic growth in Slovenia exceeded the average of the euro area by 2.7 p.p. The difference remained at a similar level as in the period after Slovenia's accession to the EU (except in 2007, when economic growth in Slovenia was 4.2 p.p. higher than the euro area average).

Table: **Contribution of expenditure components to gross domestic product (GDP) growth in Slovenia in 1996, 2000 and 2005–2008, in p.p.**

	1996	2000	2005	2006	2007	2008
Real GDP growth, %	3.6	4.1	4.3	5.9	6.8	3.5
Trade balance of goods and services (exports-imports)	0.3	2.6	2.2	0.2	-1.3	-0.2
- Exports of goods and services	1.4	6.3	6.1	7.8	9.2	2.3
- Imports of goods and services	1.1	3.7	3.9	7.6	10.5	2.5
Domestic consumption, total	3.3	1.5	2.1	5.7	8.1	3.7
- Private consumption	1.8	0.7	1.4	1.5	2.7	1.1
- Government consumption	0.6	0.6	0.6	0.8	0.5	0.7
- Gross fixed capital formation	1.9	0.2	0.9	2.6	3.1	1.7
- Changes in inventories	-1.0	0.0	-0.8	0.8	1.8	0.2

Source: SI-STAT data portal – National Accounts. Gross domestic product, annual data; Gross domestic product by quarter, 2009; calculations by IMAD.

Figure: **Average economic growth in Slovenia, the EU and the EMU, 2005–2008**



Source: Eurostat Portal Page - Structural Indicators – General Economic Background, 2009.

Inflation

Inflation dropped significantly by the end of the year from the high levels posted in the first eight months of 2008. The key factor was the change in oil and food prices.

After hovering between 6% and 7% in the first eight months of 2008, inflation dropped to 2.1% year-on-year by the end of the year. With a delay of several months, average inflation also started to fall; however, due to high rates in the second half of 2007 it was, at 5.7%, higher than a year before (3.6%). The acceleration of inflation above the 3% level in the first half of 2008, which is by our estimate in the long run in line with the process of real convergence,¹ was mostly the result of higher prices of primary commodities on global markets. In the second half of 2008, when prices of food, oil² and other primary commodities on global markets were decreasing at an accelerated pace, inflation started to slow rapidly against the background of general slowing of economic activity. While in the first half of last year oil price rises contributed 1.6 p.p. to inflation via the rise in the prices of liquid fuels for transport and heating, their contribution diminished and turned negative by the end of the year (-1.4 p.p.). From a relatively high level at the end of 2007 (2.1 p.p.), the contribution of food price rises dropped to 0.6 p.p. by the end of 2008.

In 2008, the growth of prices in other groups of goods accelerated, which is linked to indirect effects of past oil price rises and partly also to the high level of economic activity in the past.

Other groups of products (except food and liquid fuel prices), which made up around 40% of the consumer basket in 2008, contributed about 1.7 p.p. to inflation last year (in 2007, 1 p.p.). Important shares were posted for clothing and footwear, alcoholic beverages and tobacco, transport means, furnishing and household equipment, and some energy products (gas, electricity, heat and solid fuels). The contribution of higher prices of energy products (in December, 0.5 p.p. year-on-year) was mostly a result of the past trends in oil prices, which in addition to the EUR/USD exchange rate fix the price of natural gas, which in turn determines the district heating price. In the period of accelerated inflation, prices of other commodity groups saw a modest upward trend, which also continued in the second part of the year, when the contribution of liquid fuels and food started to slow. This was partly due to the secondary effects of the pass-through of higher energy prices into the price structure of individual merchandise groups, which shows with a delay, and, in our opinion,

¹ Inflation that in the long run deviates from the average inflation in the EMU (around 3%) differs from the ECB's medium-term inflation objective (about 2%) by the surplus related to real catching up with developed EMU countries (i.e. the Balassa Samuelson effect), which according to recent estimates is around 1%.

² Brent crude oil prices dropped from an average of USD 133 per barrel in July 2008 to an average of USD 40 per barrel in December 2008.

partly also to the impact of significant economic activity in the past and the rigidity of the pass-through of lower energy prices into the price structure. Goods prices excluding energy and food grew by 2.9% in 2008 (in 2007 by about 1.9%). We expect that the growth of these prices will slow in the coming months due to slower economic growth and the decrease in energy prices on global markets, while their contribution to inflation will decline.

In 2007 and in the first half of 2008, inflation was mostly driven by the growth of goods prices, but the relative importance of the growth of service prices increased in the second half of the year.

High inflation in 2007 and in the first half of 2008 was predominantly a result of the growth of goods prices, which contributed 5.2 p.p. to the 6.9% year-on-year inflation in July last year. From 2005 to the second half of 2008, service prices were also increasing at an accelerated rate, which is linked to rapid economic growth in that period. Service price rises contributed between 0.9 p.p. and 1.8 p.p. to year-on-year inflation. Similar to the growth of goods prices, the growth of service prices started to moderate in the second half of 2008, but at a slower pace, reaching 3.8% by the end of the year (4.8% in 2007). Its contribution to inflation was 1.2 p.p.

In the second half of 2008, core inflation³ started to slow. Year-on-year core inflation, which was growing from June 2007 onwards, reaching its peak in July 2008 (5.1%), dropped to 3.9% in the second half of 2008. The key factors of the increase and decrease in core inflation were processed food prices, which decreased to 5.2% in December 2008 from the high level of 11.3% in April 2008, and to a lesser extent also the slowdown in the growth of service prices.

Prices under various forms of regulation decreased in 2008 by a total of 7.8%; the prices of energy products fell by 11.9%, while other administered prices increased by 0.4%. In accordance with the guidelines of the Plan of Administered Prices Adjustment for 2008 and 2009, the growth of administered prices thus fell behind the growth of market-determined prices, which was 3.6% by our estimate.

Compared to the euro area average, Slovenia experienced a stronger impact of external price shocks on inflation.

Inflation started to grow rapidly at the end of 2007 in the entire euro area. In December 2007, year-on-year inflation was 3.1%. It had reached its peak in June 2008 (4%), while by the end of the year it fell to 1.6%. In the last two years, oil and food prices were also the key reasons for inflation dynamics in the euro area; however, due to market specificity, in Slovenia external price shocks were to a larger extent passed on to domestic price growth.⁴

³ Consumer price index excluding non-processed food and energy prices.

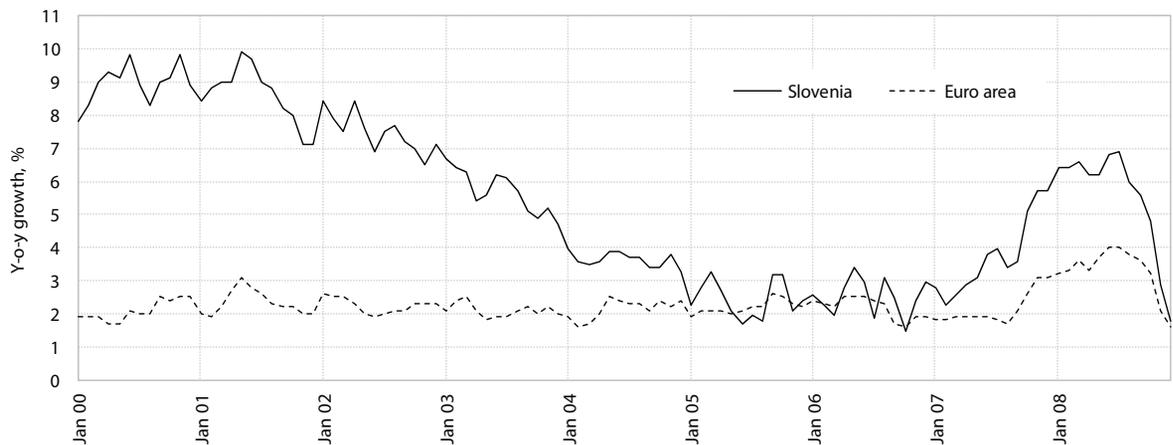
Table: Year-on-year rises in consumer prices in Slovenia and the euro area, 1995–2008, %

	1995	2000	2005	2006	2007	2008
Slovenia						
Consumer prices	9.0	8.9	2.3	2.8	5.6	2.1
Goods	7.1	8.8	2.0	2.1	6.0	1.3
Services	15.9	9.2	3.0	4.3	4.8	3.8
Administered prices	10.0	16.0	7.7	2.1	7.2	-7.8
Energy	8.2	18.9	9.8	3.7	9.6	-11.9
Other	11.4	12.0	3.0	-2.1	1.5	0.4
Core inflation ¹	N/A	6.9	2.4	2.7	3.2	2.6
Euro area						
Consumer prices	2.5	2.5	2.2	1.9	3.1	1.6

Source: SI-STAT data portal – Prices – Consumer price indices, annual data, 2008; calculations by IMAD. Eurostat Portal Page – Economy and Finance – Prices – Harmonised index of consumer prices, 2008.

Notes: ¹ Trimmean; N/A – not available.

Figure: Year-on-year rises in consumer prices, Slovenia and the euro area, 2000–2008



Source: Eurostat Portal Page – Economy and finance – Prices, 2009.

⁴ In 2008, oil prices had an approximately 60% higher share in the consumer basket in Slovenia than the EMU average. The more rapid growth of food prices was a result of the specific market structure and organisation in Slovenia (see also Economic Mirror, January 2009).

Wages and productivity

In 2008, the nominal gross wage per employee increased by 8.3% and exceeded the estimated rise in labour productivity (4.7%) by 3.6 p.p. The more rapid growth of wages in 2008 was the result of the extraordinary adjustment of wages at the beginning of the year and disbursement of the first quarter of funds to eliminate wage disparities in the public sector. The high growth of private and public sector wages (8.2%) in the first half of the year was not a result of higher labour productivity growth but of the extraordinary adjustment of wages with past inflation. Similarly, the high growth of wages in the second half of the year (8.4%) was attributable to the introduction of the new wage system in the public sector and not the rise in labour productivity.

In the 2001–2007 period, the rise in wages lagged behind the rise in labour productivity, except in 2001 (due to an exceptional rise in public sector wages). The guidelines regarding the lag of the rise in wages behind the rise in labour productivity were not always explicitly stated in wage policy documents. However, wage adjustment mechanisms agreed among social partners were restrictive enough for the policy to be implemented. The adjustment mechanism took into account only the expected consumer price rises, but with a safeguard taking account of the difference between the actual and expected price rises. In the public sector, since 2002 the adjustment for inflation was only partial because the other part of the adjustment was allocated to the elimination of wage disparities. In the 2001–2007 period, the lag of the rise in wages behind the rise in labour productivity was thus greater in the public sector than in the private sector.

One of the integrated guidelines for implementation of the Lisbon Strategy is the wage policy guideline, which deals with the relation between the rise in wages and the rise in labour productivity. Guideline 4 promotes nominal wage development consistent with the trend in labour productivity, whereby the rise in labour productivity is determined as a trend in productivity growth over a longer period (and not as annual growth). For monitoring the adequacy of the wage policy it is more appropriate to use a comparison of nominal rises in wages and productivity, as different deflators are used in calculating real rises of wages and productivity (productivity is deflated by the GDP deflator and wages by the consumer price index).

Table: **Movements of labour productivity and gross wage per employee; total, in the private sector and in the public sector, 1996–2008**

	Nominal growth, in %							
	GDP	Productivity	Wage growth	Difference between wage growth and productivity growth, in p.p.	Wage growth (private sector)	Difference between wage growth and productivity growth, in p.p.	Wage growth (public sector)	Difference between wage growth and productivity growth, in p.p.
1996–2008	10.5	10.0	8.9	-1.2	8.9	-1.1	8.6	-1.4
1996–2000	12.7	13.1	11.4	-1.7	11.0	-2.1	11.9	-1.2
2001–2008	9.1	8.1	7.3	-0.8	7.6	-0.5	6.6	-1.5
1996	15.2	17.6	15.3	-2.3	14.1	-3.5	17.2	-0.4
1997	13.8	16.0	11.7	-4.3	10.7	-5.3	13.2	-2.8
1998	10.8	11.0	9.6	-1.4	10.3	-0.7	7.7	-3.3
1999	12.2	10.6	9.6	-1.0	9.5	-1.1	10.1	-0.5
2000	11.6	10.3	10.6	0.3	10.3	0.0	11.2	0.9
2001	11.8	11.2	11.9	0.7	10.9	-0.3	13.9	2.7
2002	12.0	12.1	9.7	-2.4	10.0	-2.1	8.7	-3.4
2003	8.6	9.0	7.5	-1.5	7.8	-1.2	6.7	-2.3
2004	7.8	7.5	5.7	-1.8	6.8	-0.7	2.8	-4.7
2005	6.0	6.2	4.8	-1.4	5.4	-0.8	3.4	-2.8
2006	8.0	6.4	4.8	-1.6	5.4	-1.0	3.5	-2.9
2007	11.2	8.0	5.9	-2.1	6.9	-1.1	4.1	-3.9
2008	7.7	4.7	8.3	3.6	7.8	3.1	9.7	5.0

Source: SI-STAT data portal – Demography and social statistics – Labour market, 2009, calculations by IMAD for labour productivity and gross wages for the private and public sectors.

General government balance

Slower economic growth in 2008 led to deterioration of the general government fiscal position. Last year the general government deficit¹ was estimated at 0.9% of GDP; compared to the previous year, which saw a surplus of 0.5% of GDP, the general government balance worsened by 1.4 p.p. In 2008, relative total general government revenue decreased by 0.2 p.p. of GDP, while total general government expenditure increased by 1.2 p.p. of GDP. The growth in general government revenue slowed with less favourable macroeconomic trends, especially in the second half of the year. Among the major revenue categories, only revenue from social security contributions increased (by 0.4 p.p. of GDP), while revenue from taxes on production and imports decreased (by 0.6 p.p. of GDP), mostly due to slower economic activity and a gradual phasing-out of the payroll tax. Current taxes on income and wealth also went down (by 0.2 p.p. of GDP), due to the effect of the changed Corporate Income Tax, where higher relief and a lower tax rate were taken into account in the tax return. On the general government expenditure side, the increase in the proportion was the consequence of higher expenditure on gross investments (by 0.5 p.p. of GDP) and expenditure on social benefits in cash and kind (by 0.3 p.p. of GDP). The proportions of the compensation of employees, expenditure for intermediate consumption and other current transfers each increased by 0.2 p.p. of GDP.

The increase in general government deficit as a proportion of GDP was in 2008 mostly the result of general government expenditure. In the 2000–2008 period, general government expenditure as a proportion of GDP decreased by 3.1 p.p., while general government revenue as a proportion of GDP was down by 0.3 p.p. In 2001, when the general government deficit was the highest after 2000 (4% of GDP), expenditure grew faster than revenue, but both grew faster than GDP. After 2001, the general government fiscal position improved, particularly in 2002 and 2005, when general government revenue grew faster than expenditure and economic growth. The best position with a positive balance was recorded in 2007, when due to high economic growth, growth in general government aggregates lagged furthest behind economic growth. In 2008, the general government fiscal position deteriorated with the decrease in general government revenue as a proportion of GDP by 0.2 p.p. and the increase in general government expenditure as a proportion of GDP by 1.2 p.p. In the 2000–2008 period, the proportions of all types of expenditure except investment and other current transfers decreased; investment went up by 1.0 p.p. and other current transfers by 0.7 p.p. of GDP. In that

period the proportions of social benefits in cash and in kind decreased the most (by 1.4 p.p. of GDP), followed by the proportions of property income – interest on outstanding debt (by 1.2 p.p. of GDP), capital transfers (by 0.6 p.p. of GDP), intermediate consumption and compensation of employees (each by 0.5 p.p. of GDP) and subsidies (by 0.3 p.p. of GDP). The largest increase in revenue categories was posted for the proportion of revenue from current taxes on income and wealth (by 1.9 p.p. of GDP), while the proportion of revenue from taxes on production and imports (by 1.8 p.p. of GDP) recorded the largest decrease, mostly due to the gradual phasing out of the payroll tax.

In the 2000–2008 period, the general government deficit was to the greatest extent generated by the central government. More than 90% of the total deficit in individual years was generated by the central government (except in 2005, when the debt takeover for the social security funds (HIIS, PDII) within the national budget increased the central general government deficit by 0.7 p.p. to 2.2% of GDP, while the social security funds disclosed a surplus of 0.8% of GDP that year, and in 2008, when the deficit was divided among the central and local governments).

In 2007,² the general government's fiscal position improved in other EU Member States as well, but Slovenia was ranked among thirteen countries recording a surplus. The general government deficit at the EU level fell by 0.5 p.p. to 0.9% of GDP in 2007, and even slightly more at the EMU level, by 0.7 p.p. to 0.6% of GDP. This improvement was largely due to the increase in the proportion of tax revenue (by 0.1 p.p. of GDP) against the backdrop of positive economic trends and especially the decrease in general government expenditure (by 0.6 p.p. of GDP on average in the EMU and by 0.5 p.p. of GDP on average in the EU). Fourteen EU Member States recorded a deficit; Hungary and Greece exceeded the permitted level of 3% of GDP.³ Thirteen Member States, including Slovenia, recorded a surplus.

² The latest data for EU Member States are for 2007.

³ Following EU entry, the Stability and Growth Pact also applies to Slovenia, according to which the annual government deficit cannot exceed 3% of GDP. In order to monitor their fiscal position and identify excessive deficit and debt, Member States must submit a "Report on Government Deficit and Debt" to the European Commission twice a year. The report is drawn up in line with the single methodology of the European System of Accounts of 1995 (ESA-95) that all Member States are obliged to respect.

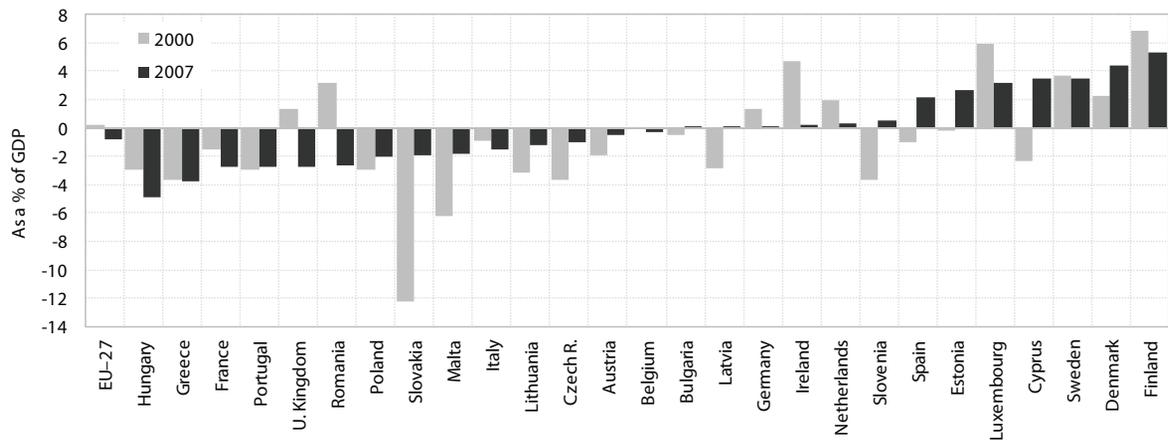
¹ ESA methodology.

Table: **General government revenues, expenditures and balance according to ESA-1995, as a % of GDP, Slovenia, 1995-2008**

	1995	2000	2005	2006	2007	2008
General government revenue	44.8	43.0	43.8	43.3	42.9	42.7
General government expenditure	53.3	46.7	45.3	44.6	42.4	43.6
General government deficit	-8.5	-3.7	-1.4	-1.3	0.5	-0.9
Central government	-7.9	-3.2	-2.2	-1.3	0.4	-0.5
Local government	0.2	0.0	0.0	-0.1	-0.1	-0.4
Social insurance funds	-0.8	-0.5	0.8	0.1	0.2	0.0

Source: SI-STAT data portal – Economy – National accounts – Main aggregates of the general government sector, 2009. Non-financial sector accounts: General government (S13), calculations by IMAD (for 1995, 2000).

Figure: **General government balance, EU Member States in 2000 and 2007, as a % of GDP**



Source: Eurostat Portal Page – Euro-Indicators – National Accounts – Public Finance – Excessive deficit procedure statistics, 2008.

General government debt

General government debt fell by 0.6 p.p. in 2008 to 22.8% of GDP. This was the second largest decrease since 2007, when general government debt also fell in nominal terms, for the first time in the period after 2000. After Slovenia joined the EMU, the conditions for successful management of public debt improved, and 2008 saw debt buybacks and replacing more expensive borrowing with cheaper loans, while the costs of debt financing were falling with the decreasing effective interest rate.

The decrease in relative general government debt was due to the decline in central government debt, while local government debt and the debt of social security funds have not changed in the last four years. Central government units' debt, which represents the bulk of the total debt, decreased by 0.7 p.p. in 2008 due to the surplus in the national budget and thus smaller needs for new financing. The costs of debt financing were also lower; they decreased mostly due to the purchase of old bonds (in 2007 and 2008¹) and borrowing abroad under better conditions with new bonds with better liquidity. The share of debt at the local level remains below 1% of GDP, amid limited possibilities for borrowing by local communities: repayment of liabilities (principal and interest) in respect of loans (not counting loans for financing investment co-financed with funds from the EU budget), financial leasing, commodity loans and guarantees furnished to individual municipalities must not exceed 8% of realised revenue of the previous year excluding received donations, transferred revenues from the national budget and funds received from the EU budget. The debt of social insurance funds has been negligible since 2005, when the total debt of the Pension and Disability Insurance Institute (PDII) and the Health Insurance Institute of Slovenia (HIIS) was transferred to the national budget. At the end of 2008, this category included only outstanding amounts of the debt of the HIIS in the form of financial leasing.

In recent years the general government sector has mostly been borrowing via long-term securities. Among debt instruments, securities (mostly long-term) represented almost 89% of the total debt at the end of 2008. Within loans, which represented around 11% of total debt at the end of 2008, the share of short-term loans has been increasing in the last four years, after dropping considerably to just 1% of the total volume of loans in 2004. General government borrowing is thus largely long-term, mainly at a fixed interest rate. Since Slovenia's joining the EMU, most of the debt has been denominated in euros, which represents the considerable stability of the existing debt in the short run.²

As regards debt and interest payments relative to GDP, Slovenia is among the EU Member States that are the least burdened with debt. According to the European Commission,³ Slovenia's level of indebtedness in 2008 was much lower than the average in the euro area (68.7%) and the EU (60.6% of GDP).

¹ In 2008 the nominal extent of all bonds decreased by 11%.

² See Economic Issues 2008, 2008.

³ EC Interim Forecast, January 2009.

Table 1: Position of consolidated general government debt by sub-sector in Slovenia, 2000–2008

	EUR m	2000 ¹	2005	2006	2007	2008
1	General government, total	4,946.9	7,754.7	8,288.7	8,071.1	8,472.9
1.1	Central government	4,790.4	7,653.0	8,208.6	8,008.5	8,372.5
1.2	Local government	59.6	210.5	235.7	241.3	324.5
1.3	Social security funds	97.0	20.3	3.1	2.8	2.7
1.4	Cosolidated debt among sub-sectors	0.0	129.1	158.7	181.5	226.8
	% of GDP	2000 ¹	2005	2006	2007	2008
1	General government, total	26.8	27.0	26.7	23.4	22.8
1.1	Central government	25.9	26.7	26.5	23.2	22.6
1.2	Local government	0.3	0.7	0.8	0.7	0.9
1.3	Social security funds	0.5	0.1	0.0	0.0	0.0
1.4	Cosolidated debt among sub-sectors	0.0	0.4	0.5	0.5	0.6

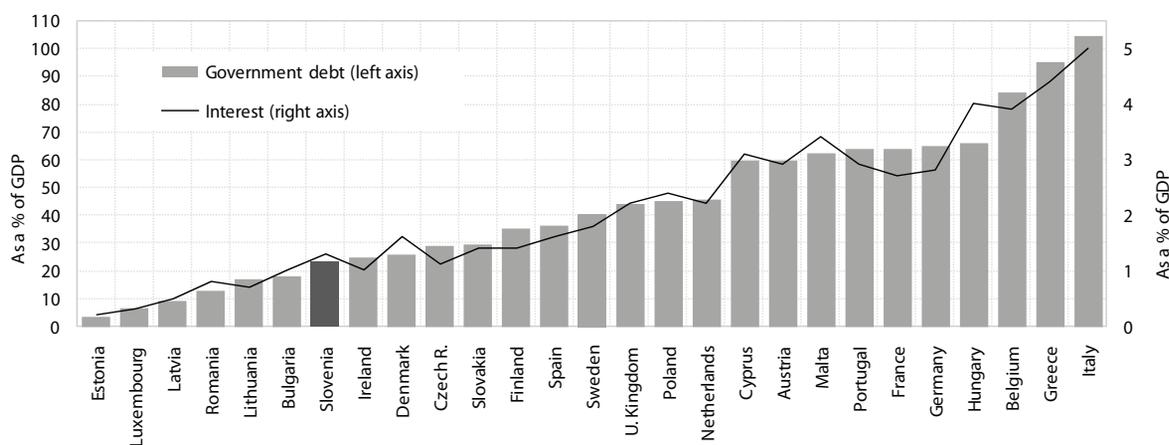
Source: For 2008, Main aggregates of the general government sector (SORS), 2009; for 2005–2007, Report on government debt and deficit (Ministry of Finance and SORS), 2008; for 2000, SORS's internal material; calculations by IMAD; before 2007 converted by the irrevocably fixed exchange rate of 239.64 tolar per euro.
 Note: ¹ The debt for 2000 is not consolidated.

Table 2: Position of consolidated general government debt by instrument and maturity in Slovenia, 2000–2008

	EUR m	2000 ¹	2005	2006	2007	2008 estimate
	Consolidated final governmental debt	4,946.9	7,754.7	8,288.7	8,071.1	8,472.9
1	Currency and deposits	3.3	14.5	15.0	39.7	41.9
2	Securities excluding shares	3,816.6	6,601.1	7,270.3	7,100.9	7,506.4
2.1	short-term	144.5	259.1	295.8	133.5	88.4
2.2	long-term	3,672.1	6,342.0	6,974.5	6,967.3	7,418.0
3	Loans	1,127.0	1,139.1	1,003.4	930.6	924.6
3.1	short-term	100.0	91.4	120.3	137.5	188.2
3.2	long-term	1,027.1	1,047.8	883.0	793.1	736.4

Source: Report on government debt and deficit (Ministry of Finance and SORS), October 2008, for 2000 and 2008 SORS's internal material; calculations by IMAD; before 2007 converted by the irrevocably fixed exchange rate of 239.64 tolar per euro.
 Note: ¹ The debt for 2000 is not consolidated.

Figure: Position of consolidated general government debt by EU Member States in 2007, as a % of GDP



Source: Eurostat Portal Page – Economy and finance, 2009.

Balance of payments

In 2008, the current account deficit amounted to EUR 2,054.6 m, or 5.5% of GDP (1.3 p.p. more than in 2007) and was thus the highest since Slovenia gained independence. The bulk of the 2008 deficit was, just as in previous years, created through the trade balance. Compared to the year before, almost half of the higher trade deficit in goods came from the deterioration of terms of trade¹ and partly from domestic consumption growth that was still relatively strong. The increase in the current account deficit was also linked to increased borrowing abroad² and the associated net interest payments, which became the main source of deterioration in the factor income balance in 2007. Since 2004, a slight deficit has also been recorded in the balance of current transfers; however, the deterioration in the current account balance is offset by the growing surplus in the services balance. In the 2002–2007 period (latest available international data), other EU Member States had much higher current account deficits on average relative to GDP than Slovenia.

Due to a significant slowdown in the growth of goods exports and the deterioration of terms of trade, the trade deficit in goods was significantly higher in 2008 than in the previous year. The actual deficit in trade in goods was EUR 2,622.1 m, EUR 956.1 m higher than in 2007. We estimate that with unchanged terms of trade the deficit would be lower by about EUR 420 m. After four years of high growth, in 2008 the rise in goods exports slowed down (to 1.2% in nominal terms) due to the rapid decline in the international economic climate as a result of the deepening of the financial crisis. The slowdown in nominal growth of goods exports was less distinct (5.5%). In regional terms, the trade balance deficit with EU Member States increased, while the surplus with non-EU countries decreased.

The surplus in trade in services was even higher than in the previous year; compared to 2007, the growth of exports of services increased further, while the growth of imports of services slowed. The surplus in trade in services was EUR 1,781.6 m, EUR 588.4 m higher than in 2007. The exports of services increased in nominal terms by 20.8%. The growth was mostly the result of the rise in travel services, various business, professional and technical services, construction services and communication services. Due to the pronounced year-on-year slowdown in the second half of the year, the growth of exports of services dropped by more than half in 2008 (to 9.8%). The greatest contribution to the higher

surplus in the balance of services was that of the lower deficit in the group of other services, especially due to higher net exports of construction services. The surplus in trade in travel services increased significantly, and the surplus in trade in transport services was higher as well.

The increase in the current account deficit was also significantly influenced by a higher deficit in the factor income balance, while the deficit in current transfers decreased. In 2008, the deficit in the factor income balance widened, mostly on account of higher net interest payments for loans. Due to extensive borrowing, by the first half of the year paid interest on foreign loans had increased more than received interest on loans given to foreign entities. Due to increasing interest rates, the share of net paid interest of the Bank of Slovenia in respect of liabilities to the Eurosystem increased to 12.6% (in 2007 10.7%). The deficit in current transfers was lower; the general government deficit increased as a result of the second consecutive annual net outflow to the EU budget in the amount of EUR 64.7 m (in 2007 only EUR 8.7 m), which represents more than a third of the government sector deficit.³ Net deficit towards the EU budget was a consequence of less than 50% realisation of revenue from the EU budget as well as higher contributions to the EU budget from gross national income, value added tax and correction in favour of the United Kingdom.

¹ Since Slovenia's accession to the EU, the terms of trade in goods have deteriorated the most in the period between the last quarter of 2007 and the last quarter of 2008 (by 3.2%), when the prices of primary commodities and oil on global markets increased drastically.

² Since 2004, gross external assets in debt instruments have been constantly increasing, but slower than gross external debt.

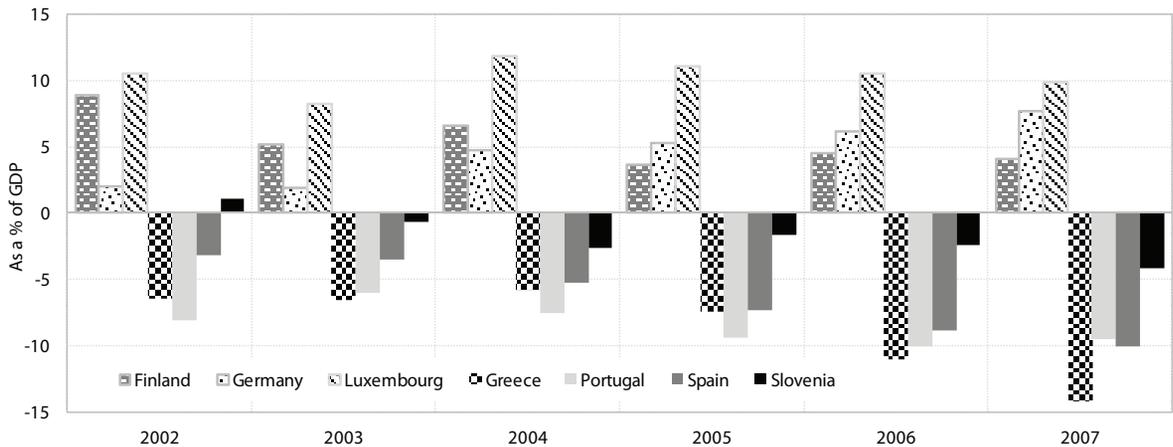
³ Net payments abroad for other current transfers (pensions), social contributions and cash benefits account for most of the government sector deficit.

Table: **Current account of the balance of payments, real growth rates of trade in goods and services, and terms of trade, Slovenia, 1995-2008**

	1995	2000	2005	2006	2007	2008
Current account, % of GDP	-0.3	-2.7	-1.7	-2.5	-4.2	-5.5
Trade balance	-4.7	-5.7	-3.6	-3.7	-4.8	-7.1
Services balance	2.9	2.3	3.2	3.2	3.5	4.8
Labour and investment income balance	1.0	0.1	-1.0	-1.4	-2.1	-2.8
Current transfers balance	0.5	0.6	-0.3	-0.6	-0.8	-0.5
Real growth rates of trade in goods and services, %						
Exports of goods and services	1.1	13.1	10.6	12.5	13.8	3.3
Imports of goods and services	11.3	7.1	6.6	12.2	15.7	3.5
Terms of trade						
Goods	103.1	96.2	97.6	99.6	100.2	98.0
Services	100.6	102.1	99.0	99.5	102.8	96.5

Source: SI-STAT data portal – National accounts, 2009; Financial accounts, External economic relations (Bank of Slovenia), 2009; calculations by IMAD.

Figure: **Current account balance in some EMU countries, 2002–2007, as a % of GDP**



Source: Eurostat Portal Page – Balance of payments – International transactions, 2009.

Gross external debt

With the stable debt of the Bank of Slovenia, created upon its admission to the Eurosystem, the growth of gross external debt slowed considerably in 2008 due to more modest borrowing by commercial banks amid deteriorated financial and economic conditions.

Slovenia's gross external debt amounted to EUR 39,096 m¹ at the end of 2008 and was EUR 4,344 m higher than in December 2007. The increase was on the level of the average annual debt increase in the 2003–2006 period and smaller than in 2007, when debt jumped mostly due to increased borrowing by domestic commercial banks as well as due to the one-off increase in gross external debt of the Bank of Slovenia as a result of changes in monetary policy instruments upon inclusion in the euro area.² The slower growth of debt in 2008 (by EUR 6.3 bn³) was – in the amount of EUR 3.6 bn – a result of the effect of increased liabilities to the Eurosystem in 2007, while the rest of the increase was mostly due to lower borrowing by domestic commercial banks (EUR 1,669 m, in 2007 EUR 5,198 m). Domestic commercial banks contributed 38.4% to the debt increase. Most of the commercial banks' borrowing was in the form of loans, and currency and deposits of non-residents, which predominated particularly in the first half of the year, while from September on it has been easing as a result of slowing domestic economic activity and limited access to foreign financial sources due to the deepening of the financial crisis.

Borrowing of the entrepreneurial sector increased again. The increase in general government indebtedness was, as in previous years, financed by issuing securities. For domestic companies, interest rates on loans above the value of EUR 1 m were lower abroad than at domestic banks in 2008, which is why companies increased their borrowing abroad. Other sectors, in which companies and non-monetary financial institutions predominate, thus increased their external debt by EUR 1,137 m (in 2007 their debt decreased by EUR 1,575 m due to methodological changes) and contributed over a quarter to the debt increase. The debt among affiliated companies, which at the end of 2008 represented 12.3% of total gross external debt,⁴ increased by EUR 8.6 m

compared to the end of 2007 and contributed 18.6% to the debt increase. Higher borrowing abroad by affiliated companies reflects problems these companies face in obtaining sources on financial markets.⁵ In February 2008, the Government issued a long-term government bond in the amount of EUR 1 bn and more than half was sold to foreign investors. Gross external debt of the general government sector increased by EUR 689 m in 2008 and represented about a tenth of the total external debt at the end of last year. Compared to the end of 2007, gross external debt of the Bank of Slovenia increased by EUR 43 m to EUR 3,631 m. Most of the debt of the Bank of Slovenia was the net position to the Eurosystem (EUR 3,491 m).

In the structure of debt by guarantees, at the end of 2008 non-guaranteed private debt, which increased the most in 2008, still accounted for the bulk of gross external debt. At the end of 2008, long-term debts accounted for 66.1% of gross external debt (slightly more than in the previous year), and short-term debts for 33.9% of gross external debt (slightly less than in the previous year), not taking account of liabilities to affiliated entities for which classification by maturity was not published. Most of the debt at the end of 2008 was again non-guaranteed private debt; since the end of 2007, it had risen by EUR 3,316 m to EUR 29,972 m. Public and publicly guaranteed debt amounted to EUR 9,124 m at the end of December 2008, of which publicly guaranteed debt to EUR 3,011 m (EUR 455 m more than at the end of 2007). The highest share of the publicly guaranteed debt was that of transport and storage, and financial and insurance services.

Slovenia has the second lowest debt of all the countries in the euro area. At the end of 2008, the share of gross external debt was 105.3% of GDP, which was almost half the average in the euro area in 2007 (191.6% GDP).

¹ As in 2005–2007, last year loans represented the highest share (52.1%), followed by currency and deposits (24.3%), commercial loans (11.7%), bonds and debentures (11.6%).

² By joining the EMU, claims on the Bank of Slovenia by commercial banks in respect of bills and long-term deposits decreased. Bank of Slovenia liabilities were compensated for by short-term liabilities to the Eurosystem, which increased substantially in the first five months of 2007, when bills in tolar were due (EUR 3,522.5 m). Excluding Bank of Slovenia liabilities, gross external debt at the end of 2007 would be EUR 3,588 m lower and would amount to EUR 31,164 m.

³ Total gross external debt increased in 2007 by EUR 10.7 bn and in 2008 by EUR 4.3 bn.

⁴ By 2007, the share was stable, just below 5%. Under the new reporting system in place since January 2007, direct investments

include, in addition to the liabilities of a company with a direct foreign owner, liabilities to all non-resident companies that belong to its category.

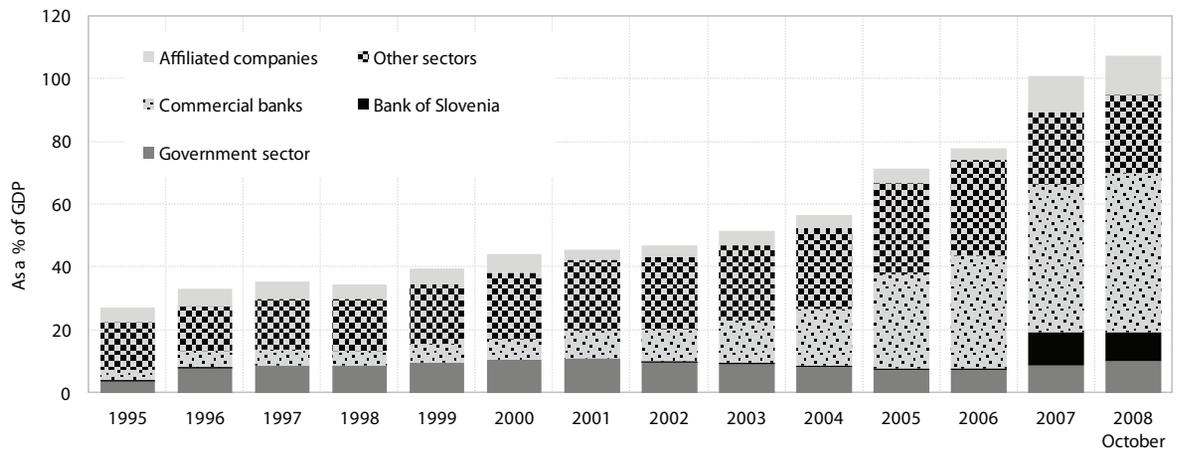
⁵ Non-banking financial companies owe most of the debt among companies with capital ties (60%); the rest is owed by non-financial companies.

Table: Slovenia's gross external debt position, EUR m, 1995–2008

	1995	2000	2005	2006	2007	2008
Total gross external debt	4,275	9,491	20,496	24,067	34,752	39,096
Short-term debt	1,470	2,283	4,573	5,239	10,728	11,619
Public & publicly-guaranteed debt	0	0	70	77	3,588	3,631
Private non-guaranteed debt	1,470	2,283	4,503	5,162	7,140	7,988
Long-term debt	2,083	5,895	14,509	17,709	20,040	22,687
Public & publicly-guaranteed debt	1,178	2,883	3,729	4,275	4,508	5,493
Private non-guaranteed debt	905	3,012	10,780	13,435	15,532	17,194
Liabilities to affiliated entities	722	1,312	1,415	1,119	3,984	4,790
Public & publicly-guaranteed debt	0	0	0	0	0	0
Private non-guaranteed debt	722	1,312	1,415	1,119	3,984	4,790

Source: Bulletin of the Bank of Slovenia, 2009.

Figure: Structure of gross external debt by sector, as a % of GDP, Slovenia, 1995–2008



Source: Bulletin of the Bank of Slovenia, 2009; calculations by IMAD.

Labour productivity

Labour productivity growth slowed significantly in 2008, as economic activity eased and employment remained at the high level of the previous year.

Expressed as real growth in GDP per employed person according to the national accounts methodology, it stood at only 0.6% in 2008, while it was 3.7% in 2007. In the first two quarters of 2008, labour productivity was 2.3% higher compared to the same period of 2007, in the third quarter 1.0% higher, while in the fourth quarter it was 2.9% lower. Mostly on account of the slowdown in foreign demand as a result of the deepening of the international financial crisis in September 2008, domestic economic activity slowed significantly in the last months of 2008, while the growth of employment, which usually follows the deterioration of the economic climate with a delay, was still at about the same level as in 2007. In 2008, productivity growth was thus barely at the level of one sixth of the average annual productivity growth in the 2000–2007 period (3.7%) and one eighth of the average annual productivity growth in the second half of the 1990s (4.7%). In 2008, the high productivity growth continued only in financial intermediation and construction, but it was lower than in 2007. In many activities productivity decreased, most notably in hotels and restaurants. Productivity growth in manufacturing, which, as the most export-oriented part of the Slovenian economy, had already been hit by the slowdown in foreign demand last year, decreased by 1.0%.

In 2007 and in the first half of 2008, productivity growth in Slovenia was still much higher than the EU average. In the second half of 2008 the gap narrowed.

In 2007 (latest available data), average labour productivity in Slovenia achieved EUR 35,811 of GDP per employed person, which at current prices is 65.0% (in 2006, 62.6%) of the EU average and in purchasing power standards 84.6% of the EU average and 77% of the EMU average. With lower productivity growth in most of the more advanced EU Member States, Slovenia narrowed its gap with the EU average in terms of labour productivity in PPS by 0.7 p.p. in 2007 and by another 2.5 p.p. in 2008, according to the Eurostat estimate. In the first half of 2008, productivity growth in Slovenia was much higher than the EU average, while in the second half the difference decreased.

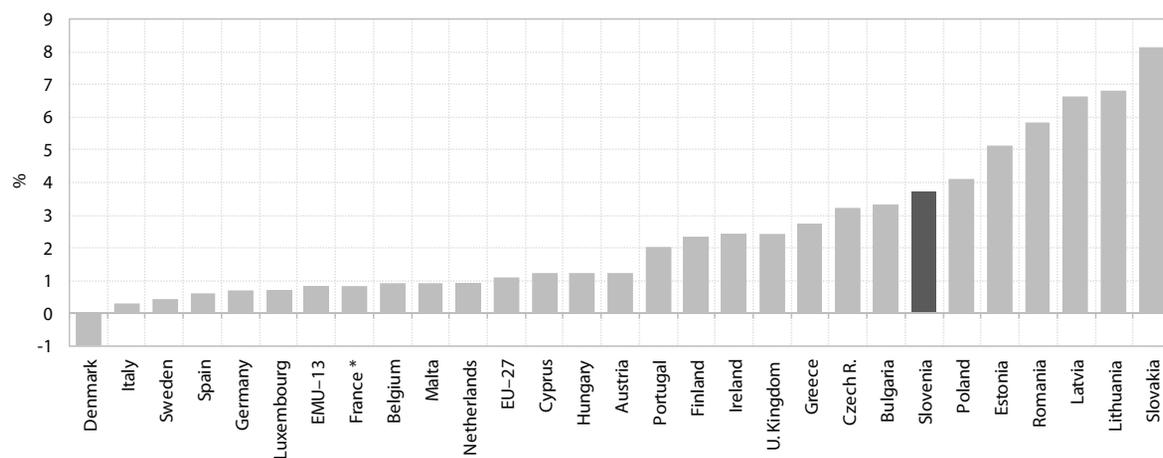
Table: Labour productivity in PPS in Slovenia and in the EU, 1997–2007, EU-27=100

%	1997	2000	2005	2006	2007	2008 ¹
EU-27	100.0	100.0	100.0	100.0	100.0	100.0
EMU-13	116.0	113.5	110.4	110.1	109.9	111.7
Austria	119.6	120.5	115.4	115.4	115.1	115.6
Belgium	137.1	136.7	130.2	129.8	129.9	130.5
Bulgaria	26.2	30.4	33.5	34.7	34.9	36.1
Cyprus	80.5	84.9	82.8	83.4	83.6	85.2
Czech Rep.	60.3	61.7	68.5	69.8	71.8	74.4
Denmark	109.6	110.4	106.6	105.5	102.2	102.5
Estonia	38.6	45.1	58.0	59.6	62.0	62.1
Finland	110.6	114.5	110.0	110.5	111.0	110.0
France	125.4	124.9	122.1	121.6	122.0	122.1
Greece	92.9	93.5	99.9	100.7	102.0	104.5
Ireland	125.0	127.2	134.4	136.8	139.9	138.4
Italy	128.5	125.9	110.8	109.2	108.0	107.6
Latvia	35.4	40.0	48.0	49.9	53.5	52.7
Lithuania	37.9	42.7	54.4	56.5	59.9	62.1
Luxembourg	165.9	175.7	169.1	176.3	173.4	170.3
Hungary	61.4	64.6	72.3	73.0	72.9	75.2
Malta	N/A	96.6	91.1	90.0	90.4	91.3
Germany	113.8	107.9	109.2	108.7	107.3	107.6
Netherlands	109.9	114.2	113.9	113.4	112.5	110.0
Poland	46.6	50.8	65.5	66.3	60.6	62.3
Portugal	67.9	68.8	70.1	70.2	71.2	71.3
Romania	N/A	N/A	35.9	39.5	43.7	47.1
Slovakia	54.3	58.0	68.6	71.6	75.1	78.9
Slovenia	73.1	76.1	83.6	83.9	84.6	87.1
Spain	108.0	103.6	101.1	102.1	103.6	105.5
Sweden	112.9	113.4	110.0	111.1	111.9	113.4
United Kingdom	108.7	110.6	112.2	111.9	112.0	112.9

Source: Eurostat Portal Page – Economy and Finance – National Accounts, 2009.

 Notes: N/A – nota available, ¹ estimate by Eurostat.

Figure: Real productivity growth in the EU Member States in 2007, %



Source: Eurostat Portal Page – Economy and Finance – National Accounts, 2009.

Market share

In 2008, Slovenia's aggregate market share in foreign markets decreased after growing steadily in the past seven years.¹ Its fall (to 0.591% from 0.612% in 2007) was a result of the decrease in market shares in all Slovenia's main trading partners, both within and outside the EU. After a one-year break, last year Slovenia's market share fell again in the German and French markets, after a six-year rise it also fell in the Italian market, while in the Austrian market its decline continued for the second year after a seven-year rise. As for other EU markets, after several years of distinct growth, the fall of Slovenia's market share was somewhat stronger in the Spanish, Hungarian and Czech markets. Outside the EU, Slovenia's market share continued to decline in the Croatian, Russian and US markets.

A detailed analysis of trends in the market share on the EU market² shows that its fall in 2008 was only partly related to a decline in Slovenia's export competitiveness. The fall in the market share on the EU market (-4.2%, in 2007 9.4% growth – according to the national concept) was to a large extent underpinned by higher EU imports under the influence of high energy price rises;³ it was also considerably impacted by the drop in exports of road vehicles (-10.4%) after exceptional growth in 2007 (42.3%). Despite that, the accelerated decrease in the market share in the second half of the year, when energy prices dropped after a mid-year turnaround, was also caused by the decline in export competitiveness. The latter is also confirmed by the trends in the market share of manufactured products, which show a slow increase in the first and an accelerated decrease in the second half of the year. The drop in the market share of manufactured goods in 2008 (-0.6%; in 2007, 8.8% growth) resulted from the drop in the market share of manufactures classified by material

(-2.6%; leather, rubber, paper, wood, textiles and metal) after a relatively modest increase in 2007 and from the continued fall in the market share of miscellaneous manufactured goods (-0.9%; prefabricated buildings, furniture, clothing, footwear and other manufactured goods). Despite a fall in the market share of road vehicles (-2.2%; in 2007, 27.2% growth), the rise in the market share of machinery and transport equipment continued, albeit at a much slower pace (1.3%; in 2007, 17.9%), as the growth of the market share of other products in this sector remained relatively high (7%; in 2007, 9%). The rise in the market share of chemical products also slowed down (2.3%; in 2007, 9.2%), but less markedly. A slight decrease in an otherwise much less important market share of food and beverages (-0.2%; in 2007, 25.6% growth) was the result of a drop in food exports, while a decrease in the market share of raw materials (-5%; in 2007, -14.5%) was the result of a drop in exports of crude materials, except fuels.

After being one of the EU Member States with the highest market share growth in global and EU markets in 2007, the data for 2008, which are available only for EU markets, show a much lower ranking for Slovenia. Slovenia dropped out of the small group of (ten) Member States that recorded market share growth on EU markets and due to a relatively small drop (-0.4% according to the Community concept) ranked 14th (in 2007 it was third for both EU and global markets).

¹ In calculating Slovenia's aggregate market share, we – as in calculating market shares according to the Standard International Trade Classification (SITC) – used the data on exports of goods published by SORS at the national level according to the "national concept", and in international comparisons of the growth of Slovenia's market shares the data on exports of goods that SORS transmits to Eurostat according to the "Community concept". The latter data are higher than the former, since the Community concept includes trade in goods by business entities with foreign (non-Slovenian) tax numbers.

² According to the sectors of the Standard International Trade Classification (SITC).

³ By eliminating oil, oil products and related materials (SITC subsector 33), the decrease in the market share in the EU was lower by 1.3 p.p. (2.9% instead of 4.2%) and by eliminating mineral fuels, lubricants and related materials (SITC sector 3) by as much as 2.9 p.p. Energy products namely represent only a very low share of Slovenia's exports (oil products 1.1%, fuels and lubricants 2.5%, data for 2008), and a much higher share in the structure of EU imports (11.1% and 15.6%, respectively); the impact of higher energy prices on Slovenia's exports was therefore smaller.

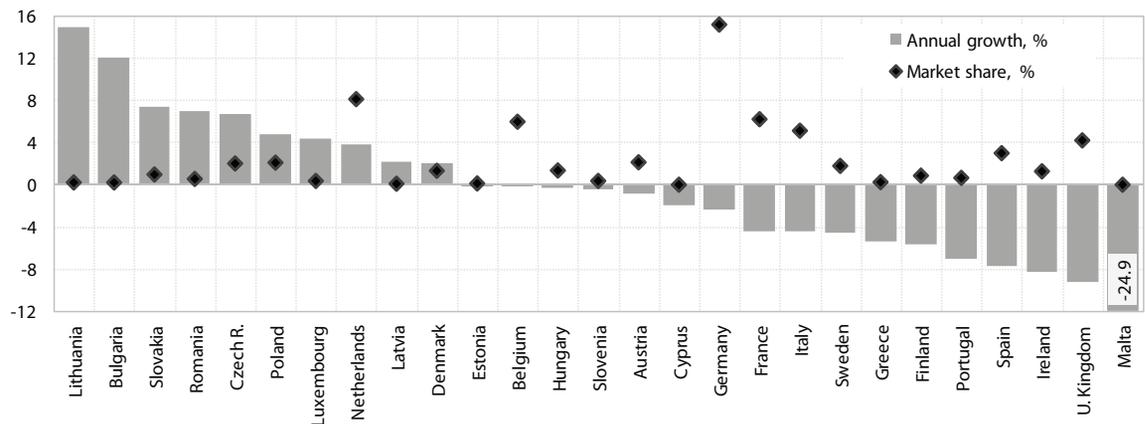
Table: Slovenia's market share¹ in the 15 main trading partners, 1996–2008, %

	1996	2000	2004	2005	2006	2007	2008
TOTAL 15 countries	0.583	0.478	0.542	0.561	0.586	0.612	0.591
Austria	0.816	0.911	0.991	1.133	1.328	1.272	1.241
Belgium	0.046	0.055	0.061	0.062	0.066	0.061	0.063
Czech Rep.	0.536	0.477	0.435	0.521	0.526	0.568	0.504
France	0.206	0.183	0.217	0.292	0.263	0.283	0.268
Croatia	10.980	8.733	8.736	8.724	8.561	8.400	8.151
Italy	0.537	0.499	0.583	0.588	0.612	0.697	0.632
Hungary	0.665	0.525	0.511	0.531	0.618	0.928	0.842
Germany	0.562	0.478	0.480	0.458	0.456	0.474	0.455
Netherlands	0.067	0.069	0.074	0.071	0.071	0.088	0.088
Poland	0.386	0.462	0.477	0.446	0.482	0.510	0.502
Russia	0.443	0.433	0.536	0.464	0.546	0.475	0.438
Slovakia	0.621	0.550	0.724	0.766	0.762	0.708	0.723
Spain	0.037	0.054	0.094	0.111	0.123	0.125	0.098
USA	0.031	0.022	0.034	0.022	0.026	0.023	0.019
United Kingdom	0.057	0.054	0.076	0.087	0.098	0.116	0.112

Source: SI-STAT data portal – Economy, 2009; Eurostat Portal Page – External trade, 2009, The Vienna Institute Monthly Reports, 2008; Foreign Trade Statistics (U.S. Census Bureau), 2008.

Note: ¹Market shares are calculated as the weighted average of Slovenia's merchandise exports in the imports of its main trading partners determined by the size of their shares in Slovenia's exports. The shares of individual trading partners in Slovenia's merchandise exports are also used as weights in calculating the weighted average (using Fisher's formula).

Figure: Market shares on the EU market in 2008, %



Source: Eurostat Portal Page – External Trade, 2009.

Unit labour costs

In 2007, for which the latest annual data are available, the ratio of labour costs per employee to GDP per employee in the Slovenian economy continued to improve as a result of stronger labour productivity growth. Real unit labour costs went down by 1.5% in 2007 (in 2006 by 0.9% and in 2005 by 0.8%). Amid slightly higher nominal growth in the compensation of employees per employee (6.3%) than in 2006 (5.5%), labour productivity, measured by the nominal growth of GDP per employee, recorded a more significant rise (to 8% from 6.4%).

In 2007, the ratio of labour costs per employee to value added per employee again improved significantly more in manufacturing than in the Slovenian economy as a whole. After dropping considerably in 2006 (by 2.7%), real unit labour costs in manufacturing were falling only at a slightly slower pace in 2007 (to 2.4%), yet still much more notably than in the total economy (1.5%). A significant drop of real unit labour costs in manufacturing was the result of high labour productivity growth, measured by the nominal growth of value added per employee (9.4%). After a continuous drop in employment in the previous five years, employment in manufacturing increased again in 2007 (by 0.8%) and the nominal growth of value added accelerated (by 10.3%, in 2006 by 7.2%). The growth of the compensation of employees per employee was, despite slightly higher growth than in the previous year (6.7%, in 2006 6%), still much lower than labour productivity growth.

Compared to the EU and EMU average, the competitiveness of the Slovenian economy improved in 2007. In 2007, the decline in real unit labour costs in the Slovenian economy was much larger than on average in the EU and in the euro area (see Table). After a significant improvement in the second half of the 1990s,¹ in the 2000–2007 period Slovenia's competitiveness slightly declined, despite occasional fluctuations, since in Slovenia the average annual drop in real unit labour costs in this period was slightly lower than in the EU and EMU.²

Quarterly data for 2008 show a break in the long-term trend of improving the ratio of labour costs per employee to gross domestic product per employee in the Slovenian economy. Real unit labour costs increased significantly in 2008 (by 3.7%) due to notably slower growth of labour productivity and a distinct increase in the compensation of employees per employee. The slowdown in labour productivity was related to a gradual

slowdown of economic activity amid further relatively high growth in employment. The accelerated growth of the compensation of employees per employee was in 2008 partly a consequence of the adjustment of wages with high past inflation and productivity, especially in the private sector, and partly of the start of eliminating wage disparities in the public sector. Given that the average growth of real unit labour costs in the EU and EMU was lower than in Slovenia in 2008, according to available estimates, the competitiveness of the Slovenian economy deteriorated as well.

¹ In the 1996–1999 period, the average annual decrease in real unit labour costs in Slovenia was 2.6%, in the EU 0.6% and in the euro area 0.8%.

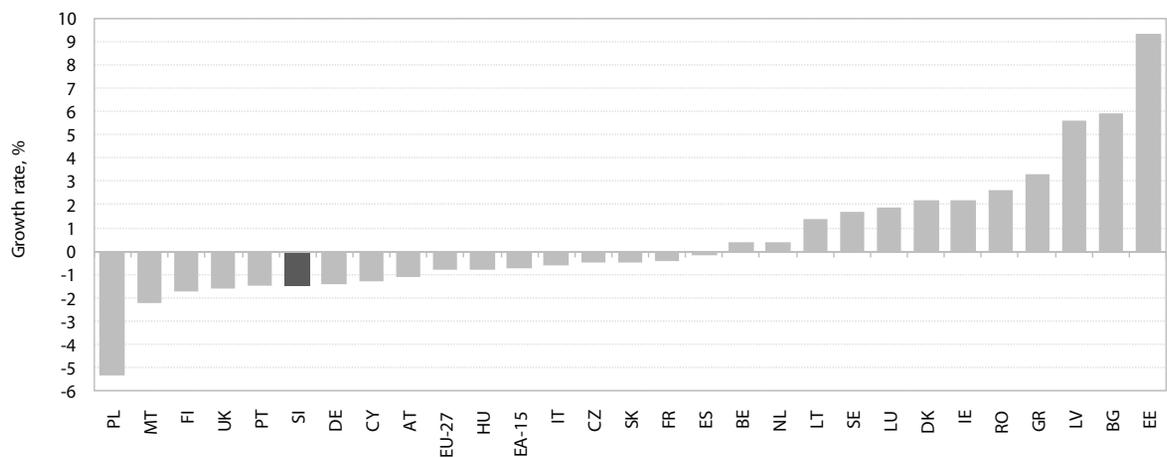
² In the 2000–2007 period, the average annual decrease in real unit labour costs in Slovenia was 0.4%, in the EU 0.5% and in the euro area 0.6%.

Table: **Unit labour costs in Slovenia and the EU, 1996–2008**

Real annual growth rates, %	1996–1999	2000–2004	2005	2006	2007	2008 ³
Unit labour costs per unit of GDP¹						
Slovenia	-2.6	0.0	-0.8	-0.9	-1.5	3.7
EU-27	-0.6	-0.3	-0.6	-1.1	-0.7	1.6
EMU-15	-0.8	-0.4	-0.7	-0.9	-0.6	1.5
Unit labour costs² – Slovenia						
Total	-2.7	-0.4	-1.0	-0.9	-1.5	3.7
Manufacturing	-5.0	-0.5	1.6	-2.7	-2.4	N/A

Source: SI-STAT data portal, Economy, 2009; Eurostat Portal Page – Economy and Finance (Eurostat), 2009;
Notes: ¹compensation per employee at current prices divided by GDP per employee at current prices; ²compensation per employee at current prices divided by value added per employee at current prices; ³estimate, N/A – not available.

Figure: **Real growth of unit labour costs in Slovenia and the EU Member States in 2007, %**



Source: Eurostat Portal Page – Economy and Finance, 2009.

Structure of merchandise exports according to factor intensity

The structure of Slovenia's merchandise exports in terms of the technological intensity of products¹ improved somewhat in 2006 and 2007, and its rather large gap with the EU narrowed significantly in 2008, with a simultaneous decline in the EU.

After declining for two years, the share of high-tech products in merchandise exports rose by 1.1 p.p. in 2006 and by 0.3 p.p. in 2007, although it was still below the record level achieved in 2003. The share of high-tech products in merchandise exports is much lower than the EU average and lower than the average of the new EU Member States. However, the gap between Slovenia and the EU narrowed significantly in 2007 (from 10.6 to 8.4 p.p.), which was amid a relatively modest shift in Slovenia to a larger extent the result of a strong decline of the share in the EU.² Compared to the EU-12, the gap slightly increased, as did the number of new Member States that surpassed Slovenia in this area.³ The main reason for the increase in the share of high-tech products in Slovenia's merchandise exports in 2007 was a further rise in the share of pharmaceutical products as well as exports of airplanes. In addition to the increase in the share of high-tech products, the share of medium-tech products also rose significantly in 2007 (by 1.8 p.p.), mainly on account of vehicle exports. Vehicle exports have been fluctuating considerably in recent years and, consequently, so has the share of medium-tech products.⁴ In 2007, the total share of medium-tech and high-tech products covered 58.2% of Slovenian merchandise exports, 3 p.p. more than the EU-12 average and 1.4 p.p. more than the EU-15 average.

¹ The classification of products into individual groups is based on the UN methodology (Trade and Development Report, 2002).

² After four years of notable expansion, exports of ICT goods slowed in 2007 in most of the EU Member States, which is related to lower demand of developed countries for these products and the tightening of competition among producers of these goods from emerging economies (India, China). In most of the EU Member States, exports of these goods stagnated or decreased; a significant drop in exports was observed in the United Kingdom (by as much as 39%) and in some other countries due to changes in VAT legislation (France, Germany) (Information technology outlook – OECD, 2008).

³ Technological competitiveness in comparison with Malta, Hungary and Estonia deteriorated as early as in the second half of the 1990s, with the Czech Republic in 2002, with Cyprus in 2003, with Slovakia in 2006 and with Lithuania in 2007.

⁴ Exports in this group fluctuated considerably over the last four years due to the impact of factors related to the manufacture of road vehicles in Slovenia. They increased markedly in 2005, decreased in 2006 and increased significantly again in 2007.

The fall in the total share of low-tech and labour-intensive products⁵ in merchandise exports accelerated after Slovenia joined the EU.

The share of these products has been decreasing steadily since 2000, mainly due to the lower share of exports of textile products, furniture, and paper and cardboard. In 2007, these products made up 23.0% of Slovenia's merchandise exports (15.7% in the EU-15 and 22.5% in the EU-12). Their share has decreased by 8.5 p.p. since 2000 and by 5.6 p.p. in the years since Slovenia's entry into the EU. Compared to the averages for the EU and the new Member States, Slovenia has a high share of labour-intensive products in its merchandise exports, which, however, has been falling, especially notably in the last two years (2006 and 2007). The share of low-tech products is also somewhat higher than the EU average, which after a significant decrease in 2005 increased again in the next two years.

The downward tendency in natural-resource-intensive products,⁶ characteristic of 1995–2004, which came to a halt in 2005 and 2006, resumed in 2007.

The share of these goods in merchandise exports rose by 2.1 p.p. in total in 2005 and 2006, while in 2007 it returned to the level of 2005.

⁵ The groups of low-tech and labour-intensive products include products with the lowest value added per employee, such as clothing, textile products, footwear, furniture, glass, glass products, flat and rolled iron products and base metal products.

⁶ The most important groups of natural-resource-intensive products in Slovenia's merchandise exports are: aluminium, finished mineral products, electricity, rough and worked wood, veneer and other manufactured wood, wood manufactures, and non-alcoholic and alcoholic beverages.

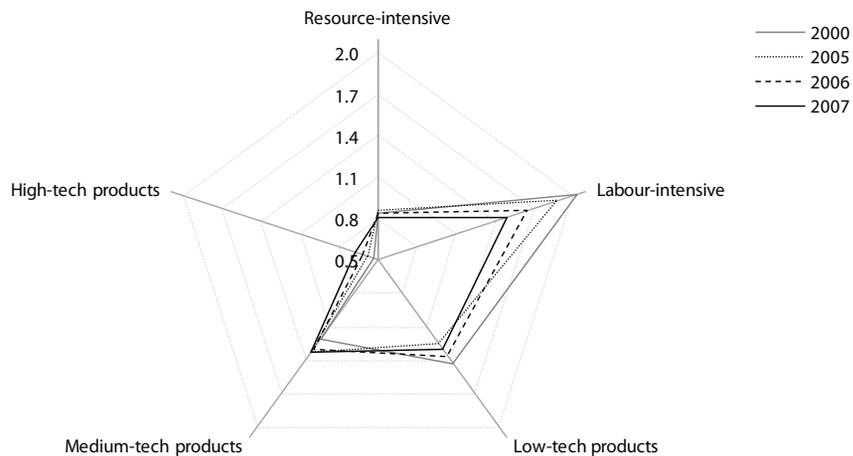
Table: **Structure of merchandise exports by factor intensity¹ in Slovenia and the EU**

		2000	2005	2006	2007
Resource-intensive	EU-27	18.2	17.9	19.4	19.2
	EU-15	18.0	17.8	19.4	19.3
	EU-12	20.7	19.2	19.0	18.5
	Slovenia	15.3	15.4	16.1	15.5
Labour-intensive	EU-27	10.6	9.0	8.6	8.5
	EU-15	10.1	8.6	8.2	8.1
	EU-12	18.5	14.0	12.3	11.4
	Slovenia	21.6	17.0	14.2	12.6
Low-tech	EU-27	6.9	7.0	7.4	7.9
	EU-15	6.6	6.6	7.1	7.6
	EU-12	10.5	10.6	10.8	11.1
	Slovenia	9.9	8.8	10.2	10.4
Medium-tech	EU-27	29.8	30.1	29.9	30.8
	EU-15	29.8	29.8	29.5	30.2
	EU-12	30.1	33.3	34.3	35.5
	Slovenia	36.2	40.2	39.1	40.9
High-tech	EU-27	28.7	27.7	27.7	25.8
	EU-15	29.4	28.5	28.6	26.5
	EU-12	18.1	18.2	19.2	19.7
	Slovenia	15.5	16.0	17.1	17.4

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

Note: ¹The classification of products into groups is based on the UN methodology (Trade and Development Report, 2002). As this classification does not comprise all products, the sum of the five product groups does not necessarily equal 100.

Figure: **Relative export advantage index¹ of Slovenia's exports by factor intensity of products**



Source: Handbook of Statistics 2007–2008 (United Nations), 2007; United Nations Statistics Division: Comtrade, calculations by IMAD.

Note: ¹ Relative Export Advantage Index – the RXA Balassa coefficient compares the share of Slovenia's exports of a particular group of products to the share of exports of that group of products in the exports of the group of countries used as a standard of comparison (in our case, the EU-27).

Exports and imports as a % of GDP

Several years of growth in the external trade integration of the Slovenian economy, measured by the share of external trade in GDP, stopped in 2008 mostly due to the falling share of merchandise exports, the growth of which slowed down significantly amid the cooling of the economy in the EU. The average share of trade in goods and services relative to GDP fell to 70.0% in 2008, down 0.8 p.p. from the previous year and up 14.3 p.p. from 2000. The share of merchandise exports decreased by 2.8 p.p., while the share of merchandise imports only dropped by 0.4 p.p. The level of international trade in services increased further. The shares of exports and imports of services went up by 1.2 and 0.4 p.p., respectively.

By 2007, the level of trade integration was increasing faster in Slovenia than in the EU and in most of the smaller EU Member States. In 2008, the gap between Slovenia and the EU narrowed. After a period of constant increase in 1995–2000, the level of trade integration of the EU Member States went down in 2002 and 2003, as it did in Slovenia as a result of the slower growth of the European economy and partly of the dynamics of the euro exchange rate. In the 2003–2007 period, however, the EU Member States saw a higher degree of trade integration again, as a result of the strong global economy, and the share of EU exports and imports relative to GDP increased on average also in 2008. By 2007, the share of foreign trade in GDP had grown more slowly in the EU on average (increase from 36.0% to 40.1% in the 2000–2007 period) than in Slovenia (increase from 55.7% to 70.8%), and the gap between Slovenia and the EU increased further. In 2008, with a slight drop in the openness of Slovenia's economy, the gap narrowed. In the 2000–2007 period, the openness of Slovenia's economy increased much more than in the small EU Member States. In eleven Member States that according to demographic criteria are classified among small countries,¹ the share of international trade relative to gross domestic product increased on average from 59.1% in 2000 to 64.4% in 2007.

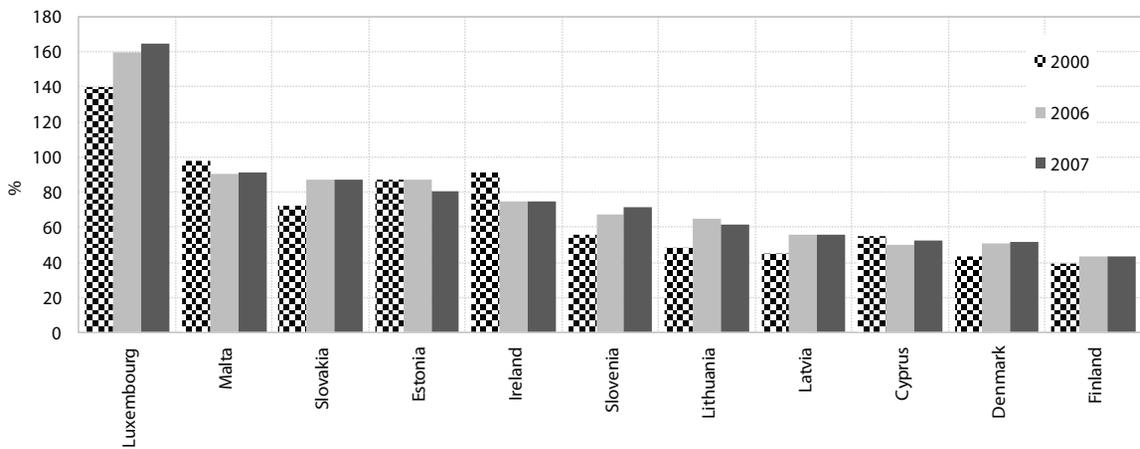
¹ As a measure of the size of an individual country, the demographic criterion was used (absolute number of population). In this respect, 11 Member States have fewer than 10 m inhabitants: Cyprus, Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, Luxembourg, Malta, Slovakia and Slovenia.

Table: Average trade-to-GDP ratios (exports and imports)¹ in Slovenia and the EU, %

	1995	2000	2005	2006	2007	2008
Trade-to-GDP ratio in Slovenia	51.5	55.7	62.4	66.9	70.8	70.0
Products	42.9	47.3	52.7	56.8	59.9	58.3
Services	8.6	8.4	9.7	10.1	10.9	11.7
Exports of goods and services	50.5	53.9	62.2	66.6	70.2	68.6
Products	40.5	44.4	50.9	54.9	57.4	54.7
Services	10.0	9.6	11.4	11.7	12.7	13.9
Imports of goods and services	52.5	57.4	62.6	67.1	71.5	71.4
Products	45.2	50.2	54.5	58.7	62.3	62.0
Services	7.3	7.3	8.1	8.4	9.1	9.5
Trade-to-GDP ratio in EU-27	28.9	36.0	37.1	39.6	40.1	42.5
Products	22.8	28.0	28.4	30.6	30.8	32.8
Services	6.1	8.0	8.6	9.0	9.3	9.7

Source: SI-STAT data portal – National accounts, 2008; Eurostat Portal Page – Economy and Finance, 2009; calculations by IMAD.
Note: ¹The ratio between the average value of total exports according to the balance of payments statistics and GDP at current prices.

Figure: Average trade-to-GDP ratios (exports and imports) in Slovenia and some smaller EU Member States, %, 2000, 2006–2007



Source: Eurostat Portal Page – Economy and Finance, 2009; calculations by IMAD.

Foreign direct investment

Both inward and outward FDI increased significantly in 2007, inward FDI mostly as a result of methodological changes in monitoring FDI, while outward FDI also due to an actual rapid increase in investment by our companies abroad. Inward FDI stock increased by as much as 39.9% in 2007 and outward FDI stock by 41.6%. The increase is almost entirely due to the increase in liabilities and claims between affiliated companies as a result of methodological changes in monitoring FDI. Since 2007, the Bank of Slovenia has been covering claims and liabilities between the parent company and its affiliates more widely,¹ which represents a break in the data series and makes the monitoring of actual FDI dynamics impossible. The most reliable estimate of FDI flows in 2007 is that based on trends in equity capital and reinvested earnings. As regards inward FDI, the stock of equity capital and reinvested earnings increased by 4.5% in 2007 (from EUR 6,283.1 m to EUR 6,563.4 m) and as regards outward FDI, by 24.0% (from EUR 2,656.7 m to EUR 3,294.9 m). One can thus conclude that the increase in inward FDI stock is mostly a result of methodological changes in monitoring FDI, while the increase in outward FDI is also due to an actual rapid increase in investment by our companies abroad. The above trends result in a considerably increased FDI stock to GDP ratio. Inward FDI stock in GDP rose from 14.8% to 22.0% of GDP in 2000–2006 and to as much as 27.7% of GDP in 2007, while outward FDI stock rose from 3.9% to 11.1% of GDP in 2000–2006 and to 14.2% in 2007.

The data on FDI flows for 2008 show a further increase in inflows and for the first time after several years of growth, a decrease in outflows. The current level of FDI in Slovenia is largely a result of increased inflows recorded since 2000, which have been notably uneven. Following the record high level seen in 2002, FDI inflows fluctuated at much lower levels in subsequent years. Due to methodological changes (wider coverage of mutual claims and liabilities between affiliated entities), they climbed to EUR 1,050.3 m. Inflows also grew significantly in 2008, amounting to EUR 1,234.7 m. In 2008, the increase was largely linked to higher net liabilities of Slovenian companies with foreign equity to foreign parent companies and their affiliates (74.2% of inflows in 2008), and only to a lesser extent to the increase in equity capital and reinvested earnings (25.8%). FDI outflows from Slovenia have been increasing steadily and rapidly in the past years. Due to the described methodological changes, the 2007 figure is not entirely comparable with the figures for previous years. After several years of increase, FDI outflows from Slovenia recorded a decline in 2008 (from EUR 1,319.0 m in 2007 to EUR 977.6 m in 2008). After three years Slovenia thus again became a net importer of foreign direct investment.

Despite the methodological changes that led to a large increase in inward FDI stock in GDP, Slovenia was among the EU Member States with the lowest inward FDI stock to GDP ratios in 2007. Looking at the old Member States, only Germany, Italy and Greece had lower ratios of inward FDI stock to GDP in 2007, while Slovenia had the lowest ratio among the new Member States. Most of the EU Member States increased their FDI stock to GDP ratios significantly in 2000–2007; in the EU-25 as a whole, this ratio rose by 14.9 p.p., while the average increase in the new Member States was even higher. In Slovenia, the FDI stock to GDP ratio increased by 12.9 p.p. in this period, in large part due to the mentioned methodological changes. Slovenia achieved better results than other new EU Member States regarding the outward FDI stock to GDP ratio. In terms of that indicator, Slovenia (14.2%) was only surpassed by Cyprus (31.3%), Estonia (27.6%) and Malta (15.7%) in 2007. As expected in view of its development level, Slovenia was far behind the old EU Member States (except Greece) as regards the outward FDI stock to GDP ratio.

¹ See the note below the table.

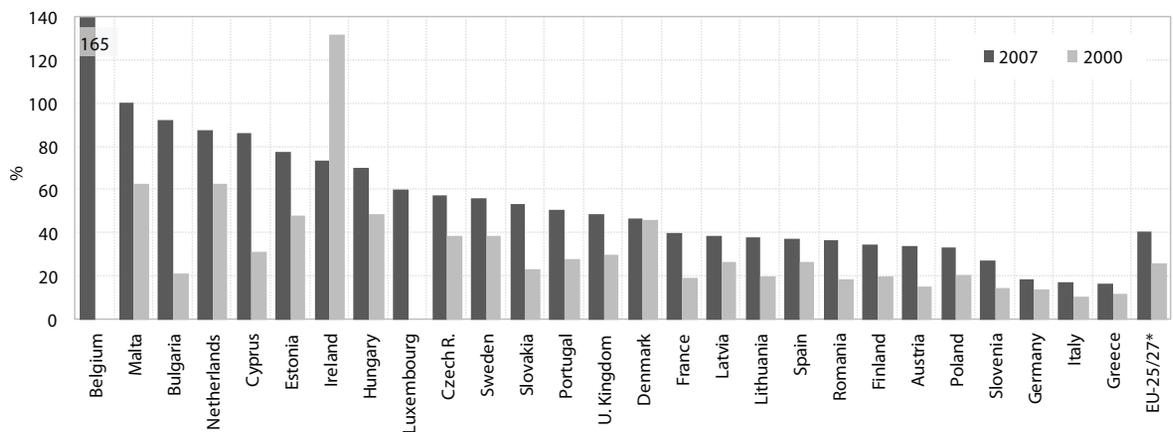
Table: **Flows and stocks of inward and outward FDI¹ in Slovenia in 1995–2008², EUR m**

	1995	2000	2005	2006	2007	2008
Year-end stock	1,376.0	3,109.8	6,133.6	6,822.3	9,542.9	N/A
Annual inflow ³	117.4	149.1	472.5	513.3	1,050.3	1,234.7
Stock as a % of GDP	9.5	14.8	21.7	22.0	27.7	N/A
Year-end stock	382.3	825.3	2,788.7	3,452.2	4,888.8	N/A
Annual outflow ⁴	7.8	-71.7	-515.6	-687.0	-1,319.0	-977.6
Stock as a % of GDP	2.6	3.9	9.9	11.1	14.2	N/A

Source: <http://www.bsi.si> – Bank of Slovenia website; SI-STAT data portal – National accounts, 2009, 2008.

Notes: ¹ Companies in which a foreign investor has a 10% or higher share in a company. ² Since 1996, the foreign direct investment of companies in second affiliation has been included. Since 2007, equity related claims and liabilities cover all claims and liabilities a company has with the direct foreign owner as well as with all non-resident companies that are part of the foreign owner's group of companies (see International Economic Relations – Bank of Slovenia, March 2007, pp. 11–13). ³ Inflows are generally lower than changes in stock because international payment transactions cover only part of the changes in stock. The main difference is that inflows do not cover changes in net liabilities to a foreign investor, neither do they include data on companies in second affiliation. From 1995 onwards, data on reinvested earnings are included in the balance of payments. ⁴ A minus sign denotes an outflow. N/A – not available

Figure: **Inward FDI stock relative to GDP in the EU in 2000 and 2007**



Source: *UNCTAD World Investment Report*, 2004, 2006, 2007 and 2008 (for the EU); <http://www.bsi.si> – Bank of Slovenia website (for Slovenia).

Note: * EU-25 for 2000, 2005 and 2006 and EU-27 for 2007.

Entrepreneurial activity

According to the Global Entrepreneurship Monitor (GEM), the early-stage entrepreneurial activity rate¹ in Slovenia improved for the fourth successive year in 2008. However, it has to be pointed out that data were collected with a survey conducted in the first half of the year,² so they do not include the period of the cooling of the economy following the deepening of the international financial crisis in autumn 2008. The rate of early-stage entrepreneurial activity (TEA-index),³ which had posted the greatest increase in 2005, rose considerably last year (by 1.6 p.p.) and reached the highest value in the 2002–2008 period (6.4%). As in the previous two years, people most frequently decided to start a business because they wanted greater independence and personal freedom and less frequently for the money (Rebernik, 2009). In terms of its early-stage entrepreneurial activity, Slovenia ranked 7th among the 15 EU Member States that participated in the GEM survey in 2008 and thus for the first time exceeded the EU average⁴ (by 1.1 p.p.). GEM 2008 data show that early-stage entrepreneurial activity is more vigorous in new and smaller Member States.

The structure of participants in early-stage entrepreneurial activity improved for the third consecutive year. The share of people included in entrepreneurial activity to exploit a business opportunity jumped 1.4 p.p. to 5.6% in 2008. After three years of stagnation, necessity-driven early entrepreneurial activity strengthened somewhat as well (see Table), which, however, given the time of survey implementation cannot yet be attributed to the tightening of labour market conditions in Slovenia towards the end of 2008. As the share of necessity-driven early entrepreneurial activity increased last year again, the ratio of opportunity-driven entrepreneurs to necessity-driven entrepreneurs dropped to 7.3 (2007: 9.2). Within the EU comparison, the ratio is still favourable, as Slovenia ranks fifth among the 15 EU Member States and also considerably exceeds their average (4.5).

The mortality rate of nascent companies remained at the level of the previous year in 2008 and was still somewhat above the EU average. The mortality rate in 2008 was 1.7, still considerably lower than the highest level achieved in 2003 and 2004 (2.7). The average ratio between nascent and new enterprises for 15 EU Member States was more favourable and totalled 1.2.

Overall entrepreneurial activity increased even faster in 2008. Almost 12% of adults were engaged in entrepreneurial activity in 2008, which was the greatest improvement of overall entrepreneurial activity (by 2.5 p.p.) in the 2005–2008 period. The increase in overall entrepreneurial activity was a result of the increase in both the share of people in early-stage entrepreneurial activities and the share of people in established entrepreneurial activities. The latter increased by as much as 1 p.p., reaching 5.6%. In 2008, Slovenia exceeded the EU average for the first time, also as regards the share of established entrepreneurs and overall entrepreneurial activity (by 0.1 p.p. and 1.3 p.p., respectively). The number of entrepreneurially active people in Slovenia thus rose by more than a quarter (to about 160,000).

In the 2004–2008 period, entrepreneurs stated a lack of financial discipline as the most frequent obstacle to their business operation. According to Interstat⁵ data, 59% of entrepreneurs on average faced financial constraints due to a lack of financial discipline in that period. In the 2004–2008 period, their share tended to decline, but the data for 2008 show a gradual quarter-on-quarter increase.⁶ In the five-year period a significant share of entrepreneurs also pointed to difficulties regarding taxation policy, excessive red tape and obtaining appropriate staff; in contrast to the first two, only the last obstacle tended to increase in the analysed period. Problems related to the decline in sales became more pronounced as a result of the global financial crisis in the second half of 2008, when 15% of the surveyed entrepreneurs on average stated this obstacle as an important factor inhibiting their activity.

¹ The share of the population engaging in entrepreneurship (individuals who have started setting up a business or entrepreneurs who have been paying wages for no longer than 42 months).

² The survey was conducted in May 2008.

³ For a methodological explanation of indicators of entrepreneurial activity, see the notes below the table.

⁴ The average of EU Member States that participated in the GEM survey in individual years.

⁵ Interstat is the successor of the SPEM Communication Group research department and conducts the survey on the entrepreneurial climate in Slovenia.

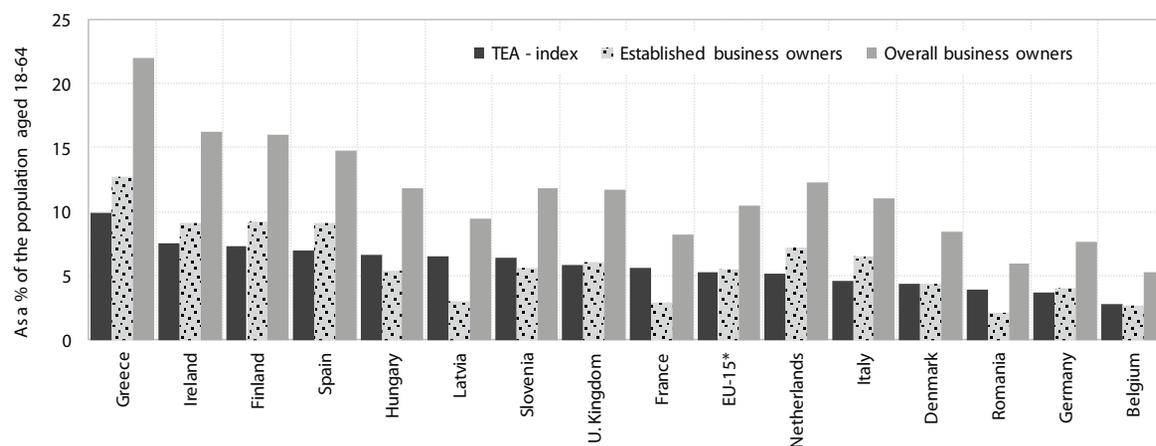
⁶ In the last quarter of 2008, 65% of entrepreneurs who participated in the survey on the entrepreneurial climate in Slovenia faced a lack of financial discipline. The highest share (74%) was otherwise recorded in the first quarter of 2004.

Table: **Selected indicators of entrepreneurial activity in Slovenia, 2002–2008**

In % of the population (aged 18–64)	2002	2005	2006	2007	2008
TEA-index ¹	4.6	4.4	4.6	4.8	6.4
TEA-nascent entrepreneurs ²	3.3	3.0	2.9	3.0	4.1
TEA-new business owners/managers ³	1.5	1.4	1.8	1.8	2.4
TEA-opportunity ⁴	3.3	3.8	4.0	4.2	5.6
TEA-necessity ⁵	1.4	0.5	0.5	0.5	0.8
Established business owners/managers ⁶	-	6.3	4.4	4.6	5.6
Overall entrepreneurial activity rate ⁷	-	10.1	9.0	9.3	11.8

Sources: Rebernik et al., 2003; Rebernik et al., 2004; Rebernik et al., 2005; Rebernik et al., 2006; Rebernik et al., 2007; Rebernik et al., 2008; Bosma et al., 2009.

Notes: ¹TEA index is the rate of total early entrepreneurial activity measuring the share of the population engaging in entrepreneurship. It comprises individuals that have started setting up new businesses or engaging in new business activities, including self-employment (²TEA – nascent entrepreneurs that have paid wages or salaries for no more than three months). In addition to that, it also includes individuals employed as owners/managers of new businesses who have been paying salaries for no longer than 42 months (³TEA new business owners/managers). ⁴TEA opportunity measures the share of the population who engage in entrepreneurial activity to exploit a perceived business opportunity. ⁵TEA necessity measures the share of the population who have set up a business out of necessity. ⁶Established business owners/managers represent the share of people who own a firm that has been operating for more than 42 months. ⁷The overall entrepreneurial activity rate includes the TEA index and the share of established business owners.

 Figure: **Selected indicators of entrepreneurial activity in Slovenia and 15 other EU Member States included in the GEM project, 2008**


Source: Bosma et al., 2009

Note: *Weighted average of 15 EU Member States included in the GEM 2008 survey; calculations by IMAD.

Share of non-financial market services in GDP

The share of non-financial market services in the Slovenian economy increased significantly in 2007, most notably the share of knowledge-based services, after stagnating for two years. According to the latest available data for 2007, non-financial market services¹ generated 39.9% of value added in Slovenia's economy, which is 1.5 p.p. more than in the previous year and 3.8 p.p. more than in 2000, and provided employment for 33.2% of all employees, 0.9 p.p. more than in 2006 and 3.7 p.p. more than in 2000. The share of all non-financial market services in value added increased in the last year, most notably (by 0.6 p.p.) the share of real estate, renting and business activities (business services – SKD K). Among non-financial market services, the importance of this activity in the total value added of Slovenia's economy also increased the most over a longer period (since 2000), which is expected in view of the process of catching up with developed countries in this area. However, progress in the period since 2004 was modest, as the share of business services in total value added of Slovenia's economy stagnated in 2005–2006. Since business services, except real estate activities (SKD K70),² account for an important share of knowledge-based non-financial market services³ (80.3%, the rest is represented by post and telecommunication services⁴), after a modest rise in the two-year period (between 2005 and 2006), the year 2007 saw a significant increase in the share of knowledge-based non-financial market services in Slovenia's economy (from 12.1% in 2006 to 12.8% in 2007). Among them, so-called other business activities (various consultancy and research services) increased in particular, and slightly also computer services. After two years of stagnation, this was a positive shift towards fulfilling Slovenia's Development Strategy, the objective of which is to increase the share of knowledge-based

business services to a level of around 12% of the value added of Slovenia's economy (in 2007, the share was 10.2%).

After an increase in 2006, the gap between Slovenia and the EU average in the share of non-financial market services in value added narrowed considerably in 2007. However, despite a positive shift in the last year, the greatest development potential remained in the sector of knowledge-based services. In 2007, Slovenia posted the smallest lag behind the EU average in the share of non-financial market services since comparable data have been available (since 1995). In 2007, Slovenia's lag decreased most notably (from 5.1 to 3.8 p.p.) in the entire observation period compared to the year before (since 1995). The closing of the gap was a result of the share of business services and hotels and restaurants drawing closer to the EU average and the widening of the gap in the fields of trade and transport, which have a higher share in the structure of value added of Slovenia's economy than in the EU. In the entire observation period, the largest gap between Slovenia and the EU average was recorded in business services. After stagnating in 2005 and 2006, the gap in this area narrowed somewhat once again in 2007 (by 0.3 p.p.), but still stands at 5.0 p.p., which is more than in 2004, when it was narrowest (4.6 p.p.). Since business services represent the most important part of knowledge-based services, it can be inferred that in 2007 the catching up with developed countries also continued in this area,⁵ after stagnating in 2005 and 2006.

¹ Activities of the Standard Classification of Activities (SKD): wholesale and retail, repair of motor vehicles and personal and household goods (G), hotels and restaurants (H), transport, storage and communications (I), and real estate, renting and business activities (K).

² The share of real estate services in total value added decreased from 8.0% in 2000 to 7.3% in 2007. Real estate business mostly consists of the estimated housing activities of households characterised by relatively low and constant value added growth rates. Housing activity accounted for 94.1% of value added in real estate business in 2000, or 47.1% of value added of activity K, and for 83.8% of value added in real estate business in 2007, or 34.8% of value added of activity K.

³ According to the OECD methodology, knowledge-intensive services, in addition to business services (leasing machinery and equipment – 71), data processing and associated services – 72), research and development – 73) and other business services – 74) also include post and telecommunication services (64).

⁴ The share of post and telecommunication services, which has for several years been around the EU average, decreased by 0.1 p.p. in 2007.

⁵ The latest data for EU Member States at a detailed sector level that enables the calculation of the share of knowledge-intensive services are only available up to 2004; therefore, we can only predict future trends on the basis of trends in wider aggregates (in this case real estate, renting and business activities – SKD K).

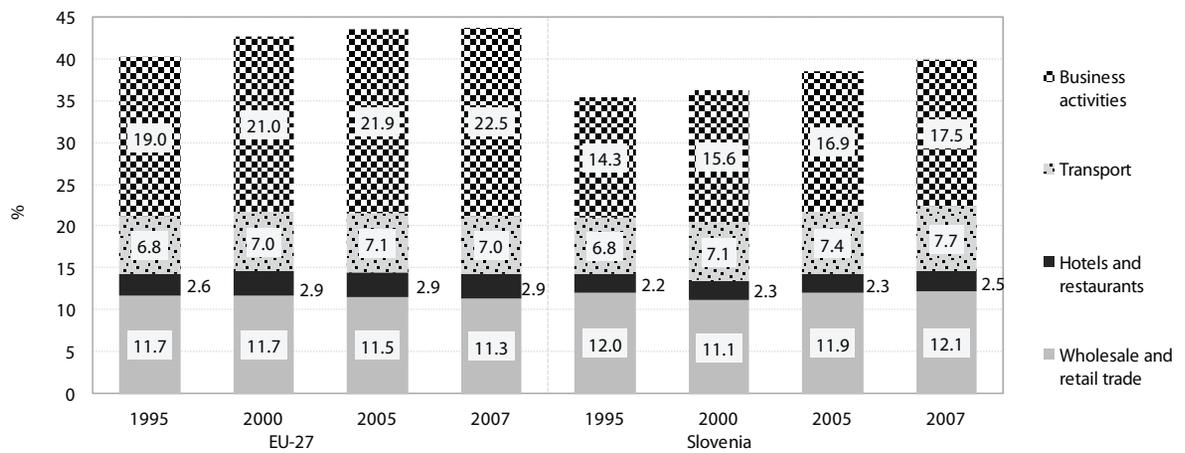
Table: Share of non-financial market services in value added, 1995, 2000, 2005–2007

%	1995	2000	2005	2006	2007
Non-financial market services	35.6	36.1	38.5	38.4	39.9
Trade (G)	12.2	11.1	11.9	11.7	12.1
Hotels and restaurants (H)	2.3	2.3	2.3	2.3	2.5
Transport (I)	6.9	7.1	7.4	7.5	7.7
Business services (K)	14.2	15.6	16.9	16.9	17.5
excluding K 702	6.4	7.6	9.3	9.5	10.2
Knowledge-based non-financial market services ¹	8.4	9.7	11.9	12.1	12.8

Source: SI-STAT data portal – National accounts, 2008; calculations by IMAD.

Note: ¹ post and telecommunication services – division 64, renting machinery and equipment – division 71, computer and related activities – division 72, research and development – division 73, other business activities – division 74. 2 Real estate activities.

Figure: Share of non-financial market services in value added in Slovenia and the EU, 1995, 2000, 2005, 2007



Source: Eurostat Portal Page - Economy and Finance – National Accounts, 2008; calculations by IMAD.

Total assets of banks

The growth of total assets of banks almost halved in 2008 compared to 2007, amounting to 12.6% and climbing to 128.1% relative to GDP.

In 2008, borrowing by the domestic banking sector abroad was again an important source of growth of total assets of banks, as despite significantly tighter lending terms, the banking sector borrowed EUR 1,227.3 m net in 2008, almost two thirds less than in the previous year but still above the value in the period before 2005. While short-term borrowing predominated in the first ten months, with net repayment of short-term loans in the amount of EUR 820.6 m in November, the maturity structure changed in favour of long-term loans. In 2008, long-term loans thus represented as much as three quarters of the net borrowing of banks abroad, but were still a half lower than in the previous year. Among sources, the growth of bank loans slowed the most, by almost two thirds compared to 2007 (to 17.9%). The growth of bank deposits (12.1%) fell by almost a half, while the growth of other sectors' deposits declined only by about 1 p.p., to 9.6%. Household deposits (especially long-term) again became a somewhat more important source of financing lending activity. These deposits were also fed by inflows from capital markets. Due to the limited sources and a changed attitude towards risk as a result of the spread of the financial crisis into other sectors of the economy, the growth of lending activity slowed considerably last year. The volume of loans to domestic non-banking sectors thus increased by only 18.1%, which is the lowest level of growth since 2005. The structure of bank assets also changed somewhat under the influence of the changed circumstances on financial markets. The share of loans continued to increase and at the end of 2008 climbed to 78.7%, which is 2.6 p.p. more than in the previous year. Compared to 2007, the volume of cash in hand and balance with the central bank more than doubled (2.6% of bank assets), which is the consequence of tightened liquidity conditions as banks deposited liquid assets overnight on accounts with central banks for possible later repayment of loans taken out abroad. In the last three months of 2008 alone, the volume of other deposits at the central bank (other than minimum reserves) grew 2.6 times, to EUR 586.7 m. After the value of debt securities held to maturity (in 2008, a large majority of them were government securities) dropped significantly in 2007 due to Slovenia's joining the EMU and due to the changed monetary policy, it jumped by almost 40% in 2008, reaching about 3% of bank assets. Banks invested their assets in these securities for two reasons: security and the possibility of refinancing with the ECB against pledged securities.

In 2007, the narrowing of the relative gap between Slovenia and the EU average in total assets of banks relative to GDP accelerated; the data on lending activity in 2008 indicate a slower narrowing of the gap between Slovenia and the EU average. In 2007, the indicator of

total bank assets relative to GDP reached 36.8% of the EU average (34.4% in 2006). The slightly more rapid narrowing of the gap between Slovenia and the EU average was mostly attributable to a significant increase in the lending activity of Slovenian banks, which in 2007 was at the highest level since comparable data have been available,¹ while the growth of lending activity in other EU Member States remained at approximately the same level (11%) as in 2006. The average value of the indicator of total assets relative to GDP for the EU Member States thus climbed to 332.7% in 2007. In terms of this indicator, Slovenia still ranks in the bottom third of EU Member States. In addition to all old Member States, higher values than in Slovenia were recorded in Malta (694.1%), Cyprus (581.7%), Latvia (146.0%) and Estonia (134.9%). We estimate that in 2008 Slovenia was approaching the EU average at a slower pace. The growth of loans slowed both in Slovenia and in the EU, but in Slovenia the level is much lower.

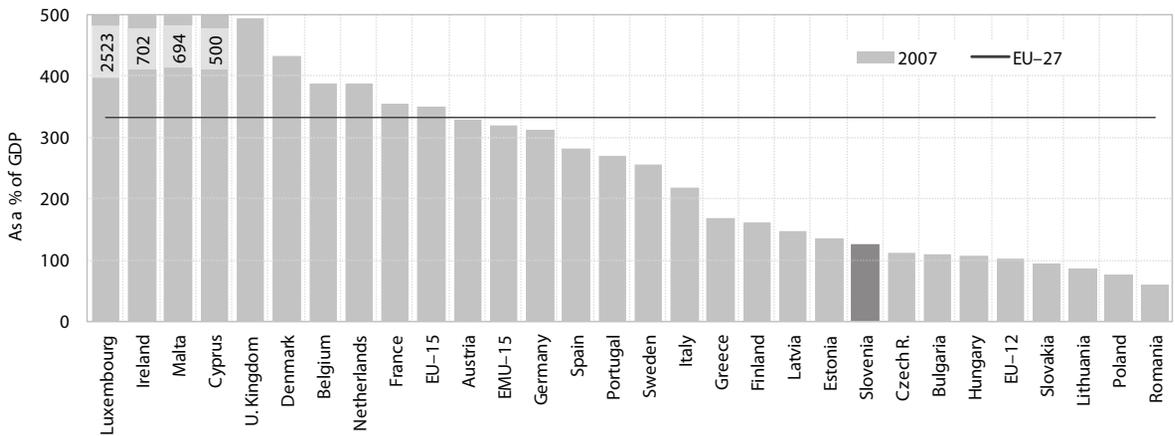
¹ Since 2005.

Table: **Structure of banks' total assets, 1995–2008, EUR m**

	1995	2000	2005	2006	2007	2008
Assets	9,137.8	14,776.3	29,134.5	33,717.1	42,194.7	47,541.8
as a % of GDP	61.8	73.1	103.7	110.7	122.4	128.1
Loans to banking sector	1,570.5	1,722.8	2,848.8	3,057.6	4,066.3	4,113.8
Loans to nonbanking sector	3,764.4	7,731.4	15,909.4	20,088.5	28,046.2	33,333.6
Other assets	3,802.9	5,322.1	10,376.4	10,596.0	10,082.2	10,094.4

Source: Bank of Slovenia's Annual Report (various volumes).

Figure: **Total assets of banks in selected EU Member States in 2007, as a % of GDP**



Source: Bank of Slovenia's Annual Report, 2008; EU banking structures, 2008; National accounts (SORS), 2008, Eurostat, 2008.

Insurance premiums

According to the latest available data, in 2007 the value of insurance premiums relative to GDP declined somewhat for the first time in eight years and dropped to 5.5% of GDP. The decline was mainly due to strong nominal GDP growth on one hand, and a slight lag in the growth of premiums (9.7%) behind last years' average on the other. Life insurance premiums also increased at a faster pace in 2007, though they still accounted for less than a third of all premiums in the structure. Life insurance thus rose by 12.7% in 2007, year-on-year, and achieved 1.8% of GDP, which is 0.1 p.p. more than in the previous year and one of the lowest growth rates in recent years. Practically all of this growth is due to the growth of life insurance premiums tied to investment funds, while the premiums of other life insurance were still mostly declining. Growth in non-life insurance premiums remained below the 10% level for the fifth consecutive year. After stagnating in the previous three years, in 2007 the value of non-life insurance relative to GDP decreased by 0.1 p.p. to 3.7%.

After increasing for two years, the volume of insurance premiums in the EU relative to GDP decreased to 8.6% in 2007. The decrease is mostly a result of the lower value of the indicator for the EU-15 (by 0.2 p.p. to 9.0%), while the value of the indicator for the EU-12 increased for the third consecutive year by 0.1 p.p. to 3.3%. The total volume of insurance premiums in the EU recorded 3.4% growth, the lowest in the last four years. Such low growth is a result of the 3% growth in the volume of insurance premiums in the EU-15, where both the growth of life and non-life insurance slowed. On the other hand, the growth in new Member States slightly increased compared to 2006, reaching 19.5%. However, premiums in these countries represent only 2.7% of all premiums in the EU.

The development gap between the EU and Slovenia in terms of the relative volume of insurance premiums slightly decreased in 2007,¹ while the structure of premiums continued to improve in favour of more advanced types of financial services. Slovenia thus attained almost 64% of the EU average and recorded a higher value than almost all other new Member States, as well as Spain and Greece. Of the new Member States, in 2007 a higher value was recorded only by Malta, where the volume of premiums relative to GDP increased by as much as 0.7 p.p., reaching 6.4%. In Slovenia the share of life insurance premiums, which include more advanced types of financial services, is increasing. In 2007, they accounted for 32.2% of all premiums, which is still much less than in the EU-27, where they accounted for more than 60% of total premiums (5.4% of GDP). In that respect, Slovenia still lags even behind the new Member States; in these countries the share of life insurance premiums is approaching 50%, but the indicator of life

insurance premiums relative to GDP reached only 1.6%. Even though in Slovenia the share of non-life insurance slightly decreased, it is still significantly higher than the EU average, which, as in Slovenia, dropped to 3.2% in 2007.

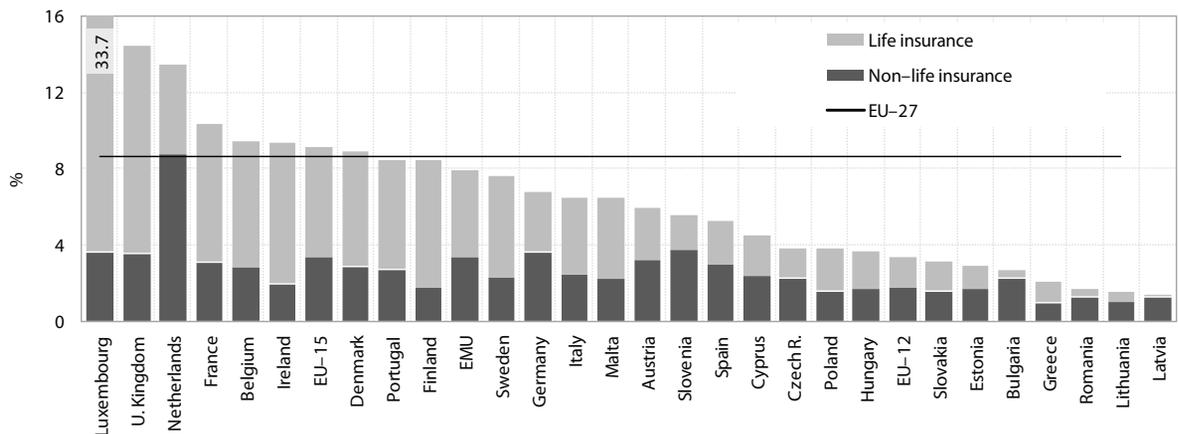
¹ As a result of the lower value of the indicator in the EU.

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

	1995	2000	2005	2006	2007
As a % of GDP					
Insurance premiums, total	4.3	4.5	5.4	5.6	5.5
Life insurance	0.6	0.9	1.6	1.7	1.8
Non-life insurance	3.6	3.6	3.8	3.8	3.7
Structure %					
Insurance premiums, total	100.0	100.0	100.0	100.0	100.0
Life insurance	14.8	19.4	30.0	31.3	32.2
Non-life insurance	85.2	80.6	70.0	68.7	67.8
Year-on-year nominal growth rates %					
Insurance premiums, total	61.8	6.3	6.3	11.4	9.8
Life insurance	66.9	14.2	8.3	16.3	12.7
Non-life insurance	60.9	4.5	5.5	9.3	8.4

Source: *Statistical Insurance Bulletin 2008* (Slovenian Insurance Association), 2008; <http://www.zav-zdruzenje.si/>.

Figure: **Total insurance premiums, life and non-life insurance premiums in EU Member States in 2007, as a % of GDP**



Source: *Statistical Insurance Bulletin 2008* (Slovenian Insurance Association), 2008; *CEA: European Insurance in Figures*, 2008; *National accounts (SORS)*, 2008; Eurostat, 2008.

Market capitalisation of shares

After pronounced growth in 2007, the value of the market capitalisation indicator decreased by about three fifths in 2008. It achieved 22.8% of GDP estimated for 2008, which is less than 1 p.p. above the level of five years before. The value of shares listed on the Ljubljana Stock Exchange was 57.1% lower than at the end of 2007 and thus decreased by as much as EUR 11.3 bn, which is about 30% of GDP in 2008. Almost three quarters of the decline was caused by the lower value of shares on the prime market, which includes shares of the best companies which stand out in terms of liquidity, size, transparency and international visibility. Their value fell by almost two thirds, while the share in total market capitalisation fell below a half (at the end of 2007 it was 62.4%). A much lower decrease, but still around 40%, was recorded by shares from the standard and entry markets. The turnover on the Ljubljana Stock Exchange more than halved in 2008, rather uniformly by all types of listing. We estimate that the decrease in market capitalisation of shares was chiefly a consequence of the lower value of securities and only to a lesser extent of the lower number of transactions. The turnover ratio of shares, measured as the ratio between the turnover value and market capitalisation of shares, remained low in 2008 as well and reached 0.11.

As regards the value of the market capitalisation indicator, in 2007 Slovenia achieved almost two thirds of the average EU-27 value,¹ but in 2008 the development gap increased by about a half. Negative trends were recorded by all EU capital markets; however, the value of market capitalisation decreased much less on average in the EU (by 48.0%) than on the Ljubljana Stock Exchange. For the EU average, the indicator value reached 42.9% of GDP, which is the lowest figure since comparable data have been available (2000). Even though Slovenia recorded one of the highest drops in the volume of market capitalisation, its ranking among the 27 EU Member States did not change much compared to 2007. In the new Member States, the volume of market capitalisation relative to GDP was higher in 2008 only in Malta (45.0% of GDP), while in the old Member States, lower values than in Slovenia were recorded in Austria (19.3%) and Ireland (19.0%).

¹ Data include Iceland, which is part of the OMX (Optionsmaklarna / Helsinki Stock Exchange).

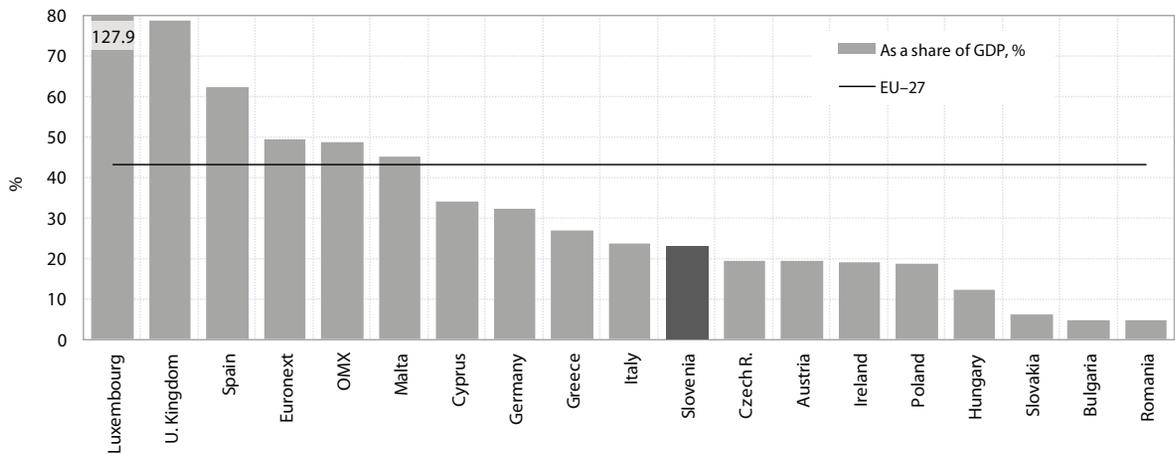
Table: **Selected capital market indicators in Slovenia, 1995–2008**

	1995	2000	2005	2006	2007	2008
Market capitalisation of shares, excluding investment funds, EUR ¹ m	250.7	3,333.7	6,696.6	11,513.1	19,740.1	8,468.4
Market capitalisation of shares, excluding investment funds, % of BDP	1.6	15.4	23.3	37.1	57.3	22.8
SBI20	1,448	1,808	4,630	6,383	11,370	3,696
Number of securities						
Shares	49	267	227	202	185	187
of which investment funds' shares	27	197	128	109	96	96
Bonds	0	44	10	7	7	11
Bonds	22	68	99	93	89	90

Sources: Annual Statistical Report (Ljubljana Stock Exchange), 2009; National accounts (SORS), 2008; calculations by IMAD.

Notes: SBI – Slovenian stock exchange index, ¹ IMAD's conversion into EUR taking into account the exchange rate on the last day of the current year.

Figure: **Market capitalisation in selected EU Member States in 2008, as a % of GDP**



Source: Annual Statistical Report (Ljubljana Stock Exchange), 2009; First Release – National Accounts (SORS), 2009; Stock market capitalisation (Eurostat), 2009; calculations by IMAD.

Note: From January 2001 onwards, Euronext comprised the stock exchanges of Paris, Amsterdam and Brussels. In February 2002, the Lisbon Stock Exchange joined in. OMX comprises the Scandinavian (Denmark, Finland, Sweden) and Baltic stock exchanges (Estonia, Latvia, Lithuania) and the stock exchange in Iceland.

THE SECOND PRIORITY:

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

- Share of the population with a tertiary education
- Average years of schooling
- Ratio of students to teaching staff
- Total public expenditure on education
- Expenditure on educational institutions per student
- Gross domestic expenditure on research and development
- Science and technology graduates
- Innovation active enterprises
- Internet use

Share of the population with a tertiary education

After having grown for several years, the share of the population with a tertiary education declined in the second quarter of 2008, according to the results of the Labour Force Survey, and Slovenia's gap behind the EU average widened. Attained tertiary education has positive effects on economic development, and individuals with a tertiary-level education have higher (life-long) income on average than those with a primary or secondary education. They face a lower probability of unemployment as well as a lower at-risk-of-poverty rate. According to the Labour Force Survey, the share of the population with a tertiary education totalled 21.9% in the second quarter of 2008 (22.9% in the preceding year). Given the trends in the number of tertiary-level students and graduates recorded in the past years, this drop is surprising, and it is also not confirmed by the employment register data, which indicate a rise in both the number and share of employed persons with a tertiary education in 2008. Therefore we estimate that the Labour Force Survey results do not reflect the actual situation but are rather attributable to the change in the survey sample and the conducted estimate of population size. As regards this indicator, the country's gap behind the EU average widened from 0.4 p.p. to 2.2 p.p. in 2008, and apart from Estonia, Slovenia was the only EU Member State where the share of the population with a tertiary education dropped. In terms of the share of this population, Slovenia lags behind the majority of old EU Member States, most notably behind certain northern European countries, which have the highest shares of the population that has attained a tertiary education and high GDP per capita. Over a longer period of time (2000–2008), Slovenia's share of the population with a tertiary education rose significantly (by 6.2 p.p.), but its gap behind the European Union only narrowed slightly (by 0.9 p.p.).

The growing share of the population with a tertiary education recorded since 2000 is a result of the growing enrolment in tertiary education in this period.

The number of students enrolled in tertiary education increased by 26.2% in 2000/2001 – 2007/2008. The ratio of the number of tertiary-level students to the number of persons aged 20–29 was 39.9 in 2007/2008, 9.0 more than in 2000. In 2000–2006, it increased significantly more than the EU average.

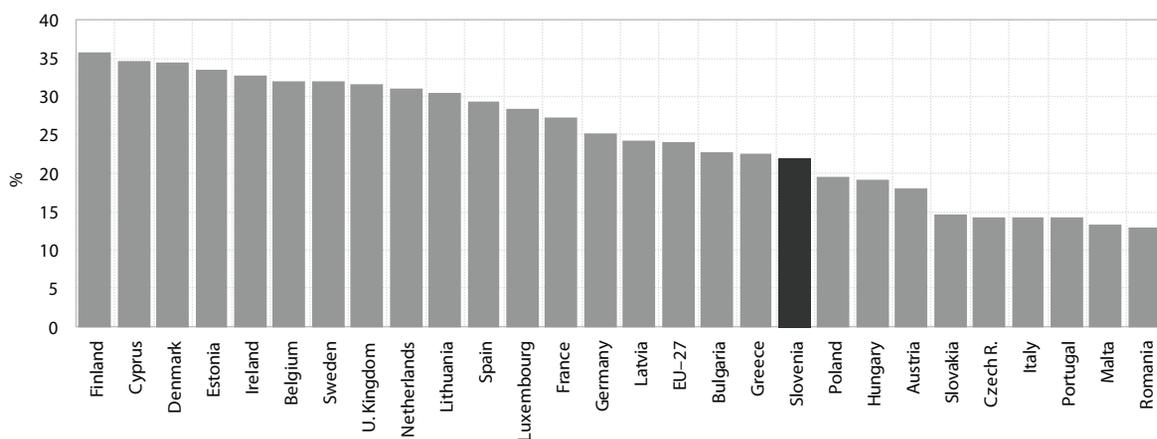
The share of women with a tertiary education is higher than the share of men, and it also increased more in 2000–2008. The share of women, totalling 25.8%, exceeded the EU average by 1.3 p.p. in 2008, while the share of men – 18.2% – lagged behind the EU average by 5.5%. In 2000–2008, the increase in this share was higher for women (8.4 p.p.) than for men (4.1 p.p.).

Table: Share of the population aged 25–64 having attained a tertiary education, Slovenia and the EU, 1995–2008, second quarter, %

	1995	2000	2005	2006	2007	2008
EU-27	N/A	18.9	22.1	22.7	23.3	24.1
Belgium	23.3	27.1	30.7	31.0	31.4	31.9
Bulgaria	N/A	18.4	21.4	21.7	22.1	22.8
Czech Rep.	N/A	11.5	13.1	13.5	13.7	14.3
Denmark	27.2	25.2	32.9	34.8	30.5	34.3
Germany	21.1	22.5	24.5	24.2	24.3	25.1
Estonia	N/A	28.9	33.6	32.9	34.0	33.5
Ireland	19.9	21.2	28.3	29.9	31.1	32.7
Greece	14.3	16.9	20.5	21.3	21.9	22.5
Spain	16.4	22.5	28.2	28.4	28.9	29.3
France	N/A	N/A	24.6	25.4	26.2	27.2
Italy	7.4	9.4	11.9	12.7	13.5	14.3
Cyprus	N/A	25.1	27.8	29.9	33.0	34.6
Latvia	N/A	18.0	21.5	21.4	23.6	24.2
Lithuania	N/A	41.8	26.5	27.2	29.8	30.5
Luxembourg	15.4	17.9	26.5	24.0	28.1	28.4
Hungary	N/A	14.0	17.0	17.8	17.9	19.1
Malta	N/A	5.4	12.1	12.3	12.4	13.3
Netherlands	N/A	24.0	29.9	29.8	30.3	30.9
Austria	N/A	14.5	17.6	17.7	17.7	18.1
Poland	N/A	11.4	16.5	17.8	18.8	19.6
Portugal	11.3	9.0	12.7	13.4	13.6	14.2
Romania	N/A	9.2	11.0	11.8	12.0	12.9
Slovenia	14.2	15.7	20.0	21.5	22.9	21.9
Slovakia	N/A	10.2	13.9	14.4	14.4	14.6
Finland	21.0	32.3	34.5	34.9	35.5	35.6
Sweden	26.1	29.5	29.3	30.3	31.2	31.9
United Kingdom	21.0	24.3	28.2	29.2	30.2	31.6

Source: Eurostat Portal Page - Population and Social conditions, 2008.
Note: N/A – not available.

Figure: Share of the population having attained a tertiary education, Slovenia and the EU, 2008 (second quarter), %



Source: Eurostat Portal Page - Population and Social conditions, 2008.

Average years of schooling

The average number of years of schooling of the adult population continues to grow in Slovenia but is still lower than the figure for developed countries.

According to the Labour Force Survey, the population aged 25–64 had completed 11.8 years of schooling in 2007 (0.1 years more than in the preceding year and 1.1 years more than in 1995).¹ The average number of years of schooling is increasing due to a rise in the share of generations completing tertiary education, while the share of young people completing secondary education has more or less stabilised.² As regards this indicator, Slovenia lags behind the OECD average, which totalled 11.9 years of completed schooling according to the latest available data for 2004.³

The average number of schooling years attained by the working population, on the other hand, remained more or less unchanged for the third consecutive year but is still falling behind that of developed countries.

According to calculations based on the Labour Force Survey, people in employment in Slovenia attained on average 12.0 years of completed schooling in 2007 (the same as in the preceding year and 0.9 years more than in 1995), and according to the Statistical Register of Employment, 11.7 years in 2008 for the third consecutive year. This is still significantly lower than the available data for the developed countries.⁴ Although ever better educated young generations are entering the

labour market and considerably less educated older generations are leaving it, the structural problems of how to appropriately employ generations of educated young people are diminishing only slowly.⁵ According to the Statistical Register of Employment, the average number of schooling years only increased in financial intermediation and predominately public services in 2008, while it even slightly declined in agriculture, fishing and construction and remained approximately at the 2007 level in other fields of activity. As in 2007, in 2008 such trends were also due to employment growth structure, as both years saw a strong rise in the number of those working in construction, which mainly employs a less qualified labour force.

¹ Calculations made by IMAD, taking into account the following assumptions on the average regulatory length of schooling: 5.5 years without completion of primary school, 8.0 years with completion of primary school, 9.5 years with lower vocational education, 11.0 years with secondary vocational education, 12.2 years with completion of vocational or general secondary school, 14.0 years with post-secondary vocational education, 16.2 years with university education and 19.0 years with postgraduate education.

² According to IMAD estimates, approximately 81% of the generation completed at least one level of secondary education in 2007 (approx. 75% in 2000 and approx. 73% in 1995), while over 33% of the generation graduated from a vocational college or university (approx. 22% in 2000 and approx. 18% in 1995).

³ The average number of years of schooling attained by the adult population in Slovenia was 11.5 years in that year. Among OECD countries, the value of this indicator was highest in Norway (13.9) in 2004, while among the EU members, it was highest in Denmark (13.4) and Luxembourg (13.3). See Development Report 2007

⁴ The only data available on average years of schooling in developed countries refer to 2003 (OECD, Education at a Glance 2005). In 2003, the OECD average was 12.7 years for employed men and 12.5 years for women, which is 0.9 years and 0.7 years, respectively, more than in Slovenia. According to the Labour Force Survey, in 2007 the average number of years of schooling for employed men in Slovenia remained (as in the preceding year) at 11.8, while the figure for women grew by 0.1 relative to the preceding year, i.e. to 12.3 years.

⁵ See the indicators *Employment rate* and *Unemployment rate*.

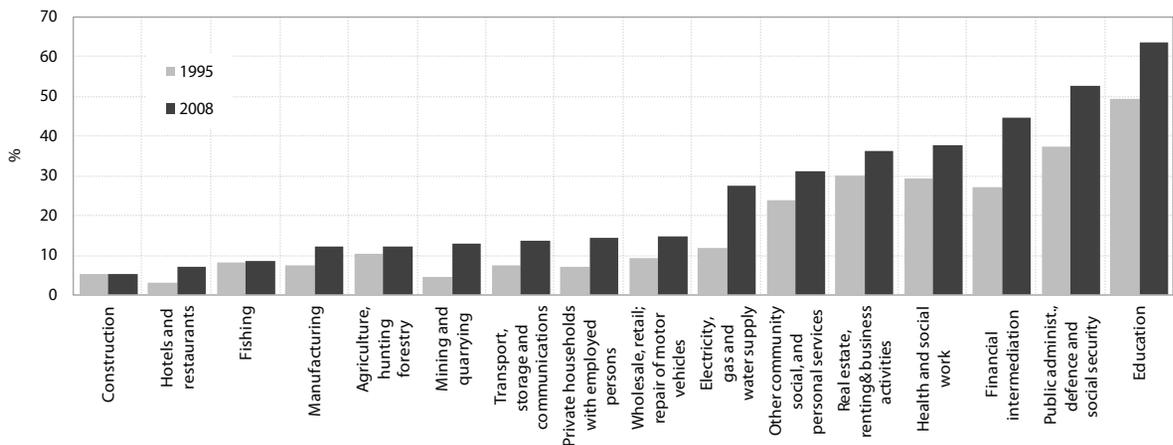
Table: Average years of schooling attained by persons in employment, Slovenia in 1995–2008

		1995	2000	2005	2006	2007	2008 ²
Persons in employment according to the LFS¹		11.1	11.5	11.9	12.0	12.0	N/A
Persons in employment according to the statistical register of employment		11.0	11.3	11.6	11.7	11.7	11.7
A	Agriculture, forestry, hunting	10.3	10.7	10.6	10.5	10.6	10.6
B	Fishery	10.1	10.4	10.4	10.3	10.6	10.5
C	Mining and quarrying	10.3	10.6	11.1	11.1	11.2	11.2
D	Manufacturing	10.1	10.3	10.6	10.6	10.7	10.7
E	Electricity, gas and water supply	11.2	11.6	11.9	12.0	12.1	12.1
F	Construction	10.2	9.9	10.0	10.0	10.0	9.8
G	Wholesale and retail trade; repair of motor vehicles	11.2	11.4	11.6	11.7	11.7	11.7
H	Hotels and restaurants	10.2	10.4	10.5	10.6	10.6	10.6
I	Transport, storage and communications	10.9	11.1	11.3	11.4	11.4	11.4
J	Financial intermediation	12.7	12.9	13.3	13.4	13.5	13.6
K	Real estate, renting and business activities	12.0	12.2	12.4	12.4	12.5	12.5
L	Public administration, defence & social insurance	12.9	13.3	13.6	13.7	13.8	13.9
M	Education	13.0	13.4	13.9	14.0	14.1	14.1
N	Health care and social assistance	11.9	11.8	12.7	12.8	12.9	12.9
O	Other community, social and personal services	11.8	11.9	12.3	12.3	12.4	12.4
P	Private households with employed personnel	10.1	10.2	10.5	10.5	10.6	10.7

Source: Statistical Register of Employment (SORS), 2008; calculations by IMAD.

Notes: ¹ Labour Force Survey; ² Provisional data for September 2008; N/A – not available.

Figure: Shares of employed persons with higher and university education by area of activity, %, 1995 and 2008



Source: Statistical Register of Employment (SORS), 2008.

Note: ¹ Provisional data released by SORS.

Ratio of students to teaching staff

The ratio of the number of students¹ to the number of teaching staff² is an internationally widely used indicator for measuring the quality of tertiary education.³ From the viewpoint of economic development, in addition to participation in tertiary education, the quality of study is relevant as well, as international OECD research shows a positive impact of the quality of study on economic growth. It is precisely the indicator of the ratio of students to teaching staff that is used to measure quality in those research studies. A lower ratio (lower number of students per teacher) implies higher quality of the teaching process, as it facilitates greater use of active teaching techniques as well as enhanced communication between students and teachers.

In terms of the ratio of students to teaching staff in tertiary education, Slovenia lagged significantly behind other EU countries in 2006, but this gap narrowed somewhat in the past year, as well as over a longer time period. The latest available international data refer to 2006. In that year, the ratio of students to teaching staff totalled 21.7 in Slovenia, lagging notably behind the average of the 19 EU countries (EU-19) that also are members of the OECD (where this ratio was 15.3). In 2005–2006, the ratio of students to teaching staff improved in Slovenia, as it did in slightly over one-half of the EU countries. However, despite narrowing the gap with other EU countries, Slovenia still lags behind all of them except Greece. More recent data – only available for Slovenia – indicate that the ratio of students to teaching staff also continued to improve in the academic year 2007/2008, when it dropped to 21.0.

¹ All students participating in tertiary education are covered in the equivalent of full-time study = full-time students + 1/3 (i.e. part-time students + candidates for graduation + postgraduate students) (SORS, Teaching staff at higher education institutions and vocational colleges, Slovenia, 2006).

² The teaching staff comprises instructional and professional support staff at vocational colleges (vocational college lecturers, exercise instructors and laboratory assistants) and teaching faculty (assistant professors, associate professors and full professors, lecturers and senior lecturers, and lectors), excluding research faculty members and faculty assistants (assistants, librarians, specialist advisors, senior researchers, researchers and skills teachers).

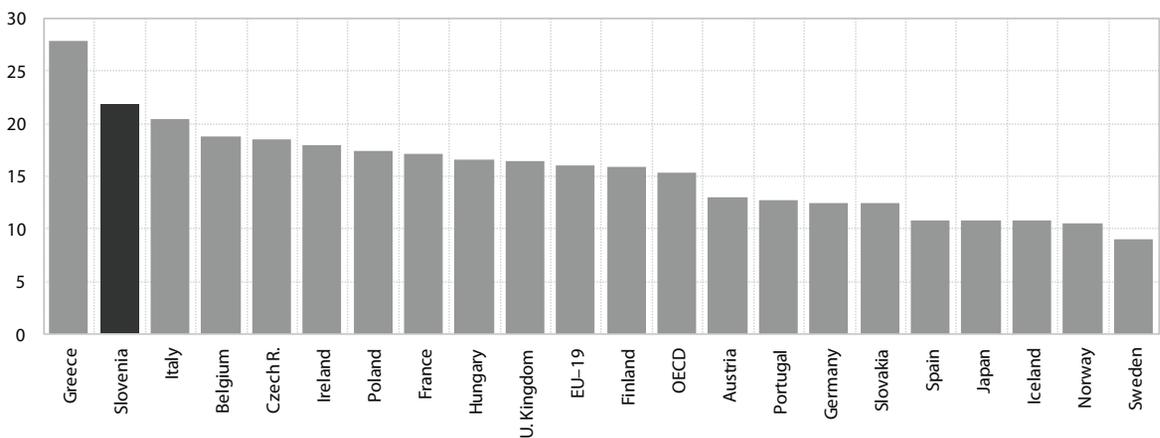
³ Tertiary education includes full-time and part-time post-secondary vocational studies, higher undergraduate studies and postgraduate studies.

Table: Ratio of students to teaching staff in tertiary education, Slovenia and OECD countries, 1998–2006

	1998	2000	2005	2006
OECD	14.8	14.7	15.8	15.3
EU-19¹	N/A	N/A	16.4	16.0
Austria	N/A	N/A	15.3	13.0
Belgium	N/A	19.9	19.6	18.7
Czech Rep.	13.5	13.5	19.0	18.5
Finland	N/A	N/A	12.5	15.8
France	N/A	18.3	17.3	17.0
Greece	26.3	26.8	30.2	27.8
Ireland	16.6	17.4	17.4	17.9
Italy	N/A	22.8	21.4	20.4
Hungary	11.8	13.1	15.9	16.5
Germany	12.4	12.1	12.2	12.4
Poland	N/A	14.7	18.2	17.3
Portugal	N/A	N/A	N/A	12.7
Slovakia	N/A	10.2	11.7	12.4
Slovenia	N/A	23.8	23.0	21.7
Spain	17.2	15.9	10.6	10.8
Sweden	9.0	9.3	8.9	9.0
United Kingdom	17.7	17.6	18.2	16.4
Island	9.3	7.9	11.0	10.7
Japan	11.8	11.4	11.0	10.8
Norway	13.0	12.7	N/A	10.5
USA	14.6	13.5	15.7	N/A

Source: Education at a Glance (OECD), 2002–2008; Teaching staff at higher education institutions and vocational colleges, Slovenia (SORS) 2006, 2007; calculations by IMAD.
 Note: ¹ Data are only available for those EU countries that are members of the OECD.

Figure: Ratio of students to teaching staff in tertiary education, Slovenia and OECD countries, 2006 (academic year 2005/2006)



Source: Education at a Glance (OECD), 2008; Teaching staff at higher education institutions and vocational colleges, Slovenia (SORS) 2008; SI-STAT data portal – Demography and social statistics – Education, 2008, calculations by IMAD.

Total public expenditure on education

Total public expenditure on education¹ as a share of GDP dropped sharply in 2007 after declining for a number of consecutive years, but it exceeds the EU average. It totalled 5.17%² of GDP in 2007, having dropped by 0.55 p.p. over the preceding year and by 0.61 p.p. over 2000. In 2005 (the latest internationally available data), Slovenia exceeded the EU average, which was 5.04%, but lagged significantly behind some northern European countries. The relatively high share of GDP appropriated by Slovenia for education is also related to the high level of participation of young people in education. Factors influencing the volume of public expenditure on education include the number, pay and age structure of teachers, teaching aids and equipment expenditure and infrastructure investments, the type, duration and costs of educational programmes, the number of students enrolled, etc.

In 2007, public expenditure on education expressed as a % of GDP dropped at all education levels, most notably in primary and secondary education. At these two levels, public expenditure as a share of GDP was lower relative to 2000, which is also associated with demographic changes (the shrinking size of enrolment generations and consequently the number of students enrolled). As in Slovenia, public expenditure on primary and secondary education also declined in some other EU countries in past years. In the last year as well as in the 2000–2007 period, Slovenia also recorded a slight drop in public expenditure on tertiary education as a share of GDP, although the number of tertiary-level students has been increased strongly since 2000. With respect to the value of this indicator, Slovenia exceeded the EU average in 2005, but Slovenia also has high participation in tertiary education. In the years ahead, the volume of public expenditure on education will be strongly influenced by wage reform in the public sector, and at the pre-school level, introduction of free kindergarten for the second child in a family, and introduction of free meals for secondary-school students.

The share of total public expenditure on education appropriated for transfers to households dropped in 2007. It totalled 8.1% in 2007, which is 5.4 p.p. less than

in 2000. Despite the drop, in 2005 Slovenia still exceeded the EU average in the value of this indicator. The country primarily differs from the EU average in its high share of financial aid to tertiary-level students and transfers to those students' households (2005: Slovenia: 23.7%; EU-27: 16.5%), although this share has been declining since 2000.

¹ Total public expenditure on education comprises the total budgetary expenditure on the formal education of young people and adults at state and municipal levels. This includes direct public expenditure on educational institutions and transfers to households (grants, subsidised meals, transport, accommodation, textbooks, etc.). Financial data for Slovenia were collected in accordance with an internationally comparable methodology using the UOE questionnaire (the common questionnaire of UNESCO, OECD and Eurostat).

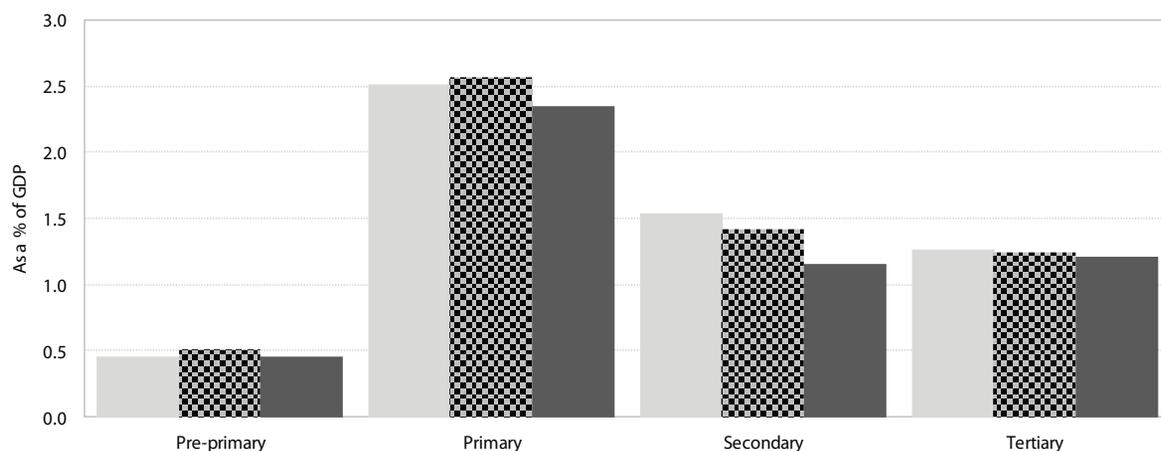
² The figure is based on the revised GDP most recently released by SORS in September 2008 (National Accounts – SORS, 2008).

Table: **Public expenditure on education, total and by purpose of expenditure, EU-27, 1995–2005, in %**

	1995	2000	2001	2002	2003	2004	2005
EU-27	N/A	4.68	4.94	5.06	5.14	5.06	5.04
Austria	6.04	5.66	5.7	5.67	5.5	5.44	5.44
Belgium	N/A	N/A	6	6.11	6.05	5.99	5.95
Bulgaria	3.39	4.19	3.78	4.03	4.23	4.51	4.51
Cyprus	4.63	5.44	5.93	6.55	7.29	6.7	6.92
Czech Rep.	N/A	4.04	4.09	4.32	4.51	4.37	4.25
Denmark	7.67	8.28	8.44	8.44	8.33	8.43	8.28
Estonia	5.88	5.57	5.28	5.48	5.31	4.98	4.87
Finland	6.85	6.08	6.04	6.21	6.41	6.42	6.31
France	6.04	6.03	5.59	5.57	5.88	5.79	5.65
Greece	2.87	3.71	3.47	3.55	3.58	3.84	3.98
Ireland	5.07	4.29	4.27	4.29	4.39	4.72	4.77
Italy	4.85	4.47	4.86	4.62	4.74	4.58	4.43
Latvia	6.19	5.64	5.64	5.71	5.32	5.07	5.06
Lithuania	5.12	5.63	5.89	5.85	5.18	5.2	4.95
Luxembourg	4.26	N/A	3.74	3.79	3.78	3.87	3.81
Hungary	5.39	4.5	5.01	5.37	5.85	5.43	5.45
Malta	N/A	4.52	4.46	4.38	4.7	4.85	6.82
Germany	4.62	4.45	4.49	4.7	4.7	4.59	4.53
Netherlands	5.06	4.86	4.78	4.9	5.12	5.16	5.19
Poland	5.1	4.87	5.42	5.41	5.35	5.41	5.47
Portugal	5.37	5.42	5.61	5.54	5.57	5.29	5.4
Romania	N/A	2.88	3.28	3.52	3.44	3.29	3.48
Slovakia	5.01	4.15	4.0	4.31	4.3	4.19	3.85
Slovenia	5.80	5.78	5.89	5.78	5.82	5.76	5.74
Spain	4.66	4.28	4.23	4.25	4.28	4.25	4.23
Sweden	7.22	7.31	7.12	7.43	7.3	7.18	6.97
United Kingdom	5.02	4.64	4.65	5.2	5.34	5.25	5.45

Source: Population and social conditions (Eurostat), 2008; Expenditure on formal education, Slovenia, 2007 (provisional data) – SORS (2009); Expenditure on formal education, Slovenia, 2005, 2006 (provisional data) – SORS (2008); Statistical Yearbook 2008 – SORS (2008).

Note: Indicators for Slovenia were calculated on the basis of the latest revision of GDP (September 2008).

 Figure: **Total public expenditure on formal education, by level of education, as a % of GDP, Slovenia, 2000–2007**


Source: Expenditure on formal education, Slovenia, 2007 (provisional data) – SORS (2009); Expenditure on formal education, Slovenia, 2005, 2006 (provisional data) – SORS (2008); Statistical Yearbook 2008 – SORS (2008).

Note: Indicators for Slovenia have been calculated on the basis of the latest revision of GDP (of September 2008).

Expenditure on educational institutions per student

Annual expenditure on educational institutions per student is high at all levels of education, and it increased more than the EU average in the last year.

It totalled EUR PPS 6056.4 in 2005, by which Slovenia exceeded the EU average, which amounted to EUR PPS 5649.6 that year, but it lagged significantly behind states with the highest expenditures (i.e. Denmark, Sweden and the UK), which, however, also have higher GDP per capita. In Slovenia, this expenditure increased more in 2005 relative to 2004 (the latest available figure) than in most other EU countries. However, taking into account the level of economic development measured by GDP per capita, Slovenia (31.1%) ranks significantly above the EU average (25.2%) and among the leading EU countries in terms of the share of expenditure on educational institutions. Compared with 2004, this expenditure grew more in Slovenia than in most other EU Member States and thus also more on average than in the EU (Slovenia: by 1.2 p.p.; EU: by 0.6 p.p.), which was also the case in 2001–2005.

In 2005 (the last year for which data are available), expenditure per student in tertiary education grew the most, however Slovenia still lags significantly behind the EU average. The indicator of the annual expenditure on institutions per student for all education levels suggests a relatively favourable situation, which, however, varies by particular level of education. In tertiary education, for example, although the share of public expenditure on this education level is higher than the EU average, the annual expenditure per student, totalling 36.4% of GDP per capita, is lower than the EU average (2005: 37.0%), which is primarily attributable to the high level of participation in tertiary education in Slovenia. In 2005, this expenditure grew more than in most other EU countries and more than in the European Union on average (Slovenia: 2.5 p.p.; EU: 1.5 p.p.), but was nevertheless lower than in 2001. We expect that in the years ahead, expenditure per tertiary-level student will increase with the introduction of shorter Bologna study programmes and given the demographic trends and the anticipated steady moderation in the growth of the number of enrolled students. Expenditure per student at primary and upper secondary level also grew more than in most other EU countries in 2005, to EUR PPS 6056.4 in primary and EUR PPS 4634.5 in upper secondary education. Expenditure per student at these two education levels increased in recent years in the majority of EU Member States due to the declining number of students as a result of demographic changes. International comparisons (Pisa, 2006) indicate that the amount spent per student does not necessarily correlate in a positive way with achievement in performance

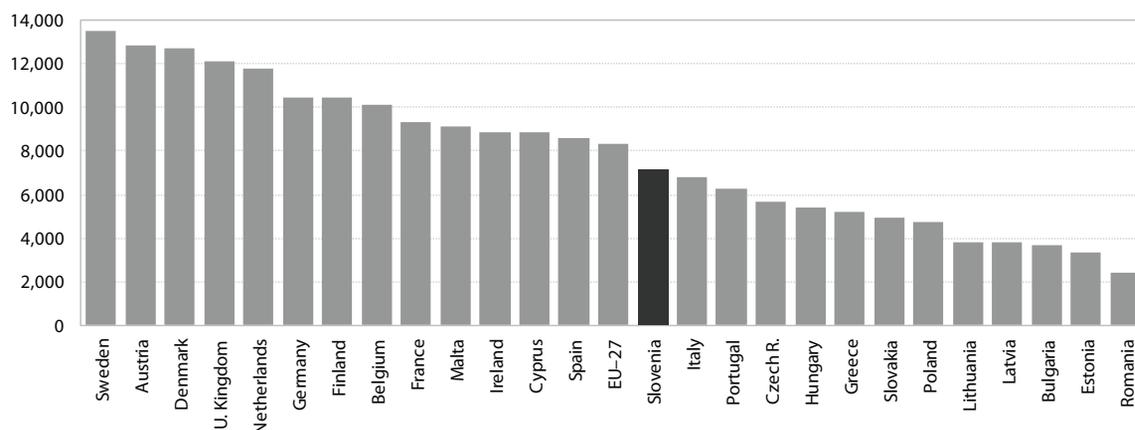
tests as part of international research, as other factors (teaching methods, curricula and objectives, teachers' expectations toward students, etc.) are also important from the perspective of quality of schooling.

Table: Annual expenditure on educational institutions per student, in purchasing power standards (EUR PPS) and as a % of GDP per capita, 2001–2005

	EUR PPS			Expenditure per student as a % of GDP per capita		
	2001	2004	2005	2001	2004	2005
EU-27	5058.6	5466.8	5649.6	24.6	24.7	25.2
Austria	7000	7806.2	8292.8	27.9	28.0	28.7
Belgium	6320.7	6252.3	6501.2	25.9	23.9	24.0
Bulgaria	1325.9	1810.3	1993.2	22.9	24.8	25.2
Cyprus	4951.9	5959.0	6684.0	27.6	30.5	32.2
Czech Rep.	2785.8	3664.8	3809.3	20.1	22.5	22.2
Denmark	7303.9	7647.4	8243.6	28.9	28.1	29.1
Estonia	N/A	N/A	2868.3	N/A	N/A	20.4
Finland	5284.4	6243.7	6224.6	23.1	24.8	24.1
France	5929.9	6122.9	6363.9	25.9	25.7	25.3
Greece	3236.9	4148.4	4605.9	18.8	20.5	21.3
Ireland	4635.4	5724.2	6011.6	17.7	18.7	18.7
Italy	6383.2	5917.8	5907.9	27.4	25.6	25.1
Latvia	1994.7	2403.3	2745.8	26.0	24.3	24.6
Lithuania	1859.8	2355.5	2475.4	22.7	21.6	20.8
Hungary	N/A	3642.9	3842.2	N/A	26.6	26.7
Malta	3305.9	4076.8	5882.4	21.5	24.6	33.9
Germany	5813.8	6186.7	6503.4	25.2	24.6	25.2
Netherlands	5694.1	6466.4	6702.7	21.5	23.1	22.8
Poland	2183.3	2723.5	3051	23.2	24.8	26.6
Portugal	4036.1	4234.2	4703.5	26.4	26.2	27.8
Romania	N/A	N/A	1454.2	N/A	N/A	18.3
Slovakia	1845.2	2594.4	2698.8	17.8	21	19.9
Slovenia	4646.4	5528.4	6056.4	29.9	30.0	31.1
Spain	4525.4	5259	5718.1	23.3	24.1	24.8
Sweden	6094.1	7132.3	7203.6	25.4	26.4	26
United Kingdom	5155.3	6051.6	7084.1	22.5	23.6	26.3

Source: Eurostat Portal Page - Population and Social conditions, 2008.
 Note: N/A – not available.

Figure: Expenditure on educational institutions per student, in EUR PPS in tertiary education, 2005



Source: Eurostat Portal Page - Population and Social conditions, 2008.

Gross domestic expenditure on research and development

Gross domestic expenditure on R&D expressed as a percentage of GDP dropped significantly in 2007.

According to final data,¹ gross domestic expenditure on research and development (GERD) as a share of GDP dropped by 0.11 p.p. over the preceding year to 1.45%, while its volume remained unchanged in real terms.² Since GERD as a percentage of GDP remained nearly unchanged in the European Union, Slovenia's gap behind the EU average widened in 2007, amounting to 0.38 p.p. (2006: 0.28 p.p.). In view of the favourable economic trends of 2007,³ this result is not encouraging for Slovenia, considering that R&D expenditure in the EU has remained unchanged since 2000. By contrast, certain countries, such as Austria, the Czech Republic, Estonia, Portugal and Spain, have made notable breakthroughs in boosting their GERD as a share of GDP. In 2007, the Czech Republic outperformed Slovenia, which is still ranked ahead of the Mediterranean countries of the EU, Ireland and other new Member States.

The share of the business sector in the funding of GERD dropped in 2007 after a significant rise recorded in the preceding year.

In 2007, the business sector's investments in R&D decreased in real terms⁴ by 1.9%, which is also partly reflected in the modest growth of amounts claimed as tax relief.⁵ The business sector's share in the total GERD funding structure thus declined by 1.0 p.p. to 58.3%. The sector's R&D expenditure as a

percentage of GDP dropped in 2007 over the preceding year, to 0.85%. Slovenia's gap behind the EU average – provided that the latter remained unchanged – thus widened, as the EU business sector appropriated 0.99% of GDP for investments in R&D in 2005.⁶ The Slovenian business sector also widened its gap behind the Barcelona R&D investment target of 2% of GDP by 2013.⁷ The public sector also lags behind the target, having spent, according to provisional data, 0.66% of GDP on R&D investments in 2007.

The structure of researchers by employment sector, which is important from the perspective of the transfer of knowledge into the economy, also changed favourably in 2007, as the share of the business sector increased.

The total number of researchers⁸ increased by 6.7%, most notably, by 13.7%, again in the business sector. The majority of researchers worked in the business sector, 41.1%, which is the highest figure recorded in the period since 2000 (31.8%). The number of researchers in the business sector grew by 9.3% annually on average in 2000–2007. In terms of the share of researchers, the Slovenian business sector narrowed its gap behind the EU average significantly in 2007, to 8.9 p.p., the lowest in the 2000–2007 period (2000: 15.7 p.p.).

¹ First release, 26 February 2009, SORS.

² GERD decreased slightly in 2007 (by 0.3%), while it increased by 14.5% in real terms in the preceding year.

³ GDP increased by 6.8% in real terms in 2007.

⁴ In 2006, the business sector increased its R&D investments by 22.7% in real terms.

⁵ As in the preceding year, taxpayers were eligible to claim tax relief on account of R&D investments in 2007 (Corporate Income Tax Act, OGRS, No. 117/06). In all, 461 taxpayers thus claimed the reduction of their tax base by 20% of the amount invested in R&D. The realised volume of tax relief totalled EUR 60.7 m in 2007 (4.6% more than in 2006). As in 2006, almost one-half of total relief – 48.4% – was claimed by 26 taxpayers operating in the production of chemicals, chemical products and artificial fibres, and motor vehicles, trailers and semi-trailers. Based on the Decree Concerning Regional Tax Incentives for Research and Development (OGRS, No. 110/2007), taxpayers that satisfied the requirements for being eligible for regional R&D tax incentives were able to reduce their tax base by a further 10% or 20% in 2007. The realised volume of this relief totalled EUR 5.7 m, claimed by 164 taxpayers. Two fifths of the total volume was claimed by 25 manufacturers of chemicals, chemical products and artificial fibres, and machinery and equipment (Ministry of Finance data on R&D tax relief in 2007, 2008).

⁶ The latest available data for EU refer to 2005.

⁷ Slovenia has extended the time frame for meeting the Barcelona R&D investment target from 2010 to 2013 (Action plan for the implementation of integrated recommendations, 2008).

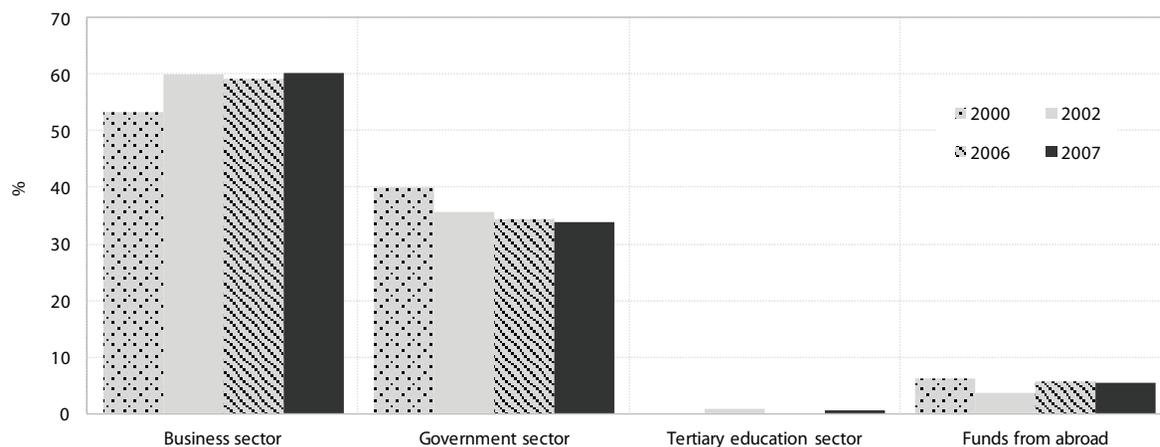
⁸ Expressed as a full-time equivalent, with the analysis only including researchers (excluding technical and other staff).

Table: **Gross domestic expenditure on R&D, Slovenia and some EU-27 Member States, % of GDP**

	1996	2000	2005	2006	2007 ¹
EU-27	1.75	1.85	1.82	1.84	1.83
Austria	1.60	1.94	2.44	2.46	2.56
Czech Rep.	0.97	1.21	1.41	1.55	1.54
Estonia	np	0.61	0.94	1.15	1.14
Finland	2.52	3.34	3.48	3.45	3.47
Ireland	1.30	1.12	1.25	1.30	1.31
Italy	0.99	1.05	1.09	1.14	np
Latvia	0.42	0.44	0.56	0.70	0.63
Lithuania	0.50	0.59	0.75	0.79	0.82
Hungary	0.65	0.78	0.94	1.00	0.97
Germany	2.19	2.45	2.48	2.54	2.53
Poland	0.65	0.64	0.57	0.56	np
Portugal	0.57	0.76	0.81	1.00	1.18
Romania	np	0.37	0.41	0.45	0.53
Slovenia	1.31	1.39	1.44	1.56	1.45
Spain	0.81	0.91	1.12	1.20	1.27

Source: Eurostat Portal Page – Science and technology – Research and development, 2009.

Notes: ¹ Data for Austria, Estonia, Ireland, Germany and Portugal are provisional, data for EU-27 is an estimate by Eurostat; N/A – not available.

 Figure: **Gross domestic R&D expenditure by source of financing, Slovenia, 2000–2007, %**


Source: Research and development, Slovenia, 2000–2007 (SORS), 2009.

Note: ¹ Due to their very small shares, the higher education and private non-profit sectors are not represented in the GERD funding structure. In 2000–2007, the former contributed 0.5% and the latter 0.1% on average to the total GERD.

Science and technology graduates

The number of science and technology¹ graduates rose again in 2007. Slovenia had 2,836 science and technology graduates in 2007, which is 2.4% more than in the preceding year. Their number grew by 5.7% in 2000–2006, significantly less than in the EU (25.4%).

As regards the number of science and technology graduates per 1000 persons aged 20–29, Slovenia lags far behind the EU average. The number of science and technology graduates per 1,000 inhabitants rose slightly in 2007 and totalled 9.8 (in 2006: 9.5); however, in 2006 Slovenia lagged behind most other EU countries and the EU average (13.0) in this field. In 2000–2006, Slovenia's gap behind the EU average continued to widen, and its position among the EU Member States strongly deteriorated. The share of science and technology graduates in the total number of graduates, which grew in the past year, is also significantly lower than in 2000 and also lower than the EU average. It totalled 17.0% in 2007 and was 5.8 p.p. lower than in 2000. In terms of the value of this indicator, Slovenia lagged behind the EU average (22.4%) by 6.2 p.p. in 2006, having considerably widened its gap in 2000–2006. With its share of science and technology graduates, Slovenia ranks in the bottom third of EU countries, falling short of almost all old members.

The number of students enrolled in science or technology fields increased in 2007/2008, while the share of students enrolled in these fields was rather small. The number of students enrolled in science or technology fields totalled 27,779 in 2007/08, and was 7.6% higher than in the preceding year. Their share increased as well, totalling 24.1% in 2007/08 (2006/07: 22.3%); however, as in other years of the 2000–2006 period, Slovenia lagged behind the EU average in 2006 (Slovenia: 21.1%; EU average: 25.2%). Due to the positive trends in enrolment in this field recorded since 2000, the number of science and technology graduates is expected to increase in the future. However, it needs to be stressed that in 2000/01 – 2007/08, the growth in the number of students enrolled in this study field (34.8%) was significantly more pronounced than the growth in the number of corresponding graduates² (8.3%), which

suggests a low efficiency of study.³ The numbers of science and technology students and graduates may be expected to rise in the years ahead, in part on account of the Scholarship Act⁴ adopted in 2007, providing for growth in company scholarships and promotion of enrolment into study programmes consistent with human resource needs.

¹ Science and technology indicators according to ISCED 97 comprise two broader fields, i.e. "science, mathematics and computing" (ISC 42, 44, 46 and 48) and "engineering, manufacturing and construction" (ISC 52, 54 and 58). Within this framework, the International Standard Classification of Education, ISCED 97, and Eurostat Fields of Education and Training Manual, 1999, were taken into consideration. The indicators cover the total number of graduates of tertiary education in the field of science and technology who completed their studies in the observed calendar year.

² Data on graduates refer to calendar years (the latest to 2007), and those on students enrolled to the 2000/2001–2007/2008 period.

³ This is also suggested by the data on the average duration of science and technology studies, which in 2006 totalled 7.2 years for science graduates and 7.0 years for technology graduates (Source: Eurostudent SI 2007, 2007).

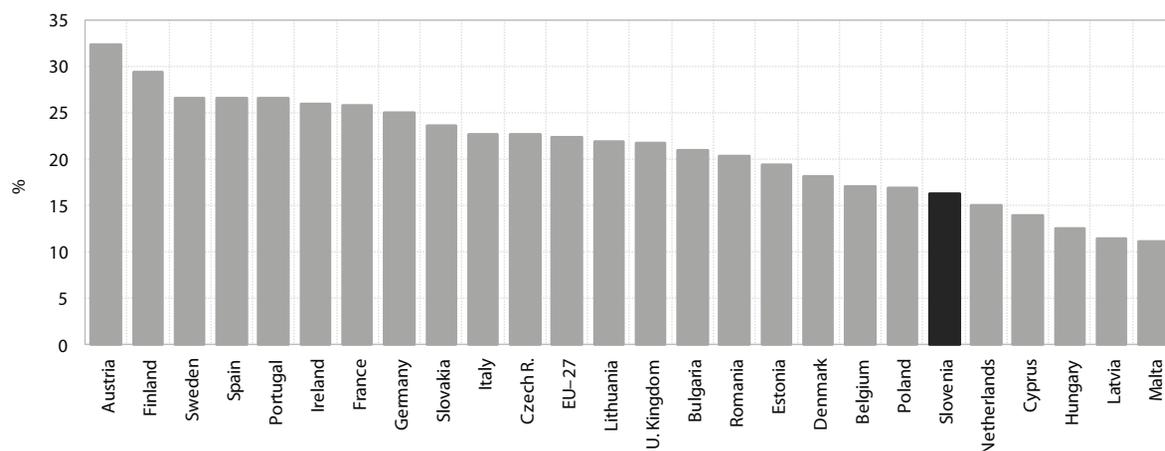
⁴ In force since September 2008.

Table: Number of science and technology graduates per 1,000 inhabitants aged 20–29

	1998	2000	2005	2006
EU-27	N/A	10.2	13	13
Austria	7.9	7.2	9.8	10.7
Belgium	N/A	9.7	10.9	10.6
Bulgaria	5.5	6.6	8.6	8.6
Cyprus	N/A	3.4	3.6	4.2
Czech Rep.	4.6	5.5	8.2	10.1
Denmark	8.1	11.7	14.7	13.8
Estonia	3.3	7	12.1	11.2
Finland	15.9	16	17.7	17.9
France	18.5	19.6	22.5	20.6
Greece	N/A	N/A	10.1	5.9
Ireland	22.9	24.2	24.5	20.9
Italy	5.1	5.7	9.7	9.2
Latvia	6.1	7.4	9.8	8.9
Lithuania	9.3	13.5	18.9	19.3
Luxembourg	1.4	1.8	N/A	0
Hungary	5	4.5	5.1	5.9
Malta	N/A	3.4	3.4	5
Germany	8.8	8.2	9.7	10.7
Netherlands	6	5.8	8.6	9
Poland	4.9	6.6	11.1	13.3
Portugal	5.2	6.3	12	12.7
Romania	4.5	4.9	10.3	10.5
Slovakia	4.3	5.3	10.2	10.3
Slovenia	8	8.9	9.8	9.5
Spain	8	9.9	11.8	11.6
Sweden	7.9	11.6	14.4	14.9
United Kingdom	15.5	18.5	18.4	17.5

Source: Eurostat Portal Page - Population and social conditions – Education and training, 2008.
 Note: N/A – not available.

Figure: Share of science and technology graduates in total number of graduates, Slovenia and EU countries, 2006, %



Source: Eurostat Portal Page - Population and social conditions – Education and training, 2008.

Innovation active enterprises

In the last three-year period for which data are available, 2004–2006, Slovenia made substantial progress in terms of innovation activity in enterprises, especially in the services sector. According to final SORS data, innovation activity in Slovenia improved markedly in 2004–2006 compared with the preceding three-year period, and the share of innovation active enterprises rose by 8.2 p.p. (2002–2004: by 5.8 p.p.), to 35.1%. In industry, the indicator's value increased with the same intensity as in the preceding period (by 6.7 p.p. to 41.0%). The greatest progress in terms of innovation activity was recorded in services, where the share of innovation active enterprises increased by 10.7 p.p.; the value of the indicator came to 26.8%. The progress of service enterprises is particularly encouraging in light of the data from the previous period (2002–2004), which indicated the widest gap behind the EU. The lag resulted especially from the low rate of innovation activity in knowledge-based business services (KBBS),¹ as in the EU, KBBS enterprises were engaged in innovation activity² to at least the same extent as enterprises in manufacturing.³ In 2004–2006, it was precisely the share of innovation active KBBS enterprises that increased considerably in Slovenia, by 15.9 p.p. to 43.1%.

In terms of innovation activity, Slovenia came close to the EU average in 2004–2006. In the EU, the share of innovation active enterprises (38.9%) remained approximately at the level of the previous period in 2004–2006, which amid Slovenia's progress additionally contributed to a pronounced narrowing of its gap behind the EU average, to 3.8 p.p. (2002–2004: by 12.6 p.p.). Among the EU Member States, Slovenia and Finland⁴ recorded the greatest increase in the share of innovation active enterprises, both by 8.2 p.p.; in Slovenia, the share of medium-sized enterprises increased the most (by 10.4 p.p.) and in Finland, the share of small enterprises (by 9.9 p.p.). Low innovation activity continues to be a pressing problem in Slovenia especially in small enterprises, of which as many as 72.3% were not engaged in innovation activities.⁵ In both countries, service enterprises increased their innovation activity significantly more relative to the previous period than enterprises in

manufacturing⁶ (services – SI: by 10.7 p.p., FI: by 10.5 p.p.; industry – SI: by 6.7 p.p., FI: by 6.1 p.p.). Nonetheless, innovation activity in EU countries was generally more pronounced in manufacturing than in services, with the exception of Greece, Latvia and Portugal.

Enterprises in the production of machinery and electrical equipment were most innovation active in the manufacturing sector in Slovenia in 2004–2006. More than one half (54.6%) of Slovenian enterprises involved in the production of machinery (DK) and electrical equipment (DL) were engaged in innovation activity. Even much higher shares of innovation active enterprises in these two industries were recorded in 2004–2006 by Germany (82.6%) and Estonia (73.0%). Enterprises in these industries were most innovation active in as many as eight old EU members, 62.8% on average. Among the new Member States, in contrast, innovation activity in most innovation active new Member States (Estonia, Cyprus and Slovenia) was more evenly distributed across manufacturing industries.

¹ Including, according to the SKD standard classification of economic activities: 72 – computer and related activities, 74.2 – architectural and engineering activities and related technical consultancy, 74.3 – technical testing and analysis.

² The only exceptions in 2002–2004 were Slovenia and Cyprus.

³ Development Report 2008, 2008.

⁴ Finland's share of innovation active enterprises is considerably higher than Slovenia's, totalling 51.4%.

⁵ In 2002–2004, the lack of qualified staff was one factor which importantly contributed to weaker innovation activity in small enterprises (research conducted for 2004–2006 provides no data on this).

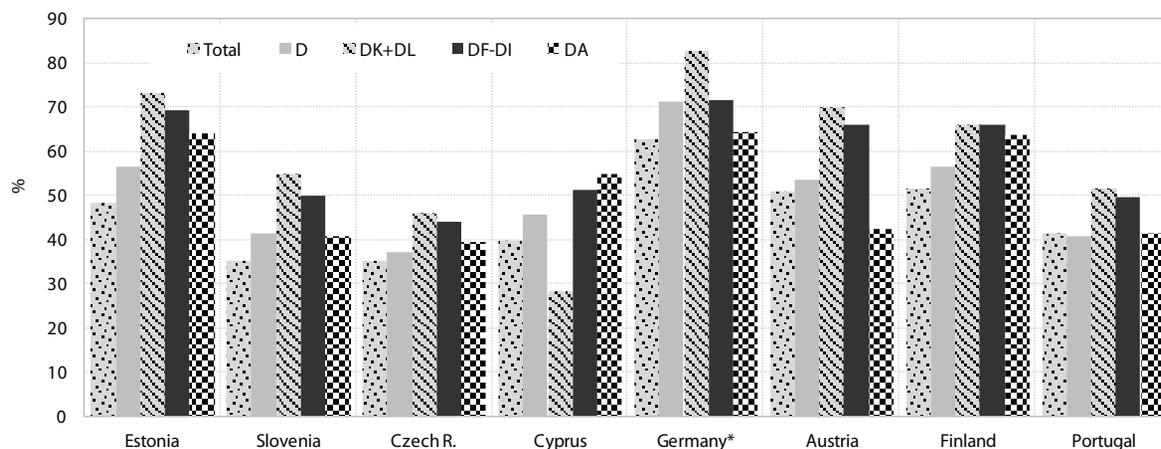
⁶ In Finland it was particularly the share of small innovation active service enterprises that grew – by 12.7 p.p., while in Slovenia this was the share of large service enterprises – by 13.9 p.p., which probably also reflects the nature of innovation policy measures implemented in Finland, focusing more on encouraging innovativeness in small enterprises.

Table: **Innovation active enterprises, 2004–2006, % of all enterprises**

	TOTAL	small	medium-sized	large	INDUSTRY	small	medium-sized	large	SERVICES	small	medium-sized	large
EU-27¹	38.9	34.4	52.3	70.1	41.2	35.2	56.0	74.3	36.0	33.5	45.5	62.0
Austria	50.6	44.0	71.1	82.8	53.0	43.3	74.7	89.8	48.6	44.6	66.6	67.4
Cyprus	39.5	35.0	56.6	82.1	46.3	42.1	68.4	76.9	33.4	28.2	49.2	86.7
Czech Rep.	35.0	28.9	48.5	70.4	36.6	27.8	50.2	72.8	32.7	30.1	44.3	60.0
Estonia	48.2	43.0	64.4	85.2	55.1	48.4	69.9	89.0	39.9	37.6	52.0	73.1
Finland	51.4	46.9	61.2	83.0	55.4	49.0	66.7	88.0	47.3	44.8	52.9	74.5
Greece	40.9	37.3	55.7	73.6	37.8	33.5	51.5	82.1	44.5	41.6	62.4	59.3
Ireland	47.2	42.7	62.5	74.9	56.7	51.4	67.3	84.2	41.3	38.1	57.5	63.1
Italy	34.6	31.3	54.2	69.2	37.3	33.5	59.9	75.5	28.3	26.1	39.7	58.4
Latvia	16.2	13.1	23.7	48.4	14.6	9.8	24.3	44.0	17.7	15.9	22.7	54.8
Hungary	20.1	15.6	31.6	55.5	21.2	15.9	31.3	56.0	18.4	15.3	32.3	53.7
Germany	62.6	57.3	71.8	87.4	69.6	63.5	75.1	90.1	56.6	53.4	65.9	82.3
Poland	23.0	15.5	37.7	64.1	23.9	14.3	38.7	67.0	21.5	17.1	35.2	54.7
Portugal	41.3	37.3	56.7	78.5	40.7	36.3	55.2	79.1	42.3	38.8	60.8	77.3
Slovenia	35.1	27.7	51.3	76.9	41.0	30.8	56.6	77.6	26.8	24.4	33.3	74.4

Source: Eurostat portal page – Science and technology – Community innovation survey, 2009; calculations by IMAD.

Note: ¹ data for France are not included in the EU-27 average because France only reported data on innovation activity in manufacturing in the last innovation survey.

 Figure: **Share of innovation active enterprises, 2004–2006, the most innovation active manufacturing industries, % of all enterprises**


Source: Eurostat portal page – Science and technology – Community innovation survey, 2008; calculations by IMAD.

Note: *for reasons of confidentiality, data for the production of coke, petroleum products and nuclear fuel (DF) are not included in DF-DI, nor data on the production of tobacco products (DA-16) in DA; D – manufacturing, DK – production of machinery and equipment, DL – production of electrical and optical equipment, DF – production of coke, petroleum products and nuclear fuel, DG – production of chemicals, chemical products and artificial fibres, DH – production of rubber and plastic products, DI – production of other non-metal mineral products, DA – production of food products, beverages and tobacco.

Internet use

The share of Internet users continued to rise in 2008, but the increase of Internet use in Slovenia recorded in the past two years lags behind the EU, with the result that the gap behind the EU average widened last year for the second year in a row. The share of the population using the Internet in the first quarter reached 56% of the population aged 16–74 according to the Eurostat methodology. Compared with the EU average, where it totalled 61%,¹ Internet use was as much as 5 p.p. lower, which is a one-percentage-point wider gap over the preceding year and 4 p.p. over 2006, when the difference between Slovenia and the EU average was the lowest in that period (1 p.p.). In 2008, Slovenia lagged behind the average of old EU members (EU-15) by as much as 10 p.p. A slower increase of Internet use in Slovenia is also reflected in comparison with the new EU members, where Slovenia, besides Estonia, had been in the lead until 2006, while in 2007 it was, in addition to Estonia, outperformed by Slovakia and Latvia, and in 2008 also by the Czech Republic and Hungary. Of the old members, four countries lagged behind Slovenia until 2007, and three in 2008.

Comparisons with the EU indicate that Slovenia has unrealised potential for increased Internet use, primarily in the elderly population, while in the past two years it also posted outstandingly slow progress relative to the EU for the middle-aged population. In Slovenia, the prevalence of Internet use decreases with age more rapidly than on average in the EU, while the share of Internet users among young people (aged 16–24) is higher than in the EU.² Whereas in the population of young people the positive difference compared to the EU average remains relatively wide, data for the population aged 25–54 indicate a deterioration relative to the EU, as Slovenia's slight advantage in 2006 turned into a lag in the last two years. The gap behind the EU in terms of Internet use is widest in the population aged over 55, where it ceased to widen in the last year, though not for the oldest population (over 65). It is characteristic of the middle-aged population (25–54) that the gap behind the EU is wider in those with a lower education, but in the last two years the situation deteriorated relative to the EU for all groups regardless of education. In contrast, within the population aged over 55, it is less educated persons that lag the least behind the EU in terms of Internet use, while persons with a secondary education do so the most.

The year 2008 also saw slower growth in the share of households with Internet access, which thus fell slightly short of the EU average for the first time since 2004. The share of households that had Internet access in the first quarter of 2008 increased by one percentage point to 59%, and in the EU by as much as 6 p.p. to 60%. However, as in 2007, broadband Internet access continued to expand at a relatively fast pace, reaching 50% and exceeding the EU average by 2 p.p. Continued rapid growth in the share of households with broadband Internet access is associated with improved offerings and favourable price trends in these services in the last few years.³ Among households without Internet access, the share of those that cite the excessive cost of access and equipment as the biggest obstacles to the use of the Internet continues to drop. Meanwhile, the shares of households that do not have Internet access because they do not need it or because of a lack of appropriate skills remained the highest, although falling. It is in these two obstacles that Slovenia differs most negatively from the EU average, which is probably to a considerable extent related to different age structure and, in certain population age groups, also different education structure of Internet users compared to the EU.

An important factor in the development of the information society is the introduction of e-government services, where in addition to the already diverse offering of e-government services, in the past year considerable progress was also made concerning their use. The availability of e-government in Slovenia is among the highest in the EU, 90% in 2007 according to the most recent data (59% in the EU). As concerns demand, the data for 2008 show continued growth in the use of these services for enterprises; after a halt in 2007, the share of individuals who used e-government services also rose again last year. With these results, Slovenia slightly narrowed its gap behind the EU average as concerns two-way e-interaction of individuals with public authorities (i.e. returning filled-in forms), which was the only type of e-government services in which Slovenia lagged behind the EU in 2008.⁴

¹ Internet use increased in all EU countries in 2008, including those where the share of Internet users already exceeded 80%.

² The fact that in Slovenia the population of young people uses the Internet more than in the EU coincides with the finding that Slovenians, as compared to the EU average, do better in the use of the Internet for various educational purposes, while they use it less frequently than in the EU for everyday services (e-banking, searching for information on goods and services) as well as for more complex communication services.

³ Since the ISDN-ADSL loop was unbundled in September 2005, competition in the market of broadband Internet access services has increased considerably.

⁴ The use of e-government by enterprises strongly exceeds the EU average in all types of interactions with public authorities, the least in returning filled-in forms and for full electronic case handling.

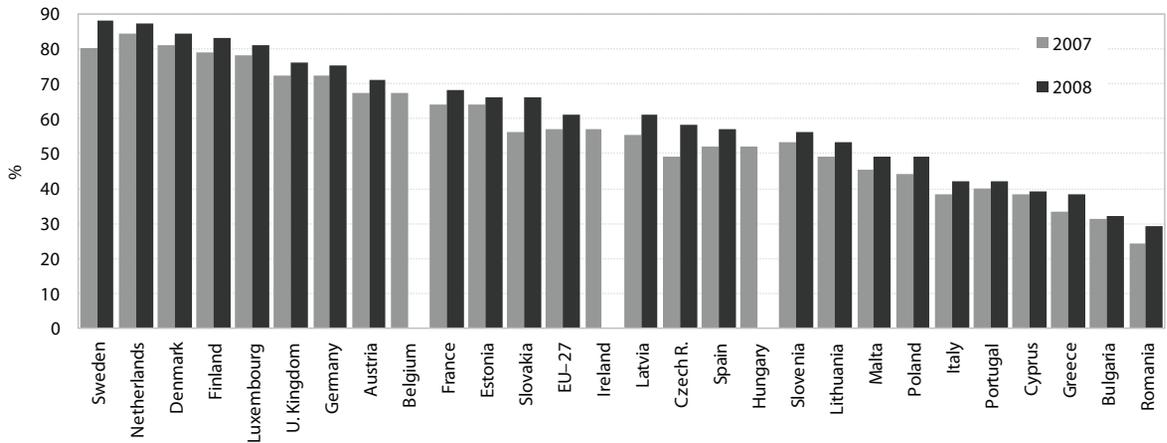
Table: **Internet use and access, Slovenia**

	2004 ²	2005 ²	2006 ²	2007 ²	2008 ²
Internet users ¹ (aged 16–74)	37	47	51	53	56
Households with Internet access	47	48	54	58	59
Households with broadband Internet access	10	19	34	44	50

Source: Use of ICT in households and by individuals (SORS), 2005–2008.

Notes: ¹The share of users who used the Internet in the past three months. ²Data refer to the Q1 of the year.

Figure: **Internet users,¹ Slovenia and the EU²**



Source: Eurostat portal page – Science and technology – Information society statistics, 2009.

Notes: ¹ Those who used the Internet in the last three months. ² Data refer to Q1 of the year.

THE THIRD PRIORITY:

An efficient and more economical state

- General government expenditure according to economic classification
- General government expenditure by function (COFOG)
- Economic structure of taxes and contributions
- Subsidies
- State Aid
- Aggregate competitiveness indices

General government expenditure according to economic classification

In 2008, general government expenditure relative to GDP stood at 43.6%, which was a rise of 1.2 p.p. compared to 2007; the structure of expenditure also slightly changed. Relative to GDP, a rise was recorded in the share of expenditure on gross fixed capital formation (by 0.4 p.p.), social benefits in cash and in kind and other current transfers (each by 0.3 p.p.), and expenditure on compensation of employees and intermediate consumption (each by 0.2 p.p.). The shares of expenditures on interest rates and taxes dropped (each by 0.1 p.p.), whereas the shares of other expenditure categories remained unchanged from the year before.

In the period 2000–2008, general government expenditure as a % of GDP was down by 3.1 p.p.; the drop was most pronounced in expenditure on social benefits in cash and in kind (2000: 18.0%; 2008: 16.6% of GDP). After 2000, the share of expenditure on pensions relative to GDP shrank by 0.1 to 0.2 p.p. per year, reflecting the effects of pension reform; the share of expenditure on other transfers to individuals and households (excluding pensions) was up from 2000 to 2004, but started to decelerate after 2004, most markedly in 2007, when a changed mechanism of adjusting transfers to inflation was put in place. In 2008, the share of social transfers picked up again, largely as a result of the introduction of indexation of transfers twice a year, high indexation of pensions (using the indexation system in force, with wage growth exceeding productivity growth), disbursement of the one-off pension allowance and higher other transfers (higher child benefits, certain benefits in pre-school childcare, meals in secondary schools). Relative expenditure on capital transfers (2000: 1.6%; 2008: 1.0% of GDP) was higher mainly at the beginning of the period, when in addition to other investment grants, certain other expenditures were also included in this category. Reprogramming of debts, lower interest rates and lower inflation all resulted in a gradual narrowing of the share of expenditure on interest rates (2000: 2.4%; 2008: 1.2% of GDP). The proportion of intermediate consumption relative to GDP dropped by 0.5 p.p. in the period 2000–2008, as did the proportion of the compensation of employees (2000: 11.3%; 2008: 10.8% of GDP), which first slightly increased, but then started to decelerate in 2004. In 2008, the share of expenditure on the compensation of employees picked up again owing to a greater number of employees in the public sector (1.4%) and a rise in the average wage in the public sector (3.8%) related to abolishing the first quarter of wage imbalances. On the other hand, the share of expenditure on other current transfers rose (by 0.7 p.p. of GDP), and

even more markedly the share of expenditure on gross capital formation (by 1.0 p.p. of GDP).

In 2007, general government expenditure relative to GDP dropped much more than the EU average and stood at a considerably lower level than in the EU. General government expenditure¹ as a % of GDP in 2007² was 3.5 p.p. below the average of the EU Member States (Slovenia: 42.4% of GDP; EU: 45.9% of GDP). Fifteen states recorded higher shares of expenditure as a % of GDP than Slovenia. In 2007, the share of general government expenditure dropped by 0.5 p.p. on average in the EU, in Slovenia by 2.1 p.p. Eight Member States increased the share of expenditure as a % of GDP. Eighteen Member States, including Slovenia, lowered the expenditure in relative terms, most of all Slovakia (by 2.5 p.p. of GDP).

¹ Slovenia's general government sector expenditure according to ESA-95 includes four general government budgets (state and local budgets, and the pension and health funds), public funds (including the Pension Fund (KAD) and the Slovenian Restitution Fund (SOD), public institutes and public agencies.

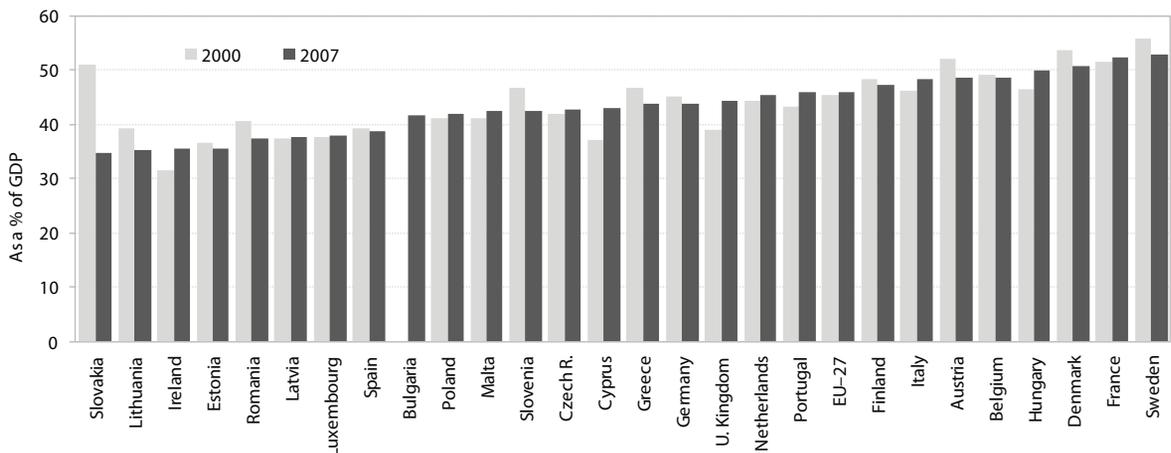
² For EU countries, latest available data is for 2007.

Table: **Breakdown of general government expenditure as a % of GDP in the period 2000–2008**

	2000	2005	2006	2007	2008
Total general government expenditure	46.7	45.3	44.6	42.4	43.6
Intermediate consumption	6.6	6.2	6.2	5.9	6.1
Compensation of employees	11.3	11.5	11.2	10.6	10.8
Other taxes on production	0.5	0.5	0.4	0.3	0.2
Subsidies	1.9	1.6	1.6	1.6	1.6
Property income, payable	2.4	1.6	1.4	1.3	1.2
Social benefits in cash and in kind	18.0	17.7	17.3	16.3	16.6
Other current transfers	1.3	2.1	2.0	1.7	2.0
Capital transfers	1.6	1.0	0.8	0.9	1.0
Gross capital formation and acquisitions less disposals of nonproduced, non-financial assets	3.2	3.1	3.5	3.8	4.2
Total general government revenue	43.0	43.8	43.3	42.9	42.7

Source: Main Aggregates of the General Government Sector, Slovenia 2005–2008 (SORS), 2009 (for the period 2005–2008); Non-financial sector: 5 13 general government, calculations by IMAD (for 2000).

Figure: **General government expenditure as a % of GDP in the EU Member States, 2000 and 2007**



Source: Eurostat Portal Page – Government Finance Statistics, 2009.

General government expenditure by function (COFOG)

Expenditure on economic affairs,¹ the first priority of Slovenia's Development Strategy (SDS), which also supports drawing EU funds to the greatest extent possible, was relatively low (2007: 4% of GDP) and is not rising. After a dramatic fall in expenditure in the period 2000–2005, largely a consequence of the transfer of a part of motorway construction expenditure to DARS borrowing with a state guarantee, the expenditure on economic affairs did not change in the period 2005–2007. In Slovenia, this expenditure is somehow at the level of the EU average, but there are wide disparities among Member States (France and United Kingdom: 2.9%; Czech Republic, 6.9% of GDP).

Expenditure on education, which supports the second development priority of SDS,² is the second highest category of expenditure (5.8% of GDP), but it slumped in 2007 compared to 2006. Up to 2006, expenditure on education had ranged from 6.3% to 6.4% of GDP, only to drop significantly in 2007. It is, nevertheless, still higher than the EU-25 and EU-15 averages (2006: 5.2% GDP) but much below the expenditure of Cyprus, Denmark, Portugal and Sweden, which earmark over 7% of GDP for education.

Expenditure on general public services, defence and public order and safety, which supports the third development priority of SDS, accounted for 9.1% of GDP in 2007. It has been slowly declining, but differently for each category. Expenditure on general public services, which is the highest, was down by 0.6 p.p. in the period 2000–2006 thanks to slower growth in wages, but again rose to the average EU-25 and EU-15 levels (2006: 6.2% of GDP) in 2007. This expenditure varies considerably across the Member States: in 2006 it ranged from 2.6% of GDP (Estonia) to 9.9% of GDP (Cyprus). The expenditure on defence was gradually rising in the period 2000–2006, only to drop to the 2006 EU-25 average in 2007. Expenditure on public order and safety ranged from 1.6 to 1.7% of GDP throughout the period and was only slightly below the EU-25 average.

Expenditure on health and social protection, which supports the fourth development priority of SDS, is the

highest (2007: 21.4% of GDP), but has been declining rapidly since 2005. Expenditure on social protection fell by 1.8 p.p. from 2005 to 2007. The largest drop was posted in 2007, as a result of the changed system of adjusting social transfers. Expenditure on health had already been gradually decreasing since 2001, and dropped by 0.5 p.p. in the period 2000–2007. Expenditure on social protection and health in Slovenia is lower than the EU-25 and EU-15 averages.

Expenditure on environmental protection, housing and community amenities, recreation, culture and religion, which covers the fifth development priority of SDS, ranged from 2% (2007) to 2.2% of GDP (2006) in the period 2000–2007. Expenditure on environmental protection, housing and community amenities averaged 1% of GDP, which was well below the EU-25 level (2006: 1.7% of GDP). Expenditure on recreation, culture and religion stood at around 1.1% of GDP, i.e. at the EU-25 average.

¹ Economic affairs also cover expenditure related to labour affairs, which falls within the fourth development priority, but the data at the first level do not yet allow separate processing.

² The second development priority is also supported by expenditure on research and development, which is recorded at the second level of COFOG. In Slovenia, only data for three divisions (health, education and social protection) are available at the second level; research and development expenditures recorded in these three divisions are therefore very low.

Table: **General government expenditure by function in Slovenia, 2000–2007, as a % of GDP**

	2000	2005	2006	2007
Total general government expenditure	46.7	45.3	44.5	42.4
General public services	6.7	6.4	6.1	6.2
Defence	1.1	1.3	1.5	1.3
Public order and safety	1.7	1.6	1.7	1.6
Economic affairs	5.2	4.0	3.9	4.0
Environmental protection	0.4	0.5	0.4	0.4
Housing and community amenities	0.6	0.5	0.6	0.5
Health	6.4	6.1	6.0	5.9
Recreation, culture and religion	1.1	1.1	1.2	1.1
Education	6.3	6.4	6.3	5.8
Social protection	17.3	17.3	16.9	15.5

Source: General government expenditure by function, Slovenia, 2000–2007 (SORS), 2009.

 Table: **General government expenditure by function in the EU Member States,¹ in 2006, as a % of GDP**

General government	Total	General public services	Defence	Public order and safety	Economic affairs	Environmental protection	Housing and community amenities	Health	Recreation, culture and religion	Education	Social protection
EU-25²	46.6	6.2	1.5	1.8	4.0	0.7	1.0	6.6	1.1	5.2	18.4
EU-15	46.7	6.2	1.6	1.8	3.9	0.7	1.0	6.7	1.1	5.2	18.6
Austria	49.2	6.7	0.9	1.5	4.6	0.4	0.6	7.2	1.0	5.9	20.5
Belgium	48.4	8.4	1.0	1.7	5.1	0.6	0.4	6.9	1.3	5.8	17.2
Cyprus	43.6	9.9	2.3	2.2	4.4	0.3	2.5	3.1	1.2	7.2	10.4
Czech Rep.	43.6	4.9	1.2	2.1	6.9	1.1	1.2	7.2	1.3	4.9	12.7
Denmark	51.6	6.1	1.6	1.0	3.5	0.5	0.5	7.1	1.6	7.7	22.0
Estonia	33.0	2.6	1.4	2.1	4.2	0.7	0.0	4.0	2.4	6.0	9.5
Finland	48.9	6.5	1.5	1.5	4.5	0.3	0.3	6.8	1.1	5.8	20.4
France	52.7	6.9	1.8	1.3	2.9	0.8	1.9	7.2	1.5	6.0	22.3
Greece	42.3	8.1	2.3	1.1	4.5	0.6	0.4	4.7	0.3	2.3	17.9
Ireland	34.2	3.6	0.5	1.4	4.5	0.6	1.3	7.8	0.6	4.2	9.7
Italy	49.9	8.7	1.4	1.9	5.9	0.8	0.7	7.0	0.8	4.5	18.2
Latvia	37.9	7.6	1.6	2.5	4.1	1.1	0.8	3.9	1.0	5.5	9.8
Lithuania	34.0	4.2	1.6	1.8	4.0	0.8	0.4	4.7	1.0	5.5	10.0
Luxembourg	38.6	4.0	0.2	0.9	4.5	1.0	0.6	4.6	1.7	4.5	16.4
Hungary	51.9	9.6	1.4	2.2	6.3	0.7	1.1	5.5	1.7	5.8	17.7
Malta	43.7	6.7	0.8	1.5	5.7	1.7	0.8	6.4	0.6	5.5	14.0
Germany	45.3	5.6	1.0	1.6	3.3	0.6	0.9	6.3	0.7	4.0	21.4
Netherlands	46.1	7.3	1.5	1.8	4.7	0.8	1.0	5.9	1.4	5.1	16.5
Poland	43.8	5.9	1.2	1.8	4.4	0.6	1.2	4.7	1.1	6.0	16.9
Portugal	46.3	6.9	1.3	1.9	3.8	0.6	0.6	7.2	1.0	7.1	16.0
Slovakia ²	37.2	5.0	1.8	2.1	4.1	0.7	0.9	5.3	0.9	4.1	12.2
Slovenia	44.5	6.1	1.5	1.7	3.9	0.4	0.6	6.0	1.2	6.3	16.9
Spain	38.6	4.6	1.1	1.8	5.0	0.9	0.9	5.6	1.5	4.3	12.8
Sweden	54.3	7.7	1.7	1.3	4.8	0.4	0.7	6.8	1.1	7.1	22.7
United Kingdom	43.8	4.3	2.6	2.5	2.9	0.9	1.0	7.1	1.0	6.1	15.4

Source: Eurostat Portal page – General government expenditure function – COFOG, 2009, General government expenditure by function, Slovenia, 2000–2007 (SORS), 2009.

 Note: ¹ for EU-27, Bulgaria and Romania, no data are available; ² for EU-25 and Slovakia – Eurostat estimates.

Economic structure of taxes and contributions

The overall burden of taxes and contributions measured as a % of gross domestic product in Slovenia eased off in 2007. In 2006,¹ the year for which the latest internationally comparable data are available, the overall tax burden stood at 39.1% of GDP, which was slightly below the EU average.² Slovenia was ranked in the upper half of countries in terms of tax burden. Thanks to tax reform, the overall burden of taxes and contributions in Slovenia was down by 0.4 p.p. of GDP in 2007.

In the period 2000–2006, the burden of taxes and contributions rose in Slovenia, whereas in the European Union it decreased. In 2006, the overall burden in Slovenia rose by 1.1 p.p. of GDP compared to 2000 (only the tax burden on capital, which was originally rather low, rose since 2000, while the burden on labour and consumption dropped), whereas the EU average dropped by 0.8 p.p. Moreover, the burden of taxes and contributions in Slovenia was rising up to 2004, when this trend reversed. The EU recorded opposite movements, with the burden rising in the last two years.

Structural analysis of tax systems³ revealed that in 2006, Slovenia deviated from the EU average in particular by a considerably higher tax burden on labour and by a lower burden on capital. The share of taxes on consumption in total taxes and contributions in Slovenia (34.3%) was similar to the EU average, whereas the share of taxes on labour was considerably above the EU average (Slovenia: 52.9%; EU: 45.5%). The share of taxes on capital was low; in 2006 it rose slightly as a consequence of rising corporate income tax, but still accounted for a mere 12.8% (EU: 20.8%). Tax reforms in 2007, in particular that of personal income and corporate income taxes as well as changes in excise duties, resulted in a higher share of taxes on capital and consumption and a lower share of taxes on labour, which have been down as a result of the gradual phasing out of the payroll tax.

Calculations and comparisons of implicit tax rates⁴ also confirm that the tax burden on labour was above average in Slovenia in 2006. The calculated implicit tax rate on consumption for Slovenia stood at 24.2%, whereas the EU average was 22.1%; only eight Member States reported higher rates, topped by all three Nordic states. After 2003, this rate dropped in Slovenia, while the average for European countries rose. The calculated implicit tax rate on labour in Slovenia totalled 37.6% in 2006 and was higher than the EU average (34.8%) on account of relatively high social security contributions. Ten Member States reported higher rates than Slovenia. In the 2000–2006 period, this rate was quite stable in Slovenia, while the average rate for European countries was decreasing.

¹ Data for 2006 are the latest available data for the EU.

² GDP-weighted average.

³ The tax classification is based on the classification of taxes according to ESA-95 and common rules for classification. Taxes on consumption are defined as taxes on transactions between consumers and producers and as taxes on final consumption of goods. Taxes on labour are directly linked to wages and paid by employees or employers. Taxes on capital refer to taxes on capital, corporate income, income from household capital (annuities, dividends, interests, other income from property), capital gains, on property, etc.

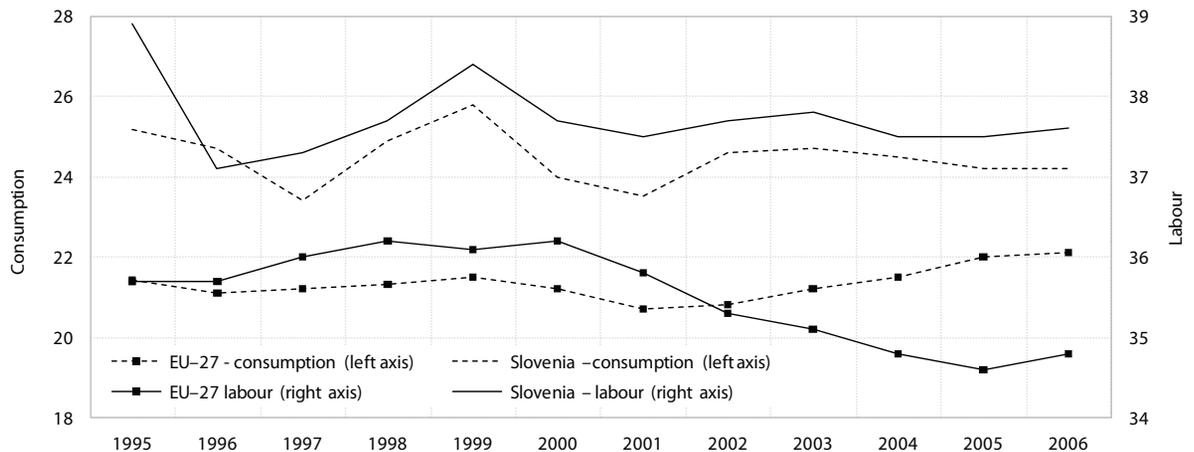
⁴ The implicit tax rate on consumption is defined as the ratio between taxes on consumption and final household consumption in a country's territory in compliance with the national accounts methodology, while the implicit tax rate on labour is defined as the ratio between taxes on labour and the compensation of employees increased by payroll tax, in compliance with the national accounts methodology

Table: **Economic structure of taxes and social security contributions, 2000 and 2006, as a % of GDP**

	Total	Total	Taxes on consumption		Taxes on labour		Taxes on capital	
	2000	2006	2000	2006	2000	2006	2000	2006
EU-27	40.7	39.9	11.4	11.1	18.2	17.5	9.0	9.4
Austria	42.8	41.8	12.1	11.1	23.7	23.3	6.9	6.8
Belgium	45.2	44.6	11.4	11.3	24.3	23.1	9.5	10.2
Bulgaria	32.6	34.4	14.4	18.9	13.5	10	5.3	6.3
Cyprus	30.0	36.6	10.6	15.4	9.8	11.1	9.6	10.0
Czech Rep.	33.8	36.2	10.6	10.7	17.1	17.6	6.2	8.0
Denmark	49.4	49.1	15.7	16.2	26.6	24.7	7.2	8.4
Estonia	34.6	31.4	11.8	13.1	17.4	15.4	2.1	2.5
Finland	47.2	43.5	13.6	13.5	23.7	22.8	9.9	7.2
France	44.1	44.4	11.6	11.2	23.2	23.2	9.6	10.0
Greece	34.6	31.4	12.4	11.3	12.4	12.9	9.8	7.2
Ireland	31.7	32.6	12.2	11.6	11.5	10.5	8.0	10.4
Italy	41.8	42.3	10.9	10.3	19.7	20.6	11.1	11.4
Latvia	29.5	30.1	11.3	12.6	15.3	14.5	2.9	3.0
Lithuania	30.2	29.7	11.8	11.0	16.3	14.8	2.3	4.0
Luxembourg	39.1	35.6	10.8	9.8	15.3	14.7	13.1	10.9
Hungary	38.5	37.2	15.3	13.9	19.1	18.6	4.1	4.7
Malta	28.2	33.8	12.1	14.1	9.7	10.3	6.3	9.4
Germany	41.9	39.3	10.5	10.1	24.3	22.3	7.0	6.8
Netherlands	39.9	39.5	11.7	12.3	20.3	19.1	8.0	8.1
Poland	32.6	33.8	11.3	12.5	14.2	13.0	7.2	8.7
Portugal	34.3	35.9	12.4	13.8	14.1	15.1	7.8	7.0
Romania	N/A	28.6	N/A	12.0	N/A	N/A	N/A	N/A
Slovakia	34.0	29.3	12.0	11.3	15.1	11.5	6.9	6.4
Slovenia	38.0	39.1	14.1	13.4	21.0	20.7	3.0	5.0
Spain	33.9	36.5	9.9	9.8	15.9	16.6	8.7	10.7
Sweden	51.8	48.9	12.4	12.5	31.0	29.3	8.4	7.1
United Kingdom	37.4	37.4	12.0	11.1	14.2	14.3	11.1	11.9

Source: Taxation trends in the European Union (Eurostat, European Commission), 2008.

Figure: **Implicit tax rates on consumption and labour (as a % of the tax base), 1995–2006**



Source: Taxation trends in the European Union (Eurostat, European Commission), 2008.

Subsidies

The share of subsidies relative to GDP has not changed, despite a considerable nominal increase in subsidies recorded since 2005. In 2007, general government subsidies rose in nominal terms by 11.7%, and in the period since 2000 by as much as 60.5%. Given high growth of gross domestic product in this period, their relative share to GDP has remained at the level of 1.6% of GDP since 2005, and was even 0.3 p.p. lower compared to 2000. Distribution of subsidies by function shows that around 82% of total subsidies is used for economic affairs (see Table 1). Out of the total general government expenditure earmarked for economic affairs, the share of subsidies slightly increased in the period 2000–2007, from less than 30% in 2000 to around 33% in 2007.

Based on the data of the programme classification of the state budget, it is estimated that almost 60% of total subsidies is earmarked for agriculture. In the economic affairs category, Slovenia still lacks data at the second level of the functional classification. Calculations¹ on the basis of the programme classification of the state budget show that in 2007 around 59% of total subsidies were used for agriculture, forestry and fisheries. Their share in the structure of subsidies has surged since 2004, when it stood at 40%. Consequently, the shares of other subsidies decreased. Significant also were subsidies for transport (11%), labour market and employment (8%) and subsidies for production and distribution of energy resources (7%). Subsidies for science and technological development have been on the rise, but their share remained relatively small (6%) compared to other subsidy groups.

In Slovenia the share of subsidies relative to GDP is considerably higher than the EU average. In Slovenia, subsidies stood at 1.6% of GDP in 2007, the same level as in 2005. As for the EU average, subsidies relative to GDP reached 1.1% of GDP in 2007 (in the euro area the average was 1.2% of GDP) and remained unchanged since 2005. In 2007, only five Member States reported higher subsidy levels than Slovenia, topped by two developed members (Austria, 3.3% of GDP, and Denmark, 2.3% of GDP).

Table 1: **Subsidies by functional classification in Slovenia in the period 2000–2007, in EUR m**

	2000	2005	2006	2007
TOTAL	350	452	503	562
General public services	17	2	2	3
Defence	0	1	4	8
Public order and safety	0	0	0	0
Economic affairs	285	350	414	465
Environmental protection	30	45	39	37
Housing and community amenities	5	8	10	14
Health	0	0	0	0
Recreation, culture and religion	2	6	7	8
Education	1	1	2	1
Social protection	9	40	25	26

Source: General government expenditure by function and type of expenditure (SORS), 2008.

Note: There is a terminological discrepancy between two classifications by purpose (see previous indicator: General government expenditure by function (COFOG)).

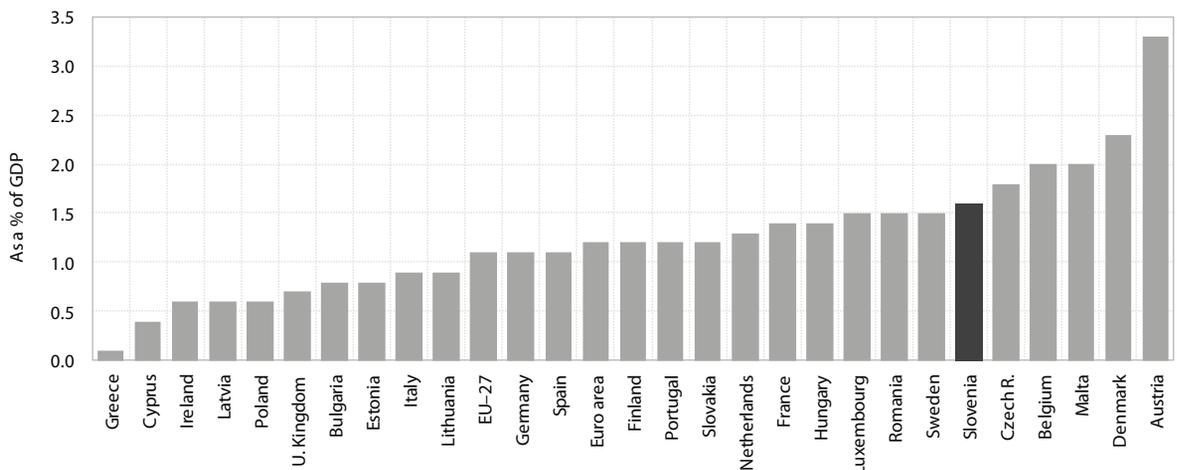
¹ The calculation was based on data from the programme classification of the annual financial statement of the state budget for the period 2000–2007. Slovenia's budget is drawn up according to programme classification, which is not internationally comparable with the COFOG classification, and according to the International Monetary Fund methodology of 1986.

Table 2: **Subsidies paid by general government in the EU Member States in the period 1995–2007, as a % of GDP**

	1995	2000	2005	2006	2007
EU-27	N/A	1.3	1.1	1.1	1.1
Euro area	N/A	1.5	1.2	1.2	1.2
Austria	2.8	3.2	3.4	3.4	3.3
Belgium	1.3	1.3	1.6	1.8	2.0
Bulgaria	1.2	1.9	0.9	0.8	0.8
Cyprus	N/A	1.4	0.7	0.5	0.4
Czech Rep.	2.9	2.8	1.8	1.9	1.8
Denmark	2.7	2.4	2.3	2.2	2.3
Estonia	0.8	1.1	0.9	0.9	0.8
Finland	2.7	1.5	1.3	1.3	1.2
France	1.6	1.5	1.4	1.4	1.4
Greece	0.4	0.1	0.1	0.1	0.1
Ireland	1.0	0.7	0.5	0.5	0.6
Italy	1.4	1.2	0.9	0.9	0.9
Latvia	1.2	1.0	0.5	0.6	0.6
Lithuania	1.1	0.8	0.7	0.7	0.9
Luxembourg	1.6	1.5	1.6	1.5	1.5
Hungary	N/A	1.6	1.4	1.4	1.4
Malta	1.7	1.4	2.1	1.9	2.0
Germany	2.1	1.7	1.2	1.2	1.1
Netherlands	1.0	1.5	1.2	1.1	1.3
Poland	0.9	0.5	0.6	0.6	0.6
Portugal	1.3	1.2	1.6	1.4	1.2
Romania	N/A	N/A	1.5	1.8	1.5
Slovakia	4.7	2.5	1.3	1.3	1.2
Slovenia	2.2	1.9	1.6	1.6	1.6
Spain	1.0	1.1	1.0	1.0	1.1
Sweden	3.6	1.5	1.5	1.6	1.5
United Kingdom	0.6	0.4	0.6	0.7	0.7

Source: Eurostat Portal Page – Government Finance Statistics, 2009.
Note: N/A – not available.

Figure: **Subsidies in 2007, as a % of GDP**



Source: Eurostat Portal Page – Government Finance Statistics, 2009.

State Aid

In 2007, the share of state aid in GDP dropped further.

Compared to 2005, state aid remained almost unchanged in nominal terms, while compared to 2006, it was down 3.2%. With the rapid growth in gross domestic product, its drop in relative terms was even more pronounced (2006: 0.91%; 2007: 0.80% of GDP). A comparison with 2000 is not realistic, as total state aid was taken into account in 2000, whereas since Slovenia's accession to the EU, almost half of state aid to agriculture, i.e. measures under the Common Agricultural Policy (CAP), has no longer been considered state aid.

In 2007, horizontal types of state aid decreased and their structure changed.

Although a drop in state aid is in line with the Lisbon Strategy goals, its structure still fails to meet these goals. Compared to 2005 and 2006, the year 2007 saw a rise in aid for agriculture as well as aid for specific sectors (transport, coal industry, rescue and restructuring), i.e. sectors which should reduce aid (2006: 0.48%; 2007: 0.49% of GDP). Aid for horizontal goals, which is much more acceptable, dropped again strongly in 2007 after a rise in 2006 (2006: 0.42%; 2007: 0.31% of GDP). Among types of horizontal aid, the most notable drop was posted for the most recommendable type of aid – aid for small and medium-sized companies. Moreover, aid for regional development and employment also decreased, and aid for energy saving, which had been relatively low in the first place, more than halved. A favourable development was the increase in aid earmarked for research and development and training and a significant rise in the relatively low aid for environmental protection. Total volume of aid for research and development, training, and small and medium-sized enterprises – the key factors of development – almost halved (down by 44.3%) in 2007 compared to 2006, and the volume of other types of horizontal aid decreased by 3.4%.

State aid (excluding railway transport)¹ in Slovenia exceeded the average level of state aid in the EU in 2006.

State aid (excluding railway transport) in Slovenia reached 0.8% of GDP and thus exceeded the average level in the EU-25 and was slightly below the average level in the new Member States. In nine Member States the level of state aid was higher than in Slovenia. Excluding total transport, agriculture and fisheries, the differences in the levels of state aid between Slovenia and the EU-25 were smaller (Slovenia: 0.5%; EU-25 0.4% of GDP).² The level of aid was higher in five Member States. The share of horizontal state aid was higher in Slovenia than on average in the EU (Slovenia: 88%, EU-25: 85%), indicating that in 2006 Slovenia pursued the goals of the Lisbon

Strategy more consistently in this area and thereby contributed to strengthening the EU internal market. In 2007, however, horizontal state aid dropped.

Table 1: Indicators of state aid in Slovenia, 2000–2007

	2000	2005	2006	2007
State aid in EUR m, current prices	407.2	267.15	276.26	267.37
Share of state aid in GDP (%)	2.07	0.95	0.91	0.80
Share of state aid in government expenditure (%)	4.68	2.18	2.09	1.85
State aid per employee (EUR)	530.11	328.37	331.64	309.32
State aid per resident (in 000 SIT)	N/A	133.35	137.42	131.97

Sources: for 2000: Third Survey of State Aid in Slovenia, 2001; for the period 2005–2007: Tenth Survey of State Aid in Slovenia (Ministry of Finance), 2008.
Notes: for tolar/EUR conversion for 2000, the average exchange rate of the Bank of Slovenia was used (1 EUR = 205.0316 tolar); N/A – not available.

¹ European Commission publishes only data on state aid for Member States: (1) excluding railway transport and (2) excluding agriculture, fisheries and transport. Latest available data are for 2006.

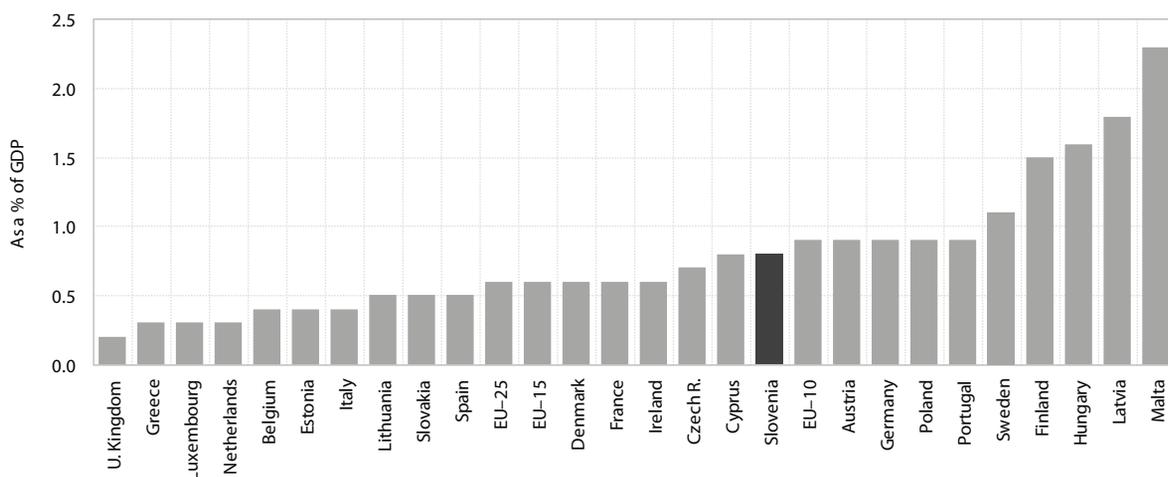
² State Aid Scoreboard, 2008.

Table 2: State aid (excluding railway transport), 1995–2006, as a % of GDP

	1995	2000	2005	2006
EU-25	0.9	0.6	0.6	0.6
EU-15	1.0	0.6	0.6	0.6
EU-10	N/A	1.2	1.0	0.9
Austria	1.1	0.7	0.7	0.9
Belgium	0.6	0.5	0.4	0.4
Cyprus	N/A	2.6	1.5	0.8
Czech Rep.	N/A	2.4	0.6	0.7
Denmark	0.6	1.0	0.6	0.6
Estonia	N/A	0.1	0.4	0.4
Finland	2.8	1.4	1.6	1.5
France	0.8	0.6	0.6	0.6
Greece	1.4	0.6	0.2	0.3
Ireland	0.7	1.1	0.6	0.6
Italy	1.2	0.5	0.4	0.4
Latvia	N/A	0.6	2.2	1.8
Lithuania	N/A	0.3	0.5	0.5
Luxembourg	0.5	0.3	0.3	0.3
Hungary	N/A	1.1	2.0	1.6
Malta	N/A	3.2	3.0	2.3
Germany	1.4	0.8	0.9	0.9
Netherlands	0.4	0.5	0.4	0.3
Poland	N/A	1.0	0.8	0.9
Portugal	0.9	0.8	1.0	0.9
Slovakia	N/A	0.6	0.7	0.5
Slovenia	N/A	0.9	0.8	0.8
Spain	1.0	0.9	0.5	0.5
Sweden	0.4	0.4	1.1	1.1
United Kingdom	0.4	0.2	0.3	0.2

Source: State Aid Scoreboard, spring 2008 update (European Commission).
 Note: data for EU-27, Bulgaria and Romania are not available.

Figure: State aid (excluding railway transport) in 2006, as a % of GDP



Source: State Aid Scoreboard, spring 2008 update (European Commission).

Aggregate competitiveness indices

According to the IMD World Competitiveness Yearbook,¹ published in spring 2008, Slovenia improved its ranking in terms of competitiveness by eight countries, whereas the WEF report, published in autumn 2008, revealed a drop by three countries despite the improvement of the competitiveness index value. In the WEF report, Slovenia slipped by three countries and was ranked 42nd out of 134 countries observed, although its value of the global competitiveness index improved (by 0.02 points, to 4.5). According to the IMD estimate, Slovenia improved its world competitiveness index value (by 2.73 points; to 57.90) and outperformed eight countries, ranking 32nd out of 55 countries. Slovenia's ranking according to WEF (2008–2009) thus differs significantly from that of IMD 2008 published in spring 2008. These major discrepancies in the assessment and the direction of changes in Slovenia's aggregate competitiveness have also been observed in the past (see figure). They stem from different times of conducting the surveys among company managers (spring/autumn) as well as different methodological approaches² of index calculation (different theoretical definitions of competitiveness and aspects of competitiveness – dynamic, static). The results of both systems, nevertheless, reveal positive moves in Slovenia's competitiveness in the recent period.

The key factors of change in Slovenia in 2008 were: business efficiency according to the IMD 2008 (improvement), and innovation and sophistication factors according to the WEF 2008–2009 (deterioration). Slovenia considerably increased the value of the business efficiency index according to the IMD and improved its ranking within the EU, whereas both EU-12 and EU-15 averages recorded deterioration in terms of this indicator. In terms of innovation and sophistication factors according to WEF, the index value for Slovenia as well as Slovenia's ranking dropped. As both areas are at least partly related, they point to slightly inconsistent results of the two methodologies.

In terms of its competitiveness according to WEF and IMD reports, Slovenia is ranked higher than the average of the new Member States, but it is only slowly

catching up with the average of the old Member States.

According to WEF, Slovenia retained its ranking, i.e. 16th out of all EU Member States, despite deterioration in its overall ranking (out of 134 countries observed). The improvement of the global competitiveness index according to WEF was the same in Slovenia as on average in the new Member States (EU-12), but its value still exceeded the average of the EU-12. Slovenia has nevertheless only been slowly catching up with the threshold of 5 index points – the average value of the global competitiveness index of the EU-15. In the IMD report, Slovenia improved its ranking by 5 (from 20th to 15th) in the EU-24 group,³ thus exceeding for the first time the average of nine new Member States that were included in the analysis, but still lagging considerably behind the average of the EU-15.

¹ The aggregate competitiveness indices are synthesised indicators of development, its interdisciplinary factors and stakeholders, complementary to GDP and other synthesised indicators of economic, social and sustainable development (Chiaiutta, 2007).

² The aggregate indices are not entirely comparable between two (normalised) years, and are above all not comparable between systems (Development Report 2007). To read more on the methodological differences between IMD and WEF, see Chiaiutta, 2007.

³ IMD does not publish data for Cyprus, Latvia and Malta.

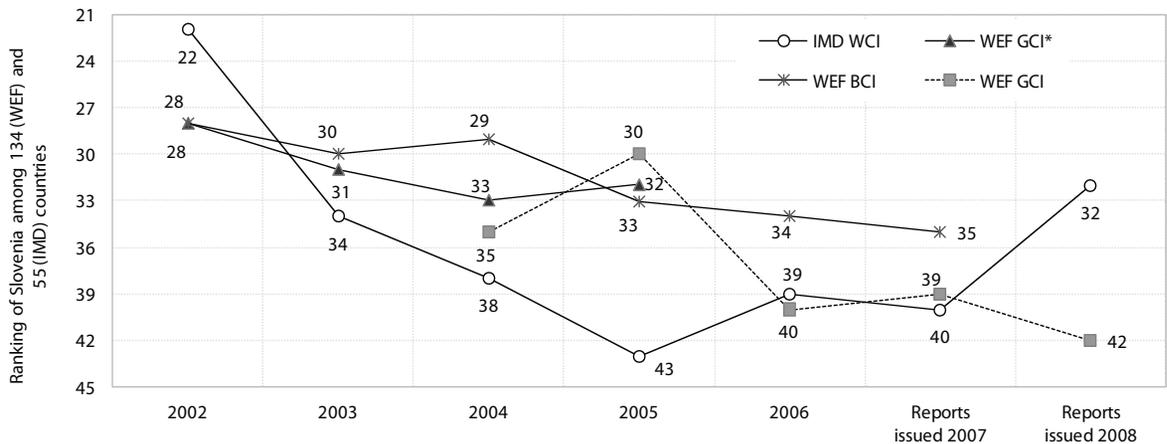
Table: **Competitiveness indices for Slovenia according to WEF and IMD**

	2007 ¹				2008 ¹			
	Value ⁴			Rank	Value ⁴			Rank
	SI	EU-15	EU-12 (9) ³	In EU-27 (24) ³	SI	EU-15	EU-12 (9) ³	In EU-27 (24) ³
WEF Global competitiveness report								
Global competitiveness index - GCI ¹	4.48	5.06	4.34	16	4.50	5.06	4.36	16
Basic requirements for competitiveness	5.10	5.53	4.73	16	5.13	5.56	4.76	16
Efficiency enhancers	4.40	4.97	4.28	17	4.45	4.98	4.40	17
Innovation and sophistication factors ²	4.20	4.89	3.82	13	4.15	4.85	3.81	15
IMD World competitiveness report								
World competitiveness index - WCI ¹	55.2	73.8	56.0	20	57.90	69.9	56.1	15
Economic performance	51.4	54.5	47.7	11	44.66	47.3	43.1	12
Government efficiency	34.4	57.1	40.5	21	29.62	46.2	36	18
Business efficiency	28.7	58.4	32.6	20	39.3	49.2	31.1	13
Infrastructure	43.7	62.8	40.8	18	39.82	58.4	35.8	16

Sources: The Global Competitiveness Report WEF 2007–2008 in 2008–2009 (WEF), 2007–2008, 2008–2009); IMD World Competitiveness Yearbook 2008 (IMD), 2008; calculations IMAD.

Notes: ¹ In its latest report, WEF 2007–2009 rates 134 countries. Due to the methodology used, index values are not fully comparable across the years and are primarily intended to compare the relative differences between factors and countries in a given year. IMD 2008 for 2007 rates 55 countries. The EU-27 countries and the USA were included as reference countries. ² Innovation and sophistication of production processes. ³ IMD does not publish data for Cyprus, Latvia and Malta. ⁴ Values of the WEF indices are between 1 and 7. Values of the IMD indices are between 1 and 100. Bold print – a rise in competitiveness by at least three places; shaded cells – a drop by at least three places.

Figure: **Ranks of aggregate competitiveness indices of Slovenia among 134 (WEF) and 55 (IMD) countries**



Sources: WEF and IMD; calculations by IMAD.

Notes: WEF: IGC = Global Competitiveness Index; BCI = Business Competitiveness Index (BCI); IMD: WCI = World Competitiveness Index (WCI); * growth competitiveness index, which was monitored until 2005.

THE FOURTH PRIORITY:

A modern welfare state

- Employment rate
- Unemployment rate
- Long-term unemployment rate
- Temporary employment
- Part-time employment
- Social protection expenditure
- Average exit age from labour force
- Expenditure on health and long-term care
- Human development index
- Minimum wage
- At-risk-of-poverty rate
- Healthcare resources
- Life expectancy and infant mortality
- Participation in education

Employment rate

The employment rate,¹ which is above the EU average, continued to climb in 2008. It stood at 68.8%² (up 1 p.p. over 2007), but in the third quarter it reached 71.1% due to seasonal factors. Until 2003, the employment rate had hovered around 63%, which was slightly below the EU average, but in 2004 it recorded a significant jump and even exceeded the average of the old EU Member States (EU-15). The employment rate of women was particularly high and significantly above the European average, while the employment rate of men was well below that in the EU. The employment rate of women had been around 58% until 2003, but it has been increasing rapidly since 2004. In 2008, it rose to 64.5%, an increase of 1.9 p.p. over 2007. The employment rate of men, which had fluctuated around 67% until 2003, was at 72.9% in 2008, 0.2 p.p. higher than in the year before. In the third quarter of 2008, both rates reached their highest values since measurements began, 66.7% and 75.2%, respectively.

As in previous years, in 2008 the employment rate rose sharply in particular due to more rapid growth in the number of employees, especially foreigners. The average number of formally employed persons³ increased by 25,259, or 3.0%, with 80% of the increase a result of more widespread hiring of foreigners. The number of employees (people in an employment relationship) was up 3.1%, and the number of self-employed persons, including independent farmers, rose by 1.6%. Having soared upon Slovenia's accession to the EU in 2004, the extent of various forms of informal employment rose at a more moderate pace in the following years. In 2008, the number of the formally employed increased most notably in construction and business services for the fourth consecutive year. The number of work permits for foreigners also rose for the fourth year in a row. A total of 82,467 work permits for foreigners were issued in 2008, which is an increase of 40.5% over the previous year. By December 2008, the number of valid work permits had risen to 90,696, up 37.3% over December 2007. Almost half of all foreigners work in construction, while the others mainly work in manufacturing, transport, trade, and hotels and restaurants.

The employment rates of the elderly and young people have been rising, but the employment rate of the elderly is still problematically low, indeed one of the lowest in the EU, whereas that of young people exceeded the EU average in 2007. In the 55–64 age group the employment rate edged only 0.1 p.p. higher in 2008, to 33.5%, which is well below the EU average (44.7% in 2007) as well as the Lisbon target (50% by 2010). The employment rate among young people (15–24 years), which had been, at 30%, well below the EU average in the period 2001–2003, has also been on the rise. In 2007, it exceeded the EU-27 average (37.4%) by 0.2 p.p. and rose to 38.4% by 2008.

¹ According to the Eurostat methodology, the employment rate is expressed as the percentage of employed persons aged 15–64 of the total population of the same age. It is calculated using Labour Force Survey data, which also include among the employed population informally employed people (working either as unpaid family workers, on a contractual basis, or in the black economy).

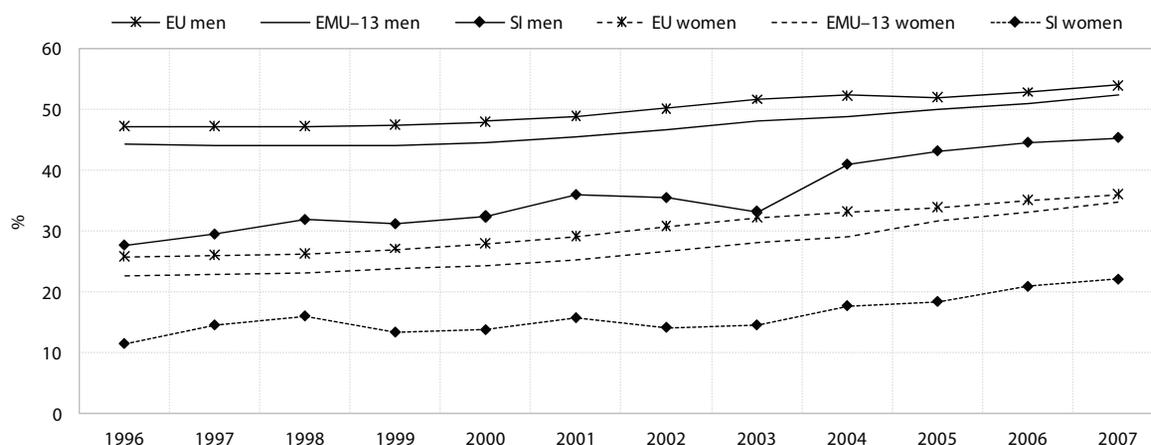
² All employment rates for 2008 are estimated by IMAD based on quarterly data from SORS.

³ Persons in formal employment are considered to be persons who are in an employment relationship and self-employed persons according to the statistical register of employment and SORS's monthly estimates on the number of farmers.

Table: **Employment rates (15–64 age group) according to the Labour Force Survey in Slovenia and the EU in 1995–2007, in %**

	1995	2000	2005	2006	2007
EU	60.1	63.4	64.0	64.9	65.4
EMU-13	58.1	61.7	63.8	64.8	65.7
Austria	68.8	68.5	68.6	70.2	71.4
Belgium	56.1	60.5	61.1	61.0	62.0
Bulgaria	N/A	50.4	55.8	58.6	61.7
Cyprus	N/A	65.7	68.5	69.6	71.0
Czech Rep.	N/A	65.0	64.8	65.3	66.1
Denmark	73.4	76.3	75.9	77.4	77.1
Estonia	N/A	60.4	64.4	68.1	69.4
Finland	61.6	67.2	68.4	69.3	70.3
France	59.5	62.1	63.9	63.8	64.6
Greece	54.7	56.5	60.1	61.0	61.4
Ireland	54.4	65.2	67.6	68.6	69.1
Italy	51.0	53.7	57.6	58.4	58.7
Latvia	N/A	57.5	63.3	66.3	68.3
Lithuania	N/A	59.1	62.6	63.6	64.9
Luxembourg	58.7	62.7	63.6	63.6	64.2
Hungary	N/A	56.3	56.9	57.3	57.3
Malta	N/A	54.2	53.9	53.6	54.6
Germany	64.6	65.6	66.0	67.5	69.4
Netherlands	64.7	72.9	73.2	74.3	76.0
Poland	N/A	55.0	52.8	54.5	57.0
Portugal	63.7	68.4	67.5	67.9	67.8
Romania	N/A	63.0	57.6	58.8	58.8
Slovakia	N/A	56.8	57.7	59.4	60.7
Slovenia	N/A	62.8	66.0	66.6	67.8
Spain	46.9	56.3	63.3	64.8	65.6
Sweden	70.9	73.0	72.5	73.1	74.2
United Kingdom	68.5	71.2	71.7	71.6	71.5

Source: Eurostat Portal Page - Population and social conditions – Labour Market, 2008.
 Note: N/A – not available.

 Figure: **Employment rates by gender in the 55–64 age group, EU, EMU-13 and Slovenia, 1996–2007, annual averages**


Source: Eurostat Portal Page - Population and social conditions – Labour Market, 2008.

Unemployment rate

In 2008, the survey and registered unemployment rates in Slovenia continued to decline significantly, and the internationally comparable survey unemployment rate remains below the EU average. In the third quarter of 2008 the survey unemployment rate again reached the lowest level since measurements began (4.1%). In the fourth quarter it climbed to 4.3%, whereas the average annual survey unemployment rate in 2008 was 4.5%,¹ down 0.4 p.p. from 2007. The registered unemployment rate was also dropping until September 2008. By then it had reached the lowest level since 1990, 6.3%, but by the end of the year it rose to 7.0%.² The average annual unemployment rate was 6.7%. Both unemployment rates, which had fluctuated between 7% and 8% (survey) and between 14% and 15% (registered) in the 1995–2000 period, were on a downward trajectory between 2001 and 2008. In 2007, the survey unemployment rate was 2.5 p.p. below the average of the euro area.

The unemployment rates of young people, people with a lower education and women have been dropping, but they still remain above average. In 2007, the survey unemployment rate of young people stood at 10.4%, and that of people with a lower education at 6.7%. However, the survey unemployment rate of young people again edged higher in 2008, to 10.7%. Until 2006, when they declined significantly, both rates followed a very slow downward trend. The survey unemployment rate of women, which had hovered around 7% in the period 2001–2006, dropped to 4.4% by the third quarter of 2008. In the fourth quarter it rose to 4.7% again, bringing the 2008 average to 4.9%.³ The registered unemployment rate of women has also been declining, dropping from an average of 9.5% in 2007 to 8.1% in 2008. The survey unemployment rate among people with a secondary education, which had been fluctuating between 6% and 7% in the period 2000–2006, dropped to 5.1% in 2007. The survey unemployment rate among people with a tertiary education, on the other hand, has been rising: in 2007 it was at 3.3%, 0.3 p.p. higher than in the previous year and up 0.8 p.p. over 2000. The share of the unemployed with a higher education among the registered unemployed remains high, at 7.1%.

The number of the unemployed persons decreased in 2008 mainly due to a smaller number of newly registered first-time job seekers. In 2008, their number was 15.1% lower than in 2007. The figure has been dropping for several years, as the employment rate of young people has been rising at the same time.⁴ It should be noted, however, that the bulk of these jobs are temporary or on fixed-term contracts. Until November

the number of people registered as unemployed because they lost their job was also lower than the year before. However, December's inflow was so high that the total number for 2008 increased 1% year-on-year after three years of decline. On the other hand, outflows from unemployment dropped for the second year in a row. The number of the unemployed who got a job dropped 15.2% compared to 2007. Outflows for administrative reasons were 12.3% lower than in 2007. The average annual number of the unemployed dropped by 8.8% (survey) and 11.4% (registered) in 2008, to 47,000 and 63,200, respectively. The former had dropped from 68,000 to 51,000 between 2000 and 2007, and the latter from 107,000 to 71,000.

¹ Eurostat release of 4 March 2009.

² At the end of 2008, 66,239 people were registered as unemployed.

³ Eurostat release of 4 March 2009.

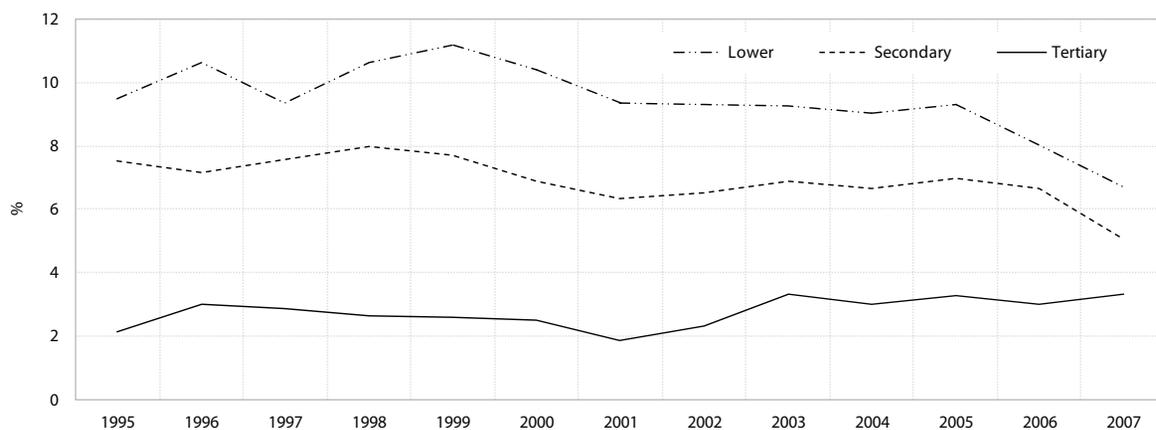
⁴ See the indicator Employment rate.

Table: Survey unemployment rates in Slovenia and the EU member states in 1995–2008 period, %

	1995	2000	2005	2006	2007	2008
EU-27	N/A	8.7	8.9	8.2	7.1	7.0
EMU-13	10.4	8.3	8.9	8.3	7.4	7.5
Austria	3.9	3.6	5.2	4.8	4.4	3.8
Belgium	9.7	6.9	8.5	8.3	7.5	7.1
Bulgaria	N/A	16.4	10.1	9.0	6.9	5.6
Cyprus	N/A	4.9	5.3	4.6	4.0	3.8
Czech Rep.	N/A	8.7	7.9	7.2	5.3	4.4
Denmark	6.7	4.3	4.8	3.9	3.8	3.3
Estonia	N/A	12.8	7.9	5.9	4.7	5.5
Finland	15.4	9.8	8.4	7.7	6.9	6.4
France	11	9.0	9.2	9.2	8.3	7.7
Greece	N/A	11.2	9.9	8.9	8.3	N/A
Ireland	12.3	4.3	4.4	4.5	4.6	6.3
Italy	11.2	10.1	7.7	6.8	6.1	N/A
Latvia	N/A	13.7	8.9	6.8	6.0	7.3
Lithuania	N/A	16.4	8.3	5.6	4.3	5.7
Luxembourg	2.9	2.2	4.6	4.6	4.1	4.4
Hungary	N/A	6.4	7.2	7.5	7.4	7.9
Malta	N/A	6.7	7.2	7.1	6.4	5.8
Germany	8	7.5	10.7	9.8	8.4	7.3
Netherlands	6.6	2.8	4.7	3.9	3.2	2.8
Poland	N/A	16.1	17.8	13.9	9.6	7.1
Portugal	7.2	4.0	7.7	7.8	8.1	7.7
Romania	N/A	7.3	7.2	7.3	6.4	N/A
Slovakia	N/A	18.8	16.3	13.4	11.1	9.6
Slovenia	N/A	6.7	6.5	6.0	4.9	4.5
Spain	18.4	11.1	9.2	8.5	8.3	11.3
Sweden	8.8	5.6	7.4	7.0	6.1	6.2
United Kingdom	8.5	5.4	4.8	5.4	5.3	N/A

Source: Eurostat Portal Page - Population and social conditions – Labour Market, 2008.
 Note: N/A – not available.

Figure: Survey unemployment rates in Slovenia by education, 1995–2007



Source: Labour Market – Active population by Labour force survey results (SORS), 1995–2008.

Long-term unemployment rate

The long-term unemployment rate,¹ an indicator of social cohesion and problems in the labour market, dropped further in 2008. Long-term unemployment typically has an adverse impact on human capital and diminishes the work capabilities of the unemployed and their chances of getting another job. Therefore, the prevention of long-term unemployment is a vital component of labour market policy. In Slovenia, the long-term unemployment rate reached its peak in 2000 (annual average of 4.1% and 4.3% in the second quarter of that year). In the period 2000–2008 it was dropping, touching 1.9% in the second quarter of 2008, which is 0.3 p.p. lower than in the same period of 2007.

Between 2000 and 2008 the long-term unemployment rate of women was falling more slowly than that of men, but in the last year the decline for women was more pronounced. In the period 2000–2008 (data for the second quarter of the year), the long-term unemployment rate of women was down 2 p.p. and of men 2.8 p.p. In the second quarter of 2008 the long-term unemployment rate of women was 2.3% (0.5 p.p. lower than in the second quarter of 2007) and that of men 1.6% (down 0.1 p.p. from the second quarter of 2007).

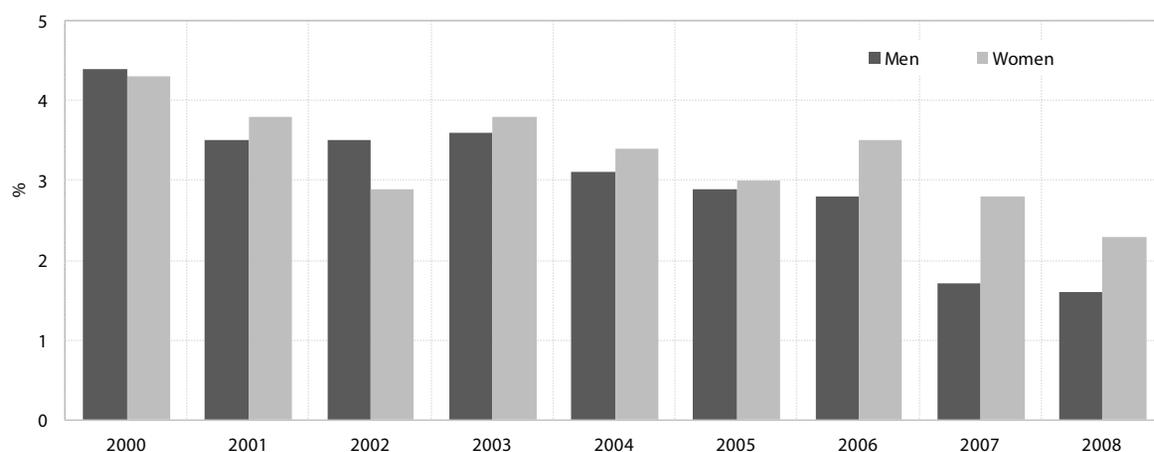
The share of the long-term unemployed has been shrinking, but it is still relatively high. In the second quarter of 2008 the share of the long-term unemployed according to the Labour Force Survey was 45.7% (EU average: 38.7%). Even though both the unemployment rate and the long-term unemployment rate in Slovenia are below the EU average, the above-average share of the long-term unemployed suggests that programmes for the prevention and reduction of long-term unemployment within the framework of active employment policy must be enhanced.

¹ The long-term unemployment rate is the ratio between the number of long-term unemployed (people unemployed for over a year) and the size of the labour force. It is one of the Laeken indicators of social inclusion.

Table: Long-term unemployment rates, 2000–2008, data for the second quarter

	2000	2005	2006	2007	2008
EU-27	4	N/A	3.7	3.1	2.6
EU-25	3.9	N/A	3.7	3	2.6
EU-15	3.4	N/A	3.2	2.8	2.6
Austria	N/A	1.2	1.3	1.2	0.8
Belgium	3.6	4.2	4.6	3.8	3.3
Bulgaria	9.6	6	4.8	3.9	2.9
Cyprus	1.2	1.3	0.9	0.7	0.4
Czech Rep.	4.3	4.1	4	2.9	2.2
Denmark	0.8	1.2	0.8	0.7	0.5
Estonia	6.1	4.3	2.8	2.4	1.4
Finland	2.6	2.2	1.9	1.6	1.1
France	N/A	3.8	3.9	3.3	3
Greece	6.3	5.2	4.9	4.1	3.6
Ireland	1.6	1.5	1.6	1.4	1.6
Italy	6.4	3.9	3.5	2.9	3.2
Latvia	8.2	4.3	2.6	1.7	1.7
Lithuania	8.1	4.6	2.6	1.5	0.8
Luxembourg	0.5	1.2	1.3	1.4	1.4
Hungary	3.1	3.2	3.4	3.5	3.6
Malta	3.9	3.3	2.9	2.3	2.2
Germany	3.8	5.8	5.5	4.7	4
Netherlands	N/A	1.9	1.8	1.3	1
Poland	7.3	10.5	8.1	5.1	2.5
Portugal	1.7	3.6	3.8	3.8	3.6
Romania	3.5	4	4	3.3	2.3
Slovakia	10.4	11.7	10.5	8.4	7.3
Slovenia	4.3	2.9	3.1	2.2	1.9
Spain	4.7	2.3	1.9	1.7	1.8
Sweden	1.4	N/A	1	0.7	0.5
United Kingdom	1.5	1	1.2	1.3	1.3

Source: Eurostat Portal Page – Employment and unemployment – Main indicators, 2009.

 Figure: Long-term unemployment rates in Slovenia by gender, 2000–2008¹


Source: Eurostat Portal Page – Employment and unemployment – Main indicators, 2009.

 Note: ¹ Data refer to the second quarter of the year.

Temporary employment

The prevalence of temporary employment (measured as the share in total employment) is one of the partial indicators of labour market flexibility. The use of such forms of employment enables companies to adjust to changes in the structure and volume of demand. The frequent use of temporary employment is generally driven by rigid dismissal regulations and the seasonal nature of production in certain activities. However, temporary employees are at greater risk of poverty than those with permanent jobs.¹

After growing for several years the share of temporary employment dropped in 2008. The share had been constantly increasing through the 2000–2007 period (data for the second quarter), but dropped to 16.9% in the second quarter of 2008, to the level posted in the second quarter of 2005. Changes to the Employment Relationships Act of November 2007 introduced certain solutions designed to improve flexibility. We assume that the legislative changes, combined with a slowdown in economic growth, may have contributed to a reduction in the share of temporary employment in total employment. The share of temporary employment dropped in the last year, particularly in the 25–49 age group, while in the 15–24 age group it remained high (66.7%) in the second quarter of 2008.

The share of women in temporary employment has typically been higher than the share of men, and the difference in Slovenia is greater than in most other countries. In Slovenia this gap is above the EU average: in the second quarter of 2008, 19.2% of women and 14.9% of men aged between 15 and 64 had temporary jobs, which compares to the EU averages of 15.1% and 13.3%, respectively.

The prevalence of temporary employment is typically higher among young people, and this is especially true for Slovenia. The share of young women in temporary employment is particularly high: in the second quarter of 2008, 76.2% of women in the 15–24 age group had temporary jobs, but the share of men with temporary jobs was 60.1%. The large share of young people in temporary employment is to a large extent attributed to occasional work through student employment brokerage services.² The overall share of temporary employment among young people stood at 66.7% in the second

quarter of 2008, which is on a par with the year before (66.5%). Slovenia has the highest share of young people in temporary jobs in the EU, which indicates strong age segregation of the Slovenian labour market.

¹ In 2006, the at-risk-of-poverty rate for people with temporary employment was 11% and for people with permanent employment 4%.

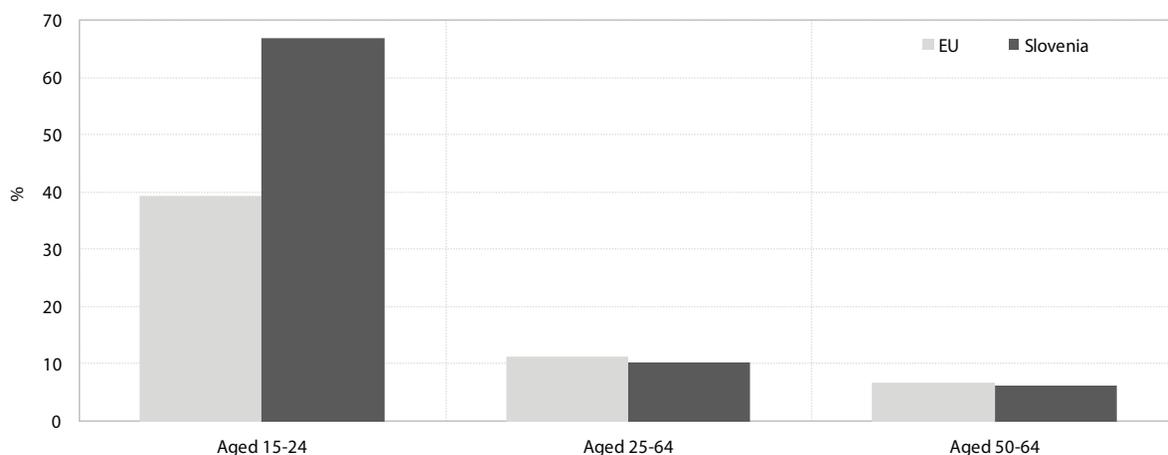
² If work through student employment services is excluded from temporary employment of young people, the share of temporarily employed youths in 2007 drops from 66.5% to around 50%, which is roughly on a par with the euro area average.

Table: Share of temporary employment in EU countries, 2000–2008¹

	2000	2005	2006	2007	2008
EU-27	12.2	13.9	14.3	14.5	14.1
EU-25	12.5	14.4	14.9	15.1	14.7
EU-15	13.6	14.3	14.7	14.8	14.5
Austria	8.6	8.8	8.7	8.8	8.7
Belgium	9.0	9.1	8.8	8.8	7.7
Bulgaria	N/A	6.3	6.2	5.7	5.1
Cyprus	10.7	13.9	13.9	12.9	14.4
Czech Rep.	7.2	8.0	8.1	7.9	7.4
Denmark	10.2	9.9	9.6	9.0	8.5
Estonia	2.3	3.3	3.3	2.3	1.8
Finland	17.7	18.1	18.0	17.3	16.9
France	N/A	14.3	14.4	14.4	14.3
Greece	13.8	12.1	10.9	11.2	11.6
Ireland	5.3	2.5	4.1	9.0	8.0
Italy	10.1	12.4	13.0	13.4	13.9
Latvia	6.7	8.4	7.1	5.3	2.8
Lithuania	3.8	5.1	4.7	3.7	2.7
Luxembourg	3.4	5.3	6.1	6.9	7.6
Hungary	6.8	7.2	6.7	7.5	7.8
Malta	3.9	4.0	3.8	5.5	4.1
Germany	12.8	13.8	14.2	14.3	14.7
Netherlands	13.8	15.1	16.1	17.9	18.0
Poland	5.6	25.4	27.1	28.1	26.9
Portugal	19.8	19.5	20.2	22.2	23.3
Romania	2.9	2.6	1.9	1.6	1.3
Slovakia	4.0	4.9	5.0	5.3	4.0
Slovenia	12.8	16.8	17.9	18.5	16.9
Spain	32.4	33.3	34.4	31.9	29.4
Sweden	14.3	16	17.3	17.7	16.4
United Kingdom	6.6	5.4	5.5	5.7	5.2

Source: Eurostat Portal Page – Population and social conditions – Labour market, 2009.
 Notes: ¹ Data refer to the second quarter of the year, N/A – not available.

Figure: Prevalence of temporary employment by age group, EU and Slovenia, 2008



Source: Eurostat Portal Page – Population and social conditions – Labour market, 2009.

Part-time employment

Having grown for several years, the share of part-time employment in total employment dropped in 2008.

In the second quarter of 2008 the share of part-time employment was 8.1%, slightly lower than in the same period of 2007 (8.8%). In this period, the share of men with part-time jobs dropped from 7.1% to 6.3%, and the share of women from 10.8% to 10.3%.

In 2008, the prevalence of part-time employment dropped in particular among the youth and the elderly.

The share of part-time employment in the 15–24 age group was 31.2% in the second quarter, down 1.8 p.p. year-on-year. Companies opt for part-time employment of young people (for example through student employment services) primarily because this gives them greater flexibility, as this is the easiest way of adjusting to market conditions and fluctuations in demand. The share of the elderly in part time employment also dropped, from 12.5% in the second quarter of 2007 to 9.6% in the second quarter of 2008, in particular as a result of a smaller number of unpaid family members, who mostly work in agriculture.

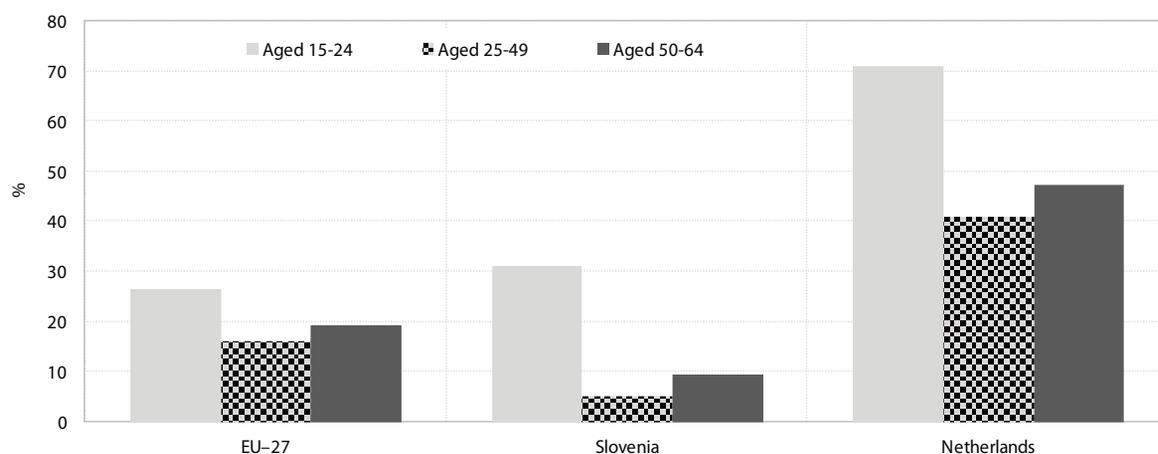
Despite lagging behind the EU average (17.7%), the share of part-time employment in Slovenia (8.1%) is no longer among the lowest in the EU (ten Member States have lower shares). The share of part-time employment in Slovenia is four times higher than in Romania and Slovakia, which have the lowest shares in the EU. However, it is nearly six times lower than in the Netherlands, the EU country with the highest prevalence of this type of employment (46.7%). The main reason that part-time employment is below the EU average in Slovenia is the great gap for women: in the second quarter of 2008 the share of part-time employment of women was 10.3% (6.3% for men), which is well below the EU average of 30.7% (7.1% for men).

Table: Share of part-time employment in total employment in the 15–64 age group,¹ EU countries, 2000–2008

	2000	2005	2006	2007	2008
EU-27	15.8	17.4	17.7	17.7	17.7
EU-25	15.9	18	18.3	18.3	18.3
EU-15	17.5	19.9	20.3	20.4	20.5
Austria	16	20.4	21.5	22	22.7
Belgium	20.6	21.7	22.9	22.5	22.4
Bulgaria	N/A	2.3	1.9	1.7	1.9
Cyprus	7.6	7.5	6.7	6.1	6.6
Czech Rep.	4.8	4.3	4.4	4.4	4.3
Denmark	21.4	21.5	22.9	23.6	23.9
Estonia	6.3	6.8	7.1	7	5.6
Finland	11.9	13.2	13	13	12.3
France	N/A	17	17.2	17.2	16.8
Greece	4.4	4.6	5.6	5.5	5.2
Ireland	16.6	N/A	N/A	17.6	18
Italy	8.7	12.6	13.2	13.3	14.4
Latvia	10.5	8.9	6	6.4	5.7
Lithuania	8.9	6.3	8.6	7.9	6.3
Luxembourg	11.2	17.4	17.1	17.5	15.7
Hungary	3.4	4.1	3.9	3.8	4.1
Malta	6.1	8.8	9.6	10.7	11.4
Germany	19.1	23.6	25.4	25.6	25.5
Netherlands	41	45.8	45.8	46.3	46.7
Poland	9.3	9.7	9	8.5	7.6
Portugal	8.1	8.4	8.1	8.9	8.8
Romania	14	9.6	8.6	8.6	8.8
Slovakia	1.8	2.3	2.7	2.6	2.1
Slovenia	5.3	7.8	8.4	8.8	8.1
Spain	8	12.6	12.1	11.8	11.9
Sweden	21.8	24.3	24.3	24.3	26.1
United Kingdom	24.4	24.6	24.3	24.2	24.2

Source: Eurostat Portal Page – Population and social conditions – Labour market, 2009.
 Notes:¹ Data refer to the second quarter of the year; N/A – not available

Figure: Prevalence of temporary employment by age group, EU-27, Slovenia and the Netherlands, 2008



Source: Eurostat Portal Page – Population and social conditions – Labour market, 2009.

Social protection expenditure

In 2006, the latest year for which data are available, social protection expenditure in Slovenia totalled EUR 7.057 m, or 22.8% of GDP.¹ This is slightly less than in 2005 (23% of GDP), which is not a consequence of systemic changes, but a result of GDP growing faster than social protection expenditure. Compared to 2005, social protection expenditure rose by 6.7% in nominal terms (3.9% in 2005) and 4.1% in real terms (1.4% the year before). The stronger real growth compared to the previous year was mainly due to the growth of expenditure on old age and survivors, which together account for all pension receipts. In 2000, Slovenia earmarked EUR 4.481 m, or 24.2% of GDP, for social protection schemes.

Data for Slovenia show that the gap to the EU average in the share of GDP allocated for social protection has been widening, but in per capita expenditure in PPS, Slovenia's position has been improving. In the EU-25, social protection expenditure averaged 27.0% of GDP in 2006 (Slovenia: 22.8%) and 26.5% of GDP in 2000 (Slovenia: 24.2%). Whereas social protection expenditure as a share of GDP was rising across most of the EU in the 2000–2006 period, it dropped in the majority of countries in the last year. In terms of the real value of per capita expenditure on social protection, Slovenia is below the EU-15 average but is improving its standing. Slovenia allocated 66% of the EU-15 average for social protection in 2006, which is 2 p.p. more than in 2000 and an increase of 10 p.p. over 1996; it reached 72% of the EU-25 average in 2006.

In Slovenia the bulk of assets for social protection come from employee contributions, while in the EU, contributions of employers represent the greatest source. In Slovenia, 67.9% of social protection schemes are financed by social contributions, with 40.8% coming from employee contributions (almost twice the share in the EU) and 27.1% from employer contributions (38.2% in the EU). General government contributions and other sources combined make up 32.1% of total social protection receipts (41.1% in the EU). In the period 2000–2006 the share of employer contributions in the structure of all social protection sources remained level, both in the EU and in Slovenia. While the share of employee contributions dropped in the EU and rose in Slovenia during this period, the share of budgetary funds increased in the EU and fell in Slovenia.

Broken down by function, the bulk of social protection expenditure is earmarked for old age, sickness and healthcare (70% combined), which is approximately

the same as in the EU (69.2%); due to methodological changes the structure is slightly different from in 2005.² Overall, the structure of spending by function has hardly changed, and was also similar in Slovenia and in the EU in 2000.

In terms of expenditure on social protection in purchasing power standards per capita, Slovenia is closest to the EU average in the area of survivors' benefits (93% of the EU average). It also approaches the EU average in expenditure on disability (87%), sickness and healthcare (84%), children and family (82%) and old age (81%). In housing expenditure, on the other hand, Slovenia is farthest below the EU average (at only 2% of the average). Per capita expenditure (PPS) on unemployment and social exclusion not elsewhere classified (in particular benefits for the poor), Slovenia does not even reach half of the EU average.

In Slovenia social protection expenditure is distributed more efficiently than in the EU. In 2006, Slovenia allocated 97.7% of total social protection expenditure for benefits and social protection services, while the EU used 1.5 p.p. less (96.2%). This is largely due to the fact that administrative costs of social protection schemes are higher in the EU (3.1% of total expenditure) than in Slovenia (2.2%).³ The figures were similar in 2000.

¹ Data acquired using the European System of Integrated Social Protection Statistics (ESSPROS) methodology.

² In 2006, family pensions for people over 60 (women) or 65 (men) are no longer included in old age (as before) but in the area of survivors.

³ The difference to 100 includes certain other costs.

Table: Social protection expenditure in Slovenia and EU Member States as a % of GDP and in PPS per capita

	% of GDP				Per capita in PPS, EU-15=100		
	1996	2000	2005	2006	1996	2000	2006
EU-27	N/A	N/A	27.1(p)	26.9(p)			
EU-25	N/A	26.5	27.3(p)	27.0(p)			
EU-15	27.8	26.8	27.7(p)	27.5(p)	100	100	100
Austria	28.9	28.4	28.8	28.5	121	121	117
Belgium	28.0	26.5	29.7	30.1	110	108	117
Bulgaria	N/A	np	16.1	15.0	N/A	N/A	18
Cyprus	N/A	14.8	18.4	18.4	N/A	42	55
Czech Rep.	17.6	19.5	19.1	18.7	41	43	47
Denmark	31.2	28.9	30.2	29.1	129	123	118
Estonia	N/A	14.0	12.7	12.4	N/A	20	27
Finland	31.4	25.1	26.7	26.2	104	95	99
France	30.6	29.5	31.4	31.1(p)	109	110	113
Greece	20.5	23.5	24.	24.2	53	64	76
Ireland	17.6	13.9	18.2	18.2	59	59	87
Italy	24.3	24.7	26.3(p)	26.6(p)	91	93	89
Latvia	N/A	15.3	12.4	12.2(p)	np	18	21
Lithuania	13.4	15.8	13.1	13.2(p)	15	20	24
Luxembourg	21.2	19.6	21.7	20.4	146	155	185
Hungary	N/A	19.3	21.9	22.3	np	35	47
Malta	17.5	16.9	18.4	18.1	44	46	45
Germany	29.4	29.3	29.7	28.7(p)	116	112	106
Netherlands	29.6	26.4	27.9	29.3(p)	115	115	125
Poland	N/A	19.7	19.7	19.2	N/A	31	33
Portugal	20.2	21.7	20.2	25.4	47	55	61
Romania	N/A	13.2(p)	14.2	14.0(p)	N/A	11	18
Slovakia	19.5	19.4	16.7	15.9(p)	30	31	33
Slovenia	23.8	24.2	23.0	22.8(p)	56	64	66
Spain	21.5	20.3	21.1	20.9(p)	62	64	71
Sweden	33.1	30.1	31.5	30.7(p)	128	124	124
United Kingdom	27.4	26.4	26.3	26.4(p)	98	102	102

Source: Eurostat Portal Page - Total expenditure on social protection, 2008; Eurostat Portal Page - Total expenditure on social protection per head of population, PPS, 2008.
Notes: Except for 2005 and 2006, the data for Slovenia do not include housing data; PPS – purchasing power standards; p – preliminary data; N/A – not available.

Average exit age from labour force

The average exit age from labour force defines the attitude of people in employment and their employers towards activity in older age. The sooner people opt to exit employment, the greater the contingent of people receiving pensions. Given the present rules for calculating pensions, expenditures for the pension system have a linear correlation with the size of the population of pensioners.

In Slovenia the average exit age from the labour force is still low compared to the EU. In 2006 (the latest year for which data are available), the average age in Slovenia stood at 59.8 as opposed to 61.2 in the EU, according to Eurostat estimates. Generally, women exit their employment sooner than men. Data by gender are not available for all countries, but in countries where they are available, women are one year younger on average than men when exiting the labour force. The difference is generally smaller in older EU countries, while it is still greater in certain new EU Member States. Slovenia does not have data on the average exit age from the labour force classified by gender. However, it does have data on retirement age, which provide a very good estimate. According to data from the Pension and Disability Insurance Institute, men retire at 60 years and 4 months on average, and women at 57 years and 2 months. The low retirement age is a result of the low required age for the completion of the full length of pensionable service¹ and insufficient incentives for remaining in employment after reaching the minimum retirement age for an old-age pension. Even though retirement before the fulfilment of the full retirement age – if the length of service is shorter than the pensionable service – is penalised with a permanent pension reduction, many people opt for retirement when choosing between extra time acquired upon retirement and a non-reduced pension. Furthermore, people whose pension is otherwise not reduced do not decide to prolong their employment either, although postponing retirement would be rewarded with the bonus of a permanent pension increase (Ahčan, Polanec, 2007).

In Slovenia the statutory retirement age started to increase in 1992. In 1999, with the introduction of pension system reform, retirement age conditions were tightened further. The effective retirement age thus kept rising during the entire period between 2000 and 2008. Compared to 2000, in 2008 the actual age at retirement was higher by a year and seven months for men and two years and one month for women. However, in 2005 and 2006 the increase in the actual retirement age of men slowed, and in 2007 and 2008 the overall average retirement age stabilised at 59 years and 2 months. Both

developments can be attributed to the influence of criteria which, taking into account children, time of study and/or military service, reduce the otherwise generally required minimum retirement age.

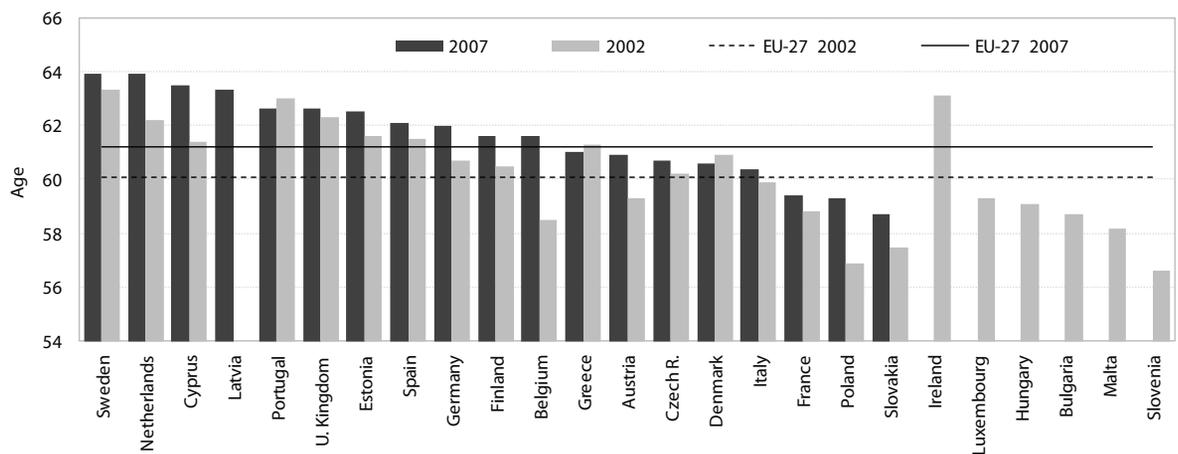
¹ For men, 58 years with 40 years of pensionable service.

Table: Average exit age from labour force in Slovenia and EU countries, 2002–2007

	2002	2003	2004	2005	2006	2007
EU-27	60.1	61	60.5	61	61.21	61.21
Austria	59.3	58.8	N/A	59.9	61	60.9
Belgium	58.5	58.7	59.4	60.6	N/A	61.6
Bolgarija	58.7	58.7	60.7	60.2	64.1	N/A
Cyprus	61.4	62.7	62.7	N/A	N/A	63.5
Czech Rep.	60.2	60.1	60	60.6	60.4	60.7
Denmark	60.9	62.2	62.1	61	61.9	60.6
Estonia	61.6	60.8	62.3	61.7	62.6	62.5
Finland	60.5	60.4	60.5	61.7	62.4	61.6
France	58.8	59.8	59	59	58.9	59.4
Greece	61.3	62.7	N/A	61.7	61.1	61.0
Ireland	63.1	62.9	62.8	64.1	64.1	np
Italy	59.9	61	N/A	59.7	60.2	60.4
Latvia	N/A	N/A	62.9	62.1	62.7	63.3
Lithuania	N/A	N/A	60.8	60	59.9	N/A
Luxembourg	59.3	57.4	58.3	59.4	N/A	N/A
Hungary	59.1	61.6	60.5	59.8	N/A	N/A
Malta	58.2	58.8	58	58.8	58.5	N/A
Germany	60.7	61.6	61.3	N/A	61.9	62.0
Netherlands	62.2	60.5	61.1	61.5	62.1	63.9
Poland	56.9	57.9	57.7	59.5	N/A	59.3
Portugal	63	62.1	62.2	63.1	N/A	62.6
Romania	N/A	62.7	59.5	63	64.3	N/A
Slovakia	57.5	57.8	58.5	59.2	N/A	58.7
Slovenia	56.6	56.2	N/A	58.5	59.8	N/A
Spain	61.5	61.5	62.2	62.4	62	62.1
Sweden	63.3	63.1	62.8	63.6	63.9	63.9
United Kingdom	62.3	63	62.1	62.6	63.2	62.6

Source: Eurostat Portal page – Population and social conditions – Labour Market, 2008.
Note: 'Estimates, N/A – not available.

Figure: Average exit age from labour force in Slovenia and EU countries in 2002 and 2007, men and women combined



Source: Eurostat Portal page – Population and social conditions – Labour Market, 2008.

Expenditure on health and long-term care

Slovenia's total health expenditure as a share of GDP is roughly on a par with the EU average, and in per capita expenditure Slovenia is approaching the average as well. In 2006 (the latest year for which data are available), Slovenia's total health expenditure fell 0.2 p.p. to 8.3% of GDP¹ (the EU in 2006: 8.2%); according to our estimates it shrank further in 2007, to 8.1%.² The main reason that Slovenia's healthcare expenditure has been declining for several years is weak growth in public expenditure, which lags behind GDP growth. In the 2003–2006 period the share of public health expenditure dropped from 6.3% of GDP to 6.0%; in 2007 it fell again, to 5.9% of GDP.³ The main reason for the decline was the moderate growth of public sector wages in the transitional period accompanying the introduction of a new wage system. Per capita total health expenditure reached PPS USD 2,076 in 2006, which is more than in any other new EU Member State, but still just below the EU average in 2004 (the last year for which data are available), when it stood at USD PPS 2,093.⁴

The main factor of growth in expenditure on long-term care⁵ in recent years has been the expansion of public expenditure, in particular for long-term social care services. In 2006, total expenditure on long-term care was at 1.15% of GDP (1.19% in 2005), with 0.66% of GDP allocated to long-term healthcare and 0.49% to long-term social care. Total expenditure on long-term care as a share of GDP is roughly at the level of the average for the 19 European countries (1.2% of GDP in 2006) for which we have comparable data (see figure). In the period 2003–2006, total expenditure on long-term care in Slovenia rose by nearly 19% in real terms (by an average of 6.0% annually in real terms). Most of the growth is a result of higher public expenditure

(state and municipal funds, Health Insurance Institute and Pension and Disability Insurance Institute), which jumped by 20.8% in real terms during this period. Real private expenditure rose by 12.9%. In 2006, the ratio between public sources (state and municipal budgets) and private sources (mostly out-of-pocket payments – co-payments for food in old people's homes and other forms of institutional care) in long-term social care services was 59.0:41.0. Long-term healthcare services are largely (93.2% in 2006) funded from public sources,⁶ but the share of private sources has risen slightly since 2003, from 5.6% to 6.8%.

¹ Health expenditure and sources of funding (SORS), 23 October 2008. Data obtained using the internationally comparable System of Health Accounts (SHA) methodology.

² The estimate includes public expenditure on health according to the COFOG classification (Classification of the functions of the government, SORS, 2009); data on private expenditure taken from the estimate in the Business Report of the Health Insurance Institute for 2007.

³ General government expenditure by function, 2000–2007 (SORS), 15 January 2009. General government expenditure on health is classified according to the COFOG methodology. This methodology is used to monitor only public health expenditure; for public health expenditure the COFOG methodology differs slightly from the SHA methodology. Using the COFOG methodology, private expenditure on health also stood at 6.0% of GDP in 2006.

⁴ See the indicator *Health expenditure* in Development Report 2008, 2008.

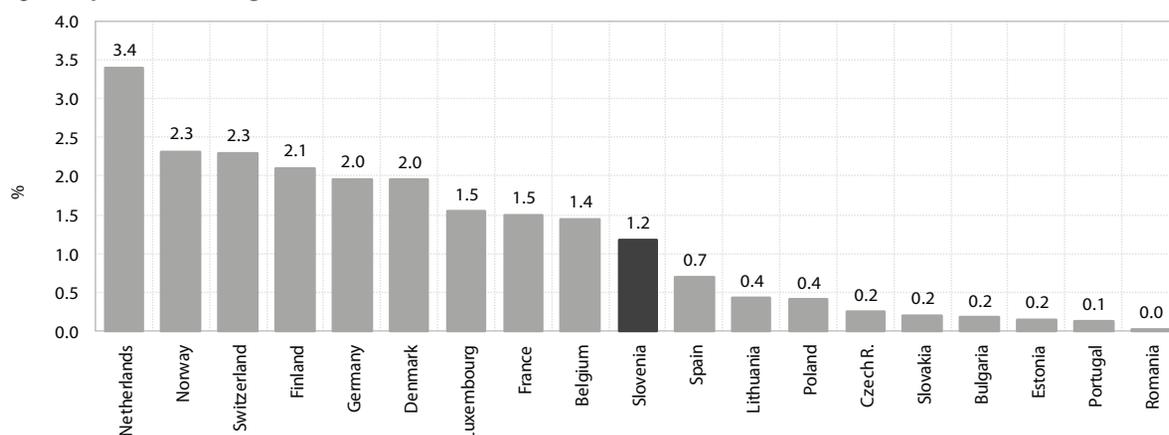
⁵ Total expenditure in long-term care includes expenditure on long-term *health* care (this expenditure is also included in health expenditure) and expenditure on long-term *social* care.

⁶ Health Insurance Institute funds earmarked for long-term care services in old people's homes, special social welfare institutions, extended hospital care and long-term home nursing, and Pension and Disability Insurance Institute funds for attendance allowances.

Table: Expenditure on health in Slovenia and EU Member States, 2000 and 2006

	Total health expenditure, in % of GDP ⁴		Public expenditure on health, in % of GDP ⁴		Private expenditure on health as a share of total expenditure, in %		Total expenditure per capita in US dollars PPS
	2000	2006	2000	2006	2000	2006	2006
EU-27	7.3	8.2	5.3	6.0	27.5	27.4	2,093¹
Austria	9.9	10.1	7.5	7.7	24.1	24.3	3,519
Belgium	8.6	10.3	6.5	7.4	24.0	27.0	3,389
Bulgaria	6.2	7.4	3.7	4.2	40.6	42.4	671 ¹
Cyprus ¹	5.7	5.5	2.4	2.5	58.4	55.7	1,128 ¹
Czech Rep.	6.5	6.8	5.9	6.0	9.7	11.4	1,479
Denmark	8.3	9.5	6.8	8.0	17.6	15.9	3,108
Estonia	5.3	5.3	4.1	4.0	22.5	24.0	752 ¹
Finland	7.0	8.2	5.1	6.2	24.9	22.2	2,331
France	10.1	11.0	8.0	8.8	21.7	20.2	3,374
Greece	7.8	9.1	4.7	5.6	55.8	57.2	2,981
Ireland	6.3	7.5	4.6	5.9	27.1	22	2,926
Italy	8.1	9.0	5.8	6.9	27.5	23.4	2,532
Latvia	5.9	7.1	3.2	4.0	46.1	43.4	852 ¹
Lithuania	6.5	6.5	4.5	4.9	30.3	25.0	843 ¹
Luxembourg	5.8	7.3	5.2	6.6	10.7	9.3	5,563
Hungary	6.9	8.3	4.9	5.9	29.3	29.5	1,337 ¹
Malta ¹	7.5	N/A	5.6	7.0	25.8	23.9	1,733 ¹
Germany	10.3	10.6	8.2	8.1	20.3	23.1	3,287
Netherlands ¹	8.0	N/A	5.0	5.5	36.9	37.6	3,094 ¹
Poland	5.5	6.2	3.9	4.3	30.0	30.6	867
Portugal	8.8	10.2	6.4	7.2	27.5	27.7	2,041
Romania	5.1	5.0	3.4	3.3	32.7	33.9	433 ¹
Slovakia	5.5	7.4	4.9	5.1	10.6	25.6	1,137
Slovenia²	8.3	8.3	6.1	6.0	26.0	27.7	2,076
Spain	7.2	8.4	5.2	6.0	28.4	28.6	2,261
Sweden	8.2	9.2	7.0	7.5	15.1	15.4	2,918
United Kingdom	7.2	8.4	5.8	7.3	19.1	12.9	2,724

Source: OECD Health Data 2008; data for Belgium taken from OECD Health Data 2007; data for Bulgaria, Cyprus, Estonia, Latvia, Lithuania, Malta and Romania from the WHO database 2007; data for Slovenia are for 2006: Health care expenditure (SORS) 23 October 2008 and for the 2000 SORS calculation using the System of Health Accounts methodology based on data from state and municipal budgets, the Health Insurance Institute, Pension and Disability Insurance Institute and SORS; the average for EU-27 calculated by IMAD except for the averages for expenditure in USD PPS. Notes: 1 2004; 2 Data using the international methodology System of Health Accounts – OECD, 2000; 4 Revision of GDP of September 2008. N/A – not available.

Figure: Expenditure on long-term care¹ in Slovenia and selected EU countries, as a % of GDP, 2006²

Source: Eurostat Portal page, 2009 and OECD Health Data 2008 (for the Netherlands, Finland, Spain, Poland and Slovakia); for Slovenia SORS: Health care expenditure (released on 23.10.2008); Note: ¹ According to the international methodology System of Health Accounts, total expenditure includes expenditure on long-term health care (HC.3) and expenditure on long-term social care (HC.R.6.1.). ² Data for Slovenia and the countries for which the source of data is OECD Health Data 2008 are for 2006; for other countries the data are for 2005.

Human development index

The human development index (HDI) is a significant indicator of the complexity of the correlation between income and well-being, and of the interaction of economic and social policies. The HDI shows well-being through three areas of social development, while indicators used for their operationalisation demonstrate the achievements of countries at different development levels: *health* (life expectancy at birth), *income* or access to resources providing a decent standard of living (GDP per capita at purchasing power parity), and *education and knowledge* (gross enrolment and literacy rates). Despite certain methodological shortcomings,¹ together with other indicators the HDI demonstrates one of the underlying objectives of Slovenia's Development Strategy – sustainable growth of the population's well-being.

According to HDI calculations for 2008 (data from 2006), the value of the index rose to 0.923 (2007: 0.917). Slovenia thus gained one place over the year before to rank 26th among the 179 countries included in the calculations. According to the most recent calculations, the life expectancy index and the gross domestic product index rose again, from 0.874 to 0.878 and from 0.902 to 0.922, respectively. On the other hand, the education index slipped further (from 0.974 to 0.969), as the gross enrolment rate in all three levels of education dropped again in the period between 2005 and 2006, from 94.3% to 92.8%.

The HDI value and the ranking of Slovenia have been gradually but constantly improving ever since the first calculation for 1990. The rapid growth can be

mainly attributed to growth in per capita gross domestic product at purchasing power parity. According to the latest calculations, per capita gross domestic product contributed as much as 0.003 points to the overall increase in the index value. The life expectancy index, on the other hand, has had the lowest values among the three sub-indices from the start. As in the year before, it was again 0.08 points lower than the highest index recorded in Japan (0.957, with life expectancy at birth totalling 82.4 years), and 0.05 lower than in Spain and Sweden, which according to UNDP data have the highest life expectancy at birth (80.7 years) and thus the highest values of this index (0.928) in the EU-27.

¹ The *education index* is considered somewhat methodologically disputable from the viewpoint of countries with a high human development index. Its methodological design conceals important differences between countries, mainly between the most developed ones. Given the availability of data, enrolment in education is demonstrated in gross rates (the numerator is *all* enrolled, disregarding their age), instead of net rates, which only account for those who are enrolled full-time. From the viewpoint of the most developed countries, even the methodology measuring literacy is unsuitable, especially because the literacy rate accounts for two thirds of the education index's value. In countries with a high human development index, the literacy rate is almost 100%. Due to the fact that various (other) forms of literacy, such as reading literacy, numerical, functional, etc., which are significant development factors, are excluded, the education index fails to show the actual (il)literacy of the population of developed countries, which certainly does not signify a lack of problems in this area. The HDI therefore cannot and should not be a comprehensive indicator of development. Indeed, its authors never had this intention. Nevertheless, the HDI importantly supplements GDP as well as a number of other development indicators.

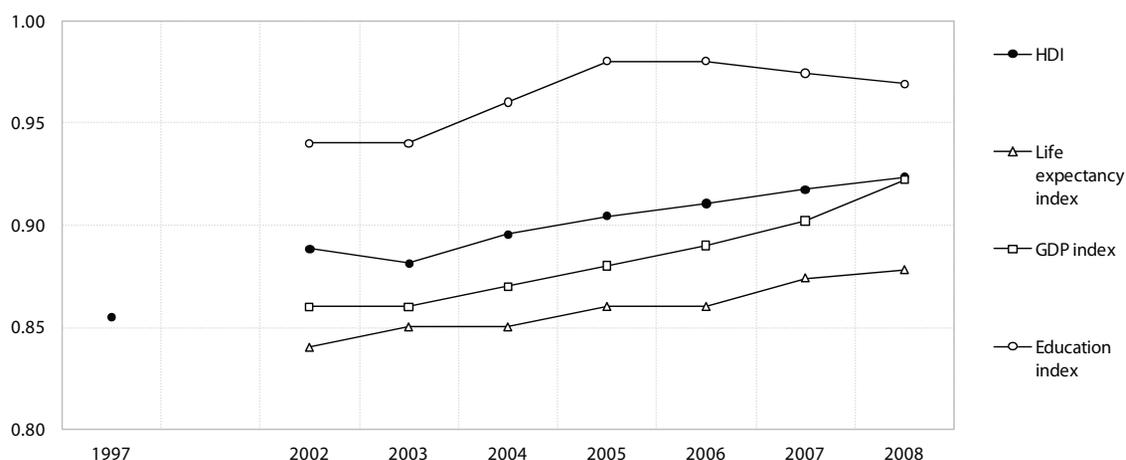
Table: Human development index, EU Member States, calculations 1997–2008¹

	1997	2005	2006	2007	2008
EU-27²	0.8693	0.899	0.905	0.910	0.916
Austria	0.914	0.936	0.944	0.948	0.951
Belgium	0.929	0.945	0.945	0.946	0.948
Bulgaria	0.785	0.808	0.816	0.824	0.834
Cyprus	0.858	0.891	0.903	0.903	0.912
Czech Rep.	0.843	0.874	0.885	0.891	0.897
Denmark	0.913	0.941	0.943	0.949	0.952
Estonia	0.795	0.853	0.858	0.860	0.871
Finland	0.914	0.941	0.947	0.952	0.954
France	0.921	0.938	0.942	0.952	0.955
Greece	0.876	0.912	0.921	0.926	0.947
Ireland	0.894	0.946	0.956	0.959	0.960
Italy	0.907	0.934	0.940	0.941	0.945
Latvia	0.765	0.836	0.845	0.855	0.863
Lithuania	0.787	0.852	0.857	0.862	0.869
Luxembourg	0.911	0.949	0.945	0.944	0.956
Hungary	0.812	0.862	0.869	0.874	0.877
Malta	0.852	0.867	0.875	0.878	0.894
Germany	0.913	0.930	0.932	0.935	0.940
Netherlands	0.928	0.943	0.947	0.953	0.958
Poland	0.816	0.858	0.862	0.870	0.875
Portugal	0.878	0.904	0.904	0.897	0.900
Romania	0.772	0.792	0.805	0.813	0.825
Slovakia	N/A	0.849	0.856	0.863	0.872
Slovenia	0.853	0.904	0.910	0.917	0.923
Spain	0.904	0.928	0.938	0.949	0.949
Sweden	0.929	0.949	0.951	0.956	0.958
United Kingdom	0.921	0.939	0.940	0.946	0.942

Source: Human Development Report (UNDP), 2002–2007; Human Development Indices: Statistical Update 2008.

Notes: ¹ The United Nations Development Programme measures the HDI annually, using data with a two-year time lag due to data availability. The table shows HDI values by calculation year; the data for calculating the HDI 2007 therefore rely on data for 2005 and HDI 2006 on data for 2004, etc. The index comprises values in the range between 0 and 1. ² Non-weighted average. ³ Value excluding data for Slovakia. N/A – not available.

Figure: HDI trends and sub-indices, Slovenia, calculations 1997–2008



Source: Human Development Report (UNDP), 1997–2007; Human Development Indices: Statistical Update 2008.

Note: Sub-indices for 1995 are not comparable due to different methodologies; only the HDI is therefore shown for that year.

Minimum wage

Following two adjustments in 2008, the minimum wage rose by 8% in nominal terms and 2.2% in real terms, reaching EUR 589.19 at the end of the year. In the 2000–2008 period, the minimum wage increased at a real annual average rate of 2.3%. In 2008, the ratio of the minimum wage (EUR 571.31) to the average gross wage (EUR 1,312.48) in the private sector was 43.5% and maintained the levels of 2007 (43.5%) and 2000 (43.5%). The ratio of the minimum wage to the average wage in the private sector places Slovenia among the half of EU countries where this figure is above 40%.

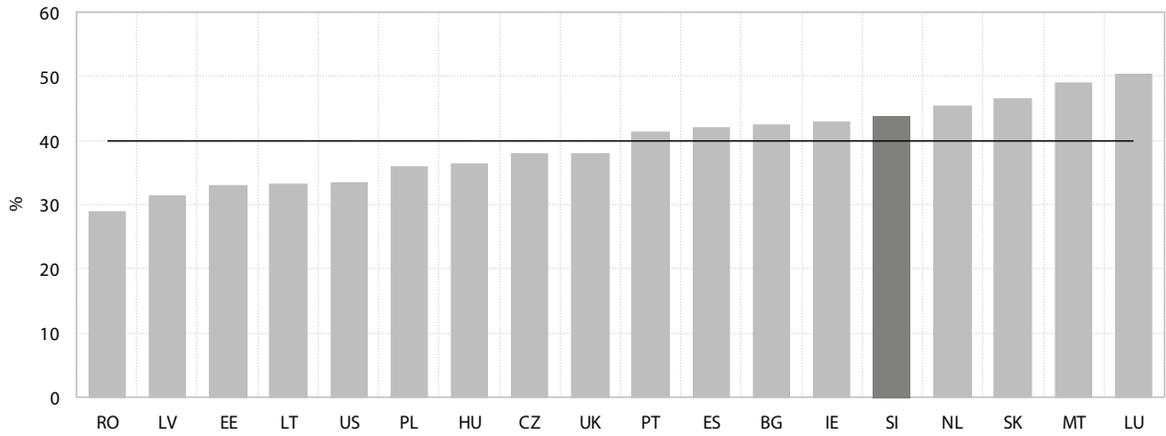
The policy of minimum-wage adjustment was less favourable between 2006 and 2008 than in the period after 1999, which is why the minimum wage grew at a slower pace on average than private sector wages in the last two years. From 1999 until 2003, the minimum wage was adjusted to inflation and real GDP growth in accordance with an agreed mechanism. Hence the 3.4% average annual growth in the minimum wage in this period, which outpaced real gross wage growth in the private sector (2.1%). For 2004 and 2005 the minimum wage had been set at a nominal amount; its average annual growth in those two years still outpaced private sector wage growth (minimum wage: 2.9%; private sector wage: 2.5%), albeit by less than if it had been additionally adjusted to real GDP growth. The Minimum Wage Act, which has been in force since 2006, introduced a less favourable adjustment system for the minimum wage, which is tied to projected inflation but has no safeguard in the event that actual inflation exceeds projected inflation. After the minimum wage dropped in real terms in 2007, an extraordinary adjustment was carried out in early 2008, which means that in 2008 the minimum wage was adjusted twice. In the period between 2006 and 2008, the minimum wage grew at a real average annual rate of 0.6%, whereas the average wage in the private sector increased at a real average annual rate of 2.6%.

The level of the minimum wage also had an impact on changes in wage inequality and the proportion of low-wage employees.¹ Wage inequality is shown by the interdecile ratio (9decile/1decile), calculated using data on the distribution of employees by gross wage. Between 1997 and 2002 the interdecile ratio remained at around 3.2, whereupon it rose to 3.3 in 2003–2005 and 3.4 in 2006 and 2007. In the period 1997–2002, the proportion of low-wage employees in the private sector hovered at around 14%. After dropping to 12.7% in 2005, it increased in the following two years and in 2007 reached the highest value since 1997 (15.6%). In addition to the minimum-wage adjustment mechanism, the

proportion of low-wage employees also depends on the adjustment system for private sector wages. The wage policy agreement in place in 2004 and 2005 instituted an adjustment mechanism in the form of an equal amount of wage supplements according to the sectoral collective agreements, so that lower wages would rise more than higher wages in relative terms. This scheme was very appropriate for reducing the proportion of low-wage employees, since this proportion dropped substantially in those two years. But in the next two years it started rising again, reaching its highest value so far, which is attributable to the fact that the minimum wage was adjusted in a less favourable way, allowing even lower growth of the lowest wages.

¹ According to OECD methodology, this group included all employees whose wages were equal to or below two thirds of the median, which in 2007 means wages up to EUR 644.

Figure: **Ratio between minimum gross wage and average gross wage in the private sector, EU Member States, 2007, in %**



Source: Eurostat Portal page – Population and social conditions, 2009; data for Estonia and the Netherlands are for 2005 and data for Poland for 2006; data for France and Belgium are not available.

At-risk-of-poverty rate

In 2007, the at-risk-of-poverty rate in Slovenia remained low, at 11.5% (2006: 11.7%¹). If the calculation had taken into account income in kind, the at-risk-of-poverty rate in 2007 would have been even lower (11%).² About 233,000 people lived below the poverty threshold, earning less than EUR 495, which was the poverty threshold for one-person households (for a four-person household it was EUR 1,040). In the absence of social transfers, the at-risk-of-poverty rate in Slovenia would double, which shows just how important social transfers are and what their impact is. The inequality of income distribution, measured with the Gini coefficient and the quintile coefficient, was also low in Slovenia in 2007 compared to the EU-25, and has been dropping slightly since 2000. Slovenia ranks among the eight EU countries with the lowest at-risk-of-poverty rates (between 10% and 12%). In the period 2000–2007, the at-risk-of-poverty rate in Slovenia dropped by 1.5 p.p., whereas the average rate in the EU remained level (16%).

At-risk-of-poverty rate data by socio-demographic and socio-economic status show that certain groups of people have been at greater risk of poverty for a quite some time. In the period 2000–2007 the group at greatest risk of poverty in Slovenia comprised: the unemployed and jobless households (where no one holds a job); population over 65, especially women living in single households; single-parent households with at least one dependent child (single-parent families); and two-parent households with at least three dependent children (large families). Tenants also face an above-average risk of poverty. In the analysed period, women were at greater risk than men. In 2007, the situation of these groups, which are among those at greatest risk of poverty as it is, deteriorated further: for single-parent families the at-risk-of-poverty rate rose by over 6 p.p., for tenants by almost 4 p.p. and for the unemployed by nearly 3 p.p. Despite significant differences between EU countries, there are four groups of people that are always at greatest risk of poverty:³ i) single working or non-working parents with dependent children – the majority are women; ii) single households aged 65 or older (mostly women); iii) unemployed living alone; and iv) families with children where only one of the parents is employed.

¹ The at-risk-of-poverty rate is not an indicator of absolute poverty; it measures the inequality of income distribution and shows what percentage of the population has income below the poverty threshold.

² All data on poverty are hereinafter calculated based on income excluding income in kind.

³ Source: The Social Situation in the European Union 2007, European Commission, April 2008.

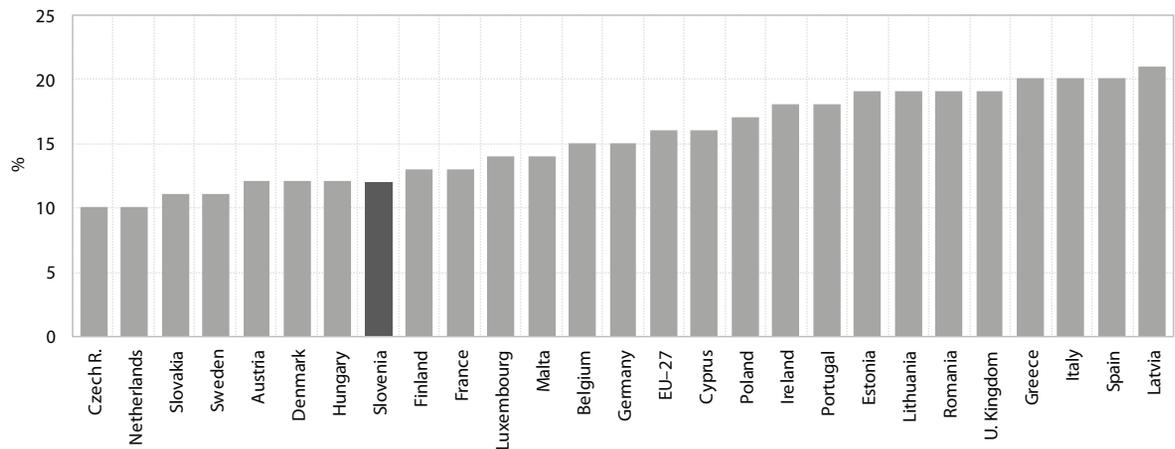
Table: **Selected indicators of at-risk-of-poverty and income inequality, Slovenia, EU-25, 2000, 2005–2007 (excluding income in kind), in %**

	2000		2005		2006		2007	
	SI	EU-25	SI	EU-25	SI	EU-25	SI	EU-25
At-risk-of-poverty rate after social transfers	13.0	16	12.1	16	11.7	16	11.5	16
At-risk-of-poverty rate before social transfers ¹	37.2	23	25.8	26	24.2	26	23.1	26
At-risk-of-poverty rate for women	13.5	17	13.2	17	13	17	12.9	17
At-risk-of-poverty rate for men	12.5	15	10.2	15	10.3	15	10.1	15
At-risk-of-poverty rate for children (aged 0–15)	11.2	20	8.9	19	11.8	19	11.7	19
At-risk-of-poverty rate for youth (aged 16–24)	12.3	20	12.4	20	9.1	20	9.2	20
At-risk-of-poverty rate for the elderly (aged 65 and more) ²	23.4	17	22.8	19	20	19	19.4	19
At-risk-of-poverty rate for one-person household, 65 years of more	37.3	25 ³	45.3	25	45	26	43.8	27
At-risk-of-poverty rate for single-parent household, one or more dependent children	17.5	30 ³	23.4	31	22.1	32	28.6	34
At-risk-of-poverty rate for unemployed	39.5	N/A	37.6	39	33.4	41	35.9	42
At-risk-of-poverty rate for tenants	16.6	N/A	24.6	23	21.9	23	25.7	25
Quintile share ratio 80/20	3.6	4.5	3.4	4.9	3.4	4.8	3.3	4.8
Gini coefficient	24.7	29	24.1	30	23.8	30	23.3	30

Source: Social cohesion indicators, Slovenia, 1997–2003, First release, 14 October 2005; Income and poverty indicators (SILC), Slovenia, 2005–2007, provisional data, 30 December 2008, E-release, SI-STAT Data Portal, Eurostat Portal page – Population and social conditions, 2009.

Notes: ¹ Pensions included; ² poverty of the elderly, regardless of what type of household they live in; ³ data for 2001; N/A – not available.

Figure: **At-risk-of-poverty rates after social transfers in EU countries, 2007 (excluding income in kind), in %**



Source: Eurostat Portal Page – Population and social condition, 2009 / EU-SILC.

Healthcare resources

By most indicators of healthcare resources, Slovenia is far behind the European average. Amid the growing demand for health services, the demand for healthcare personnel has been growing. Like most European countries, Slovenia thus faces a shortage of doctors, dentists and nurses.

After a ten-year period in which the number of practicing physicians increased at a very slow pace, the growth picked up in 2007. In 2007, Slovenia thus had 246.7 practicing physicians per 100,000 inhabitants,¹ an increase of 4.6% over 2006 (the EU average in 2006 was 325.9). This is a relatively brisk growth rate compared to the past decade (1996–2006), when the number of practicing physicians per 100,000 inhabitants increased on average by 1.4% a year (by 10.4% in the entire period).² In the EU, meanwhile, the number of practicing physicians per 100,000 inhabitants increased by 2.4% a year on average in the same period (a 17.6% increase over the entire period). As the number of practicing physicians has been increasing slowly for several years, Slovenia is now placed at the bottom of the EU rankings. The figure for the number of practicing dentists is slightly better, as Slovenia had 62.8 dentists per 100,000 inhabitants in 2007, which is close to the EU average (61.2 in 2005). However, this indicator is expected to deteriorate in the coming years, as projections show that by 2013 the number of dentists will remain level or even drop due to retirement and an insufficient inflow of graduates.

Even though the number of graduated medical nurses has been rising rapidly in recent years, only a quarter have a higher or university education. In 2007, there were 791 nurses and medical technicians per 100,000 inhabitants,³ which placed Slovenia in the upper half of EU rankings (EU average in 2005: 736); however, in most other European countries nurses typically have a higher or university education. According to staffing projections, the number of nurses will rise by 17% in the 2008–2013 period, more notably than in previous years, particularly the number of nurses and medical technicians with a completed tertiary education.⁴

The number of hospital beds again dropped significantly in 2007. Slovenia had 466 hospital beds

per 100,000 inhabitants⁵ (476 in 2006), whereas the EU average was 590 in 2005.

¹ Data from the Public Health Institute (including specialists, interns and trainees).

² See Development Report 2008, the indicator *Healthcare resources*, Figure.

³ In 2007, Slovenia had 4,007 nurses and midwives with a higher or university education (3,829 in 2006) and 11,972 medical technicians, a total of 15,979 (15,426 in 2006). The number of graduated nurses and midwives rose by 13% to 2,272 (Statistical Office of the Public Health Institute, December 2008).

⁴ Resolution on the national plan of health care 2008–2013 (OGRS, No. 72/2008).

⁵ The data refer to the number of all hospital beds (not just acute) and include Diagnostic Centre Bled and MC Medicor.

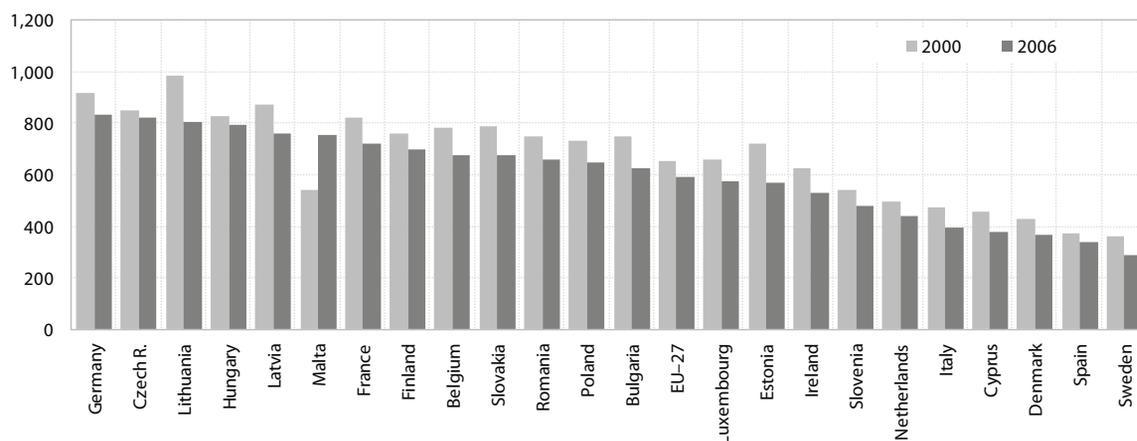
Table: Human resources in the health system in Slovenia¹ and selected EU Member States, 2000, 2005, 2006

	Practicing physicians per 100,000 inhabitants			Practicing dentists per 100,000 inhabitants		No. of hospital beds per 100,000 inhabitants	
	2000	2005	2006	2000	2006	2000	2006
EU-27	308.2	320.9	325.9	58.2	61.0	652.6	590.4
Austria	315.2	352.8	365.0	44.6	53.8	698.7	N/A
Belgium	385.0	401.2	400.8	82.5	82.3	777.8	672.3
Bulgaria	337.8	365.3	366.1	83.2	84.8	743.0	621.4
Cyprus	258.0	257.8	250.4	88.7	91.8	455.8	373.7
Czech Rep.	337.1	354.9	355.7	64.9	67.4	846.0	817.0
Denmark	269.5	308.2	316.2	78.8	78.3	426.7	361.8
Estonia	309.7	320.2	328.9	76.2	89.1	719.0	565.3
Finland	232.0	244.5	246.0	85.3	N/A	754.8	695.6
France	329.4	337.5	341.4	68.8	68.1	816.8	718.3
Greece	432.8	500.3	510.0	N/A	N/A	495.2	N/A
Ireland	222.7	283.4	292.3	50.1	57.0	619.9	524.7
Italy	416.4	378.3	364.8	56.2	62.8	470.9	395.2
Latvia	286.3	291.9	291.5	51.9	67.6	870.3	758.6
Lithuania	364.0	363.2	364.8	68.7	63.8	979.2	801.0
Luxembourg	235.7	335.0	340.0	64.6	N/A	657.1	569.4
Hungary	268.5	278.4	303.7	32.4	49.6	826.2	792.1
Malta	265.4	348.7	388.1	40.7	47.1	539.8	752.3
Germany	325.8	341.2	345.5	73.4	76.2	912.2	829.1
Netherlands	319.3	370.8	380.0	46.5	N/A	492.1	438.2
Poland	222.3	213.9	218.0	30.7	33.0	726.2	647.5
Portugal	263.5	344.3	345.0	3.7	N/A	381.6	N/A
Romania	192.8	217.4	215.8	35.5	49.1	743.9	658.6
Slovakia	336.0	302.8	315.9	44.4	50.3	784.1	671.4
Slovenia	215.0	234.2	235.8	58.2	59.8	540.6	477.5
Spain	328.3	373.6	359.5	43.7	53.7	369.7	334.1
Sweden	307.8	348.7	356.6	80.5	82.7	358.5	287.7
United Kingdom	197.8	235.6	238.0	N/A	N/A	413.1	N/A

Sources: Eurostat Portal page, 2009 and WHO Database 2008; for Slovenia: Public Health Institute.

Notes: ¹ For 2007, the indicators for Slovenia are stated in the text, while the table includes data for 2006, which are the latest available figures for EU countries; the EU-27 averages for physicians and dentists were provided by the WHO; the EU-27 average for hospital beds is Eurostat data for 2005.

Figure: Number of hospital beds per 100,000 inhabitants, Slovenia and EU Member States, 2000 and 2006



Source: Eurostat Portal Page, 2009.

Life expectancy and infant mortality

Life expectancy continued to rise in 2007. According to the latest data, it reached 75.0 years for men (0.2 years more than the year before and 4.7 years more than in 1995), and 82.3 years for women (0.4 years more than the year before and 4.5 years more than in 1995).¹ After closing for two years, the gender gap widened again and remained high (at 7.3 years). In 2007, men's mortality decreased the most in the age groups 40–59 and over 85, and women's mortality in the age group over 60. Following a short period of stagnation in the early transition period, life expectancy in Slovenia has been constantly increasing since 1994. Life expectancy is also rising in the majority of other EU countries. In terms of this indicator, Slovenia still ranks behind the old Member States, as well as behind Cyprus and Malta.

In 2007, the infant mortality rate, already among the lowest in the EU, dropped for the second year in a row. In 2007, the infant mortality rate was 2.8 dead babies aged less than one year per 1,000 live-born children, which is 0.6 less than in 2006, when it reached the lowest level until then. The infant mortality rate in Slovenia has been dropping for many years. In 1980, 15.3 infants per 1,000 live-born children died, and by the second half of the 1990s this figure had dropped to 4.5–5.5. In terms of this indicator, Slovenia was ranked 4th in the EU in 2007, behind Luxembourg, Finland and Sweden, which had already had the lowest infant mortality rates in the previous year. Romania and Bulgaria have the highest infant mortality rates in the EU. The low infant mortality rate in Slovenia points to further improvement of specific preventive measures in prenatal and neonatal care, which in developed countries have the greatest impact on infant mortality, aside from the general well-being of society.

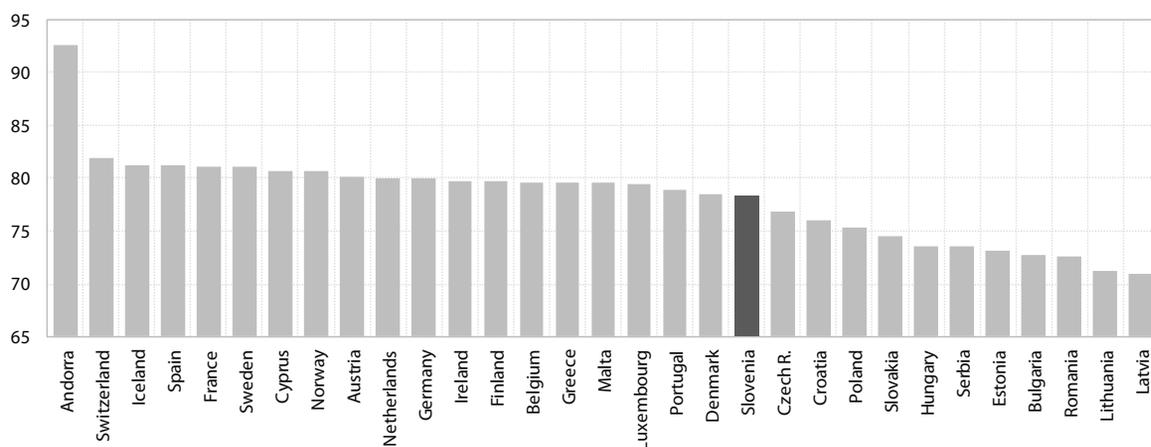
¹ According to Eurostat calculations, the average life expectancy (for both genders) in Slovenia reached 78.3 years in 2006, which is 0.8 years more than in 2005 and 3.6 years more than in 1995 (see table).

Table: Infant mortality per 1,000 live-born children in Slovenia and the EU, 1995–2007

	1995	2000	2005	2006	2007
EU-27	N/A	N/A	N/A	4.7	N/A
EMU-13	N/A	4.6	N/A	3.9	N/A
Austria	5.4	4.8	4.2	3.6	3.7
Belgium	6	4.8	3.7	4.0	3.1
Bulgaria	14.8	13.3	10.4	9.7	9.2
Cyprus	9.7	5.6	4.6	3.1	6.2
Czech Rep.	7.7	4.1	3.4	3.3	3.1
Denmark	5.1	5.3	4.4	3.8	4.0
Estonia	14.9	8.4	5.4	4.4	5.0
Finland	3.9	3.8	3.0	2.8	2.7
France	4.9	4.4	3.6	3.6	N/A
Greece	8.1	5.9	3.8	3.7	3.8
Ireland	6.4	6.2	4.0	3.7	N/A
Italy	6.2	4.5	N/A	4.2	3.8
Latvia	18.8	N/A	7.8	7.6	8.7
Lithuania	12.5	8.6	6.8	6.8	5.9
Luxembourg	5.5	5.1	2.6	2.5	1.8
Hungary	10.7	9.2	6.2	5.7	5.9
Malta	8.9	5.9	6.0	3.6	6.5
Germany	5.3	4.4	3.9	3.8	3.8
Netherlands	5.5	N/A	4.9	4.4	4.1
Poland	13.6	8.1	6.4	6.0	6.0
Portugal	7.5	5.5	3.5	3.3	3.4
Romania	21.2	18.6	15.0	13.9	12.0
Slovakia	11	8.6	7.2	6.6	6.1
Slovenia	5.5	4.9	4.1	3.4	3.1
Spain	5.5	4.4	3.8	3.8	3.7
Sweden	4.1	3.4	2.4	2.8	2.5
United Kingdom	6.2	5.6	5.1	4.5	N/A

Source: Eurostat Portal Page - Population and social conditions – Population, 2008.
Note: N/A – not available.

Figure: Life expectancy in Slovenia and selected European countries, 2006



Source: Eurostat Portal Page - Population and social conditions – Population, 2008.

Participation in education

The participation of the adult population in formal education¹ in 2006 remained at the level of the previous year, according to the latest available data. Participation in education improves individuals' flexibility and competitiveness in the labour market, and boosts income. It also has a positive impact on personal development and social inclusion. In 2006, the participation of the population aged 25–64 in all levels of formal education reached 4.4%, and Slovenia thereby exceeded the EU average for the second year in a row. Unlike in other EU countries, the participation of the adult population in education in Slovenia did not increase in 2005 and 2006, while it increased more than in the EU on average in the period 2000–2006.

In the last year (2006) the enrolment of adults in secondary education dropped, but it was still above the European average. The enrolment rate stood at 0.8%, which is higher than the European average of 0.5% and places Slovenia in the top quarter of EU countries. Belgium, Finland and Sweden have the highest secondary education enrolment rates. Compared to 2005, the enrolment rate was down by 0.1 p.p., continuing a negative trend that started in 2004. However, in the period 2000–2006 the participation of adults increased more than in most other European countries.

Participation in tertiary education inched lower for the second successive year in the academic year 2007/2008. It stood at 3.3%, down from 3.4% in 2006/2007. The participation of adults in tertiary education (3.5%) was above the EU average of 2.4%, but Slovenia still lags behind northern European countries with the highest enrolment rates: Finland (5.7%), Sweden (5.1%) and Denmark (4.8%). In the 2000–2006 period, the participation in tertiary education in Slovenia rose faster than in the EU on average (Slovenia: 1.5 p.p.; EU: 0.4 p.p.).

Participation of adults in non-formal education differs substantially with regard to the attained level of formal education. In 2007, 9.4% of the population in the 25–64 age group participated in non-formal education, which is 0.1 p.p. more than in 2006 and 1.9 p.p. more than in 2003.² Yet despite the positive trend, the picture is very unfavourable in terms of participation by the attained level of formal education. Participation drops faster the lower people's formal education, and in 2007 the share of people with a tertiary education participating in informal education was 7.2 times greater than the

share of people with a lower education. The share of the population with a tertiary education participating in non-formal education totalled 19.2%, the share of those with a secondary education 7.5% and the share of those with a lower education a mere 2.7%. The difference in the participation in non-formal education between the most and least educated population groups was thus 17 p.p. in 2007, having decreased by 0.7 p.p. from 2003.

¹ Includes full-time and part-time students at all levels of formal education (primary, secondary and tertiary).

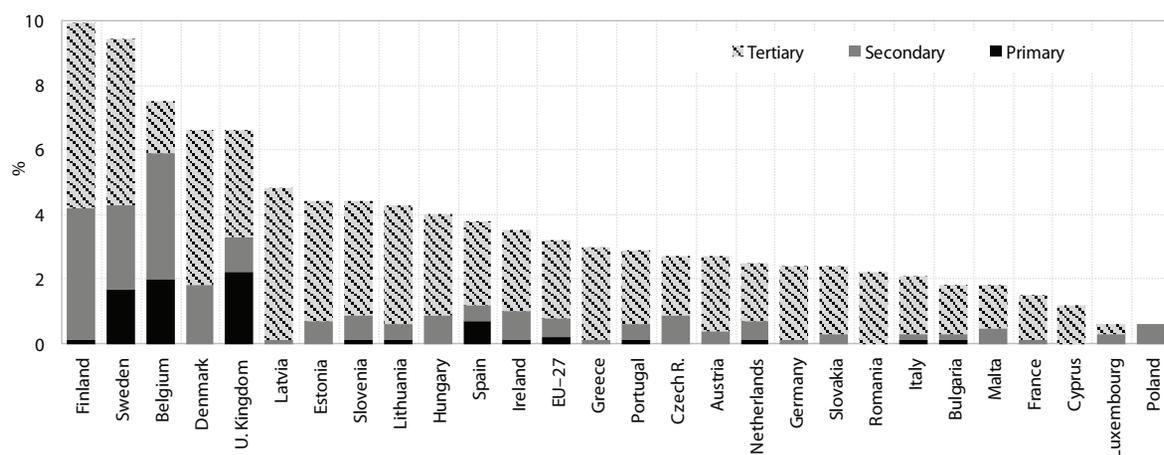
² Due to a change in methodology in 2003, the data are comparable only from that year onwards.

Table: Participation of the population aged 25–64 in all levels of formal education, Slovenia and EU countries, in %

	1998	2000	2005	2006 ¹
EU-27	N/A	3.3	4.2	3.1
Belgium	N/A	5.1	7.4	7.5
Bulgaria	N/A	1.5	1.7	1.8
Czech Rep.	N/A	1.1	2.7	2.7
Denmark	N/A	5.0	6.7	6.6
Germany	N/A	2.4	2.3	2.4
Estonia	N/A	N/A	4.4	4.4
Ireland	N/A	2.0	2.8	3.4
Greece	N/A	0.6	3.0	3.1
Spain	N/A	2.5	3.7	3.8
France	N/A	N/A	1.5	N/A
Italy	1.7	1.9	2.2	2.2
Cyprus	N/A	0.3	1.0	1.2
Latvia	1.5	2.9	4.8	4.8
Lithuania	0.9	1.6	4.2	4.3
Luxembourg	N/A	0.3	0.4	0.6
Hungary	1.5	2.3	4.0	4.0
Malta	N/A	0.8	1.9	1.8
Netherlands	2.9	2.6	2.5	2.5
Austria	3.2	3.3	2.6	2.6
Poland	N/A	2.0	N/A	N/A
Portugal	2.8	3.3	3.3	2.9
Romania	N/A	N/A	N/A	N/A
Slovenia	1.5	2.5	4.4	4.4
Slovakia	N/A	N/A	2.1	2.4
Finland	5.6	6.9	9.4	9.8
Sweden	N/A	10.3	9.4	9.3
United Kingdom	7.1	11.0	13.9	4.4

Source: Eurostat Portal Page – Population and social conditions – Education and training, 2008.
 Notes: ¹ Data for 2006 are provisional; N/A – not available.

Figure: Participation of the population aged 25–64 in individual levels of formal education, 2006, in %



Source: Eurostat Portal Page – Population and social conditions – Education and training, 2008.

THE FIFTH PRIORITY:

Integration of measures to achieve sustainable development

- Emission-intensive industries
- Energy intensity
- Renewable energy sources
- Share of road transport in total goods transport
- Implicit tax rate on energy consumption
- Agricultural intensity
- Intensity of tree felling
- Municipal waste
- Old-age dependency ratio
- Fertility rate
- Migration ratio
- Regional variation in GDP per capita
- Regional variation in the registered unemployment rate
- Building permits
- Household expenditure on culture

Emission-intensive industries

In the 2006–2008 period, emission-intensive industries again experienced faster growth than other manufacturing sectors. In the whole period since 1999, Slovenia's total output of emission-intensive industries, i.e. sectors with the highest emission intensity (into air, water, earth) per unit of output,¹ was growing faster than the output of other manufacturing sectors. The gap was most notable in 2003 (7.4 p.p.). It narrowed in 2004 and 2005, but widened remarkably again in 2006 and 2007 (to 6.9 p.p. and 8.4 p.p., respectively). In 2008, production volume growth in these industries was 5.1 p.p. higher than the average in other manufacturing sectors. With strong production volume growth, the yield rate was lower than the average in other manufacturing sectors. The share of value added of emission-intensive industries in total manufacturing therefore declined somewhat in 2007,² but remained at the level of 2005. The decline was largely a consequence of a lower share of value added in the manufacture of chemicals and chemical products. Relative to 2005, in 2006 and 2007 a lower share of value added was only recorded in the manufacture of pulp, paper and paper products.

A favourable result is that after a five-year period of stagnation, the reduction in energy intensity in manufacturing industries strengthened in 2006 and 2007. The consumption of final energy³ (energy consumption in TJ⁴) per unit of value added in manufacturing industries, the main indicator of qualitative changes in the energy sector, was falling at an average annual rate of 1.3% in 2001–2004. In 2005, the consumption of final energy per unit of value added in manufacturing even increased, by 2.3%. However, a favourable reversal occurred in 2006 as the consumption of final energy per unit of value added declined (by 4.6% in 2006 and by as much as 9.2% in 2007). The decline was mainly related to lower energy consumption in the manufacture of metals and in the manufacture of pulp and paper (in the latter both due to qualitative changes, such as lower energy intensity, and due to a lower volume of production). By our estimate, energy intensity also continued to decline in 2008, given that

the production of primary aluminium diminished by a quarter as a result of adjusting to the IPPC Directive; the production of primary aluminium thus accounted for only 9% of total electricity consumption in Slovenia instead of 12% registered in previous years (a decline from 1.7 TWh per year to 1.2 TWh per year). The reduction in electricity consumption in this production branch is comparable with the annual production in the Zlatoličje hydroelectric power plant and in block 5 of the Šoštanj thermal power plant.

A major part of the industry participates in emission trading and the remainder in a system of CO₂ taxes. In the first and second phases of trading (2005–2012), emission allowances were distributed free of charge, while starting in 2013 they will be sold at auction. For the industry the transition will be gradual: in 2013, the industry will be eligible for free allowances at a level of 80% of the total quantity of allowances to be issued; by 2020, the share of free allowances will be reduced to 30%, while from 2027 onward the industry will also have to buy all allowances at auction. The industrial sectors which in the event of unsuccessful negotiations on the global climate agreement package could be exposed to the risk of carbon leakage will be allocated 100% of emission allowances free of charge, provided that they meet the criterion of the best technology available. Free allowances will be allocated to sectors or sub-sectors at the level of the EU as a whole whose production costs will increase by more than 5% of their gross value added due to emission trading and to those with non-EU trade intensity (value of exports to non-EU countries plus value of imports from non-EU countries in the total value of production and imports) at the level of the total EU above 10%. Sectors will also be eligible for free allowances if their production costs (with regard to value added) increase by 30% or more, regardless of the non-EU trade intensity, and if their non-EU trade intensity exceeds 30%, regardless of the increase in costs. These provisions, which represent one of the most important compromise solutions in the energy and climate package adopted in December 2008, make practically the whole Slovenian industry participating in the emission trading scheme (ETS) eligible to receive emission allowances free of charge. The package otherwise stipulates that emissions from machinery under the ETS, such as large industrial installations, should drop by 21% relative to 2005 emissions by 2020.

¹ According to the World Bank methodology and groups of the Standard Classification of Activities, emission-intensive industries include: the total manufacture of chemicals, chemical products and man-made fibres; the total manufacture of pulp, paper and paper products; within the manufacture of metals and metal products only the manufacture of metals; within the manufacture of other non-metal products, the manufacture of cement, lime and plaster; and the manufacture of other non-metallic mineral products.

² The most recent data on value added by manufacturing industry are available for 2007.

³ Energy consumption by activity, in TJ (SORS).

⁴ Terajoules.

Table: **Indices of growth in production volumes¹ and value added in manufacturing and emission-intensive industries**

	2000	2005	2006	2007	2008
Manufacturing, real value added growth, indices	109.7	103.7	107.5	107.8	98.5
Manufacturing, real growth of production volume, indices	107.0	103.7	106.5	107.5	98.3
Emission-intensive industries, real growth of production volumes, indices	108.2	104.2	112.1	114.3	102.4
Pulp, paper, and paper products	104.7	102.9	99.8	98.8	97.6
Chemicals, chemical products, manmade fibres	110.4	107.6	113.0	121.7	107.9
Other non-metal mineral products	96.4	93.1	106.2	105.8	99.9
Manufacture of metals	111.9	103.1	119.6	106.7	91.0
Manufacturing (excluding emissionintensive ind.), real growth of prod. volume, indices	106.7	103.6	105.2	105.9	97.3

Source: SI-STAT Data Portal – National accounts and Mining and manufacturing (SORS), 2008; calculations by IMAD.

Notes: ¹ Until 2004, industrial production indices were calculated from quantity data, from 2005 on from value data. ² The figures for 2008 refer to ten months.

Energy intensity

Slovenia has a relatively high energy intensity, which is slowly diminishing. In 2007, Slovenia recorded a more notable decline for the second year in a row. In 2007, Slovenia consumed 280.8 toe¹ (tonnes of oil equivalent) of primary energy to produce EUR 1 million of GDP expressed in constant 1995 prices, while in 2006, 202.5 toe were consumed to produce EUR 1 million of GDP in the EU as a whole (against 299.1 toe consumed in Slovenia that year). The EU countries hence consumed a third less energy to produce one unit of GDP. The disparities in the EU countries' energy intensity are very large: energy intensity in Bulgaria is thus nearly 13 times higher than in Denmark. In the EU, only the Eastern European countries reported higher energy consumption per unit of GDP than Slovenia. In Slovenia, the intensity of energy consumption declined by 4.9% in 2006,² and even more, 6.1%, in 2007.

High energy intensity is also related to the increasingly industry-based economic structure. The intensity of energy consumption is also a result of the economic structure, as a greater share of heavy industry, which consumes more energy than service activities, increases a country's energy intensity. Among the EU Member States, Slovenia had almost the highest share of manufacturing industries in 2007 (23.4%; EU: 17.1%), especially paper, chemical, non-metal and metal industries, i.e. activities which use an above-average amount of energy. These four industries together generated 43.7% of value added generated by manufacturing industries in 2007 (EU: 37.4%), while the share of energy consumed by these industries accounted for as much as 70.9%.³

Slovenia's energy consumption per capita is equal to the EU average, while the country's economic development is more than a third lower. In 2006, Slovenia consumed approximately the same amount of energy per capita as the EU countries on average (1.0% less).⁴ Given that Slovenia's GDP per capita lagged behind the EU average by 34.7% (in 2007 still by 31.3%, despite strong GDP growth), its energy consumption divided by its smaller GDP was much higher than in the EU.

The relatively high decline in energy intensity in Slovenia in 2007 was achieved with high GDP growth and very weak growth in energy consumption. In 2007, Slovenia's economic growth was as much as 6.8%, whereas primary energy consumption increased by a mere 0.2%.⁵ This means that energy intensity declined by 6.1%. The relatively low energy consumption was the consequence of a reduced consumption of oil products (by 1.4%, or 36 ktoe) and renewable sources (by 4.5%, or 35 ktoe) and low growth rates in consumption of other energy sources (solid fuels 1.2%, or 19 ktoe, natural gas 1.7%, or 17 ktoe, and nuclear energy 2.6%, or 38 ktoe).⁶

Energy intensity is also decreasing at a relatively rapid pace in countries which have already pursued more energy-saving policies than Slovenia. In the period 1995–2006, energy intensity in Slovenia decreased by 24.7%. In as many as 12 EU countries the reduction was even higher than in Slovenia, including in some countries where energy intensity had already been very low (such as Ireland, Luxembourg and Denmark). Reduced energy intensity is a consequence of technological development and restructuring of the economy in terms of greater value added of services and of policies promoting efficient energy use.

¹ Calculated using Eurostat data (to ensure international comparability) on energy intensity for 2006 and SORS figures on GDP growth and growth in energy consumption in 2007. The SORS data otherwise differ somewhat from those published by Eurostat.

² Environment and energy (Eurostat), 2008; calculations by IMAD.

³ SI-STAT, National Accounts and Energy (SORS), 2008; calculations by IMAD.

⁴ Population and Social Conditions and Environment and Energy (Eurostat), 2008; calculations by IMAD.

⁵ According to SORS data.

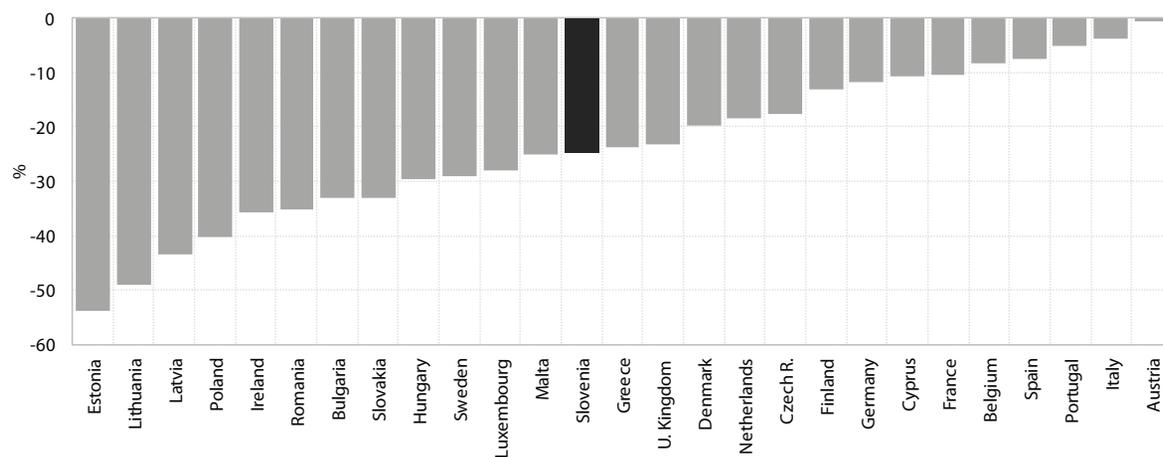
⁶ Energy (SORS), 2007; calculations by IMAD.

Table: Energy intensity (primary energy consumption per unit of GDP), toe/m EUR, 1995

	1995	2000	2005	2006
EU-27	236.3	213.9	208.6	202.5
Austria	145.8	137.1	149.9	145.0
Belgium	238.6	247.1	227.5	218.5
Bulgaria	2,326.0	1,940.0	1,606.9	1,554.0
Cyprus	281.0	280.2	246.7	250.8
Czech Rep.	965.8	890.2	828.5	794.8
Denmark	146.9	121.9	115.6	118.1
Estonia	1,835.2	1,215.4	967.4	848.3
Finland	290.6	258.1	242.7	252.5
France	199.7	188.3	184.9	179.1
Greece	268.5	236.5	212.2	204.7
Ireland	217.0	177.7	143.5	139.3
Italy	192.4	182.8	189.6	185.0
Latvia	994.4	758.6	613.8	563.2
Lithuania	1,691.7	1,134.0	948.4	861.9
Luxembourg	241.2	170.8	184.5	173.8
Hungary	740.6	602.2	545.8	521.0
Malta	320.2	222.8	264.9	239.8
Germany	175.2	160.1	158.3	154.8
Netherlands	231.2	197.1	198.7	188.4
Poland	962.8	656.7	582.5	574.0
Portugal	237.3	235.9	243.4	225.1
Romania	1,738.3	1,459.8	1,167.4	1,128.0
Slovakia	1,155.4	993.7	848.3	772.2
Slovenia	397.3	330.8	314.4	299.1
Spain	228.7	221.5	220.6	211.3
Sweden	265.5	209.6	199.4	188.3
United Kingdom	251.5	226.9	202.2	193.3

Source: Eurostat Portal Page - Structural indicators, 2009.

Figure: Change in energy intensity between 1995 and 2006 in EU countries



Source: Eurostat Portal Page - Environment and Energy, 2009; calculations by IMAD.

Renewable energy sources

The share of the use of renewable energy sources is relatively high in Slovenia, but has been on a declining trend since 2000, also dropping somewhat in 2007.

According to the latest SORS data, the share of renewable sources accounted for 10.0% of total energy consumption in Slovenia in 2007, while the average share in the EU in 2006 was 7.1%, according to Eurostat data. Seven EU countries recorded even higher shares of renewable sources than Slovenia. Having risen in both Slovenia and the EU in 1995–2000, the share of renewable sources in the EU increased by a further 1.3 p.p. in 2000–2006, while it declined by 1.8 p.p. in Slovenia. Namely, energy consumption in Slovenia increased by 14.2% in the last six years, while the use of renewable sources even decreased (by 2.5%¹). The decrease in the use of renewable sources and occasional fluctuations are primarily a consequence of lower hydro-energy production due to a greater frequency of dry periods and the slow construction of new power plants, which does not keep up with energy consumption growth. In 2007, the use of renewable sources declined by a further 4.5% mainly due to the lower hydro-energy use. The latter decreased by 9.1%, and the use of biomass and waste by 1.5%. The total use of renewable sources thus declined by 4.5% in 2007; with the total energy consumption having grown by 0.2%, the share of renewable sources slid by 0.5 p.p. to 10.0%.

Biomass and waste account for over two thirds of renewable sources in the EU, while Slovenia produces a large amount of hydro-energy. The structure of renewable sources, the use of which increased by 7.1% in the EU, was as follows in 2006: 68.9 % biomass and waste (within that, the use of biofuel grew fastest, by 62.5%), 20.5% hydro-energy, 5.5% wind energy (19.9% growth), 4.3% geothermal energy, and 0.8% solar energy (23.3% growth). In Slovenia the share of biomass and waste stood at 62.4% in 2007 (within that, biofuel use grew fastest, but the percentage is still low, below 1.8% of RES), while the relative share of hydro-energy, which amounted to 37.6%, is higher than in the EU. Other renewable sources in Slovenia have not yet been covered statistically. In 2006, only two EU countries recorded a higher hydro-energy percentage than Slovenia: Slovakia and Austria. As for biomass and waste, Slovenia primarily used wood and wood waste. In the EU, a considerable share of total biomass and waste also comes from municipal solid waste (12%), and biofuels and biogas (8% and 5%, respectively).

Slovenia posts a higher share of electricity from renewable sources in total electricity consumption than the EU, but it will nevertheless find it hard to realise the increase targeted for 2010. In the EU, electricity from renewable sources accounted for 14.6% of electricity consumption in 2006, and for 24.4% in Slovenia. Five EU countries recorded higher shares than Slovenia (the highest Sweden, almost one half). Slovenia plans to produce 33.6% of the electricity it consumes from renewable sources by 2010.² After this share had already totalled 31.7% in 2000, it fluctuated significantly in subsequent years, dropping on account of a greater frequency of droughts and slow growth in the number of new power plants. In 2007, when the output of hydro-electric power plants declined by one tenth, the percentage of electricity production from renewable sources dropped to a mere 22.1%.³ In 2008, it rose to over 25%, by our estimate, because the output of hydropower plants increased by one quarter due to above-average water levels in rivers.

The EU has set ambitious goals with regard to increasing the share of renewable sources. To achieve the Kyoto objectives, it plans to increase the 7.1% share in primary energy balance to 12% by 2010, and the share in final energy consumption to 20% by 2020. According to the new directive on the use of renewable energy,⁴ Slovenia is to increase its share of renewable sources from the current 16% to 25% of final energy consumption by 2020. These ambitious targets will clearly require an even more proactive policy of promoting all potential renewable energy sources. Estimates of how much of the renewable energy potential is economically utilisable differ. Analyses for Slovenia⁵ indicate that it has already used slightly less than 60% of its economic water power potential, and slightly less than 80% of its ecologically acceptable potential.

¹ According to Eurostat data (to ensure international comparability), which differ slightly from the SORS data, according to which energy consumption increased by 15.1%, and the use of RES decreased by 0.6%.

² National Energy Programme.

³ SORS data.

⁴ Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC.

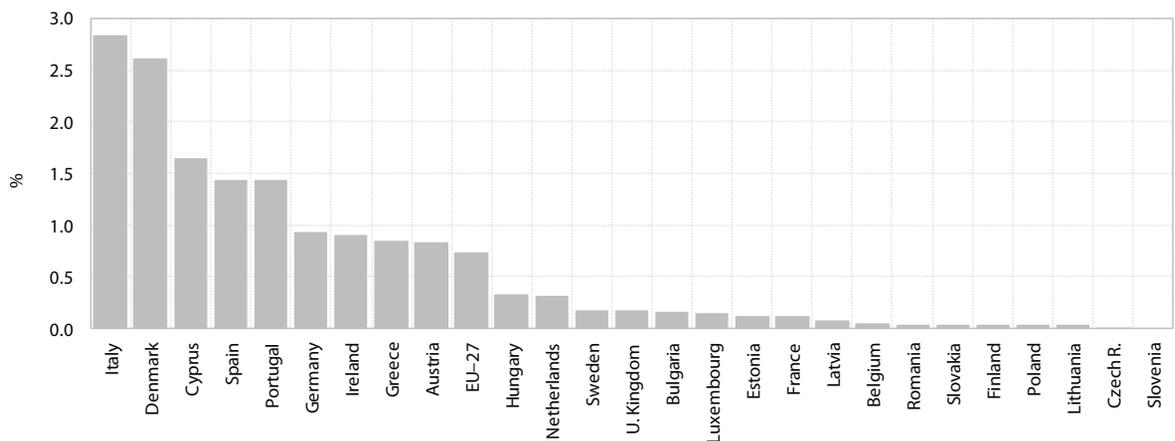
⁵ Concession Payments Report (Ministry of the Environment and Spatial Planning), 2007.

Table: Share of renewable sources in total primary energy consumption, %

	1995	2000	2005	2006
EU-27	5.1	5.8	6.6	7.1
Austria	21.8	22.9	20.2	21.4
Belgium	1.2	1.2	2.4	2.9
Bulgaria	1.6	4.2	5.6	5.5
Cyprus	2.1	1.8	1.9	1.9
Czech Rep.	1.4	1.5	4.0	4.3
Denmark	7.6	10.9	16.6	15.6
Estonia	9.0	10.9	10.6	9.8
Finland	21.1	23.8	23.1	22.7
France	7.7	7.0	6.1	6.3
Greece	5.3	5.0	5.2	5.7
Ireland	1.4	1.6	2.4	2.7
Italy	4.8	5.2	6.5	7.0
Latvia	27.2	31.8	33.0	31.0
Lithuania	5.7	9.2	8.8	9.3
Luxembourg	1.4	1.6	1.6	1.7
Hungary	2.4	2.1	4.2	4.6
Malta	0.0	0.0	0.0	0.0
Germany	1.9	2.8	5.0	6.0
Netherlands	1.5	2.4	3.4	3.6
Poland	3.9	4.2	4.8	5.1
Portugal	16.2	15.3	13.2	17.0
Romania	5.9	10.9	12.6	11.7
Slovakia	2.8	2.8	4.3	4.6
Slovenia	9.3	12.3	10.6	10.5
Spain	5.4	5.7	6.0	6.6
Sweden	25.9	31.4	29.6	29.1
United Kingdom	0.9	1.1	1.7	1.9

Source: Eurostat Portal Page - Environment and energy, 2009.
Note: N/A – not available.

Figure: Shares of wind, geothermal and solar energy in total primary energy consumption in EU countries in 2006



Source: Eurostat Portal Page - Environment and energy, 2009; calculations by IMAD.

Share of road transport in total goods transport

The share of road freight transport, which is growing faster in Slovenia than in the EU, increased further in 2007 and 2008. While in 2000 the share of road freight transport¹ in total goods transport (roads, railway and inland waterways, in tonne-kilometres) in Slovenia was still 3.9 p.p. lower than in the EU, it increased faster than in the EU in the following years. In 2005, the share of road goods transport had thus already exceeded the EU average; in 2006, it totalled 78.2%, in 2007, 79.2%,² while in the first three quarters of 2008 it rose to 82.0%.³ In the period after 1995, most Eastern European countries saw major increases in the shares of road goods transport, even higher than registered in Slovenia. In other EU countries the increases were more moderate, and in three countries the shares of road goods transport even declined.

In recent years, the strong rise in transport as a result of Slovenia's geographic location and the openness of its economy has been further boosted by extensive international trade in goods. The volume of road goods transport per capita is among the highest in the EU, ranking second only to Luxembourg. Per capita, 6,843 tkm were logged in road goods transport in Slovenia in 2007, which is 73.5% more than the EU average.⁴ This again is a result of the country's favourable location at the crossing of Trans-European corridors V and X, where transport increased significantly upon the last two enlargements of the EU. In addition, several administrative obstacles for Slovenia's transporters with regard to transport in EU countries were removed after Slovenia's entry into the EU (above all, problems related to the limited number of permits). Slovenia also negotiated the right to cabotage⁵ in the countries of the EU-15, which other countries that entered the EU together with Slovenia will only be allowed after the expiry of a five-year transition period. Since Slovenia is a small Central European country, the share of international goods transport is expectedly high and the share of national goods traffic low. Also in 2007, the rapid growth of both road goods transport and the transport of goods by rail were further boosted by high economic growth at home and abroad, particularly in Eastern Europe.

In the last four years, the growth in road goods transport in Slovenia exceeded economic growth as well as the growth in railway goods transport at a much greater rate than in the EU. The growth in goods transport in Slovenia was 3.5 times higher than GDP growth: in the period 2003–2007, the average annual GDP increased by 5.3%, road goods transport by 18.2% and railway transport by 4.5% per year.⁶ In the EU the disparity between GDP growth and the growth in road goods transport was two times smaller. Another important difference is that the annual increases in road goods transport and transport of goods by rail were much more balanced in the EU (5.3% and 3.6%, respectively). From the viewpoint of sustainable development, transport of goods by rail and transport of goods by waterways are more acceptable than transport by lorry; it would therefore be sensible to encourage rail and waterway transport in order to stop the upward trend in road freight transport. This is a challenge for Slovenia, as well as for the EU as a whole. In Slovenia the observed indicator could be improved by further increasing transshipment through the Port of Koper, by transforming Slovenia's railway operator into a modern transport company and by modernising railway infrastructure, which will be a priority in the coming decade. Furthermore, it would also be sensible to include external transport costs in transport prices to the greatest possible extent.

¹ The data on road goods transport refer solely to road freight vehicles registered in Slovenia.

² Transport (Eurostat), 2008.

³ SI-STAT (SORS), 2008

⁴ Population and Social Conditions in Transport (Eurostat), 2007; calculations by IMAD.

⁵ National transport performed by Slovenian vehicles in other countries.

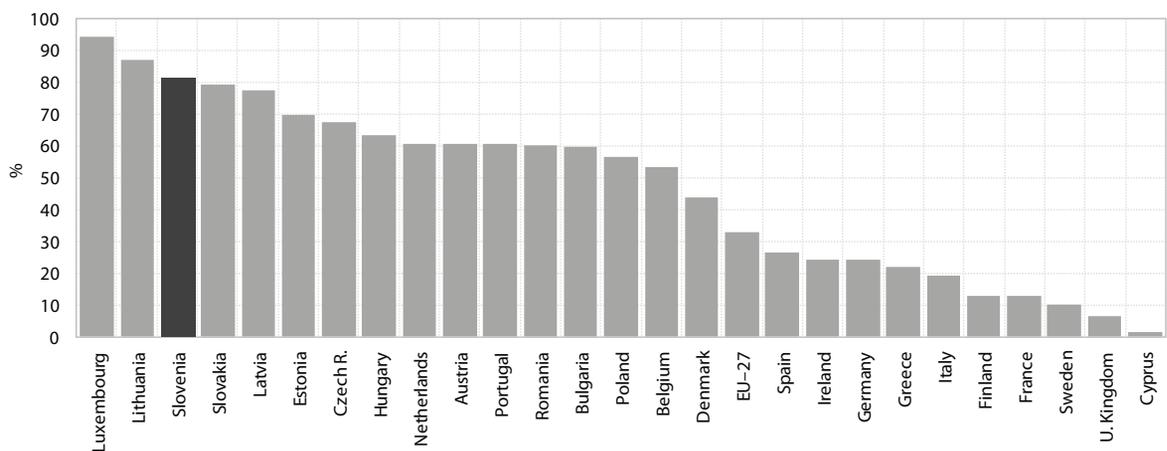
⁶ Economy and Finance in Transport (Eurostat), 2007; calculations by IMAD.

Table: Share of road transport in total goods transport (tkm), %

	1995	2000	2005	2006	2007
EU	N/A	73.9	76.5	76.6	76.9
Austria	63.5	64.8	64.4	63.2	60.9
Belgium	77.4	77.4	72.4	71.2	N/A
Bulgaria	N/A	52.3	70.8	69.0	70.0
Cyprus	100.0	100.0	100.0	100.0	100.0
Czech Rep.	57.5	68.0	74.5	76.1	74.7
Denmark	91.8	92.1	92.2	91.8	92.2
Estonia	28.7	37.3	35.4	34.7	43.2
Finland	72.3	75.8	76.5	72.7	73.9
France	76.5	76.0	80.5	80.9	81.5
Greece	97.7	N/A	97.4	98.1	97.1
Ireland	90.1	96.2	98.3	98.8	99.3
Italy	88.2	89.0	90.3	90.1	89.3
Latvia	15.8	26.5	29.8	39.0	41.9
Lithuania	41.6	46.6	56.1	58.4	58.5
Luxembourg	85.9	87.8	92.5	91.5	93.8
Hungary	58.3	68.1	69.2	71.6	74.4
Malta	100.0	100.0	100.0	100.0	100.0
Germany	63.9	66.1	66.0	65.9	65.7
Netherlands	63.6	63.4	63.6	63.1	N/A
Poland	42.6	56.9	69.0	70.4	74.3
Portugal	90.3	92.5	94.7	94.9	94.7
Romania	42.0	42.9	67.3	70.5	71.3
Slovakia	63.7	53.0	70.3	68.8	73.6
Slovenia	66.4	70.0	77.3	78.2	79.2
Spain	90.3	92.8	95.2	95.4	95.9
Sweden	62.0	63.9	64.0	64.2	63.5
United Kingdom	92.3	90.0	88.0	86.4	88.5

Source: Eurostat Portal Page - Structural indicators, 2008; Si-STAT data portal, 2008.
Note: N/A – not available.

Figure: Share of international road transport in total road goods transport¹ (tkm) in 2007



Source: Eurostat Portal Page - Structural indicators, 2008.
Note: ¹The data on road goods transport refer solely to road freight vehicles registered in Slovenia.

Implicit tax rate on energy consumption

The implicit tax rate on energy¹ was decreasing in Slovenia in 2001–2006. Data on the implicit tax rate for Slovenia have been available since 2000, when it amounted to 82.3 (EUR 1,000 per toe). The implicit tax rate increased in 2001, but was declining in the whole period from 2002 to 2006. As inflows from excise duties on automotive fuels account for almost all inflows from energy taxes, the movement of this indicator was impacted by the level of excise duties on fuels, which was only slightly above the minimum rate in 2002–2006, on average, for unleaded gas and at the minimum rate for gas oil.

In 2007, the implicit taxation of energy increased to 84.4 by our estimate. Excise duties on automotive fuels were slightly above the minimum rate set in Directive 2003/96/EC for more than half of 2007; an excise duty on electricity was also introduced in 2007 and was at the minimum level as well (EUR 0.5/MWh for industrial use and EUR 1/MWh for households). However, both only had a small impact on this indicator's increase. In 2007, the higher tax burden of energy consumption in Slovenia was mainly a consequence of lesser energy consumption and a significant improvement in energy intensity of the economy.²

Among the EU countries, in 2006 the highest burden of implicit taxes on energy consumption was recorded by Denmark, followed by Germany, United Kingdom, Sweden and the Netherlands. The highest figure was posted by the United Kingdom, which achieved the high tax burden practically solely on account of the burden on automotive fuels, which is nearly 2.5 times higher than the minimum rate (see figure). In most new members, practically all inflows from energy taxes come from excise duties on automotive fuels, which are at the minimum level or, due to the transitional period, below it.

In Slovenia, revenue from excise duties on automotive fuels accounts for 99% of revenue from excise duties on energy. In contrast, in Denmark and Sweden a large portion of inflows from energy taxation comes from

excise duties on electricity, in addition to inflows from excise duties on automotive fuels. The excise duty on electricity is highest in Denmark (EUR 81–90 per MWh); it is also high in the Netherlands and Sweden. These are countries which also boast the highest rates of excise duties on natural gas.

In 2008, excise duties on automotive fuels in Slovenia were among the lowest in the EU. In 2007, the minimum rates of excise duties on energy set in Directive 2003/96/EC became obligatory for Slovenia as well, except for natural gas, where Slovenia was granted a transitional period until not later than 2014. In 2008, excise duties on automotive fuels were at the minimum level, but started to rise at the end of the year. Excise duties on electricity were at the minimum level as well, while excise duties on mineral fuels for industrial use and heating (gas oil for heating, fuel oil, liquid gas), natural gas and coal were higher.

¹ The implicit tax rate on energy consumption shows taxation in euros (deflated) per unit of energy per unit of final energy consumption, in tonnes of oil equivalent (toe). The weakness of this indicator is that all (both "green" and fossil) energy consumption has equal weight. Due to the promotion of the use of renewable resources, the use of these resources is usually subject to low taxes or no tax at all; a country with a high share of the use of renewable resources may thus have a lower implicit tax rate on energy than a country which mainly uses fossil fuels.

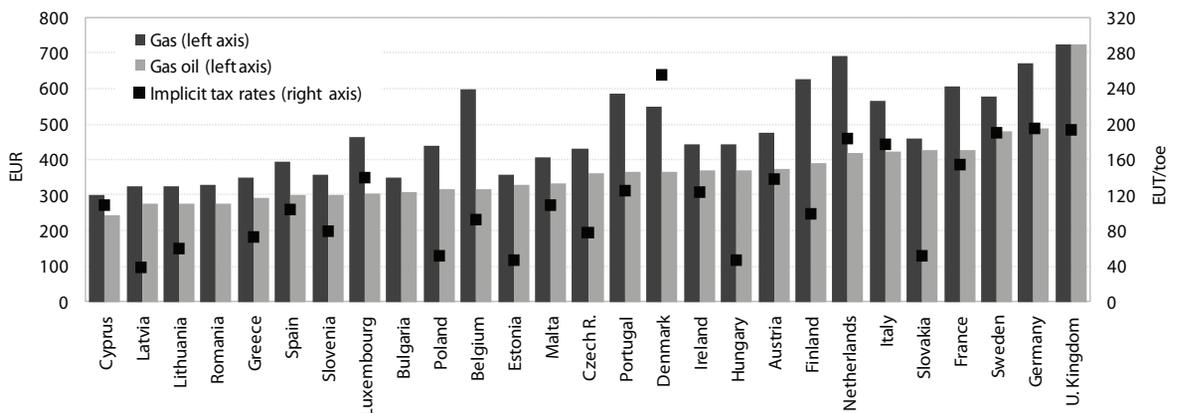
² See the indicator *Energy intensity*.

Table: **Implicit tax rate on energy consumption (revenue from taxes on energy consumption – deflated – to final energy consumption), in EUR 1,000/toe**

	1995	2000	2005	2006
EU-25	144.8	160.5	153.6	152.0
Austria	123.1	135.9	143.1	137.7
Belgium	91.7	83.1	95.9	92.3
Cyprus	26.4	37.4	111.8	109.4
Czech Rep.	39	43.2	73.1	77.5
Denmark	200.5	275.1	264.4	254.8
Estonia	6.8	21.0	44.2	46.3
Finland	96.7	101.7	104.6	99.0
France	168	164.8	155.2	154.3
Greece	157.7	89.8	77.0	73.5
Ireland	112.2	118.8	127.5	123.3
Italy	236.7	214.9	177.4	177.2
Latvia	10.1	35.7	40.7	38.9
Lithuania	12.3	46.3	63.1	60
Luxembourg	140.9	137.9	148.5	139.3
Hungary	58.5	42.1	47.5	47
Malta	52	121.8	96.3	108.8
Germany	168.3	188.1	200.3	195.2
Netherlands	113.8	148.3	171.4	183.1
Poland	20.6	34.9	50.1	52.3
Portugal	163.1	96.5	128.1	125.7
Slovakia	N/A	31.6	49.0	51.2
Slovenia	N/A	82.3	79.5	78.9
Spain	128.1	119.7	103.7	103.8
Sweden	137.9	173.7	188.0	189.8
United Kingdom	143.2	232.5	194.7	192.9

Source: Eurostat Portal Page - Sustainable Development, 2009.
Note: N/A – not available.

Figure: **Excise duties on automotive fuels as of 1 July 2008 (EUR/l) and implicit tax rates (ITR) on final energy consumption (EUR 1000/toe; deflated), 2006**



Source: Directorate General Taxation and Customs Union. Tax policy. Excise duties and transport, environment and energy taxes (European Commission), 2008; Eurostat Portal page - Sustainable Development, 2009.

Agricultural intensity

The consumption of NPP fertilisers¹ per unit of utilised agricultural area declined again in 2007. In 2007, 57,600 tonnes of NPP fertilisers were used in agricultural production, which was 1.7% less than the year before and nearly 23% less than in 2000. The calculation shows that 115.6 kg of NPP fertilisers were used per hectare of utilised agricultural area, which was 3.3% less than the year before and only slightly more than in 2005 when consumption was lowest in the whole analysed period since 1995. According to the latest comparable data, in 2005, consumption per unit of utilised agricultural area in Slovenia was still higher than the EU average, yet already lower than the EU-15 average (in Slovenia 115.3 kg/ha, the EU average 99.8 kg/ha, the EU-15 average 118.5 kg/ha, within that Italy 88.4 kg/ha, Austria 159.3 kg/ha, Hungary 92.9 kg/ha).

Sales of pesticides in Slovenia dropped again in 2007. The total quantity of active ingredients of pesticides sold in Slovenia, which, however, was not only used in agriculture, had varied until 2004, when it started to fall. In 2007, total pesticide sales amounted to 1.2 thousand tonnes, 9.8% less than in 2006 and 21.3% less than in 2000. Within that, the sales of fungicides decreased, in particular, as did the sales of insecticides, while the sales of herbicides increased.² A comparison of pesticide use among countries is inappropriate because the figures are a sum of active ingredients with very different levels of toxic intensity. A rough comparison would show relatively high pesticide consumption in Slovenia, given a significant share of older types of pesticides which are biologically weaker (but less burdening for the environment) and used in greater quantities. A pilot study on the use of pesticides in wheat production showed that the use of pesticides for this culture is relatively low.³

Average production levels per unit of area sown with the two most important crops in Slovenia differed in 2007: the level of wheat production remained the same as in 2006, while the level of maize production increased. A low level of production is not optimal in terms of exploiting land as the primary natural resource. On the other hand, a very high level is also not appropriate, as it brings about high pressure on the

environment. After a relatively bad harvest in the year before, the average yield of wheat remained almost the same in 2007, totalling 4.2 t/ha, which is below the EU average (the EU average: 4.8 t/ha, within that Italy 3.4 t/ha, Austria 4.8 t/ha, Hungary 3.6 t/ha). The average yield of maize increased, as a result of the favourable weather conditions, from 6.9 t/ha to 7.5 t/ha, which is above the EU average (EU: 5.8 t/ha, within that Italy 9.3 t/ha, Austria 9.9 t/ha, Hungary 3.7 t/ha).

In 2007, the average number of animals per unit of utilised agricultural area remained at the same level as the year before, while the average milk yield increased. Slovenia had 0.89 livestock units (LSU)⁴ per hectare of utilised agricultural area in 2007, which was slightly more than in 2005, when the penultimate research of agricultural holdings was performed. In Slovenia, this type of environmental burdening is relatively high due to a high share of hilly areas and grasslands, which are more favourable for livestock production than for other agricultural activities. In 2005, the number of animals per unit of utilised agricultural area was higher than the EU average, but almost equal to the EU-15 average (Slovenia 0.87 LSU/ha, EU: 0.80 LSU/ha, EU-15: 0.88 LSU/ha). In the neighbouring EU Member States these figures are lower (in 2007, Slovenia 0.89 LSU/ha, Italy and Austria 0.77 LSU/ha, Hungary 0.56 LSU/ha). The average milk yield per animal increased by as much as 11% in 2007, to 5.9 t/animal. This level of milk yield is nevertheless still relatively low (the EU average 6.7 t/animal, within that Italy 6.1 t/animal, Austria 6.0 t/animal, Hungary 6.9 t/animal).

The share of agricultural areas controlled for organic and integrated farming continued to increase in 2007, but given Slovenia's strategic objectives, the increase should have been faster. In 2007, Slovenian farms included in the control of sustainable (organic and integrated) farming cultivated 29,300 hectares of land, which is somewhat more than 17% of the total utilised agricultural area; within that, one third was cultivated using organic methods and two thirds using integrated methods. The total areas also increased significantly in 2007: by 9% in organic farming and by 14% in integrated farming. The share of organically farmed area in the total utilised agricultural area thus rose from 5.5% to 5.9%, which is insufficient compared with the targets set in the Action Plan for Organic Farming (20% of utilised agricultural area by 2015) and in the Rural Development Programme 2007–2013 (64,000 ha by 2013), even though the share of utilised agricultural area in Slovenia was higher than the EU average (which is 4%, within that 9.1% in Italy, 13.4% in Austria, 2.3% in Hungary).

¹ NPP fertilisers are mineral fertilisers, which contain the three most important plant nutrients: nitrogen, phosphorus and potassium.

² Fungicides are chemical agents used for plant disease control; herbicides are used for weed control and insecticides for pest control.

³ It is more appropriate to make a direct comparison of pesticide use for one culture at a time, as the differences between the active ingredients in individual preparations are smaller. Research was only carried out for new Member States and candidates for accession to the EU for 2007; in Slovenia the research was conducted by SORS.

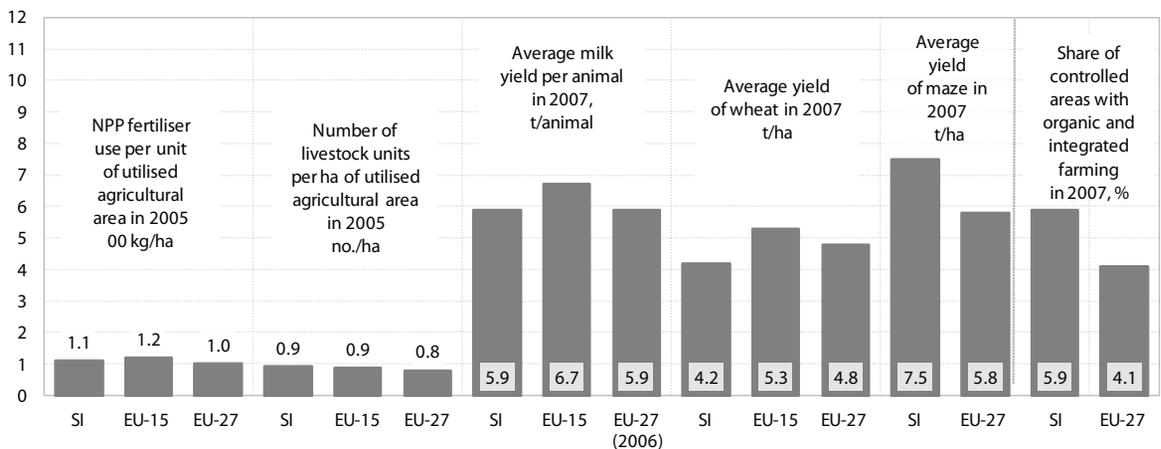
⁴ Livestock size unit is a criterion for determination of extent of livestock breeding. 1 LSU=500 kg of live weight of animals.

Table: **Selected agricultural intensity indicators for Slovenia, 1995–2007**

	unit	1995	2000	2005	2006	2007
NPP fertiliser use						
Use per unit of utilised agricultural area	kg/ha	134.6	146.6	115.3	119.6	115.6
Pesticide sales						
Pesticide sales - total, active substance	000 t	N/A	1.5	1.4	1.3	1.2
Production intensity						
Number of livestock units per hectare of utilised agricultural area	no./ha	N/A	1.0	0.9	N/A	0.9
Average milk yield per animal	t/cow	N/A	4.5	4.9	5.3	5.9
Average yield of wheat	t/ha	4.2	4.2	4.7	4.2	4.2
Average yield of maize	t/ha	6.3	5.9	8.3	6.9	7.5
Sustainable production						
Controlled areas with organic farming	000 ha	N/A	5.4	23.2	26.8	29.3
No. of controlled organic farms	no. in 000	N/A	0.6	1.7	1.9	2.0
Controlled areas with integrated farming	000 ha	N/A	N/A	44.6	49.9	56.9
Controlled organic farms	no. in 000	N/A	N/A	5.5	5.7	6.0

Source: SI-STAT data portal - Environment and Natural Resources - Agriculture and Fisheries, 2009; calculations by IMAD.
Note: N/A – not available.

Figure: **Selected agricultural intensity indicators for Slovenia and the EU**



Source: SI-STAT Data Portal – Environment and natural resources – Agriculture and fisheries (SORS), 2009; Agriculture and fisheries – Agriculture (Eurostat), 2007; Long-term Indicators – Agriculture, forestry and fisheries – Agriculture (Eurostat), 2009; Archives – Fertilizer and pesticides (Faostat), 2007; Organic Europe – Organic and in-conversion agricultural land and farms in the EU, 2009. Note: most recent year with available data.

Intensity of tree felling

Forest area, which covers more than half of Slovenia's territory, is still expanding, even though this is not planned. Remote areas less suitable for agricultural production are overgrowing faster than forests are shrinking in suburban and intensive agriculture areas. At the end of 2007, forest area thus totalled 1,183,000 hectares, which was 0.8 % more than in the year before, 7.8% more than in 1995 and 3.6% more than projected in the forestry management plans for 2001–2010.

Wood increment increased further in 2007, while tree felling intensity declined. In 2007, wood increment rose by 2.2% and growing stock by 3.4%. Tree removal, which amounted to 3.2 million m³ (63% conifers and 37% non-conifers), was down 12.8% compared to the year before. This notable decline is also a result of methodological changes in keeping records, as trees marked for removal are no longer recorded as actual removal.¹ Removals were mainly carried out for tree-tending and sanitation purposes. Following an increase in 2006, tree-tending removal, which is most vital for the development of forests and therefore most extensive, dropped again, by 14.1%, to only 60.7% of total removal (in 2000 its share was 10 p.p. higher). Sanitation removal, which is increasing in the long term due to increased attacks by insects, recorded a smaller decline (11.7%) and accounted for 33.3% of total removal (12 p.p. more than in 2000).

The intensity of tree felling,² which in 2006 was the highest in the whole observed period, declined again in 2007 and thus increased the shift from the possible intensity level according to the forestry plans. With lower removal and higher wood increment, the tree-felling intensity decreased to 41.4%, compared with the permitted 59.2%. In 2007, tree fellings represented only 68% of all possible fellings according to the forestry management plans (82% in 2006). In 2007, the maximum possible removal was again carried out in state-owned forests, while in privately-owned forests, which account for almost three quarters of all forest areas in the country,

this was not possible due to the fragmentation of property.³ Due to the growing annual wood increment, the quantity of wood that can be removed in the coming years will continue to increase. A simulation of forest development performed by the Slovenian Forest Service shows that the allowed tree-felling intensity could rise to approximately 90% by 2040. Greater tree fellings would be sensible, as wood is one of the few renewable natural resources in Slovenia.

In Slovenia, the intensity of tree fellings is among the lowest in the EU. In 2005, when it totalled 43%, it lagged by as much as 17 p.p. behind the EU average. Only five EU Member States posted lower tree-felling intensity than Slovenia. Relative to 2000 (when it totalled 24 p.p.), Slovenia's gap with the EU average declined.

¹ Until 2007, marked trees in enclosed tree-cutting areas were recorded as felled wood, even if they had not yet been cut; due to methodological changes, in 2007 these trees were (for the first time) moved to the records of next year's fellings. The changes in keeping records also impact the growing stock. The decline in wood fellings is also suggested by data on the total value of cut wood according to the economic accounts for forestry, which declined compared with the year before, albeit by only 0.6% in nominal terms, given that purchase prices notably increased (pulpwood by 30%, fuel wood by 26% and industrial wood by 12%).

² Tree-felling intensity is the ratio of annual removal levels to the annual wood increment.

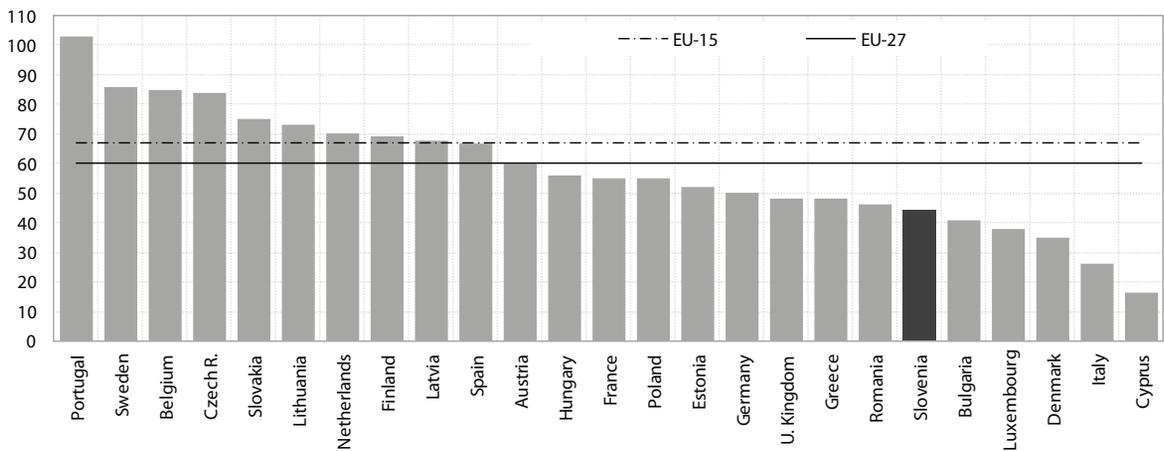
³ On the other hand, some analyses (Krajnc, Piškur, 2006) show that tree removal in privately owned forests is underestimated. From their analysis of measurements in permanent sampling areas it can be inferred that the tree-felling intensity in private forests is actually higher (due to illegal tree removal).

Table: Forest area, wood increment, growing stock and tree removal in Slovenia, 1995–2006

	1995	2000	2005	2006	2007	GGN ¹
						2001–2010
Forest area, thousand hectares	1,098	1,134	1,169	1,174	1,183	1,142
Annual increment, thousand m ³	5,995	6,872	7,569	7,652	7,822	6,923
Growing stock, thousand m ³	228,493	262,795	300,795	307,689	318,107	266,704
Annual removal, thousand m ³	2,092	2,609	3,253	3,718	3,242	4,101
tending	1,325	1,849	1,873	2,288	1,966	N/A
restoration	12	19	17	18	13	N/A
protection and sanitation	589	553	1,212	1,224	1,080	N/A
for infrastructure	15	40	48	50	48	N/A
clearing	35	53	65	86	87	N/A
no approval	113	91	35	49	38	N/A
other	2	3	2	1	9	N/A
Intensity of tree fellings ² , %	34.9	38.0	42.8	48.6	41.4	59.2

Source: Statistical Yearbook of the Republic of Slovenia 2008 (SORS), 2008; Report of the Slovenian Forest Service on forests in 2005, 2006.
 Notes: ¹ Forestry management plans for 2001–2010; ² the ratio of annual removal levels to the annual wood increment; N/A – not available.

Figure: Intensity of tree fellings in Slovenia and in the EU, 2005



Source: Eurostat Portal Page – Agriculture and fisheries – Forestry, 2009.

Municipal waste

The quantity of separately collected municipal waste collected by public waste removal services in Slovenia increased somewhat again in 2007. Sustainable development in the area of waste primarily entails a reduction in waste generation and reuse and recovery of waste, as this enables decoupling economic growth from pressures on the environment. Municipal waste growth lagged significantly behind economic growth in 2007 (4.7 p.p.). The share of separately collected fractions in total municipal waste collected by public removal services also increased slightly again, to 15.3% (13.4% in 2006). The share of separately collected municipal waste has only been increasing slowly over the past years. In 2006, the largest increase was recorded for the share of separately collected packaging waste in municipal waste, and in 2007, for the share of other separately collected fractions and biodegradable waste. This is a result of the establishment of the system of "ecological islands", i.e. dedicated waste containers for separate collection of household waste. The share of mixed municipal waste, which is difficult to reuse or recycle, therefore decreased. Among the fractions of municipal waste collected by public waste removal services, in 2007 the largest increase was observed in glass and discarded electrical, electronic and other equipment. Despite positive trends, there is still a lot of room for improvement in the area of waste management in Slovenia, for separate waste collection still amounts to less than half of all generated municipal packaging waste, while in separately collected biodegradable municipal waste (representing only one sixth of all generated biodegradable municipal waste) the situation is even worse.

In Slovenia, landfilling is still the predominant method of municipal waste management. Sustainable development in the area of waste treatment is aimed at reducing landfilling to the greatest possible extent. By depositing waste in a landfill site, we use space, which is a natural resource, and at the same time waste a material resource, which is not in line with the targeted reduction of use and pressures on the natural environment. Landfilled waste also causes water and soil pollution and is a source of greenhouse gas emissions.¹ The share of landfilled municipal waste in total municipal waste thus amounted to 77.5% in 2007; this is otherwise less than in 2006 when the trend of reducing the quantity of landfilled municipal waste was interrupted. The share of landfilled municipal waste has thus decreased since 2002 (86%), but is still exceptionally high.

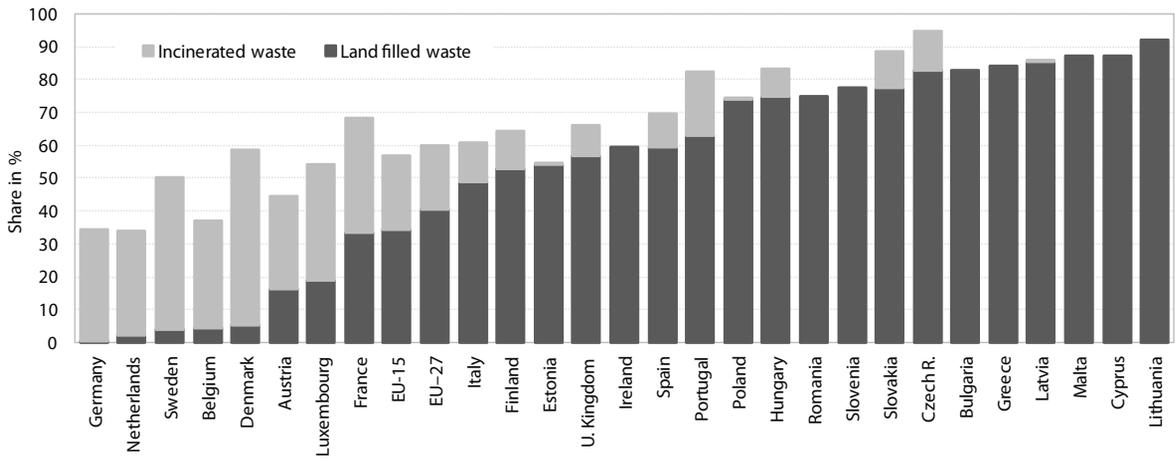
Given that more waste was collected separately in 2007, less waste was deposited in landfills and more handed over for recycling and to other collectors and

packaging treatment providers. Increased separate waste collection and recycling also contribute to a reduction of landfilled municipal waste. Treatment of separately collected fractions improved significantly in 2007, when a somewhat larger quantity of separately collected waste was sent for recycling and to other collectors and packaging waste treatment providers (16.6% of total waste collected by public waste removal services, against 14.5% in 2005) and the quantity of separated waste disposed of at landfills decreased. The situation was particularly problematic for biological waste, as in previous years, even though collected separately, 20% of biological waste nevertheless still ended up in landfills.

In the EU, the share of landfilled waste has been declining constantly over the past years and dropped from 59.6% to 41.0% in the period from 1996 to 2007. In the EU-15, the decline is even faster (from 54.6% to 34.2%). In recent years, the most rapid declines were recorded in Germany, Sweden, Belgium and the Netherlands where the share of landfilled municipal waste dropped below 5% in 2007. Among the EU-15, only Greece still sets a bad example, as albeit decreasing slowly over the past few years, the share of its landfilled municipal waste still accounted for 84.2% in 2007. On average, altogether 20% of all municipal waste is incinerated in the EU. As much as half of all municipal waste is incinerated in Denmark and Sweden, while in Greece, Ireland and most new Member States waste is practically not incinerated at all, except in the Czech Republic, Slovakia and Hungary, where the share of incinerated municipal waste totals 10%. Slovenia started the trial operation of its first incinerator of mechanically and biologically pre-treated municipal waste in 2008.

¹ During the biological degradation of waste, methane is released into the atmosphere at waste landfill sites. Methane is a greenhouse gas which is 23 times more powerful than carbon dioxide.

Figure: Share of incinerated (by energy production) and landfilled municipal waste, EU, 2007, %



Source: Eurostat Portal Page - Environment - Waste - Municipal waste by type of treatment, 2009; calculations by IMAD.

Old-age dependency ratio

With the ageing of the population, the old-age dependency ratio¹ in Slovenia continues to rise. In 2008, the old-age dependency ratio rose by a further 0.3 of an index point. The total age dependency ratio increased for the fourth consecutive year. There were 23.2 persons aged 65 and over (3.2 more than in 2000 and 5.4 more than in 1995), 19.8 children aged 0–14 (2.9 less than in 2000 and 6.8 less than in 1995) and 43.0 young and old combined per 100 working age persons in 2008 (0.2 more than in the previous year and 1.4 less than in 1995).

The total age dependency ratio is increasing due to the decline in the share of working age population in the total population. The share of young people in the total population is diminishing at a slower rate than the share of the elderly population is increasing. Until 2003, the share of working age population was rising (from 69.2% in 1995 to 70.4%). Despite high positive net migration,² which otherwise contributes to the increase in this population group, the share of working age population began to decline in 2005, falling to 70.0% in 2007. In the last thirteen years, the percentage of children dropped from 18.4% in 1995 to 13.8% in 2008, while the percentage of elderly population rose from 12.3% in 1995 to 16.2% in 2008. In 2003, the number of people aged 65 or over was, for the first time, higher than the number of children. The ageing index, which is the ratio between these two population groups, rose over 100 and has been rising ever since, reaching 117.1 in 2008.

The old-age dependency ratio in Slovenia continues to be lower than the EU average. In most EU Member States, life expectancy is longer than in Slovenia,³ and the ratio of old people to the total population is therefore also higher. However, all countries face similar problems regarding the decline in births and the fall in the share of children and working age population, despite high positive net migration. The average old-age dependency ratio in the EU is thus higher than in Slovenia: it totalled 25.0% in 2007, 2.5 p.p. more than in Slovenia. The highest old-age dependency ratios were recorded in Italy (30.0), Germany and Greece, which also have the highest percentages of old people (see figure).

¹ The age dependency of the population is measured with three age dependency ratios: a) old-age dependency ratio, which is the ratio of the population aged 65 or over to the working age population (which has an internationally comparable definition as the population aged 15–64); b) young-age dependency ratio, which is the ratio of the population aged 0–14 to the working age population; and c) the total age dependency ratio, which is the ratio of both the old and young population to the working age population.

² See the indicator *Migration Coefficient*.

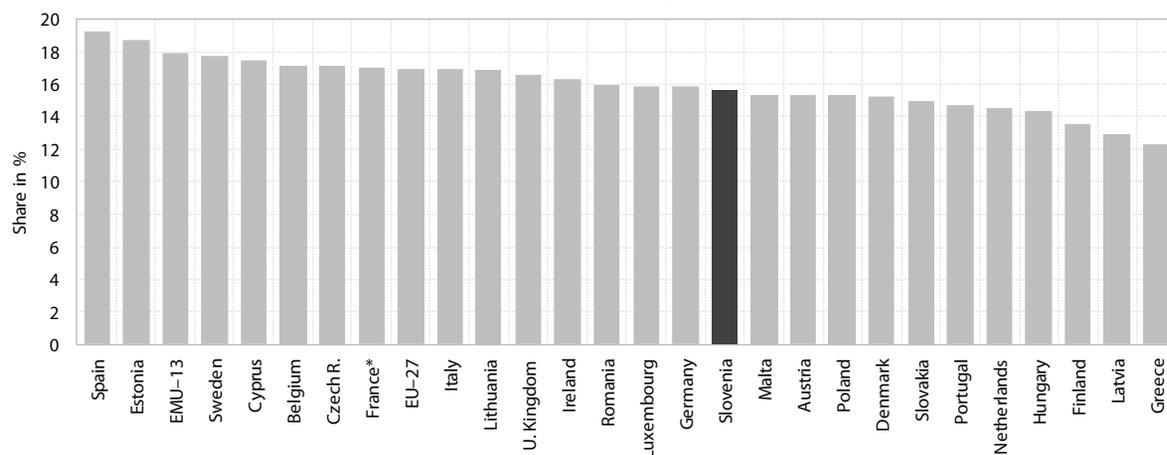
³ See the indicator *Life Expectancy and Infant Mortality*.

Table: **Old-age dependency ratio (ratio of the population aged 65 or over to the working age population), %**

	1995	2000	2005	2006	2007
EU-27	21.9	23.2	24.6	24.9	25.2
EMU-13	22.6	24.3	26.1	26.5	26.9
Austria	22.5	22.9	23.5	24.4	25.0
Belgium	23.8	25.5	26.3	26.2	25.9
Bulgaria	22.4	23.9	24.9	24.9	N/A
Cyprus	17.2	17.0	17.3	17.3	17.6
Czech Rep.	19.3	19.8	19.8	20.0	20.2
Denmark	22.7	22.2	22.7	22.9	23.2
Estonia	20.2	22.4	24.3	24.5	25.1
Finland	21.1	22.2	23.8	24.0	24.8
France*	23.0	24.6	25.2	25.2	25.2
Greece	22.2	24.2	26.8	27.6	27.6
Ireland	17.8	16.8	16.4	16.2	16.2
Italy	24.0	26.8	29.3	29.8	30.2
Latvia	20.5	22.1	24.1	24.4	24.8
Lithuania	18.5	20.8	22.3	22.5	22.7
Luxembourg	20.6	21.4	20.9	20.8	20.7
Hungary	20.9	22.0	22.7	22.9	23.2
Malta	16.3	17.9	19.3	19.8	19.8
Germany	22.5	23.9	27.8	28.9	29.9
Netherlands	19.3	20.0	20.8	21.1	21.5
Poland	16.6	17.6	18.7	18.9	19.0
Portugal	21.9	23.7	25.2	25.4	25.6
Romania	18.0	19.7	21.1	21.2	21.3
Slovakia	16.3	16.6	16.3	16.4	16.5
Slovenia	17.4	19.8	21.8	22.2	22.7
Spain	22.2	24.5	24.4	24.3	24.2
Sweden	27.4	26.9	26.5	26.4	26.4
United Kingdom	24.5	24.3	24.3	24.2	24.1

Source: Eurostat Portal Page - Population and social conditions – Demography, 2008, calculations by IMAD.

Note: * European part of France.

Figure: **Share of the population aged 65 and over in the total working age population, %, 2007**

Source: Eurostat Portal Page - Population and social conditions – Demography, 2008, calculations by IMAD.

Fertility rate

The fertility rate in Slovenia increased further in 2007 and 2008, although it is still relatively low. The total fertility rate, which is the ratio between the number of live births and the number of women of childbearing age in a calendar year, was 1.38 in 2007. The available data for the first half of 2008 also show that the number of births continues to increase. Except for 2000, this ratio has been constantly falling since 1980, when it totalled 2.11 and was for the last time above the population replacement level. It reached its low in 2003 (1.20), when it started to gradually increase.

Slovenia nevertheless remains one of the countries with the lowest fertility rates in Europe. Compared with other EU members, the total fertility rate in Slovenia was at the level of Austria, Germany, Greece and Spain in 2007. In 2007, fertility increased most notably in the Czech Republic, the Baltic countries, Slovenia and Bulgaria, while it was more or less stagnant in other countries of the EU. The largest decline was recorded for Portugal.

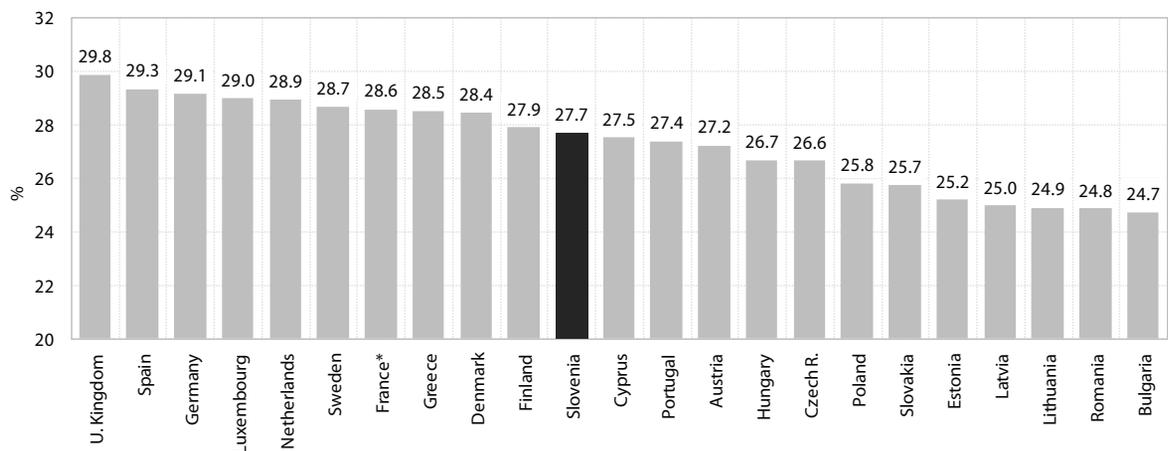
The fall in fertility rates of women aged up to 26 and the rise in fertility rates of women aged over 27 is continuing; the average age of women at the birth of their first child, consequently, also continues to rise. Fertility rates of women aged up to 26 have been falling for more than 25 years. In recent years, the drop in the age group of 15–19 has stopped, while in the age group of 20–26 it is slowing. Fertility rates of women aged 27 or more have been on an upward trend ever since 1990. The average age of women at childbirth and the average age of women at the birth of their first child thus continue to rise. By 2007, the former had increased to 29.7 years (1.7 years more than in 2000 and 2.7 years more than in 1995) and the latter to 28.2 years (1.7 more than in 2000 and 3.3 years more than in 1995). With these figures, Slovenia is nearing the level of countries with a high average age of women at childbirth (see figure).

Table: **Fertility rates (ratio between the number of live births and the number of women of childbearing age in a calendar year), 1995–2006**

	1995	2000	2005	2006	2007
Austria	1.42	1.36	1.41	1.40	1.4
Belgium	1.56	N/A	N/A	N/A	1.8
Bulgaria	1.23	1.26	1.31	1.37	1.4
Cyprus	2.03	1.64	1.42	1.47	N/A
Czech Rep.	1.28	1.14	1.28	1.33	1.4
Denmark	1.80	1.78	1.80	1.83	1.8
Estonia	1.38	1.39	1.50	1.55	1.6
Finland	1.81	1.73	1.80	1.84	1.8
Francija	1.71	1.87	1.92	1.98	2.0
Greece	1.31	1.26	1.33	1.39	1.4
Ireland	1.84	1.88	1.86	1.90	N/A
Italy	1.19	1.26	1.32	N/A	1.3
Latvia	1.27	1.24	1.31	1.35	1.4
Lithuania	1.55	1.39	1.27	1.31	1.4
Luxembourg	1.70	1.76	1.66	1.65	1.6
Hungary	1.57	1.32	1.31	1.34	1.3
Germany	1.25	1.38	1.34	1.32	1.3
Netherlands	1.53	1.72	1.71	1.70	1.7
Poland	1.62	1.35	1.24	1.27	N/A
Portugal	1.41	1.55	1.40	1.35	1.3
Romania	1.41	1.39	1.32	1.31	1.3
Slovakia	1.52	1.29	1.25	1.24	1.3
Slovenia	1.29	1.26	1.26	1.31	1.4
Spain	1.17	1.23	1.35	1.38	1.4
Sweden	1.73	1.54	1.77	1.85	1.9
United Kingdom	1.71	1.64	1.78	1.84	N/A

Source: Eurostat Portal Page - Population and social conditions – Population, 2009.
Note: N/A - not available.

Figure: **Average age of women at childbirth in selected EU Member States, 2005**



Source: Eurostat Portal Page - Population and social conditions – Population, 2008.
Note: * European part of France.

Migration ratio

The migration ratio doubled in Slovenia in 2007 and grew further in 2008. The number of immigrants increased to 29,193 in 2007, which is 9,000 more than in the preceding year, compared with about 5,500 per year on average in 1993–2000, with the figure continually increasing since 1999. As the international migration statistics in Slovenia also cover seasonal employees returning home at the end of the working season, the number of emigrants from Slovenia has also been rising since 2000. In 2007, it totalled 14,943, against less than 3,400 per year recorded in 1993–2000. The net migration in 2007 was thus 14,250 persons, or 7.06¹ per 1000 population, which is almost two times more than in the year before, and almost seven times more than the annual average recorded in the period 1993–2004, when the net migration amounted to about 2,000, or 1.2 per 1000 population. According to the available data, the net migration in 2008 was even higher than in 2007, also in 2008, mainly due to high demand for foreign workers generated by the favourable economic trends, especially in construction.²

Most immigrants come from the countries of the former Yugoslavia; their educational attainment is poor but improving. Foreign nationals predominate over citizens of the Republic of Slovenia among both immigrants and emigrants, and men predominate over women. As regards age, most immigrants and emigrants are 20 to 29 years old. In 2007, 89% of men and 70% of women among immigrants were aged 20–59. The majority of immigrants come from Bosnia and Herzegovina. Immigrants from other EU Member States are few (1,679 in 2007). Persons with a lower level of education prevail among foreigners living in Slovenia, but their percentage (around 56.2% in 2007) is declining in favour of those with a secondary education. Less than 5% of immigrants (3.0% in 2007) have a higher education.

The migration ratio in Slovenia has been higher than the EU average for two years. In 2007, it increased in the majority of EU Member States, the most in the Czech Republic and Slovenia, and decreased in nine. On average, it was 3.8 per 1,000 inhabitants (0.5 more than in the preceding year and slightly more than the average of the last six years). Among the EU-15 countries, only the Netherlands recorded a negative migration balance in the last two years. The main reason was the decline in immigration due to tighter immigration conditions.³

¹ Calculated from SORS data.

² See also the indicator *Employment rate*.

³ Immigration decreased because immigration conditions for family members were made stricter, and language and culture tests were introduced. Economic survey of the Netherlands 2008: Reaping the economic benefits of immigration (OECD), 2008.

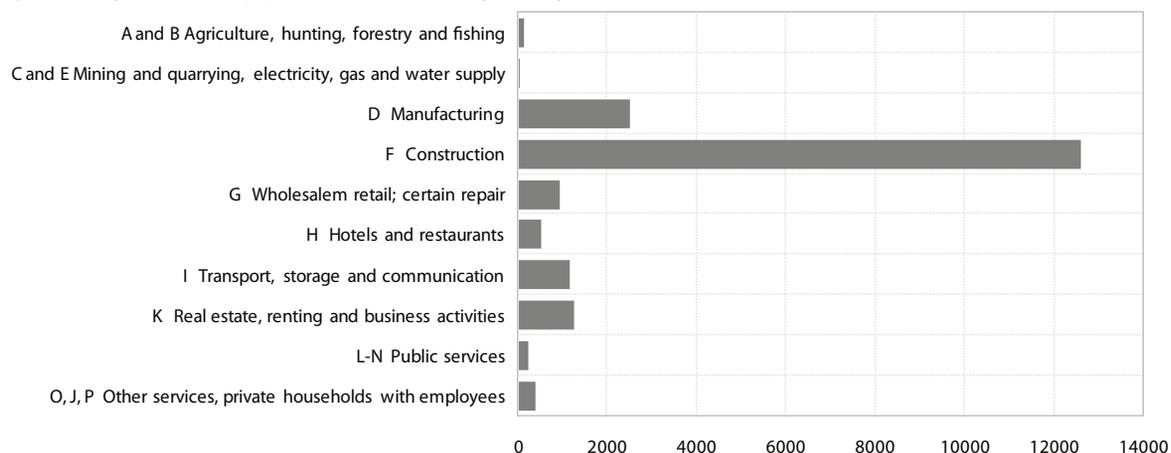
Table: Net migration (with statistical corrections), per 1,000 inhabitants, 1995–2007

	1995	2000	2005	2006	2007
EU-27	1.4	1.5	3.4	3.3	3.8
EMU-13	2.0	3.2	4.4	4.1	4.8
Austria	0.3	2.2	6.8	3.5	3.8
Belgium	0.2	1.4	4.8	5.1	5.9
Bulgaria	0.0	0.0	0.0	0.0	-0.2
Cyprus	9.2	5.7	19.0	11.2	9.4
Czech Rep.	1.0	0.6	3.5	3.4	8.1
Denmark	5.5	1.9	1.2	1.9	3.7
Estonia	-10.8	0.2	0.1	0.1	0.1
Finland	0.8	0.5	1.7	2.0	2.6
France*	-0.3	2.6	1.6	1.5	1.2
Greece	7.3	2.7	3.6	3.6	3.6
Ireland	1.6	8.4	15.9	15.7	10.6
Italy	0.5	0.9	5.5	6.4	8.4
Latvia	-5.5	-2.3	-0.2	-1.1	-0.3
Lithuania	-6.5	-5.8	-2.6	-1.4	-1.6
Luxembourg	10.6	7.9	13.1	11.3	12.5
Hungary	1.7	1.6	1.7	2.1	1.4
Malta	0.2	2.3	4.0	5.3	4.2
Germany	4.9	2.0	1.0	0.3	0.6
Netherlands	1.0	3.6	-1.4	-1.6	-0.1
Poland	-0.5	-10.7	-0.3	-0.9	-0.5
Portugal	2.2	4.6	3.6	2.5	1.8
Romania	-0.9	-0.2	-0.3	-0.3	0.0
Slovakia	0.5	-4.1	0.6	0.7	1.3
Slovenia	0.4	1.4	3.2	3.1	7.1
Spain	1.8	9.7	14.8	13.7	15.6
Sweden	1.3	2.7	3.0	5.6	5.9
United Kingdom	1.1	2.4	3.2	4.1	2.8

Source: Eurostat Portal Page – Population and social conditions – Demography, 2009.

Note: * European part of France.

Figure: Immigrants (active population) to Slovenia by activity, 2007



Source: SORS, calculations by IMAD.

Regional variation in GDP per capita

In terms of GDP per capita, it was the Podravska region that narrowed its gap behind the Slovenian average the most (by one index point) in 2006 relative to the previous year. Positive shifts were also recorded by the Osrednjeslovenska, Obalno-kraška and Jugovzhodna Slovenija regions, while all other regions widened their gaps, most notably Zasavska. Also in the period 2000–2006, the lag behind the Slovenian average widened the most in the Zasavska region, while the Osrednjeslovenska region posted the greatest increase of the relative advantage over the average.¹ Compared with the Slovenian average, only the Jugovzhodna Slovenija and Podravska regions made progress in 2000–2006, in addition to Osrednjeslovenska, while in all other regions GDP per capita decreased.

The relative positions of regions with respect to the level of their development measured by GDP per capita remained mainly unchanged in 2006. In addition to Osrednjeslovenska, only Obalno-kraška recorded an above-average GDP per capita, while the figures for Pomurska, Zasavska and Notranjsko-kraška amounted to less than three quarters of the Slovenian average. Osrednjeslovenska is the only region exceeding the EU average at the NUTS 3 level – by over one quarter. The economically weakest Pomurska region attained around 58% of the EU average. At the NUTS 2 level, Zahodna Slovenija exceeded the Slovenian average by slightly over one fifth, and the European average by approximately 5%, while Vzhodna Slovenija stood at the level of 82.7% of the Slovenian average, and 72.5% of the EU average.

The ratio between the two regions at the extreme points of gross domestic product per capita is moderate. The GDP per capita of the Osrednjeslovenska region exceeded that of the economically weakest Pomurska region by a factor of 2.2 in 2006, i.e. by the same amount as in the year before and slightly more than in 2000, when the former value was 2 times higher than the latter. Ratios between regions with extreme values are moderate in Slovenia, being much higher in most EU countries. For instance, in 2005 this ratio was the highest in the UK (8.2), and the lowest in Malta (1.4) and Sweden (1.7²).

¹ Zasavska lost no less than 12.4% of jobs during that period, while the number of jobs in Osrednjeslovenska increased by 11.1%.

² See Economic Mirror No. 4/2008.

³ 46% of companies had their registered offices in Osrednjeslovenska in 2006, employing 36.1% of workers, and generating over 45% of total revenues of all Slovenian companies and 51.7% of Slovenia's positive difference between net profit and net loss. The concentration is partly the result of the method of collecting and presenting statistical data (registered office principle).

One reason why the Osrednjeslovenska region stands out in terms of GDP per capita is that it comprises the capital city with the highest concentration of economic activities.³ This is, however, also characteristic of other EU countries, except for Germany, Greece, Spain and Italy.

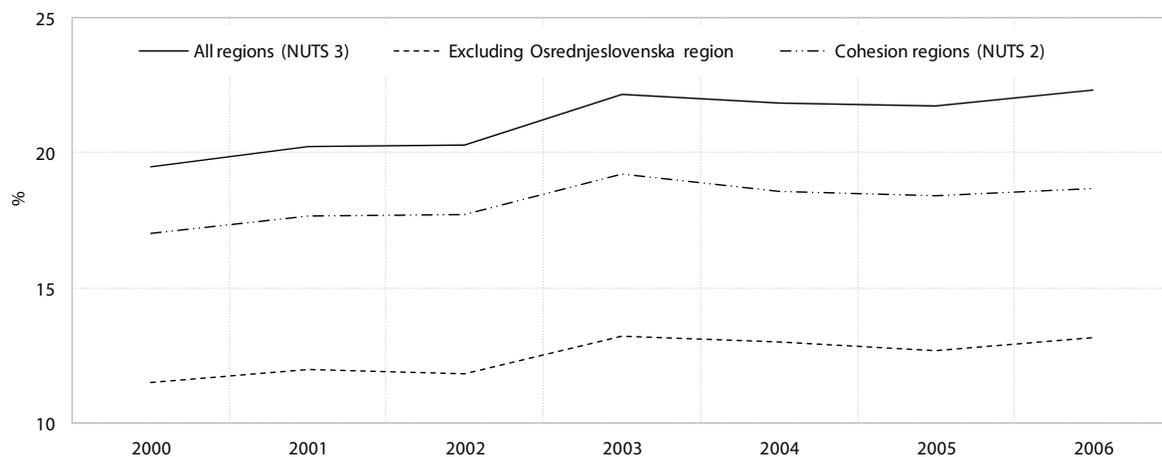
Regional disparities measured by the indicator of regional dispersion⁴ of GDP per capita in purchasing power standards (PPS) increased slightly in 2006, but have persisted at a rather even and relatively low level since 2003. According to our calculations, GDP per capita dispersion, which represents the average divergence from the national value, slightly increased (to 22.3%) across the NUTS 3 regions in 2006. While having remained more or less unchanged since 2003, it is higher than in 2000 (by 2.8 p.p.). Compared with EU countries, such cross-regional differences are relatively low.

⁴ Regional GDP dispersion records the differences between regional per-inhabitant GDP and the national average, taking into account the regions' population sizes. It is expressed as the sum of the values of those divergences. This is a linear dispersion indicator developed by Eurostat as a better measure of regional disparities than the coefficient of variation (i.e. ratio of standard deviation to the average) used in the preceding years.

Table: **Gross domestic product per capita, indices, Slovenia = 100**

Cohesion region / Statistical region	1995	2000	2005	2006	GVA structure 2006, %
Slovenia	100.0	100.0	100.0	100.0	100.0
Zahodna Slovenija	118.9	118.5	120.0	120.2	55.5
Obalno-kraška	108.5	105.4	101.6	101.9	5.4
Goriška	99.3	99.0	96.2	95.7	5.7
Gorenjska	89.2	87.6	85.2	84.0	8.4
Osrednjeslovenska	138.0	138.5	143.4	144.3	36.1
Vzhodna Slovenija	84.2	84.4	82.9	82.7	44.5
Notranjsko-kraška	78.7	80.5	76.1	74.5	1.9
Jugovzhodna Slovenija	88.7	91.7	92.7	92.8	6.5
Spodnjeposavska	80.9	85.0	82.3	81.0	2.8
Zasavska	84.8	79.3	70.6	68.0	1.5
Savinjska	93.0	90.6	89.6	89.0	11.5
Koroška	79.6	82.7	78.5	76.7	2.8
Podravska	81.6	83.7	83.5	84.5	13.4
Pomurska	74.9	69.6	67.0	66.2	4.0

Source: SI – stat data portal – Economy – National Accounts – Regional Gross Domestic Product, 2008.
 Note: GVA – gross value added.

 Figure: **Dispersion of regional GDP per capita in PPS at the NUTS 2 and NUTS 3 levels in Slovenia, 2000–2006**


Source: Eurostat Portal Page – Regional Statistics, 2009; calculations by IMAD.

Regional variation in the registered unemployment rate

The registered unemployment rate, which had been falling since 2000, continued to decrease in all regions in 2008, most notably in those with above-average rates. Measured in percentage points, it declined the most in the Zasavska region, and the least in Notranjsko-kraška and the Gorenjska regions, where the registered unemployment rates are among the lowest in Slovenia. In the period 2000–2008, all regions posted a decline. The decline was most pronounced in Podravska, and above-average in Zasavska, Spodnjeposavska and Savinjska, as well as in the two regions with relatively low rates – Notranjsko-kraška and Gorenjska. The smallest drop in that period was recorded in Goriška, the region with the lowest registered unemployment rate in the total period.

In 2008, there were no major changes among regions compared to the Slovenian average. The registered unemployment rate was above-average in the same regions as in 2007, including Koroška since 2002. The Goriška region recorded the lowest registered unemployment rate in 2008 (4.3%; Slovenia 6.7%). Regions in the eastern half of the country continue to record above-average rates; the unemployment rate recorded in Pomurska, where this figure is the highest (12.2%), exceeds the lowest figure recorded in Goriška by a factor of 2.9 (2.8 in 2007). Notranjsko-kraška made the greatest progress over 2000, having outperformed four regions.

Regional disparities measured by the dispersion of registered unemployment rate increased slightly over 2007, but have not undergone any significant changes since 2005. The registered unemployment rate dispersion¹ across the regions increased by 0.3 p.p. in 2008 over the preceding year, and was 0.8 p.p. higher than in 2000. It was the highest in 2003, at 32.4%, after which time it was declining to 2006, when it reached its low (27.3%); in 2007 and 2008 it rose slightly again, to 28.4%.

Although registered unemployment rates have been dropping for several years, structural unemployment has remained a problem in all regions, including those posting low rates. Long-term unemployed and elderly people aged over 40 or over 50 predominate among job seekers in all regions. The percentage of *long-term unemployed* is the highest, almost 60%, in the Spodnjeposavska region, where it also rose the most in 2008. Long-term unemployed also accounted

for above-average shares in Jugovzhodna Slovenija, Pomurska, Osrednjeslovenska and Savinjska. Long-term unemployed frequently include people *with low educational attainment*, who are proportionally the most numerous in Jugovzhodna Slovenija and Pomurska (over one half of all unemployed). The proportion of *elderly unemployed* – primarily of those over 50 – also increased in all regions compared with 2007. They account for the highest shares in the Obalno-kraška and Gorenjska regions (the latter being the region with almost the lowest unemployment rate). In most regions the share of unemployed *with tertiary education* continues to grow. They are the most numerous in Osrednjeslovenska – in both absolute and relative terms (representing 14.5% and around 1750, respectively, of all unemployed in the region), and also account for an above-average share in Goriška (14% and around 320, respectively, of all unemployed). The percentage of *unemployed who lost temporary jobs* is growing. They account for over one third of all unemployed in the Koroška, Notranjsko-kraška, Podravska and Gorenjska regions. It is favourable that the share of *young unemployed* (under 25) has been declining in regions for a number of years. In the last year, this share decreased the most in Obalno-kraška, while it is the highest in Zasavska (15.2%). The young unemployed frequently overlap with *first-time job seekers*, accounting for slightly more than one fifth of all unemployed in both Jugovzhodna Slovenija and Pomurska, and for above-average shares in the Podravska, Zasavska and Savinjska regions. Their share also declined in all regions relative to 2007. Furthermore, the percentage of *women* among the unemployed also declined in all regions. Women account for the highest share in the unemployed in the Koroška region (almost 57.1%).

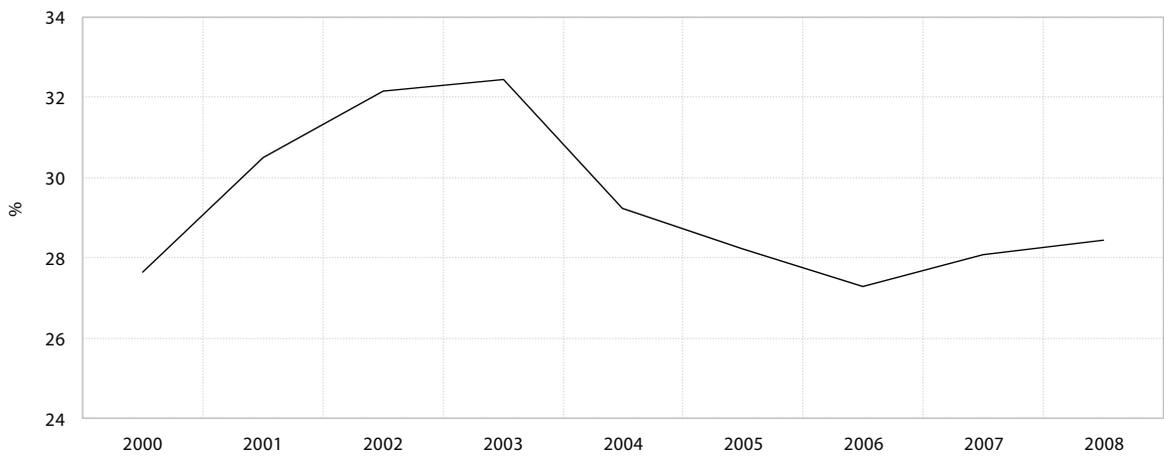
¹ Dispersion is calculated in the same manner as with the indicator *Regional variation in GDP per capita*.

Table: **Registered unemployment rates by region, %**

	2000	2005	2006	2007	2008
SLOVENIA	11.8	10.2	9.4	7.7	6.7
Osrednjeslovenska	8.8	7.6	7.2	5.9	5.0
Obalno-Kraška	8.8	7.5	7.2	6.3	5.2
Gorenjska	9.7	7.3	6.4	4.9	4.4
Goriška	5.9	6.5	6.2	4.9	4.3
Savinjska	13.1	12.7	11.6	9.4	8.0
Jugovzhodna Slovenija	10.4	8.8	8.6	7.0	6.3
Pomurska	16.7	17.1	15.7	13.4	12.2
Notranjsko-Kraška	10.4	7.9	7.0	5.4	4.9
Podravska	18.1	13.5	12.7	10.4	9.1
Koroška	9.9	10.6	10.1	8.1	7.3
Spodnjeposavska	13.4	11.5	10.5	8.9	7.7
Zasavska	14.9	13.8	12.0	9.7	8.2

Source: SI – stat data portal – Demography and social statistics, 2009.

Figure: **Dispersion of the registered unemployment rate at the NUTS 3 level in Slovenia, 2000–2008**



Source: SI – stat data portal – Demography and social statistics, 2009; calculations by IMAD.

Building permits

The total floor area of planned buildings declined in 2008, but was still larger than before 2006.¹ In 2008, the total floor area of planned buildings, by issued building permits, declined by 22.6% compared to the previous year. After the high figures in 2006 and 2007, the total floor area of planned buildings thus declined last year and was only slightly higher than in 2005.

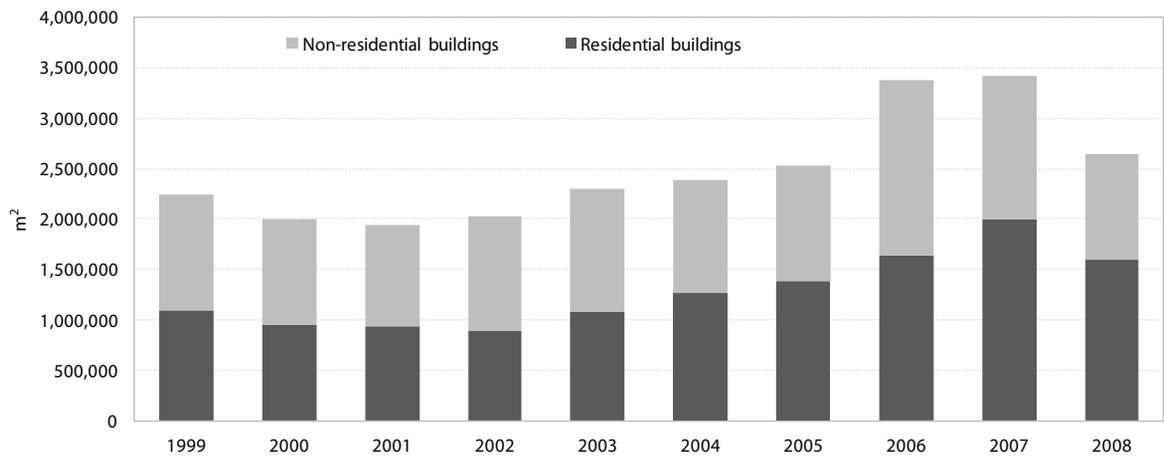
The total floor area of planned residential and non-residential buildings decreased in 2008. The total floor area planned for new residential buildings decreased by 20.2% relative to 2007, but was at a similar level as in 2006 and considerably larger than in previous years (a decline was mainly recorded for buildings with three or more dwelling units). The floor area planned for new non-residential buildings diminished by 25.9%, reaching its six-year low. The decline was mainly attributable to hotels, wholesale and retail trade buildings, and industrial buildings and warehouses, where in previous years the planned floor area had increased the most.

In 2008, the number of planned dwellings decreased primarily in buildings with three or more dwelling units. Construction of 8,442 dwellings was planned, by issued building permits, in 2008, a decline of 17.3% compared with the previous year. In the 2000 and 2002 period, the number of planned dwellings declined (in total by 9.8%), while it rose sharply after 2002 and in 2007 was 100.9% higher than in 2002. In the 1999–2007 period, the largest increase was recorded for the number of dwellings in buildings with three or more dwelling units, which posted the sharpest decline last year (by 24.4%).

The total floor area of planned buildings increased in only three regions last year. The largest increase was recorded in the Goriška region (by over 50%); rises were also observed in the Spodnjeposavska and Koroška regions, while other regions posted a decline. The largest contribution to the decrease in the total floor area of planned buildings came from the Osrednjeslovenska, Savinjska and Podravska regions.

¹ Data for 2008 are provisional.

Figure: **Floor area of planned buildings, by issued building permits, Slovenia, 1999–2008**



Source: Construction, SI-STAT Data Portal – Statistics of building permits (SORS).
 Note: data for 2008 are provisional.

Household expenditure on culture

According to the Household Budget Survey (HBS),¹ household expenditure on culture decreased slightly in real terms in 2006 relative to the year before. This means that the share of this expenditure in the structure of consumer goods was also slightly smaller (4.27%; 4.34% in the year before). It was higher than in 2003 and 2004, but lower than in 2000 (4.71%).

Households tend to spend less and less on books. The year 2006 saw the largest increase in expenditure on the purchase of TV sets and video recorders and musical instruments (in real terms,² somewhat less than 30%). Looking at more important categories, expenditure on books declined for the second year in a row (by as much as a fifth in real terms); expenditure on data processing equipment (computers, etc.) also dropped somewhat in 2006. Expenditure on books accounted for only 6.7% of expenditure on culture (against 8.4% in the year before and 9.9% in 2000), having declined by close to a real 36% since 2000. In contrast, expenditure on museums, galleries, zoos, etc. recorded a relatively large increase (16.2% in real terms) for the third year in a row; its share in expenditure on culture thus increased by 0.2 p.p. to 1.0% in one year.

According to the methodology of national accounts³ used for international comparisons of consumption, Slovenia allocates a somewhat larger share of consumer expenditure for recreation and culture than the EU average. Over the last few years this share has declined, both in Slovenia and in the EU average; it is largest in UK and smallest in Romania.

¹ Household Budget Survey (SORS). For the definition of the Culture subgroup see the note below the figure. In 2006, culture as defined here accounted for 40.1% of the Recreation and culture group, which is one of the 12 groups of consumer expenditure according to COICOP (20005: 39.8%).

² All components are deflated by the deflator of the Recreation and culture group.

³ For comparison with other countries, we used data on household consumption from national accounts, which are available at the aggregate level only and do not provide as good a basis for detailed analysis as the HBS data; therefore we have only compared expenditure on the aggregate group of Recreation and culture.

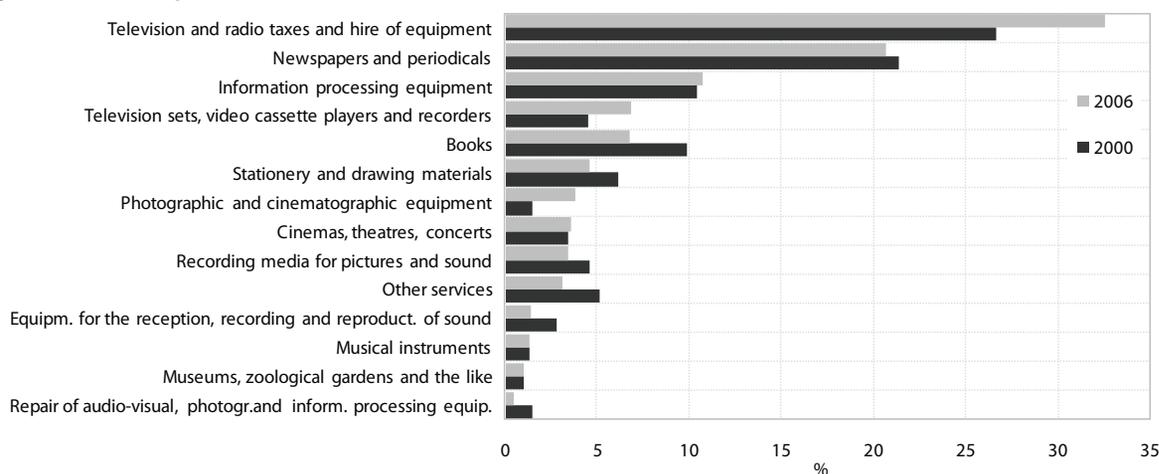
Table: Recreation and culture, percentage of total household expenditure according to the national accounts, 1995–2007, %

	1995	2000	2005	2006	2007
EU-27	9.0	9.7	9.5	9.4	N/A
Austria	11.4	11.9	11.3	11.3	11.6
Belgium	9.1	10.1	9.3	9.2	9.3
Bulgaria	3.4	4.8	5.4	N/A	N/A
Cyprus	7.4	6.8	8.0	8.3	8.0
Czech Rep.	10.6	11.1	11.7	11.3	11.3
Denmark	10.2	11.0	11.5	11.7	11.6
Estonia	5.0	8.2	8.8	8.6	8.8
Finland	10.6	11.3	11.4	11.8	11.9
France	8.6	9.1	9.3	9.2	9.2
Greece	:	6.3	7.6	8.8	8.5
Ireland	7.7	7.4	7.4	7.2	7.1
Italy	7.1	7.3	6.8	6.8	6.7
Latvia	3.8	6.7	7.6	N/A	N/A
Lithuania	3.0	5.8	6.4	6.2	6.5
Luxembourg	8.2	7.8	7.6	7.5	7.4
Hungary	8.0	7.4	7.9	7.9	7.6
Malta	10.3	10.4	10.7	11.2	11.5
Germany	9.3	10.1	9.4	9.3	9.4
Netherlands	10.8	11.1	10.1	10.4	10.6
Poland	8.2	8.9	7.5	7.3	N/A
Portugal	5.6	6.4	6.9	7.0	N/A
Romania	N/A	5.0	3.9	4.7	N/A
Slovakia	7.4	8.8	8.9	8.9	N/A
Slovenia	8.9	10.1	10.7	10.5	10.2
Spain	8.3	9.1	9.1	8.9	N/A
Sweden	10.2	11.6	11.2	11.3	11.4
United Kingdom	11.2	11.8	12.6	12.5	N/A

Source: Eurostat Portal Page – National Accounts, 2009.

Note: N/A - not available

Figure: Household expenditure on culture, Slovenia, 2000 and 2006, %



Source: SORS – HBS, 2007; calculations by IMAD.

Notes: "Culture" includes the following COICOP groups: Recreation and culture: .09111 Hi-fi equipment; .09112 TV, VCR; .09121 Photographic and cinema equipment; .09130 Data processing equipment and accessories (writing machine, calculator, personal computer); .09140 Picture and sound recording media; .09150 Repair of audio-video, photo equipment, etc.; .09211 Musical instruments; .09421 Cinema, theatre, concert; .09422 Museums, galleries, zoos, etc.; .09423 Radio and TV subscription; .09424 Other services; .09510 Books; .09520 Newspapers and magazines; .09540 Stationery and drawing material.

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Part III

Appendix

Calculation of a synthetic estimate of Slovenia's development according to the priorities of SDS¹

The synthetic estimate of Slovenia's development based on selected indicators complements the Development Report's expert approach with a quantitative analysis. The calculation of a synthetic estimate enables an international time-series comparison of a country's development based on selected indicators without subjective evaluation. The two main difficulties of this approach relate to the selection of indicators, which is significantly limited by data availability, and even more by the fact that numerically measurable indicators cannot capture all the important dimensions and factors of development. A synthetic estimate thus arrived at should therefore only be used to complement other development estimation methods.

The purpose of calculating a synthetic development estimate is to quantify development according to the priorities of SDS with regard to selected indicators. Several indicators are available for each priority, with different measures that are not directly comparable. There are generally no predetermined optimum indicator values to enable evaluation of Slovenia's divergence in terms of development. Slovenia's development is therefore assessed in relative terms as compared to other countries. In practice, evaluation with regard to the deviation of a specific indicator from the average and a (weighted) aggregate of points attained by indicators are often used for this purpose.

A synthetic estimate of development according to individual SDS priorities and their main components has been calculated by employing a standardised continuous scoring system.² This means that the indicator value is standardised with the average and standard deviation and multiplied by ten. To reduce the influence of extreme values, points are limited to 3 standard deviations (± 30). Zero points in a particular indicator mean that its value equals the EU average, and 10 points that it exceeds the average by one standard deviation. To ensure that SDS

policy areas are evenly covered, in adding the points some indicators were first merged by averaging the point values for individual indicators. Using selected indicators, the synthetic development estimate was calculated at two levels: first, at the level of specific problem sets within each priority, and second, at the level of development priorities. The synthetic estimate of development within a particular priority is the sum of points of all development indicators of that priority. Our estimate covers the period 2004–2007³ and is presented in comparison with other European Union Member States. The selection of indicators (see Table 1), which at the same time defines development by particular priorities and problem sets, complies with the required model criteria regarding data completeness for the analysed period and the countries compared. Hence, Bulgaria, Cyprus, Malta and Romania were excluded from the analysis due to incomplete data, while Luxembourg was excluded due to its specificity. For some indicators, data for the last year were unavailable, and therefore the values of the previous year were used.

The calculated synthetic estimate of development has a number of constraints which must be taken into account in its interpretation. Advantages of the methodology used to calculate the synthetic estimate of development mainly lie in the reduction of subjective evaluation. Its chief disadvantage, however, is on the side of data: although trying to select maximally suitable indicators for each priority,⁴ we are limited by data (un)availability, as some SDS areas are not covered by adequate internationally comparable indicators; furthermore, the development estimate is influenced by the selection of indicators and countries compared. Hence, the calculated estimate does not necessarily fully reflect development in a particular priority or its problem set. Caution should also be exercised in interpreting the results due to the varied number of indicators for individual priorities, and in some cases also due to their quality and explanatory value. We should also bear in mind that because of the nature of the method applied, the development estimate may also vary due to changes in the other countries observed and not just because of better or poorer results for Slovenia. Since the definition of development, which may differ according to country, is determined by the selection of indicators which partly depends on data availability, the rankings of other countries must be seen exclusively from the perspective of Slovenia's own development goals. The use of the synthetic development estimate is thus only appropriate taking into account all the above constraints, i.e. only as a complement to the expert approach assessing Slovenia's realisation of SDS goals.

¹ The synthetic development estimate published this year employs a different methodology than the model-based estimate published in preceding years; the two estimates are therefore not directly comparable.

² In terms of an equation: $((\text{indicator value} - \text{EU average}) / \text{standard deviation}) * 10$. This is a slightly adapted version of the methodology developed by the *Lisbon Methodology Working Group (LIME) operating within the Economic Policy Committee (EPC)*.

³ Because for a number of indicators data for 2008 are not available for all EU countries.

⁴ To cover as broad a dimension of development as possible, we also used some indicators that may not necessarily show a priority's development, but come closest to this from among the available sets of data.

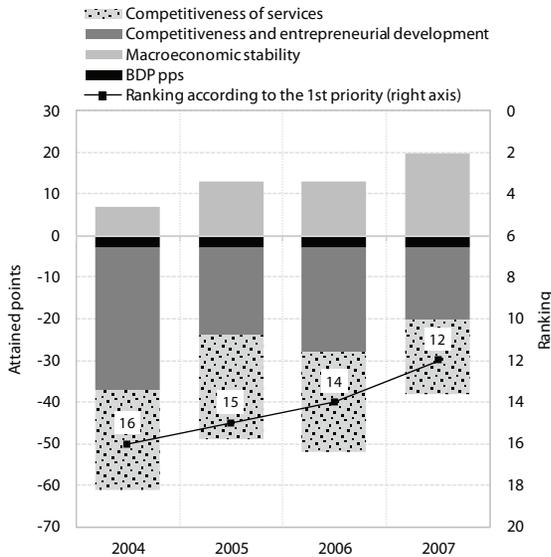
Table: Synthetic estimate of development by priorities and main components within each priority, and the number of points assigned to individual indicators, Slovenia, 2004–2007

		2004	2005	2006	2007
	1st priority	-54	-36	-39	-18
	BDP pps	-3	-3	-3	-3
1	GDP per capita in purchasing power standard	-3	-3	-3	-3
	Macroeconomic stability	7	13	13	20
2	Real GDP growth	2	1	3	8
3	Inflation	-5	0	2	-2
4	General government balance	0	1	-1	3
5	General government debt	9	8	8	8
6	Balance of payments	-1	1	1	0
7	Cyclically adjusted general government balance	2	2	0	3
	Competitiveness and entrepreneurial development	-34	-21	-25	-17
8	Labour productivity	-4	-4	-4	-4
9	Unit labour costs	-8	5	2	7
10	Share of high-tech products in total goods exports	-5	-6	-6	-5
11	Exports and imports as a share of GDP	5	6	6	8
12a	Inward foreign direct investment	-8	-8	-9	-9
12b	Outward foreign direct investment	-7	-7	-8	-7
13a	Market shares in network industries – mobile telephony	-30	-30	-30	-30
13b	Market shares in network industries – electricity	1	2	1	1
	Competitiveness of services	-24	-25	-24	-18
14	Non-financial market services as a share of GDP	-10	-10	-10	-7
15a	Total assets of banks	-9	-9	-8	-8
15b	Insurance premiums	-2	-3	-3	-3
15c	Market capitalisation	-8	-10	-7	-2
16	Share of other services in exports of goods and services	-8	-8	-8	-7
	2nd priority	-26	-22	-19	-19
	Education and training	-5	0	3	5
17	Share of the population with a tertiary education	-5	-5	-4	-2
18	Expected average years of schooling	-2	0	2	2
19	Total public expenditure on education	5	5	5	5
20	Expenditure on educational institutions per student	-3	0	0	0
	Research and Development, innovation and use of ICT	-21	-22	-22	-24
21	Gross domestic expenditure on R&D	-1	-1	0	-1
22	Science and technology graduates	-6	-6	-8	-8
23	Number of patent applications (EPO)	-4	-6	-6	-6
24	Expenditure on information-communication technologies (ICT)	-8	-6	-4	-4
25	Internet use	-2	-3	-4	-5
	3rd priority	-12	-7	-8	-5
	General government expenditure	3	-1	1	6
26a	General government expenditure	-1	-1	0	3
26b	General government expenditure on capital transfers and investment	4	0	1	3
	Taxes and contributions	-6	-6	-5	-4
27a	Economic structure of taxes and contributions – total burden of taxes and contributions	-1	-1	0	1
27b	Economic structure of taxes and contributions – tax burden on labour	-5	-5	-5	-5
	State aid and subsidies	-10	-4	-6	-6
28a	State aid – total	-7	1	-2	-2
28b	State aid for horizontal objectives	-3	2	1	1
29	General government subsidies	-5	-5	-5	-5
	4th priority	5	4	-1	12
	Labour market	9	8	5	12
30	Employment rate	2	2	1	2
31	Unemployment rate	6	6	5	8
32	Long-term unemployment rate	3	3	1	3
33a	Part-time employment	-6	-7	-6	-6
33b	Temporary employment	8	6	7	7
33c	Share of self-employed people	-7	-7	-6	-5
	Social protection	0	-1	-2	-2
34	Social protection expenditure	0	-1	-1	-1
35	Public and private expenditure on health	0	0	-1	-1
	Living conditions	-5	-3	-4	3
36	Number of doctors and nurses	-15	-14	-15	-13
37a	Life expectancy	0	0	1	3
37b	Infant mortality	7	4	7	8
38	Participation in education	-1	-1	1	1
39	Population in jobless households	8	10	6	9
	5th priority	-6	-10	-12	-5
	Environmental criteria	-5	-12	-14	-14
40	Share of road transport in total goods transport	0	-2	-2	-2
41	Energy intensity	3	2	2	2
42a	Agricultural intensity – average yield of wheat	4	2	3	4
42b	Agricultural intensity – number of livestock units per ha	0	1	1	1
42c	Agricultural intensity – average milk yield per animal	7	10	6	3
42d	Agricultural intensity – NPP fertiliser use	0	-2	-2	-2
42d	Agricultural intensity – share of controlled areas with organic farming	1	-1	0	1
43	Share of municipal waste which is not landfilled	-7	-9	-10	-9
44	Renewable energy sources	2	1	0	0
45	Implicit tax rate on energy consumption	-5	-6	-6	-6
	Sustained population growth	-9	-6	-5	4
46	Migration coefficient	-5	0	0	8
47	Fertility rate	-9	-10	-9	-7
48	Old-age dependency ratio	5	4	4	3
	Culture	8	8	7	5
49	Household expenditure on culture	8	8	7	5

Source: calculations by IMAD.

Note: Values in lighter colour are IMAD estimates based on data from previous years.

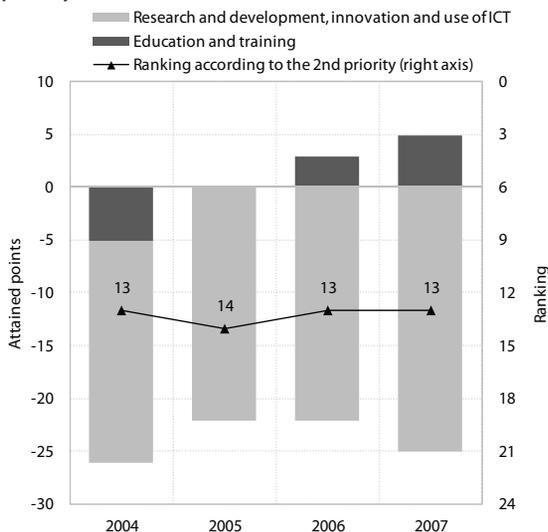
Figure 1: Synthetic estimate of Slovenia's development in the 1st priority (A competitive economy and faster economic growth) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2004–2007



Source: calculations by IMAD.

Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

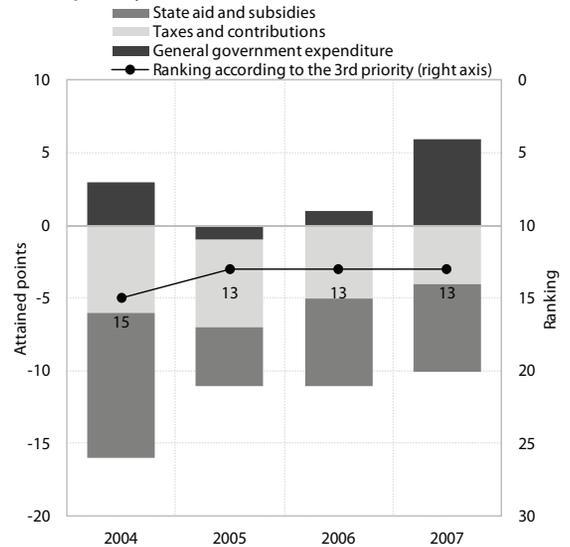
Figure 2: Synthetic estimate of Slovenia's development in the 2nd priority (Efficient use of knowledge for economic development and high-quality jobs) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2004–2007



Source: calculations by IMAD.

Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

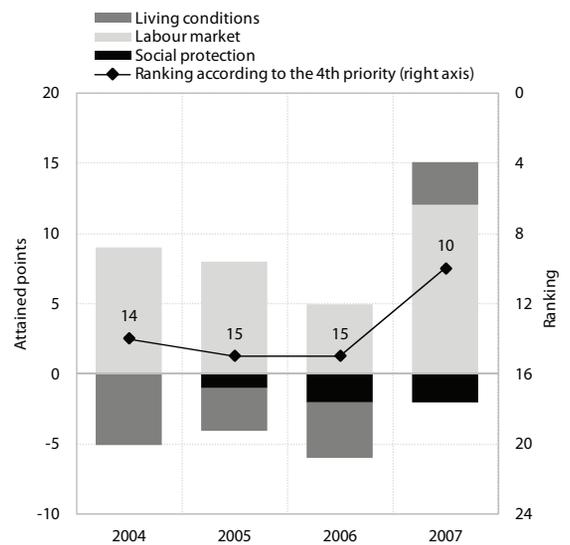
Figure 3: Synthetic estimate of Slovenia's development in the 3rd priority (An efficient and more economical state) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2004–2007



Source: calculations by IMAD.

Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

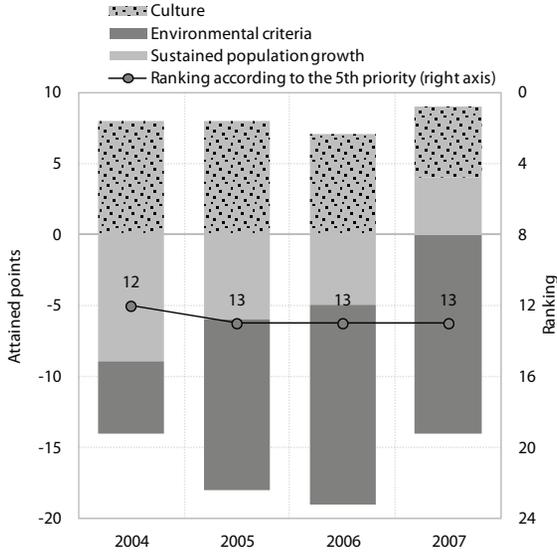
Figure 4: Synthetic estimate of Slovenia's development in the 4th priority (A modern welfare state and higher employment) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2004–2007



Source: calculations by IMAD.

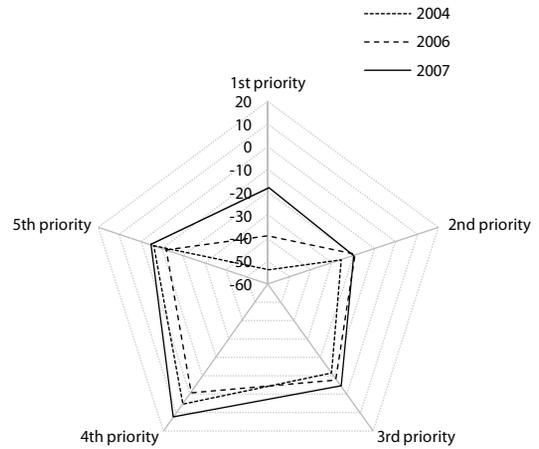
Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

Figure 5: Synthetic estimate of Slovenia's development in the 5th priority (Integration of measures to achieve sustainable development) and its main components, and Slovenia's ranking among 22 EU Member States in terms of development according to this priority, 2004–2007



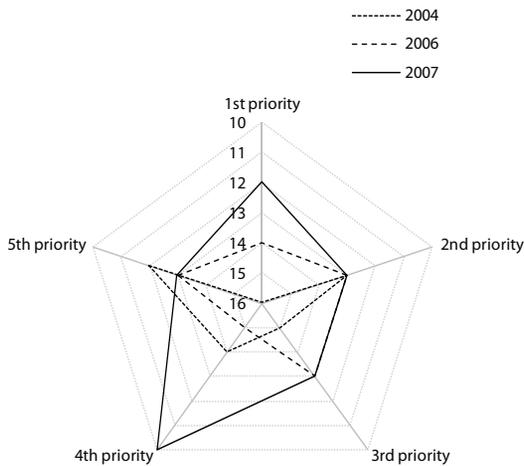
Source: calculations by IMAD.
Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

Figure 7: Slovenia's ranking among 22 EU Member States according to the five priorities of Slovenia's Development Strategy, 2004, 2006, 2007



Source: calculations by IMAD.
Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

Figure 6: Synthetic development estimate according to SDS priorities, 2004, 2006, 2007



Source: calculations by IMAD.
Notes: The columns show the points (development estimate) attained according to individual data sets, where a positive value represents above-average development relative to the EU countries included in the analysis. Zero points for a data set would therefore mean that in terms of development in this set Slovenia is equal to the average of countries included in the analysis and a negative value that Slovenia lags behind the average in a certain year.

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