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### **DEVELOPMENT REPORT 2004**

Institute of Macroeconomic Analysis and Development Janez Šušteršič, director

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## **Development Report 2004**

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IMAD Development Report 2004
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### Country acronyms:

A-Austria, B-Belgium, BG-Bulgaria, BY-Belarus, CH-Switzerland, HR-Croatia, CZ-Czech Republic, CY-Cyprus, DK-Denmark, D-Germany, E-Spain, EE-Estonia, EL-Greece, F-France, FIN-Finland, HU-Hungary, I-Italy, IRL-Ireland, L-Luxembourg, LT-Lithuania, LV-Latvia, NL-Netherlands, MT-Malta, NO-Norway, PL-Poland, P-Portugal, RO-Romania, RU-Russia, S-Sweden, SI-Slovenia, SK-Slovakia, TR-Turkey, UA-Ukraine, UK-United Kingdom.

### **Foreword**

The *Development Report is primarily intended to monitor implementation of the Strategy for the Economic Development of Slovenia (SEDS)* adopted in July 2001. The Report aims to assess the extent to which the country's development follows the goal of a sustainable improvement of Slovenian citizens' welfare and to what extent the development factors and mechanisms set out in the SEDS have been reinforced. The Report has become recognised by the government and the professional public, which was seen in last year's presentation and is further revealed by the fact that its recommendations have been taken into account in the government's Programme for Effective Integration into the European Union.

The Report is largely based on the *list of indicators designed to monitor development*, which began to be formulated during preparation of the SEDS. The selection was made on the basis of the SEDS' content and data provided by the Statistical Office of the Republic of Slovenia (SORS) and other institutions. We have aimed for maximum compatibility with the structural indicators developed by the European Union to monitor the Lisbon Strategy. This year's list of indicators is broadly in line with the indicators used in previous years. Some indicators have not been updated because no new data were provided (e.g. innovative enterprises in manufacturing, the national competitive index by the IMD, the genuine savings index, and secure servers) or because some indicators are too complex to be updated every year (e.g. the balanced development index). Some indicators have been replaced by secondary ones, while new ones have also been included (e.g. court backlogs). Slovenia's development has also been examined by means of the structural indicators used by the European Commission to assess the development of the EU, its members and acceding countries.

As Slovenia enters the EU, an important issue will become the relation of Slovenia's national development strategy to the Lisbon Strategy. Slovenia's main strategic document for economic development is the Strategy for the Economic Development of Slovenia 2001-2006 (SEDS) from 2001. The counterpart in the EU is the Lisbon Strategy, which was adopted in 2000 and updated subsequently in several European Council meetings (Gothenburg, adding environment-related guidelines, and Barcelona, adding R&D guidelines). This raises two main issues. First, whether these two documents are compatible and, second, how Slovenia can align its national strategy with the Lisbon Strategy, identify the most relevant issues from its point of view, and determine its national interest in implementation.

- The SEDS is compatible with the Lisbon Strategy in terms of development concept and content. Both are based on the concept of balanced economic, social and environmental development, while prioritising economic development. Social development is linked to economic development in the fields of employment, creation of the knowledge-based society, taxation, and pension and health system reforms. Environmental development relates to economic development in the fields of taxation of environmentally detrimental activities and investments, development of environmental technologies, and rational exploitation of natural resources, including the reduction of energy intensity.
- National development priorities are broadly in line with those of the EU, while there are some important differences. Both the SEDS and the Lisbon Strategy

identified priority measures on the basis of the main weaknesses, however, some weaknesses of Slovenia are identical to and some are different from those in the EU (specific ones mainly relate to pending transitional reforms). The main differences are that the SEDS: (i) is much less determined in stressing the importance of competitiveness than the Lisbon Strategy; (ii) takes macroeconomic stability as an easily achievable target in the short run, contrary to the Lisbon Strategy; (iii) pays much less attention to employment, employability and the creation of quality jobs; (iv) points out some specific priorities, mainly improved efficiency of the state, the policy for integrating into the EU single market, and regional development.

- The SEDS focuses more on conceptual and orientation issues, whereas the Lisbon Strategy deals more with concrete and operative activities and measures. While the Lisbon Strategy sets target-oriented priorities and focuses on the most urgent activities, the SEDS is comprehensive and lists a number of activities (without any hierarchical organisation) which are important, but have a varying effect on the implementation of priority objectives. The SEDS' benchmark is the EU average, meaning that this is a catching-up rather than an advancing strategy. Conversely, the Lisbon Strategy sets clear objectives and concrete activities to make the EU the most dynamic and competitive economy. Nevertheless, the Lisbon Strategy also faces an important implementation gap.
- The methods of monitoring the effectiveness of strategy implementation are similar between the Lisbon Strategy and the SEDS. The Lisbon Strategy pays a great deal of attention to transparency, monitoring and measuring the effects of the measures taken, while the SEDS only prescribes regular annual monitoring through the Development Report. A list of structural indicators was compiled within the framework of the Lisbon Strategy, while the indicators are calculated and published by Eurostat. Using these indicators, the European Commission reviews the state of development in each country and prepares recommendations for future implementation of the Lisbon Strategy. Slovenia was already incorporated in the monitoring process last year when the statistical offices of acceding countries were asked to submit national data. With the preparation of the Report on Structural Reforms (November 2003), Slovenia's structural reforms underwent the same review as member-states in terms of approach and methodology.
- The time span covered by the Lisbon Strategy is much longer (2000-2010) than that of the SEDS (2001-2006). A special mid-term report should be prepared in 2005, assessing implementation of the Lisbon Strategy and adjusting objectives and guidelines to achievements and shortcomings in implementation.

In July 2003, the government decided to prepare a new Strategy of Slovenia's **Development (SSD).** The reasons were the following. First, a more precise definition of short-term priorities, including the agents responsible for their realisation, should step up implementation of the existing strategy. A similar process is taking place in the EU where the European Council identifies the main gaps and sets priorities for better implementation at its spring meeting. Secondly, Slovenia needs a new comprehensive strategy which does not focus primarily on economic issues. Thirdly, accession to the EU formally ends the transition period so Slovenia must formulate its national strategy for the first decade of its membership in the Union.

This year's report differs from previous ones in terms of content and amount. The main substantive change is that indicators measure the starting point for the new strategy IMAD

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(SSD) as well as implementation of the SEDS. Less attention is paid to progress in structural reforms because a special *Report on Structural Reforms* was prepared last year in line with the European Union's methodology. Further, the Report does not give guidelines for implementing the SEDS because new priorities will be set out in the draft SSD, which is being co-ordinated by the IMAD and should be finished in April 2004.

The Report used the latest official data, which cover different periods of time (some of them may be relatively old), so the Report does not present an overall picture of development in the given period of time. The period covered by the Report is therefore determined by the data that were available up until 29 February 2004.

### Summary of the main findings

The main findings are presented in two ways that follow the dual aspect of the Development Report (see Foreword). Implementation of the Strategy for the Economic Development of Slovenia (SEDS) is presented first, while the European Commission's evaluation of Slovenia's development using the structural indicators is presented next. The monitoring of development at the national level is thus combined with the assessment of meeting the objectives set at the supra-national level.

### 1. Implementation of the SEDS

The principle of balanced economic, social and environmental development is not being realised satisfactorily. The level of Slovenia's economic development is rising steadily. This is accompanied by progress in social development, however, environmental development is slow: some development gaps are persisting or are narrowing too slowly. Regional disparities are broadly unchanged, however, some figures point to the tendency of a gradual narrowing. The reduced level of national competitiveness and slowing economic growth are a warning sign that the relatively positive trends may be broken unless structural reforms are pursued further (see Table 1).

In addition to positive outcomes in **economic development** reflected in economic growth and falls in inflation, some macroeconomic and structural weaknesses have surfaced. As far as **macroeconomic stability** is concerned, restrictive macroeconomic policy measures have helped remove some imbalances, mainly in the fields of inflation and public-sector wage growth, while the current account of the balance of payments has levelled off from a large surplus in 2002 due to increased import growth and modest export growth. Some macroeconomic indicators fell slightly in 2003 chiefly due to external factors, but they did not cause any significant macroeconomic imbalances. Real gross domestic product growth was below the level of the past medium-term period, but it was still about two percentage points above the average level of the EU. The general government deficit (excluding the 'compensatory deficit' from 2002) is estimated to have fallen by 0.1 of a percentage point in 2003, while general government expenditure relative to GDP increased and the expenditure structure changed positively. The faltering economic growth affected **labour market** performance as the rise in employment and the fall in unemployment came to a halt.

Structural weaknesses were mainly the result of the slow implementation of transition-related and other structural reforms. Slovenia only managed to catch up with countries that implemented reforms most vigorously in the late 1990s, while the pace of reforms again slowed down after 2001. The main shortcomings continue in the non-banking financial sector reform and competition policy implementation. Slovenia's economic structure measured by the structure of gross domestic product is gradually approaching the structure of advanced economies as the importance of agriculture and industry is diminishing and the role of services is growing. Structural weaknesses can be seen in the slow growth of market services, mainly business and financial services, and manufacturing, where the restructuring process aimed at strengthening technology-intensive industries is too slow.

The main factors of structural transformation are the development of the knowledgebased society, the economy's competitiveness, liberalisation of infrastructure, and the government's new role in economic development. Some positive shifts have been seen in the development of the knowledge-based society over the last year (education, research and technological development, use of information and communications technologies). These shifts, however, have been too weak to enable Slovenia to achieve the EU's high objectives so a more proactive development policy is necessary. As regards the corporate sector's competitiveness, positive changes have been seen in rising productivity, falling costs per unit of value added, resumed growth in market shares in the main international markets, and rising inward and outward foreign direct investment. However, it is clear that Slovenia's corporate sector is facing significant structural problems and rigidities reflected in the slowing labour productivity growth and unfavourable and persisting composition of merchandise exports according to factor intensity. Low productivity growth was mainly the result of slow restructuring that encourages high value-added activities whose competitiveness is based on the created factors of production, implying that Slovenia's current export structure may be unsustainable in the long run. The slow pace of reforms is even more evident in the financial sector. According to the main indicators of the level of development of the financial system, Slovenia is one of the most developed acceding countries, however, it is still way behind EU member-states. The key financial intermediaries in Slovenia's financial market are banks, but they are slow in reducing the development gap behind the EU-15. Albeit smaller, the gap remains wide in the insurance industry. Advancement of the capital market is also lagging behind; most trading involves existing securities, while new issues (except government bonds) are practically non-existent. The liberalisation and privatisation of **infrastructure sectors** is under way and the pace of reforms is as fast as in other EU acceding countries. These processes, however, have produced little results in terms of the quality of supply and lower prices. Structural reforms are, among others, hampered by the government's rigid role given that its developmental function was subordinated to other functions up until and including 2002. The shifts seen recently have not given enough impetus to structural reforms.

**Regional disparities** in the level of economic development, which are relatively low compared to EU members, have stayed unchanged over the last few years, however, recent trends suggest they should narrow in the long run. Pomurska is still the worst-performing region in terms of the level of development and unemployment, while Central Slovenia remains the most developed region, achieving 94% of the EU average.

The outcome is somewhat worse in **environmental development**, meaning that economic development has recently been achieved to the detriment of environmental development. This was due to high energy intensity, which is falling very slowly, and the high rates of growth seen in emission-intensive industries and intensive agriculture. This suggests that the principle of environmental sustainability is still poorly integrated into the process of steering economic development. Positive shifts have been seen in the relatively large shares of renewable resources and organic farming and the relatively small and declining share of road freight transport. Conditions for faster environmental development are being created by introducing special taxes for polluters and institutional preparations for emission trading, subsidies for energy saving, promotion the use of renewable energy sources, and the gradual regulation of municipal water and waste utilities. This should be backed up by structural changes in the economy favouring those production facilities with the least adverse environmental impact.

The results of social development are favourable: life expectancy and the level of social

Table 1: Overall evaluation of development achieved in individual areas

AREA	IMPROVEMENT	WEAKNESSES
Sustainable increase in welfare	Narrowing gap in economic development; favourable outcome in social development; regional disparities unchanged.	Slow improvement in environmental development and complex national competitiveness.
Changes in the economic structure (measured by the structure of GDP)	Declining shares of agriculture and manufacturing; increasing shares of services.	Business and financial services lagging behind; slow changes in manufacturing towards higher value added and technology-intensive production.
Macroeconomic stability	Reduced rise in consumer prices; balance of payments in equilibrium; wage growth in line with macroeconomic restrictions.	Slow growth partly due to slow structural changes; deteriorated conditions in the labour market.
Transition reforms	Corporate sector reforms pursued further.	Slow reforms in the financial sector, competition policy and government efficiency.
Knowledge-based society	Population's education level and enrolment; increased investment in research and development; Internet use.	Tertiary education (number of years required to complete studies, dropouts); the corporate sector's investment in research and technological development and the number of innovations; use of e-commerce.
Corporate competitiveness	Increase in productivity and fall in costs per unit of value added; increase in market shares in the most important foreign markets; increase in inward and outward foreign direct investment.	Restructuring of enterprises towards higher value added and technology-intensive production; the structure of exports inappropriate in the long run.
Financial sector	Creating conditions for raising the financial sector's competitiveness; growth of mutual funds.	Institution of efficient ownership structure in insurance companies; capital market development.
Infrastructure	Liberalisation processes maintained in energy and telecommunications sectors and launched in postal services.	Public water and municipal waste services; liberalisation of railway transport; modest volume of public passenger transport.
The state	Reduced court backlogs in important cases; restricted growth in wages and social transfers relative to total general government expenditure.	Court backlogs important for the functioning of economic subjects; the focus of administrative reform on organisational issues.
Regional development	Low development gaps between regions compared to other countries.	Lagging development of the Pomurska region.
Environmental development	Institution-building and implementation; reduced environmental burden of transport; share of renewable sources.	Energy intensity; growing production of environmentally adverse industries; intensifying agriculture; emission of greenhouse gasses.
Social inclusion and falls in poverty; relatively small income inequality in general and between women and men; most social protection reforms completed.		Slow preparation of the health reform; employment of older workers.

protection are increasing, while the rate of poverty risk and income inequality are not rising. The effects of pension reform can be seen in the rising average retirement age and the falling ratio of pensions to wages.

### 2. Slovenia's ranking according the European Commission's structural indicators

Slovenia is ranked above the average of the EU and acceding countries in the field of social cohesion (at-risk-of-poverty rate, long-term unemployment rate), the youth educational attainment level, the volume of freight transport relative to GDP, and business investment relative to GDP according to the Commission's shortlist of 14 structural indicators (see Table 2) used in the preparation of its Spring Report<sup>1</sup>. Slovenia's employment rate roughly equals the EU average and is higher than in EU acceding countries.

The Commission made the shortlist of indicators on the basis of methodological indisputability and evenly distributed monitoring of all objectives of the Lisbon Strategy.

Table 2: Slovenia's position according to the European Commission's structural indicators

	LISBON STRUCTURAL INDICATORS (14) - SLOVENIA'S POSITION AND CHANGE COMPARED TO THE PRECEDING YEAR							
	Slovenia is above or around the EU-15 average	Slovenia is behind the EU-15 average						
Improvement	- Youth educational attainment level, 2003 (SLO: 90.7%, EU: 74%) - At-risk-of-poverty rate after social transfers, 2000 (SLO:12.9%, EU:15%) - Long-term unemployment rate, 2002 (SLO: 3.3%, EU: 3%) - Volume of freight transport relative to GDP, 2002 (1995=100) (SLO: 92.1, EU: 102.4)	- GDP per capita in PPS, 2003 (EU15=100) (SLO: 70) - Labour productivity in PPS, 2003 (EU15=100) (SLO: 69.4) - Gross domestic expenditure on R&D, 2001 (SLO: 1.6% BDP, EU: 2% BDP) - Comparative price levels, 2002 (EU15=100) (SLO:70)						
Worsening	- Business investment, 2001 (SLO: 23.3% BDP, EU: 17.9% BDP) - Employment rate, 2002 (SLO: 63.4%, EU: 64.3%)	- Employment rate of older workers, 2002 (SLO: 24.5%, EU: 40.1%) - Greenhouse gas emissions, 2001 (1990=100) (SLO: 108, EU: 98) - Energy intensity of the economy, 2001 (SLO: 341.2 kgoe/1000 EUR; EU: 194.2 kgoe/1000 EUR)						

Source of data: Eurostat, New Cronos database.

Note: Data for Slovenia for the indicator of dispersion of regional employment rates are unavailable

Slovenia is lagging behind the EU average in about half of all indicators and is above the average of acceding countries in most indicators. The gap behind the EU is recorded in the field of general economic background (gross domestic product per capita in terms of purchasing power standards, labour productivity in terms of purchasing power standards) and the environment (energy intensity, greenhouse gas emissions). Slovenia is also lagging behind in gross domestic expenditure on R&D as regards innovation and research, and in the employment rate of older workers as regards employment. The employment rate of older workers is below the average of EU acceding countries as well, chiefly due to the widespread early retirements seen in the early years of transition. Slovenia is performing worse than most acceding countries in the field of reducing greenhouse gas emissions.

In 2003, Slovenia made progress in eight out of thirteen indicators: it significantly reduced the gap behind the EU average in labour productivity, it continued to narrow the gap in gross domestic product per capita in terms of purchasing power standards, innovation and research (gross domestic expenditure on R&D relative to GDP, youth educational attainment level) and in one of the environmental indicators (volume of freight transport relative to GDP). A fall compared to the year before was seen in the field of employment (employment rate, employment rate of older workers) and the environment (greenhouse gas emissions, energy intensity of the economy). This raises concern because Slovenia is lagging behind the EU average in most of these indicators as well as behind the average of EU acceding countries in some of these indicators.

In addition to the shortlist, Eurostat uses an extended list of structural indicators, however, some data are unavailable for all countries.<sup>2</sup> While these indicators should be used with caution, they still provide an interesting insight. Slovenia is performing better than the EU on average mainly in the domain of the knowledge-based society (lifelong learning, level of Internet access of enterprises, ICT expenditure) and social development (gender pay gap, inequality of income distribution). Slovenia is ranked above the average of EU acceding countries in a number of indicators, however, it is way below the EU-15 in certain areas (tax rate on low wage earners, number of patents granted by the United

<sup>&</sup>lt;sup>2</sup> Regularly updated figures are available on Eurostat's homepage: <a href="http://europa.eu.int/comm/eurostat">http://europa.eu.int/comm/eurostat</a>.

States Patent Office). Critical areas are indicators where Slovenia is lagging behind the average of both the EU and acceding countries (ICT expenditure, employment rate of older workers).

#### 3. Guidelines

The Development Report has been designed to monitor implementation of objectives and priorities of the SEDS by means of a system of indicators. The concept of balanced economic, social and environmental development proposed by the SEDS continues to be valid for both Slovenia and the EU. The SEDS' priorities in the field of economic development are still up-to-date and are being realised, however, this process is too slow in many areas, leading to structural imbalances that may hamper the pace of development in the long run. Reasons for the slow implementation process can be found in the corporate sector, whose commitment to restructure and seek new business opportunities has been too weak, and the government's development policy, which is too dispersed and poorly co-ordinated.

The weaknesses of current economic, social and environmental development, as shown by the SEDS' system of indicators and the European Commission's structural indicators, provide a platform for new priorities that should be set by the new Strategy for Slovenia's Development. This Strategy will pay most attention to national objectives (while taking supranational objectives into account), primarily the rapid structural adjustment and reduction of development gaps behind the average level of development of EU members (catching-up objectives) and improved recognition mainly in areas where Slovenia enjoys comparative advantages against (current and new) members of the EU.

The SEDS was designed in such a way that the main development objectives are proposed for all areas, however, the set of most important priorities is not identified. The Strategy and institutional regulation (Public Finance Act) envisaged that these priorities and related programmes and measures would be set out by the National Development Programme (NDP). Since work on the NDP came to a standstill after adopting the preliminary programme two years ago and turned to preparation of the Single Programming Document, no mechanism is available to steer the government's active development policy and assess its role in realising priorities.

Assessing the role of the government through development results alone has at least two shortcomings. First, there is a time gap between government measures and the results achieved. Second, what should also be assessed is the connection between measures taken and results achieved as well as the flexibility of these measures in relation to the underlying conditions and changes. The co-ordination of measures should also be checked because some can have both positive and negative effects (for example, some social measures may undermine the motivation to be economically active, or the promotion of dirty and energy wasteful industries may be detrimental to the environment). The main guidelines for improving the government's developmental role are to: (i) define the most important short-term actions and measures for each priority, including the clearly defined agents in the revamped NDP; (ii) break down and co-ordinate measures in the new NDP; (iii) set up a monitoring system for measures and their effects on the main components of development; and (iv) make regular reports on development results and the effectiveness of measures.

# **Development Report**

Editor in Chief:

Ana MURN

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### 1. Development results

The new development concept endorsed in **Slovenia in the New Decade: Sustainability, Competitiveness, Membership in the EU** – Strategy for the Economic Development of Slovenia 2001-2006 (SEDS) – is described in two different and separate parts. The first one focuses on the long-term balanced development of different, yet inter-related development components, which are given form in the new development paradigm. The second part sets the course of economic development for the next medium-term period (up to 2006) and provides measures to gradually bring Slovenia's development level and its economic structure closer to advanced economies.

## 1.1. Balanced economic, social and environmental development

THE SEDS' OBJECTIVE: The new development paradigm is based on the equal treatment of the economic, social and environmental aspects of welfare and on sustainable development, which ensures that the needs of current generations are met without impeding future generations in meeting theirs to the same extent. Sustainable development is expressed in structural, temporal, and spatial dimensions – the respective issues are the three sources or components of welfare, intergenerational aspects, and balanced regional development. Given the current levels of advancement in each of the three welfare components, the SEDS gives priority to reducing the economy's development gap, which should be achieved without increasing the relatively narrower gaps in social and environmental development.

THE REPORT'S FINDINGS: Slovenia's development level is rising steadily, while its development gap behind the EU average is narrowing gradually. Economic development is accompanied by progress in social development, however, environmental development is advancing more slowly. Regional disparities are broadly unchanged, however, some figures point to the tendency of a gradual narrowing. The reduced level of national competitiveness is a warning sign that the relatively positive trends may be broken unless structural reforms are pursued further.

*ANALYSIS:* As far as **economic development** is concerned, Slovenia is gradually reducing its gap behind the EU-15 average, as shown by the synthesised and analytical indicators (see Table 3). According to the synthesised indicator of gross domestic product per capita in terms of purchasing power standards<sup>3</sup>, Slovenia made

<sup>&</sup>lt;sup>3</sup> Purchasing Power Standard (PPS) is an artificial general reference value used in the EU to express the volume of economic aggregates. Economic volume aggregates in PPS are obtained by dividing their original value in national currency units by the respective purchasing power parities (currency conversion rates that eliminate the effect of different price levels). Since Purchasing Power Standards are statistical calculations which are the result of some conceptual assumptions, methodological determinations and derivation procedures, they can be used with an assumed 5% error.

At the end of 2003, Eurostat published revised data (for explanation see p. 99 in the Analytical Appendix) on gross domestic product in terms of Purchasing Power Standards (GDP in PPS) for 31 European countries for 1995-2002. A comparison of figures released before and after the revision shows about a 3% lower value for

significant progress in the past seven years (1995-2002), rising from 61% to 69% of the EU-15 average. Slovenia overtook Greece in 1999 and drew closer to Portugal. In 1995-2000, Slovenia improved its position relative to the EU average by 5 percentage points, while other acceding countries improved theirs by just 2 percentage points. Slovenia continued to reduce this gap faster than other acceding countries in 2001 and 2002. Slovenia achieved 76% of the average gross domestic product in PPS of all 25 EU members in 2002 (which equalled 91% of the EU-15 average). According to the IMAD's preliminary calculations, Slovenia could achieve the average development level of the enlarged Union in the next ten years provided that the current comparative price levels are unchanged and Slovenia's GDP growth is 2.8 percentage points higher than that of the EU. A similar picture is painted by analytical indicators which, in addition to progress in economic development, show either some notable or small imbalances in individual areas. The exceptions are labour market indicators, which show a deterioration in 2003, and the rate of investment, which declined as a result of the three-year slowdown in economic activity.

As far as **social development** is concerned, measured by the synthesised indicator of Human Development Index (HDI), 2001 saw no major change compared to previous years. Slovenia was ranked 29<sup>th</sup> among 175 countries for the fourth year running, while the total value of the index rose again slightly. The only component recording a change compared to 2000 was the life expectancy index, which rose marginally. Slovenia was ranked highest in the education index (23<sup>rd</sup> place), while it was placed much lower in the life expectancy index and gross domestic product per capita (33<sup>rd</sup> and 32<sup>nd</sup> places, respectively). Slovenia was behind all members of the EU-15. As in previous years, Slovenia lagged behind in the life expectancy index and the index of gross domestic product per capita. Slovenia was ranked highest out of all EU acceding countries, however, both the Czech Republic and Poland drew close thanks to the continuing and marked rise in the overall value of their HDI. Other acceding countries did not record any major positive changes. Social development is presented in more detail by the analytical indicators (Table 3), which point to gradual but steady progress.

**Environmental development** and sustainability are not shown by a synthesised indicator this year. Instead, we have used various partial indicators (Table 3). Data show that Slovenia is handicapped by persistently high energy intensity. A significant environmental impact is also seen in agriculture, while the volume of road transport relative to total freight transport is declining. The introduction of various taxes on pollution has created conditions for reducing pollution, albeit to a limited extent. Weak (financial) measures taken to save energy and the expected effects of electricity price liberalisation, possibly leading to lower prices for the biggest consumers, are contributing little to reducing energy intensity.

**Regional disparities** measured by gross domestic product are low in comparison to other countries and are not widening, while differences in unemployment have started narrowing after having increased for several years. The variation of gross domestic

Slovenia for the last four years on average. The revised GDP in PPS for 2002 was up to 6.3% lower than the previous figure and totalled PPS 16,600, as against the PPS 17,710.

Table 3: Development indicators

1. ECONOMIC DEVELOPMENT  Gross domestic product per capita in PPS  Gross domestic product growth  Unemployment rate  Employment rate  Educational attainment structure of people in	EU = 100  Real annual growth (%)  Labour force survey (%)  Labour force survey (%)  Average number of schooling years according	66 4.1 7.0	68	69	
Gross domestic product growth  Unemployment rate  Employment rate  Educational attainment structure of people in	Real annual growth (%) Labour force survey (%) Labour force survey (%)	4.1		69	
Unemployment rate  Employment rate  Educational attainment structure of people in	Labour force survey (%) Labour force survey (%)		2.9		
Employment rate  Educational attainment structure of people in	Labour force survey (%)	7.0		2.9	
Educational attainment structure of people in	* ' '	7.0	6.4	6.4	6.6
	Average number of schooling years according	62.9	63.9	63.4	62.5
employment	to the labour force survey	11.4	11.4	11.5	11.6
Population with a completed secondary education	Population aged 25-64 with a completed secondary education (%)	75.5	76.2	78.0	
Researchers	No. of researchers per thousand labour force	4.5	4.6		
R&D expenditure	Gross expenditure on R&D as a % of GDP	1.47	1.57		
Labour productivity	GDP growth per employee (%)	2.9	2.4	3.5	
Unit labour costs	Rise in labour costs per unit of GDP (%)	1.4	-0.1	-1.2	
Market share	Share of exports/imports in the main trading partners (%)	0.488	0.510	0.544	0.551
Composition of merchandise exports according to factor intensity	High-technology-intensive products (%)	15.3	15.9	16.5	18.1
Gross fixed capital formation	As a % of GDP	25.7	24.0	22.6	
Foreign direct investment	Inward investment as a % of GDP	15.1	13.5	16.8	
Total assets of banks	Assets as a % of GDP	78.8	81.8	86.4	
Insurance premiums	As a % of GDP	4.6	4.9	5.1	
Market capitalisation	As a % of GDP	16.7	17.9	23.4	
2. ENVIRONMENTAL DEVELOPMENT					
Share of "dirty" industries in manufacturing	Index of production volumes growth in "dirty" industries	108.2	105.4	104.8	104.6
Energy intensity	Primary energy consumption (toe/mill. EUR)	335.3	338.6	336.7	
Renewable sources	Renewable sources in total primary energy consumption (%)	11.9	11.7	11.2	
Environmental impact of transport	Road transport in total freight trans. in tkm (%)	64.8	66.0	60.0	
Agricultural intensity	Use of NPK fertilisers (kg/ha)	148.1	142.2	138.3	
Tree-felling intensity	Removal relative to wood increment (%)	38.0	37.7	37.3	
3. SOCIAL DEVELOPMENT					
Human development index	Index value	0.879	0.881		
Life expectancy	Men, number of years	71.9	72.1	72.3	
Infant mortality	Per 1000 live-born children (%)	4.9	4.2	3.8	
Poverty	Population in jobless households (%)	9.0	8.2	8.0	8.7
Poverty risk	Risk of poverty rate after social transfers	12.9			
4. REGIONAL DEVELOPMENT					
Variation of gross domestic product across regions	Coefficient of variation (%)	23	23.3		
Variation of unemployment across regions	Coefficient of variation (%)	31.2	33.5	34.8	33.9
5. NATIONAL COMPETITIVENESS					
National competitiveness - growth competitiveness index	Index value		4.70	4.64	4.70

Source of data: Development indicators.

Note: These results are explained in detail for each area in the Analytical Appendix. Some data for 2003 are preliminary. An empty box means that figures are unavailable.

product per capita in PPS across regions measured by the coefficient of variation<sup>4</sup> changed little in 2000 and 2001<sup>5</sup> (23.0% and 23.3%, respectively) and remained relatively low in the international context. According to the international comparison of the variation coefficient for 1995-1999 (the old methodology<sup>6</sup>), Slovenia recorded one of the lowest regional disparities (including Sweden, Greece and the Netherlands in the EU). The widening of regional disparities in unemployment came to a halt in 2003. The coefficient of variation, which totalled 30.2% in 1997, fell slightly before 2000, began to rise afterwards and dropped again in 2003.

After improving in 2002, Slovenia's national competitiveness measured by the WEF's<sup>7</sup> growth competitiveness index and business competitiveness index fell notably in 20038. As a result, Slovenia dropped to the same place in the global ranking it had two years before. While the value of the growth competitiveness index edged up, Slovenia fell from 28th to 31st place, i.e. to the place it held in 2001. Slovenia's position also declined in the business competitiveness index, going down three places to 30<sup>th</sup> place, which was still a better outcome than in 2001 (32<sup>nd</sup> place). The fall in the growth competitiveness ranking was due to the poorer quality of public institutions, while Slovenia's ranking improved in the technology index and the macroeconomic environment index. The main factor behind the fall in business competitiveness was the deterioration in the quality of Slovenia's business environment, while the competitiveness of company operations and strategies also dropped. The gap between the business competitiveness index and GDP per capita in PPP (27th place) widened from two to three places, which the WEF interpreted as a cause for alert. Slovenia is moving away from those countries where the created microeconomic foundations provide important growth potential, as Slovenia's microeconomic foundations seem too weak to support the achieved level of income.

### 1.2. Changes in the economic structure9

THE SEDS' OBJECTIVE: The SEDS does not deal with sectoral policies directly. It does, however, point to some basic changes in the production structure of GDP expected to be brought about by Slovenia's economic development and its integration

<sup>&</sup>lt;sup>4</sup> The coefficient of variation is defined as the ratio of the standard deviation to the average, while this formula is modified to take a region's size into account.

<sup>&</sup>lt;sup>5</sup> The revised figures on regional gross domestic product are only available for 2000 and 2001 and are not comparable with those for 1995-2000.

<sup>&</sup>lt;sup>6</sup> We assume that a comparison of the revised GDP figures would reveal a similar relationship between Slovenia and other EU member and accession countries.

<sup>&</sup>lt;sup>7</sup> World Economic Forum.

<sup>8</sup> In addition to actual changes in competitiveness and methodological adjustments to the calculation of indexes, Slovenia's ranking in 2003 was affected by the higher number of countries included for observation (up from 80 to 102). Hence, Slovenia lost two places in the growth competitiveness index and stayed in the same place in the business competitiveness index.

<sup>&</sup>lt;sup>9</sup> Changes in the economic structure can be monitored from different points of view. This chapter focuses on changes in the production structure of gross domestic product, however, this does not reflect all important structural changes in the economy. Some of these are dealt with in other parts of the Report (changes in merchandise exports according to factor intensity, electricity consumption etc).

with the EU. At the same time, the SEDS takes into account globalisation processes, the integration of European markets, intensive technological progress, and the transition to a knowledge-based society.

THE REPORT'S FINDINGS: Positive shifts in the economic structure measured by the production structure of GDP were sustained in 2000-2002. Slovenia's economic structure is gradually approaching the structure of advanced industrialised economies as the importance of agriculture and industry is diminishing and the role of services is growing. Among services, the importance of both market-oriented and public services increased, however, growth in market services, primarily business and financial ones, was too slow to reduce the gap behind the EU average. Slovenia drew very close to the EU average in terms of the share of public services in the total economy. The restructuring process continued in manufacturing, however, this was too slow especially in the area of strengthening technology-intensive industries.

ANALYSIS: Changes in the structure of gross domestic product seen in 1995-2002 brought Slovenia gradually closer to structural changes of advanced economies. While the shares of services and construction increased, the importance of industry and agriculture decreased in the second half of the 1990s. Similar trends continued in 2000-2002<sup>10</sup>: services gained another 1.1 percentage points in the GDP structure (0.8 of a percentage point in 2002), while the share of industry and agriculture each dropped by 0.4 of a percentage point (by 0.5 and 0.1 of a percentage point in 2002). After a sharp rise from 1995 to 1999, boosted by the building of roads infrastructure, the share of construction shrank by 0.5 of a percentage point in 2000-2002 (by 0.2 of a percentage point in 2002).

As far as service sectors are concerned, the importance of both public and mainly market-oriented services increased in 2000-2002, each rising by 0.6 of a percentage point in the overall economic structure. Among public services, the shares of public administration and compulsory social insurance increased significantly (by 0.4 of a percentage point), while the shares of education, and health and social work rose slightly less (each by 0.2 of a percentage point). Like in previous years, the rise in public administration and compulsory social insurance resulted from a fast rise in the number of employees11, as new institutions were set up in the process of preparations for EU membership. Measured by the number of employees, higher education and adult education were the fastest growing segments of education. This is considered a positive shift from the perspective of the need to improve the population's education structure. The main lever of growth of mainly market-oriented services was business and financial services (their share increased by 0.4 of a percentage point), while the shares of traditional services – wholesale and retail trade, hotels and restaurants, and transport – rose less (by 0.2 of a percentage point). The strengthening and development of business and financial services, which complement production activities, are important because they can boost the competitiveness of the economy. Their advancement, however, is slow. International

<sup>&</sup>lt;sup>10</sup> The Statistical Office released revised national accounts for 2000-2002 so figures on the production structure of GDP are not fully comparable with those for previous years.

<sup>&</sup>lt;sup>11</sup> The number of employees in the public administration, defense and compulsory social insurance rose by as much as 6.1% in 2000-2002.

comparisons show that the Slovenian economy's structure is lagging most strongly behind the EU average in the share of business and financial services relative to GDP. Further, this gap widened slightly from 2000 to 2002<sup>12</sup>. In the same period, Slovenia's share of public services nearly caught up with the EU average, as did the shares of wholesale and retail trade, hotels and restaurants, and transport.

The share of industry in Slovenia's GDP structure remained significantly above the average of EU member-states despite deindustrialisation in the past decade. Its role even increased in comparison with the EU average, namely from 6 percentage points in 2000 to 6.4 percentage points in 2002. The role of manufacturing diminished the most within total industry. Its share in GDP shrank by one percentage point in 1995-1999 and by a further 0.3 of a percentage point in 2000-2002. The share of mining was also on the decrease, primarily because of the gradual closure of brown coal mines. On the other hand, the share of electricity, gas and water supply remained the same in 2000-2002.

It is important for the economy's competitiveness that restructuring in manufacturing primarily favours high-productivity industries. In 2000-2001<sup>13</sup>, structural changes continued to move towards the growing importance of mainly capital-intensive, highly export-oriented<sup>14</sup> and above-average innovative industries, while the importance of mainly labour-intensive industries continued to decline. In 2001, transport, chemicals, rubber, metal and electrical equipment industries mostly increased their shares in manufacturing's value-added. On the other hand, the shares contracted the most for wood, food-processing and textiles industries. Among the

Table 4: Structure of gross domestic product in 2000, 2001 and 2002

A -41-de .		As a % of GDI	•	Structure of people in employment¹ (%)			
Activity	2000	2001	2002	2000	2001	2002	
A, B Agriculture, forestry, fishing	3.0	2.8	2.7	11.7	11.2	11.0	
CF Industry and construction	32.2	32.0	31.3	37.5	37.5	37.0	
CE Industry	26.7	26.8	26.3	30.2	30.1	29.7	
F Construction	5.5	5.2	4.9	7.3	7.3	7.3	
GO Services	53.8	54.1	54.9	50.8	51.3	52.0	
GK Mainly market-oriented services	36.0	35.8	36.6	22.4	22.3	22.3	
GI Wholesale & retail trade, hotels & restaurants, transport	18.7	19.0	18.8	9.4	9.8	10.2	
J, K Financial intermediation, business services	17.4	16.9	17.7	31.9	32.1	32.5	
LP Mainly non-market-oriented services	17.7	18.2	18.3	18.9	19.2	19.5	

Source: SORS, the IMAD's calculations.

Note: 'people in employment according to the national accounts statistics.

<sup>12</sup> From 7.5 percentage points in 2000 to 7.7 percentage points in 2002.

<sup>&</sup>lt;sup>13</sup> The latest data on manufacturing's value-added structure are available for 2001.

<sup>&</sup>lt;sup>14</sup> Industries that earn over 60% of their revenues in foreign markets.

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fast-growing industries in the second half of the 1990s, the share of the machinery sector stopped rising, while among the labour-intensive industries, whose importance has diminished in the past few years, the share of leather manufacturing increased slightly. Shifts in the structure of manufacturing seem to be moving in the right direction, however, they are relatively slow. Namely, evidence shows that Slovenia is lagging way behind the advanced European economies in terms of the share of high-technology and medium-high-technology industries. Similarly, Slovenia is behind some countries which are below its level of development (Hungary, the Czech Republic). In order to make a breakthrough in competitiveness and keep economic growth sustainable in the long run, it will be necessary to make important shifts based on technological restructuring, higher investment in R&D, ICT technologies and innovation, and the increased role of knowledge-based services.

## 2. Prerequisites for implementing the development strategy

According to the SEDS, the prerequisites for implementing the development strategy include the provision of macroeconomic stability and completion of structural reforms. The first is implemented through classical macroeconomic (monetary, incomes and fiscal) policies, while the second requires the establishment of a functioning market economy.

### 2.1. Macroeconomic stability

THE SEDS' OBJECTIVE: The stability of the main macroeconomic frameworks is the key requirement for effective implementation of the SEDS' objectives, and this is one of the primary tasks of classical macroeconomic policies: monetary, income and public finance policies. Monetary policy's main goal is to gradually reduce inflation to the level allowing integration into the Economic and Monetary Union. In line with Slovenia's macroeconomic constraints and the broad guidelines of the EU's economic policies, incomes policy's goal is to keep real growth in the gross wage per employee below the rate of labour productivity growth, which should help reduce inflation and create conditions for companies to increase their investment in technologies, markets and human capital, leading to improved competitiveness and higher employment. Fiscal policy's strategic goal is to restructure general government revenue and expenditure, which should help boost the economy's competitiveness and bring public finances into balance without increasing the share of expenditure in gross domestic product in the medium term.

THE REPORT'S FINDINGS: Real gross domestic product growth in 2003 was below the level of the past medium-term period, while it was still above the average level of growth of EU-15 members. Compared to 2002, the contribution of domestic demand strengthened significantly. The current account of the balance of payments levelled off from the large surplus in 2002 due to increased import growth and modest export growth. Improved co-ordination and greater restrictiveness of macroeconomic policies helped reduce the annual price increase from 7.2% to 4.6%. The goal of keeping wage growth below the rate of productivity growth was also achieved. The general government balance (excluding the 'compensatory deficit' from 2002) worsened slightly, however, this was contained within sustainable limits and the expenditure structure changed positively. Deterioration in the labour market was primarily due to the slowing economic growth.

ANALYSIS: Relatively modest real gross domestic product growth continued in 2003 (2.3% according to the SORS' first estimate) and remained below the level of the past medium-term period, the same as in 2001 and 2002 (2.9% each year). This was more due to deteriorated external economic conditions than in the preceding two years. Export growth slowed down notably (2.9% year on year in the first nine months of 2003 as against the 6.1% in the same period of 2002), while domestic consumption growth strengthened (4% as against 1.7%). Export trends were largely influenced by modest economic growth in EU members and the slowdown in exports to the countries of former Yugoslavia and Russia, however, this was offset by the growing market share in most important trading partners and acceleration of exports to CEFTA countries and the USA. The low growth rates seen in exports to advanced industrialised European countries, typical of the past few years, were also the result of the pending structural reforms, leading to a slow improvement in competitiveness and a poor quality export structure (see Chapter 3.2). The impact of fiscal and monetary policy measures on domestic consumption growth was positive compared to 2001 and 2002 (capital expenditure relative to total general government spending increased, while the gradual falls in interest rates and the de-indexation of financial contracts produced positive results). In addition to some one-off factors (the importation of a civil aircraft and helicopters), investment consumption was driven by intensified motorway construction, and the gradual revival of private investment and housing construction. Private consumption growth, on the other hand, was underpinned by affordable loans and the start of a new cycle of buying durable goods. The available data on exports and industrial production suggest a pick-up in economic activity in the last quarter of 2003, which should be sustained in 2004. The rise in domestic consumption spurred import growth, so the current account of the balance of payments returned to balance from the relatively large surplus seen in 2002 (1.4% of GDP). Gross external debt increased by around EUR 1 billion in the first ten months of 2003 (external borrowing of commercial banks prevailed), while the liquidity and solvency indicators stayed broadly unchanged and Slovenia's net creditor position fell slightly.

The faltering economic growth affected **labour market** performance as the rise in employment and the fall in unemployment came to a halt. Employment growth decelerated for the two years in a row due to the slowing economic growth. Falls<sup>15</sup> were seen in agriculture, manufacturing, financial intermediation, hotels and restaurants, transport, electricity, gas and water supply, and mining. Conversely, employment increased the most in the public administration, education and community, social and personal services. According to the labour force survey, total employment fell for the third year running (63.9% in 2001, 63.4% in 2002 and 62.5% in 2003). Registered unemployment chiefly fell due to deletions from the unemployment registers for reasons unrelated to employment, while the trends of rising inflows into unemployment caused by dismissal and the faltering recruitment of the unemployed continued in 2003. The average rate of registered unemployment fell slightly from 11.6% to 11.2%, while the unemployment rate according to the labour force survey rose from 6.4% to 6.6%.

After persisting at a relatively high level of 7%-9.7% for a few years in a row, **inflation** dropped to 4.6% in 2003 thanks to tighter macroeconomic policies and relatively favourable conditions in the international environment. Administered prices rose less than market-shaped prices for the first time after 1996, in accordance with the plan of raising administered prices for 2003. The contribution of indirect taxes to inflation also fell compared to 2002: the counter-cyclical adjustment of excise duties on liquid fuels, which buffered the indirect impact of oil prices and anchored inflationary expectations, was particularly important. At the end of the first quarter,

<sup>&</sup>lt;sup>15</sup> The number of people in formal employment according to the monthly statistics.

the monetary policy stance also changed, leading to a slower rise in the euro's exchange rate against the tolar, which additionally assisted the fall in inflation. The government and the Bank of Slovenia tightened their policies and improved their co-ordination by adopting the Programme for Entering the ERM2 and Introducing the Euro. The policy of administered prices<sup>16</sup> will be pursued further in line with the Plan of Adjusting Administered Prices for 2004 and 2005, however, the crucial factors in bringing inflation down further, reflected in a lower Balassa-Samuelson effect<sup>17</sup> and lower contribution of administered prices, are the completion of structural reforms and elimination of structural imbalances. In addition to liberalisation and the establishment of competition in sectors where prices are still regulated, structural reforms include financial markets (needing more competition) and the labour market (needing greater flexibility of wage agreements and employment practices). Inflationary expectations will also be anchored by the Wages Policy Agreement for the Public Sector for 2004 and 2005 adopted last year, which introduces changes in the adjustment mechanism in line with the proposed Social Agreement, and the Annex to the Collective Agreement for the Public Sector, which replaced August's adjustment by a premium of collective supplementary pension insurance for publicsector employees. A similar agreement was reached in April 2004 for the private sector, while inflationary expectations should be further eased by indexation having been abolished in the financial field in 2003.

In mid-2003, the budget was revised as a result of the changed macroeconomic conditions: budget expenditure was cut slightly, however, a partial increase in the budget deficit was allowed and the fiscal stabiliser was retained should conditions deteriorate further unexpectedly. In July, the government adopted the Programme for Effective Integration into the European Union which should provide more room for adjusting economic policy to current economic conditions by rationalising public expenditure, and help boost the private sector's competitiveness by restructuring public expenditure and accelerating structural reforms. The **general government deficit** was 1.4% of the estimated GDP in 2003, 0.1 of a percentage point less than the deficit in 2002 (excluding the 'compensatory deficit')<sup>18</sup>. As far as the economic structure is concerned, the shares of capital expenditure and transfers to individuals and households relative to GDP increased the most. Expenditure on wages and contributions and expenditure on goods and services relative to GDP increased slightly less. The percentage of expenditure on interest payments stayed roughly unchanged, while the percentage of expenditure on pensions fell.

General government debt rose in 2002 mainly due to the rise in central government debt; the government borrowed almost exclusively in the domestic market in line with the strategy of stepping up the development of the domestic financial market. The gradual transition to nominal interest rates, which began in 2002 by issuing a three-year tolar bond carrying a fixed interest rate, was concluded in 2003 by issuing a five- and ten-year nominal bond. General government debt totalled 27.8% of GDP at the end of 2002, 1.2 percentage points more than the year before. According to provisional data, general government debt fell in 2003 over the year before.

<sup>16</sup> The total rise in prices under various regimes of regulation should not exceed the rise in market-shaped prices.

<sup>&</sup>lt;sup>17</sup> For details, see the Spring Report 2001, p. 59.

<sup>&</sup>lt;sup>18</sup> In 2002 the total general government deficit was 3% of GDP.

## **2.2. Completion of institutional reforms from the transition period**

THE SEDS' OBJECTIVE: As a result of pending institutional reforms from the transition period, Slovenia continues to see excessive direct political interference in the economy and the over-regulation of particular sectors of the economy and labour market segments. These circumstances allow the implementation gap<sup>19</sup> to persist. In order to complete institutional reforms from the transition period, the SEDS envisages that the transitional restructuring of the corporate and financial sectors are finished, along with public utility, labour market and pension reforms. Reforms should also be carried out in regional policy and areas where gaps have been identified.

THE REPORT'S FINDINGS: Slovenia is characterised by the relatively slow pace of the transitional reforms. As a result, Slovenia managed to catch up with those countries where reforms were most vigorous as late as in the final years of the 1990s. The pace of carrying out reforms has again slowed down in the last few years so some of them remain unfinished. The main gaps continue to be seen in the non-banking financial sector and competition policy implementation.

*ANALYSIS:* The course of the transition reforms is assessed by the European Bank for Reconstruction and Development (EBRD) using the **transition index**<sup>20</sup> for the 27 countries in which it operates.

The analysis of the individual indicators of the transition index (Table 5) shows that in 2003 Slovenia recorded the *main backlogs* in reforms of the non-banking financial sector and competition policy, while recording slightly better results in the privatisation of large enterprises and reforms of the corporate sector and infrastructure. Over the last two years, progress has been made in price liberalisation and corporate sector reform, however, the latter still recorded a low value of the index despite some improvement. The level of a market economy (the highest value of the index) was seen in international trade liberalisation and exchange rate system, and the privatisation of small enterprises, where transition processes were completed as early as in 1995.

A comparison of the *average annual transition index* (the non-weighted arithmetic mean of the nine indicators) between the eight most advancing transitional economies<sup>21</sup> shows that in 2003 Hungary was closest to and Slovenia was furthest

<sup>&</sup>lt;sup>19</sup> The implementation gap is the difference between the formally adopted measures and their actual implementation, between the formal and actual influence of various social players.

The transition index uses eleven indicators to cover six main reform areas: liberalisation, privatisation, enterprises, infrastructure, financial institutions and legal environment. Each indicator shows a synthesised assessment of progress made in a particular area, established on the basis of different data, descriptive information and analyses. The indicators have values from 1 to 4, while a plus or minus sign can be added to the basic value. In this case, a value of 0.3 is added to or subtracted from the basic value for the purpose of quantitative analysis. An index value of 1 means that a country is still at the level of a centrally planned economy in the given area of transition; an index value of 4.3 means that a country has achieved the level of a market economy.

 $<sup>^{21}\,</sup> The\, comparison\, includes\, the\, Czech\, Republic,\, Estonia,\, Latvia,\, Lithuania,\, Hungary,\, Poland,\, Slovakia,\, and\, Slovenia.$ 

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Table 5: Values of the EBRD indexes for Slovenia

	1991	1995	1996	1997	1998	1999	2000	2001	2003
Price liberalisation	3.0	3.0	3.0	3.3	3.3	3.3	3.3	3.3	4.0
Exchange rate system and trade liberalisation	3.0	4.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Privatisation of small enterprises	3.0	4.0	4.3	4.3	4.3	4.3	4.3	4.3	4.3
Privatisation of large enterprises	1.0	2.7	2.7	3.0	3.0	3.0	3.0	3.0	3.0
Reform of the corporate sector	1.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.0
Competition policy	1.0	2.0	2.0	2.0	2.3	2.3	2.7	2.7	2.7
Reform of the banking sector	1.0	3.0	3.0	3.0	3.0	3.3	3.3	3.3	3.3
Reform of non-banking financial institutions	2.0	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Infrastructural reform		1.7	2.0	2.0	2.7	3.0	3.0	3.0	3.0
Legal extensiveness <sup>1</sup>				3.0	3.0	4.0	4.0	3.7	
Legal effectiveness <sup>2</sup>				4.0	3.0	4.0	3.7	4.0	
AVERAGE OF ANNUAL VALUES OF EBRD INDEXES	1.9	2.9	3.0	3.1	3.1	3.4	3.4	3.4	3.4

Source: EBRD Transition Reports 2000, 2002 and 2003

Notes: 'legal extensiveness - the indicator shows to what degree the legislation meets minimum international legal standards; 'legal effectiveness - the indicator shows to what extent legally acknowledged rights can be realised through legal proceedings. No data are available for these two indicators for 2003.

away from the level of a developed market economy (index values of 3.8 and 3.4, respectively). In 2001, Slovenia was ahead of Slovakia, Lithuania and Latvia, however, these countries stepped up their reform efforts considerably and overtook Slovenia as a result. Slovenia has recorded a relatively slow pace of reforms throughout the transition period. It has been behind Hungary and Poland since the start of transition in terms of the achieved level of reforms, as well as behind Estonia since 1994. It overtook Slovakia in 1997 and reached the level of the Czech Republic and the average of all eight countries in 1999. However, all countries overtook Slovenia over the last two years in terms of the level of completed reforms.

The advantage of synthesised indicators is that they enable international comparisons, while the weakness is that their composition may not be flawless. Hence, it is necessary to shed some more light on reforms that have a strong impact on competitiveness. The WEF's and IMD's competitiveness indexes for Slovenia for 2002/03 reveal some weaknesses in the fields of infrastructure, administrative framework and state efficiency. What appears to be critical for enterprises and their competitiveness are reforms designed to improve the effectiveness of the institutional regulatory framework and the public administration, including measures to improve the business environment. The key reforms relevant to improving state efficiency include competition legislation and competition policy, state aid, tax law, public procurement rules, public sector efficiency, and legislation regulating the administrative framework. Another important set of reforms involves liberalisation of network industries, which should increase the number of competitors and, consequently, provide consumers with a wide range of service providers. The liberalisation process has already been launched in telecommunications, the energy sector and postal services, while other network industries are undergoing a process of normative regulation. The first results can be seen in increased competition, ensuring better supply, while the effect on prices has still been negligible. The third important set is *financial sector reforms*. The key financial intermediaries in Slovenia's financial market are banks, reflecting the selected mode of privatisation. The development of non-banking financial intermediaries was slow as a result of the ownership transformation of insurance companies and the transformation of authorised investment companies into regular financial institutions, i.e. mutual funds, and the relatively late introduction of supplementary pension schemes. Reforms are being pursued effectively in the areas of regulation, supervision and alignment of Slovenia's legislation with EU directives, while they are slow in other areas.

As Slovenia enters the EU's single market, current reform efforts will be assessed in the international context in terms of quantity and quality. The Programme for Effective Integration into the European Union has been adopted in order to prepare Slovenia for the new development opportunities and risks entailed by EU membership, while proposing new measures to step up the reforms.

# 3. Development strategy's implementing mechanisms

The principle underlying the strategy's implementing mechanisms is complex national competitiveness. The SEDS sets out the main mechanisms for bolstering complex national competitiveness, which relate to structural and development policy guidelines in the following fields: (i) transition to a knowledge-based society; (ii) bolstering the competitiveness of the economy; (iii) state efficiency; (iv) effective integration into the EU's single market; and (v) balanced regional and spatial development.

### 3.1. Transition to a knowledge-based society

THE SEDS' OBJECTIVE: The knowledge-based society is characterised by a number of intertwining factors: the creation and transfer of knowledge to all spheres of the economy and society (investing in education, research, technological development and innovation, putting research results into practice, using information and communication technologies). The parallel development of all the above factors can contribute to creating the knowledge-based society in the long run and, in turn, to accomplishing sustainable development as defined by the SEDS.

THE REPORT'S FINDINGS: Some positive shifts have been seen since 2000 in education, investment in research and technological development, and the use of information and communication technologies. However, these shifts have been too modest to allow significant progress in the knowledge-based society. Slovenia will not be able to make progress in the EU unless its policies are co-ordinated in all these areas and the objectives are realised consistently.

ANALYSIS: The **population's education level** is just one, albeit very important, factor of realising the knowledge-based society, which is closely connected with other factors such as investment in research and technological development, the putting of research results into practice, technological, organisational, institutional and social innovation, and the extensive use of information and communication technologies. A balanced strengthening of each of these factors is the only way to rapidly improve the economy's competitiveness and the quality of living. Slovenia has made some progress since 2000, however, there is still room for improvement, suggesting that the possible synergies have not been exploited sufficiently.

The population's education structure is improving gradually as youth and adult enrolment in education is increasing. The average number of schooling years of people in employment is also growing (including industry and high value-added services in the last few years), as is the share of young people who have completed secondary education. Given the high level of enrolment, the education structure could improve more quickly if the number of dropouts and the average number of schooling years were lower in tertiary education. Slovenia is behind the most advanced European economies in terms of the share of adults with a tertiary

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education, and the gap has increased over the last few years. While enrolment in tertiary education is high (62.7% of the generation in 2002), the dropout rate is significant and will have to be reduced. This also entails large financial losses for higher education, which calls for a rethinking of the functioning of the higher education system and changes in its financing.

Slovenia has stepped up investment in research and technological development, especially in 2001, and has drawn closer to the average of EU members, however, it is still way behind the most advanced members. If the current dynamics of investing in R&D are maintained (an average annual increase of 0.1 of a percentage point in GDP), the objective of the SEDS can be achieved (an increase in R&D expenditure to around 2% of GDP by 2006). Slovenia may therefore draw close to the Barcelona objective of 3% of GDP earmarked for R&D. A rise in investment in R&D of the government and business sectors cannot produce optimal results unless a sufficient number of quality researchers are ensured and their mobility vis-ŕ-vis the business sector is facilitated. The fulfilment of these goals largely depends on the business sector, whose investment in research and technological advancement is still insufficient and lags behind the investment of business sectors seen in industrialised countries. Some positive shifts were seen in technological advancement in 2000 and 2001, however, it will take some time before this is reflected in a larger share of high-technology exports. Currently, high-technology exports make up just 4.8% of Slovenia's total exports, much lower than in the EU and acceding countries on average (19.8% and 9.7%, respectively). The business sector, supported by appropriate government measures, must significantly increase its investment in R&D for the sake of improving its competitiveness in the EU's single and other world markets rather than for the sake of realising action plans. The Slovenian economy's capacity (manufacturing and service sectors) to introduce innovation also remains low compared to the EU average. A breakthrough in innovation activity calls for decisive action and a co-ordinated mix of policy measures in various fields in order to encourage innovation not only in the business sector, but also in society in general.

The wide use of **information and communication technologies** in all spheres of business, public and private life makes an important contribution to creating the knowledge-based society. Here, significant progress was made in the past few years (2002-2003) according to the indicators of Internet use in the total population and households, probably thanks to the reduced costs of equipment and Internet access. The use of various forms of e-commerce (e-shopping, e-banking, e-administration services) paints a much less positive picture as Slovenia is lagging way behind the EU. Reasons for the inadequate use of e-commerce are security and reliability of services, the availability of related services, the low level of the population's skills to use these services, and some specific barriers (while interest in using e-administration services is big in Slovenia the low level of actual use suggests a lack of these services and the slow implementation of the E-administration Action Plan).

Slovenia has adopted a number of national programmes and action plans in all segments of the **transition to a knowledge-based society.** Together, they aim to accelerate structural changes and development.<sup>22</sup> The proposed measures are in line

<sup>&</sup>lt;sup>22</sup> Programmes and measures are described in detail in the Report on Structural Reforms, November 2003, pp. 19-22.

with the activities undertaken in the EU, in particular regarding co-ordination between education and employment. As regards research and development, an initiative has been launched to take on the Barcelona objective, according to which 3% of GDP should be earmarked for R&D by 2010 (1% from public and 2% from private funding). 2000 was a turning point for the process of expanding the use of information and communication technologies among the population.

### 3.2. Strengthening the economy's competitiveness

According to the SEDS' objectives, strengthening economic competitiveness includes: (i) the creation of a competitive *corporate sector* capable of responding quickly to technological and market challenges and building up competitiveness by increasing the use highly skilled human resources and reducing the intensity of energy and natural resources; (ii) internationalisation of the corporate sector; (iii) alliances between small and medium-sized enterprises; (iv) the development of an efficient *financial system*; (v) the creation of an efficient *public sector* by enhancing the role of private service providers and offering tailor-made services; and (vi) the creation of an efficient *non-tradable sector* by price regulation, licensing and concessions.

### 3.2.1. Improving the corporate sector's competitiveness

THE SEDS' OBJECTIVE: The SEDS proposes the following measures to strengthen the corporate sector's competitiveness: (i) conclude transitional restructuring by consolidating ownership, establishing an efficient ownership structure and corporate governance (identifying the 'real' and long-term owners in companies); (ii) find a final solution for those loss-making companies without any prospects; (iii) create conditions for developing a competitive corporate sector, particularly by accelerating the entry of new domestic and foreign companies, lifting administrative barriers to investment, stimulating internationalisation of the economy, and by fostering the development of small and medium-sized enterprises.

THE REPORT'S FINDINGS: There have been some clear positive shifts towards higher productivity and lower costs per unit of value added. Other positive developments include the resumed growth in Slovenia's market share in the main international markets and growth in inward and outward direct investment. However, it is clear that Slovenia's corporate sector is still facing significant structural problems and rigidities reflected in the slowing labour productivity growth and unfavourable and persisting composition of merchandise exports in terms of intensity of different input factors. Low productivity growth was mainly the result of slow restructuring in favour of high value-added activities whose competitiveness stems from the created factors, implying that Slovenia's current export structure may be unsustainable in the long run.

ANALYSIS: **Labour productivity** is one of the main indicators of an economy's competitive strength among all *competitiveness indicators*. After rising relatively fast in the 1990s, labour productivity faltered in 2001 (2.4% growth) and, following

the cyclical trend, picked up again in 2002 (3.5% growth and as much as 6.6% growth in manufacturing) mainly due to the fall in employment. In 2003, labour productivity growth was again low (just 2.5% year on year in the first nine months) and was again partly due to the fall in employment. Slovenia's gap behind the average productivity level in the EU continued to narrow (Slovenia achieved 45.3% of the EU-15 average in 2001 and 46.6% in 2002); however, a sustainable narrowing of this gap in the long run will be impossible without the rapid restructuring of the corporate sector towards fostering high value-added activities. Unit labour costs, an alternative indicator of competitiveness, paint a similar picture. In 1995-2000 the relationship between labour costs and gross domestic product, i.e. value added per employee, improved significantly. In 2001-2002, unit labour costs relative to gross domestic product and value added continued to decline in both the economy and manufacturing, albeit at a slower pace. This slowdown resulted from the fast rise in compensation per employee and the weak rise in labour productivity. A comparison with the EU-15 average shows that the Slovenian economy's competitiveness continued to improve, however, the pace of improvement slowed down significantly (from an annual rate of 2.4% in 1995-2000 to 0.6 of a percentage point annually in 2001-2002). Trends in the Slovenian economy's competitiveness, as revealed by labour productivity and unit labour costs, are not consistently reflected in Slovenia's external market shares. In the period of a relatively fast increase in the economy's competitiveness, Slovenia's market share in its main trading partners fell (down from 0.60% in 1995 to 0.49% in 2000) and, conversely, increased in 2001 and 2002 (0.55% in 2002). The fall seen in 1995-2000 suggests that the dynamic growth in merchandise exports was more the result of export market growth than any improvement in export competitiveness. Other EU acceding countries have been much more effective in expanding their market shares abroad, especially in the EU. In 1995-2000 Hungary increased its market share in the EU about 1.3 times, Slovakia 0.9 times, while the Czech and Polish market shares were respectively about one-third and one-fifth larger. While economic activity in the main trading partners slowed down significantly in 2001-2002, Slovenia's aggregate market share increased slightly as robust export growth was sustained (up 6.7% annually), suggesting that export competitiveness improved. In the first nine months of 2003, Slovenia's aggregate market share (0.551%) increased, however, this increase was much weaker than in 2002 and 2001.

Structural changes are best illustrated by the indicator of investment activity. After the transition depression ended in 1993, Slovenia's investment activity gained momentum, reaching its peak in 1999 when the share of gross fixed capital formation in GDP was 26.4%, 6 percentage points more than in 1995. Gross fixed capital formation relative to GDP declined after 1999 to just 22.6% in 2002. The negative trends in 2001 were primarily due to subdued activity seen in transport infrastructure and housing construction, while growth in investment in equipment and machinery continued. In 2002, investment in machinery and equipment slowed down due to the unfavourable international economic conditions, while remaining positive. Investment in buildings and constructions was lower than the year before despite the intensified motorway construction. According to an international comparison, Slovenia's share of gross fixed capital formation in GDP was above the EU-15 average in 2002, the same as before, and somewhere in the middle of EU acceding countries.

The **structure of merchandise exports according to factor intensity** shows some positive trends in favour of exports involving created factors of competitiveness (technology-intensive products and products with a high content of human resources), while the share of exports involving primary factors of competitiveness (natural resources and labour) fell. In 1995-2000, the share of products involving created factors increased from 57.8% to 63% of total exports of goods, and by another 3.8 percentage points to 66.8% in 2003. The share of products involving the intensive use of natural and human resources shrank (from 16.6% to 14.6% as regards the former and from 25.6% to 18.6% as regards the latter). The structural changes have revealed a gradual increase in the share of created factors of competitiveness (only in the area of high-technology-intensive products) and a gradual fall in the share of labour-intensive products. However, the respective structure of the EU-15 is still better, where exports involving created factors represented as much as 75.5% of total exports in 2002 and those involving natural sources 14.6% (the same as Slovenia).

According to the SEDS, internationalisation is indispensable to the development and strengthening of the corporate sector's competitiveness. The shares of exports and imports and inward and outward foreign direct investment (FDI) in gross domestic product are the main indicators of an economy's internationalisation. The share of inward FDI stock in GDP climbed from 9.5% to 16.8% in 1995-2002, while the share of outward FDI in GDP rose from 2.6% to 6.1%. Both inward and outward FDI surged in 2001, while 2002 saw record levels of inward FDI. In 2003, outward FDI increased substantially, however, inward FDI almost dried up completely. This shows the growing importance of FDI for the inward and outward internationalisation of the Slovenian economy, however, the fact remains that Slovenia has difficulty attracting greenfield FDI. A comparison with EU memberstates and EU acceding-countries clearly shows that Slovenia is still a country with one of the lowest proportions of inward FDI stock in GDP. Slovenia recorded better results than other acceding countries in the area of outward FDI. All in all, despite the rapid increases in FDI in 2001 and 2002 Slovenia's internationalisation through FDI is still at a low level. Slovenia is much more integrated into the world economy through exports. It should also be noted that Slovenia improved all three indicators in 2002 compared to the year before.

Corporate sector reforms, and their slow pace in particular, are becoming a hindrance to economic development, as suggested by research conducted by domestic and foreign experts and various international institutions' estimates (World Economic Forum, EBRD, European Commission). Despite a number of measures taken and the gradual improvement in the business environment, many problems remain (Simoneti, Rojec, Gregorič, 2004) which lead to: (i) an inefficient ownership structure characterised by the absence of key investors and strategic owners with a long-term vision and motivation to increase productivity and competitiveness as well as the means and capability to put this into practice; (ii) the persisting unfriendly environment (administrative barriers, lack of appropriate facilities) to the entry and development of enterprises; (iii) lack of mechanisms to finance new/small enterprises; (iv) inadequate and dispersed state aid, which should encourage young and perspective industries; and (v) inability to attract new FDI projects.

### 3.2.2. Financial sector

THE SEDS' OBJECTIVE: The gradualist approach to carrying out reforms, which is typical of Slovenia's financial sector, has had an inhibiting effect over the last few years. The main purpose of the process is to improve the financial sector's international competitiveness so as to provide for effective integration and functioning in the EU's common financial market. In order to achieve this, the balanced development of all elements of the financial market is necessary. The SEDS distinguishes between three groups of measures for further restructuring: (i) establishment of a competitive structure and completion of the restructuring process, including privatisation; (ii) completion of the process of enforcing regulation and control; and (iii) harmonisation of the related legislation with the acquis communautaire.

THE REPORT'S FINDINGS: According to the main indicators of the level of the financial system's development, Slovenia is one of the most developed acceding countries, however, it is still well behind EU member-states. The key financial intermediaries in Slovenia's financial market are banks, but they are slow in reducing the development gap behind the EU-15 average. Albeit smaller, the gap remains wide in the insurance industry. Advancement of the capital market is also lagging behind, where new issues of securities (except government bonds) are practically non-existent. Development of non-banking financial intermediaries was slow as a result of the lengthy ownership transformation of insurance companies and the transformation of authorised investment companies into regular financial institutions, and the relatively late introduction of supplementary pension schemes. Reforms are being pursued effectively in the areas of regulation, supervision and alignment of Slovenia's legislation with EU directives, while further reforms are necessary to boost the competitiveness and efficiency of the financial system.

ANALYSIS: The banking sector still represents a large share of the total assets of Slovenia's financial system (58.4% at the end of 2002), however, this share is falling gradually. The banking sector's level of development measured by the banks' total assets relative to gross domestic product is increasing from year to year; this share increased by 4.6 percentage points to 86.4% in 2002. Investment in (government) securities rose fastest for the second year running in 2002, while lending activity strengthened notably in 2003, mainly underpinned by robust growth in foreign currency loans. Despite the continued rise in the total banks' assets relative to GDP, Slovenia was still way behind EU member-states in 2002 (the ratio of the banks' total assets to GDP averaged 269.4% in the EU-15), as well as some countries whose development levels are comparable to Slovenia. The fact that some of these countries record higher indicators (104.4% by the Czech Republic, 232.8% by Portugal, and 150.8% by Greece) suggests the relatively poor development of Slovenia's banking sector, further confirmed by some other indicators (the interest margin and the share of interest income) (Hawtrey, 2003, Padoa-Schioppa, 2002). For the faster narrowing of this gap, it will be necessary to introduce new quality and attractive banking services, reduce operating costs, and strengthen information technology support of banking operations.

The smallest, albeit still relatively large, gap behind the EU average can be seen in the **insurance industry**. The volume of insurance premiums relative to GDP was 5.1% in 2002, the most out of all EU acceding countries, but still significantly below the average of EU members (8.7%). A marked difference compared to advanced insurance sectors is also seen in the structure of premiums. Life insurance represented just 22.7% of all insurance premiums in Slovenia (41.0% in Hungary, 37.6% in the Czech Republic and 35.1% in Poland) compared to an average of 60.3% in the EU-15. However, life insurance has recorded the highest growth rates over the last ten years (an average annual increase of 30% in nominal terms) which, coupled with premiums of supplementary pension insurance, will help strengthen the role of insurance companies in the financial market. Since part of the insurance sector is still in government ownership, it will be necessary to step up the ownership transformation process and establish such an ownership structure that can ensure stability and provide enough additional capital to make the adjustments in line with the EU's directives.

Another poorly developed segment of the financial sector is the **capital market**. However, international comparisons show Slovenia has made significant progress in the last two years according to the market capitalisation of shares relative to gross domestic product. Recording 14.9% of GDP, Slovenia was at the bottom of EU acceding countries in 2000, however, it was only outperformed by Cyprus, Estonia and Malta in 2002. The market capitalisation of shares relative to GDP increased by 5.5 percentage points to 23.4% in 2002 thanks to the significant rise in the prices of securities listed on the Ljubljana Stock Exchange, while the gap between Slovenia and the EU average (57.8%) narrowed because of the negative trends seen in advanced European capital markets. This gap, however, remains wide. As deposit interest rates in banks dropped rapidly, investment in the capital market became an important form of household savings in the past two years, while the announced changes in tax law may give an additional boost to this type of saving. The takeovers of large enterprises and possible withdrawal of their shares from the stock market could seriously reduce the number of enterprises listed on the Slovenian capital market. Hence, the domestic capital market may become too small for large investors, forcing them to invest in foreign capital markets in order to diversify their portfolios. While the primary market is currently relatively limited because of high issuing costs, the lack of institutions dealing in trading, and inadequate knowledge about the different forms of financing, it could play a much more significant role in the future.

Slovenia is most behind schedule<sup>23</sup> in its **financial sector reforms**, which is not surprising given they were launched as late as a few years ago. As far as the banking sector is concerned, reforms are underway, however, they are being carried out slowly because of a lack of consensus in setting the goals. Reforms have just started in the insurance sector, mainly involving the process of ownership transformation. Capital market reforms have formally been completed, however, development of the capital market depends on the actual implementation of reforms in this as well as other segments of the financial market.

<sup>&</sup>lt;sup>23</sup> Reforms are described in detail in the Report on Structural Reforms, November 2003, pp. 22-25.

THE SEDS' OBJECTIVE: The strategic goal of developing economic infrastructure is to ensure a reliable and cost-effective supply in the energy sector, transport, telecommunications and local utility services. The main priorities are: (i) continuation of the programmes of economic infrastructure building; (ii) the liberalisation and privatisation of infrastructure; (iii) the entry of private capital in the building and financing of infrastructure; and (iv) the provision of a quality supply of economic infrastructural services to companies and the population at large.

THE REPORT'S FINDINGS: After several years of decline, investment in infrastructure building has increased recently, mainly in the area of road infrastructure. Private capital is still not involved in the building and financing of investment projects. The liberalisation and privatisation of infrastructure sectors is under way and the pace of reforms is as fast as in other EU acceding countries. Independent regulators (agencies) have been largely established, however, they are facing start-up difficulties so their operation is still not efficient enough. Liberalisation and privatisation have not yet produced significant results in terms of the quality of supply and increased competition.

ANALYSIS: Slovenia's infrastructure reform got a medium score in the transition index (EBRD, 2003, p. 16), meaning that reforms are still taking place. Compared to other EU acceding countries, Slovenia and the Czech Republic are placed behind Estonia, Hungary and Poland and ahead of Latvia, Lithuania and Slovakia. The scores are roughly the same in all areas of infrastructure (telecommunications, electricity, railways and roads), with a slightly more positive assessment of water supply and wastewater treatment.

In the past few years Slovenia began to liberalise network industries<sup>24</sup> in order to increase the number of competitors, thereby offering a wider choice to consumers, and forcing companies to streamline their operations, improve the quality of their services, and cut prices.

Slovenia's **telecommunications** market has developed relatively fast in the last few years, and the size of the market is estimated at about EUR 600 million (2002), rising by about 6% from 2001 mainly due to the growing mobile telephony market.<sup>25</sup> The share of mobile telephony users was 77% in 2002, while the penetration rate in fixed telephony was 47 subscribers per 100 people, or 90 subscribers per 100 households. Over the last two years, prices have only fallen in mobile telephony, while rising in fixed telephony in 2003 due to the elimination of price imbalances<sup>26</sup>. Competition has been established in all segments of the telecommunications market, except in fixed telephony for inland calls, where the monopoly has formally been

<sup>&</sup>lt;sup>24</sup> Reforms are described in detail in the Report on Structural Reforms, November 2003, pp. 11-18.

<sup>&</sup>lt;sup>25</sup> 3<sup>rd</sup> Report on Monitoring EU Candidate Countries (Telecommunication Services Sector), IBM, European Commission, June 2003.

<sup>26</sup> This involves the institution of cost-recovery prices in fixed telephony and the elimination of cross-subsidising of inland and international calls.

eliminated but real competition has still not been established. Two new operators have been granted the right to provide these services, yet they have not entered the market. There are 12 operators in fixed telephony for international calls and three operators in mobile telecommunications (two of which have important market shares). There are 20 providers of narrowband access to the Internet (no one has a majority market share), while broadband access is provided through ADSL (Siol has a 60% market share) and cable systems. In addition to the Post of Slovenia, which is the main and sole provider of general **postal services**, five minor suppliers operate in the field of courier services. Slovenia is an advanced European country in terms of the number of square kilometres and population per one post office, covering 3,529 people and 36.7 km² (4,943 people and 66.2 km² on average in the EU).<sup>27</sup> In 2002, Slovenia aligned its legislation with the *acquis*, eliminated the monopoly, and established a public service for general postal services provided to all at affordable prices. The role of an independent regulator has been given to the transformed Telecommunications, Broadcasting and Postal Agency.

**Local utility services** are provided by local communities. There are 62 providers of public services of water supply, wastewater collection and treatment, and solid waste management and disposal. Most providers are public enterprises or mixed organisations and the rest are concessionaires in private or mixed ownership. The present organisation of public services is inappropriate, as shown by the inefficient organisation structures and excessive number of companies dealing in all local utility services. The weak co-ordination between municipalities and regions does not allow companies to enjoy economies of scale or specialise in a particular service. Transparency, supervision and the monitoring of performance of public service providers are also deficient. Local utility prices were under government regulation in the 1990s and rose less than retail prices. In 2000, the authority to set prices was again given to local communities, which set cost-recovery prices, while incorporating the cost of new investment projects. This caused local utility service prices to surge above the level of inflation so the government imposed restrictions by setting the highest possible rate of increase. In the future, it will be necessary to establish an efficient regulation system, while pricing policy will have to be formulated in such a way that private investment is attracted and unaccountable differences in price levels between municipalities and providers are eliminated.

Deregulation of the **electricity sector** has separated the activities of production, transmission, distribution and supply. Half of all electricity is produced by the Holding of Slovenian Power Plants, <sup>28</sup> 40% by the Krško Nuclear Power Plant and 10% by two large thermal power plants and several qualified producers. There are five distribution companies, which are regionally distributed, and one transmission company (ELES). After a partial opening up of the market on 1 April 2001, close to 7,000 eligible consumers (power distribution companies and consumers with connection power of over 41 kW) have been able to choose their electricity provider. Since these consumers account for about 66% of Slovenia's total electricity consumption, two-thirds of the market is open. Companies using over 100 GWh of

<sup>&</sup>lt;sup>27</sup> Annual Report of the Post of Slovenia 2002.

<sup>&</sup>lt;sup>28</sup> Large public hydro-electric power plants and two thermal power planst have operated within the Holding of Slovenian Power Plants since summer 2001.

electricity annually were allowed to buy electricity abroad in 2002, while the external market was fully opened up on 1 January 2003, however, the share of imported electricity was limited to 20% of total consumption of eligible and tariff-system consumers. The right to import electricity was given to 16 eligible consumers and the right to export electricity was given to 5 electricity producers. In 2002, trading on the organised electricity market was divided into the spot market and the priority dispatching market. Electricity prices for tariff-system consumers, which are regulated by the government, rose by 2%. The net price for a typical household consumer<sup>29</sup> was about 17% behind the weighted average of prices in EU members. Companies which are allowed to import electricity have probably attained lower electricity prices, while the positive effects of liberalisation seem more uncertain for other consumers.

Natural gas represents about 13% of total primary energy consumption and 16% of final energy consumption (the respective shares in the EU are 23% and 25%). In 2002 the activity of natural gas supply was organised as a public utility, with transmission being organised at the national level and distribution at the local level. The gas market was not opened up that year. As of 1 January 2003, eligible consumers are all natural gas consumers and distributors whose annual consumption exceeds 25 million m<sup>3</sup> and all electricity producers using gas as a fuel regardless of the volume of consumption. There are about 20 such enterprises in Slovenia. About 50% of the market is formally open, given the level of annual consumption. As regards suppliers, there was no change in 2003 because the present supplier, Geoplin, 30 has concluded long-term contracts with its customers. Regulated access to the network is being introduced in Slovenia, while this access is given on the basis of negotiated prices. A project of separating market and non-market activities (transmission and sale) is in preparation, while the price of using transmission and distribution networks will be set by the regulator (Energy Agency), which will also be in charge of approving prices.

As far as **railway transport** is concerned, freight transport is a market-oriented activity, of which combined transport, representing 11% of all freight transport, is subsidised. Inland passenger transport is organised as a public utility, while international passenger transport is carried out in co-operation with foreign railway companies on the basis of market principles. Both freight and passenger transport increased in 2002 and 2003. Some interest has been expressed in carrying out transport services in the Slovenian railway network, however, the only operator remains Slovenian Railways. The company is going through a transformation process, which will separate its public services from its market-oriented activities. The railway services market will open up to foreign transport operators upon Slovenia's accession to the EU. As far as **road transport** is concerned, freight transport is a market-oriented activity, while inter-city and suburban commuter passenger transport is the responsibility of the state and urban passenger transport is the responsibility of local communities. From 1998 to 2002, the volume of inter-city passenger transport

<sup>&</sup>lt;sup>29</sup> The typical household consumer records 2,200 kWh of annual electricity consumption in the upper tariff grade and 1,300 in the lower tariff grade.

<sup>&</sup>lt;sup>30</sup> Geoplin, a company for transmission and sale of natural gas, supplies gas to 166 large industrial consumers and 16 distribution companies which supply gas to about 100,000 households.

slumped by 45% and that of urban passenger transport by 31%. Public transport accounted for a good third of all commuter traffic, compared to over two-thirds seen in some of the largest European cities. A system of subsidies is currently used in Slovenia to encourage public passenger transport, while this transport should become a public utility in 2004 carried out by the successful bidder to which a concession will be granted. A new state-owned company for managing air transport navigation services will start operating in 2004, so regulatory functions will be separated from public services. In the field of maritime transport, the first concession agreement will be concluded to manage, develop and maintain the harbour infrastructure for Slovenia's only port (Luka Koper). As freight and passenger transport is growing, it will be necessary to build the complete harbour infrastructure and make connections with rail and road infrastructure, set up an information system and equipment for navigation safety control and for rescuing people stranded at sea.

#### 3.3. Improving state efficiency

THE SEDS' OBJECTIVE: The state exercises its developmental role in three main ways: (i) it sets and enforces the main rules of economic activity by ensuring the protection of economic agents' rights and guaranteeing the execution of contracts (effective legal system) and by establishing a framework for the market's efficient functioning (competition policy); (ii) it manages economic resources directly as the owner or supervisor of public and mixed companies, as the manager of public systems (health, education etc) and as the manager of public resources (general government revenues and expenditure), and indirectly through regulations and financial instruments, steering free economic initiative and influencing the allocation of resources; and (iii) it makes sure that it is capable of efficiently managing and coordinating economic and development policies and functioning at the lowest possible cost.

THE REPORT'S FINDINGS: As regards the rules of economic activity, positive shifts have been seen in reducing the overall level of court backlogs, however, backlogs in areas that are important for the functioning of economic subjects are rising. Competition policy remains the worst regulated area, as suggested by international institutions (EBRD, WEF). Minor positive shifts have been seen in the area of managing economic resources, while industrial policy conditions deteriorated further in 2002 over the year before. As regards the efficiency of organisation and functioning of the state, reforms mainly deal with legal and organisation issues, while international assessments of efficiency are poor.

ANALYSIS: Rules of economic activity. In 2002, the number of court backlogs continued to fall in important cases, down 12.8% in county courts and 15.1% in district courts. This suggests that measures presented in last year's Report took effect. What raises concern is the growing trend in the number of unresolved minor cases, especially the rise in court backlogs in areas important to the economy. In 2002, court backlogs rose by 33.1% in judgement enforcements and 1.3% in the land registry. Estimates for 2003 show a further rise in the number of court backlogs in enforcing judgements, while the number of unresolved cases fell in the land

registry. The effectiveness of reducing court backlogs was also pointed out in the Comprehensive Monitoring Report on Slovenia's Preparation for Membership (2003), however, the Report concludes that a more comprehensive approach to the reform of the judicial system is needed to improve the efficiency of the courts. Measures that have been recommended include increasing the obligatory workload of individual judges, increasing the number and responsibilities of court support and management staff, and further changes in procedural legislation in order to speed up court procedures.

A study conducted by the EBRD deals with the efficiency of the judiciary from the economic point of view, calculating how long it takes to resolve a case of overdue liabilities in a particular country. It takes 22 weeks in Slovenia, and a longer period is only required in the Ukraine and Poland. The highest-ranking EU acceding countries are Lithuania and Estonia, where less than 10 weeks is needed to resolve such a case. While this evidence should be interpreted with caution (some countries may be better because disputes are settled quickly due to corruption or illegal procedures), it points to an important aspect of institutional inefficiency.

No significant change was seen in competition policy in 2003 so the finding that institutions are under-developed still holds from the viewpoint of both opportunities and the authority of a particular government institution. A positive shift involves the institution of independent regulators, while a price structure is being established that enables a higher level of competition, particularly in telecommunications.

Managing economic resources. As in 2003, no new data are available on the share of the public sector in the economy, but we estimate that the state's indirect influence on the economy has changed little because there have been no major sales of stateowned assets or significant institutional changes. The share of administered prices in the consumer price index has increased slightly after regulation has been reintroduced for all petroleum products.

After coming to a halt in 2002, the trend of rising general government expenditure relative to GDP re-emerged, however, it is encouraging that this was due to increased investment, while the shares of public-sector wages and pension expenditure roughly stagnated. From 1996 to 2003, general government expenditure relative to GDP increased by around 3 percentage points. The SEDS set a limit for general government expenditure at 43% of GDP. Given the methodological changes in calculating GDP, the upper limit of general government expenditure will have to be determined anew, ensuring balanced public finances without increasing the total fiscal burden. The findings of last year's Report on the distribution of expenditure among different state functions are still valid.

The volume of state aid relative to GDP fell further in 2002, while its structure changed significantly. State aid for agriculture and fishing (including aid to implement structural policy which is received by EU members from the supra-national level) represented as much as 60% of total aid in 2002 (48.7% in 2001), while state aid for manufacturing and other sectors shrank to 33.4% (42.8% in 2001). The distribution of aid among sectors (Table 6) also shows a growing share of aid for agriculture and fishing and a falling share of aid for other sectors, with the exception of some Development Strategy's Implementing Mechanisms

Table 6: State aid in 2001 and 2002 broken down by activities

		State a	id 2001	State a	id 2002
	Activity	relative to gross value added (%)	per person in employment (SIT thousand)	relative to gross value added (%)	per person in employment (SIT thousand)
A.	Agriculture, forestry, hunting	20.9	667.8	21.0	688.4
B.	Fishing	1.3	51.2	2.2	85.9
C.	Mining	0.1	5.6	15.1	718.4
D.	Manufacturing	1.8	86.4	1.4	67.5
E.	Electricity, gas and water supply	0.0	2.5	0.0	2.6
F.	Construction	0.3	12.4	0.2	10.8
G.	Wholesale & retail trade, repair of motor vehicles	0.7	34.6	0.5	29.4
H.	Hotels and restaurants	1.4	53.1	0.6	21.3
I.	Transport, storage and communications	2.4	153.3	1.9	131.0
J.	Financial intermediation	0.1	9.7	0.0	4.6
K.	Real estate, renting and business activities	2.5	318.1	0.6	78.3
L.	Public administration, defence and social security	1.7	99.8	1.3	83.4
M.	Education	0.7	29.4	0.7	33.7
N.	Health and social work	1.5	56.2	0.6	29.6
О.	Other community, social and personal services	3.1	169.8	3.0	175.1
	TOTAL	2.3	119.3	1.7	98.1

Sources of data: calculations by the IMAD made on the basis of analytical data broken down by state aid recipients, Ministry of Finance, materials for internal use; value added by activities and gross domestic product, Autumn Report 2003, IMAD, p. 68; people in employment by activities, Republic of Slovenia, January-December 2001 and 2002, the SORS.

Notes: 'people in employment include all employees, self-employed and farmers. 2 out of the 9.3% of total state aid for the public administration, education and health, most was given for agricultural objectives meaning that this aid was given to these activities for further allocation to final recipients or allocated for special purposes.

industries (mining, for example). Aid for manufacturing, and business services in particular, dropped markedly from 2001. This was due to the fall in aid for rescue and restructuring, which was allocated through the Slovenian Development Corporation, on one hand (this was expected and reasonable from the viewpoint of development) and stagnation in aid for fostering entrepreneurship and bolstering competitiveness on the other (this was counterproductive in terms of development). Enterprises need this aid to create new jobs, make new investment, and introduce technological and environmental improvements in their production facilities. Aid to wholesale and retail trade, financial intermediation, public administration, education, health and other services was mainly allocated in pursuit of agricultural objectives. Industrial policy conducted in manufacturing and service sectors weakened substantially. Namely, state aid was lower than or equal to half of the EU-15 members even though these industries generated much more gross value added. The Development Report 2003 stated that this contributed to poor economic performance, which the government took into consideration in its Programme for Effective Integration into the European Union adopted in July 2005, as well as in drawing up the budgets for 2004 and 2005. The results of changes in the underlying orientations will be seen in the upcoming years when the new data are examined.

Efficient organisation and functioning of the state. Reasons why Slovenia's international competitiveness fell in 2003 primarily related to the inefficient functioning of the state, according to an analysis made by the WEF. Slovenia lost 12 places in the index of the quality of public institutions, mostly due to a deterioration in contractual relations and law as well as corruption, and it lost seven places in the index of the quality of the national business environment. This suggests that the legal and organisational reform of the public sector (dealt with in last year's Report, involving acts regulating civil servants, public agencies, and public-sector wages) will have to be upgraded to include measures to improve legal protection, reduce unnecessary regulatory and administrative barriers to competition and economic activity, and create a stimulative business environment.

#### 3.4. Balanced regional and spatial development

THE SEDS' OBJECTIVE: According to the SEDS, balanced regional and spatial development forms part of integrated development. The main strategic orientation in regional development is that national development is subject to a regional balance, while the main goal of regional policy is to improve locally-controlled development potential, focusing on people's welfare in all Slovenian regions, while priorities are those spheres where divergence from this goal is currently the biggest. The main goal in spatial development is to activate space as a production factor and protect it from wasteful exploitation by using the relevant systemic, institutional and instrumental means.

THE REPORT'S FINDINGS: Regional disparities in the level of economic development, which are relatively low compared to EU-15 members, have stayed unchanged over the last few years and display a gradual downward tendency. Pomurska is still the worst performing region in terms of GDP per capita and unemployment, while Central Slovenia remains the most developed region, achieving 94% of the EU's GDP per capita.

ANALYSIS: Balanced regional development. Regional disparities are measured by different indicators showing gross domestic product and unemployment. Variation in gross domestic product per capita expressed in terms of purchasing power standards, measured by the coefficient of variation, changed little between 2000 and 2001. The coefficient of variation was 23% for 2000 and 23.3% for 2001. If Central Slovenia is excluded, the coefficient of variation drops to about 15%, suggesting that this region, assuming the role of the core of the national economy, significantly contributes to regional disparities in Slovenia. In 2000 and 2001, gross domestic product per capita was above the national average in Central Slovenia and Obalno-kraška, and close to the average in Goriška. The lowest GDP per capita was seen in Pomurska, which only achieved 71% of the national average. Relative gaps behind the average did not change much between regions in 2001 compared to the year before, with the exception of Zasavska, where this gap widened by 3.9 index points. Central Slovenia reached 94% of the EU-15 average in 2001, while Pomurska saw just 48% of the average. Slovenian statistical regions differ in terms of the volume and structure of value added. Central Slovenia generated over oneagriculture.

third of Slovenia's total gross value added in 2000 and 2001<sup>31</sup>, one-third of gross value added came from Podravska, Savinjska and Gorenjska together, while the remainder was generated by eight other regions. Almost three-quarters of Central Slovenia's gross value added came from the service sectors, a share that was exceeded only by Obalno-kraška. Zasavska, Spodnjeposavska and Koroška generated large shares of gross value added in manufacturing, mining, energy and construction. Pomurska recorded an above-average share of gross value added generated in

Regional disparities in **unemployment** measured by the coefficient of variation increased after 2000 and began to narrow in 2003. The coefficient was 30.2% in 1997, it recorded a downward trend up until 2000 and an upward trend from 2000 to 2002. It fell to 33.9% in 2003, but it was still higher than in 2001. After several years of decline, which varied from region to region, the unemployment rate rose again after 2001 in some regions, whereas the gap between regions recording the lowest and the highest unemployment rates narrowed slightly. After 1997, the registered unemployment rate fell the most in Podravska and South-eastern Slovenia and the least in Pomurska and Koroška. A comparison between 2003 and 2001 shows that Podravska and South-eastern Slovenia were still among regions where registered unemployment dropped the most, while unemployment increased in as many as five regions: Koroška, Zasavska, Pomurska, Spodnjeposavska and Goriška, mostly in Koroška. In 2003, the highest registered unemployment rate was seen in Pomurska, which replaced Podravska, leading up until 2002, and overran the national average by close to 60%. The registered unemployment rate was 2.7 times higher in Pomurska than in Goriška, a region that still recorded the lowest registered unemployment rate. The ratio of the worst-performing to the best-performing region improved in 2001 from 1:3.1 to 1:2.7, however, this was mainly due to the rise in unemployment in Goriška. A major problem is structural unemployment, which is revealed specifically in each region, including those with below-average registered unemployment rates. Long-term unemployment, which seems to be on a downward trend in all regions, is the biggest problem in South-eastern Slovenia whose registered unemployment rate is otherwise below the national average. Long-term unemployment is also high in Podravska and Pomurska. This tends to be related to the poor education structure of the unemployed, as is the case in South-eastern Slovenia and Pomurska. On the other hand, people who completed higher education may also have difficulty finding a job. The share of the unemployed with a higher education continued to increase in 2003; these shares were above the national average in Central Slovenia, Goriška, Obalno-kraška and Notranjsko-kraška. People with low employment prospects are also those aged over 40, whose share has shrunk since 2001, but continued to be above average in Goreniska (over 50% of all unemployed), Spodnjeposavska, Koroška and South-eastern Slovenia. The share of women among total unemployed increased again chiefly due to bankruptcies seen in 2003 in the textile industry, mainly employing women.

**Balanced spatial development.** Long-term issues and objectives concerning balanced spatial development remain unchanged, while some positive changes have been

<sup>&</sup>lt;sup>31</sup> Revised data on regional GDP are available for 2000 and 2001 and are not comparable with unrevised data for 1995-2000.

recorded. As the motorway construction plan is being implemented, the country's spatial cohesion is increasing and some measures have been taken to deal with unauthorised and dispersed construction. Some real-estate scandals have been exposed, pointing to inadequate legislation and suggesting which improvements need to be made to the legislation. Short-term indicators showing spatial changes are still unavailable, however, some initiative has been taken in this direction.

The SEDS proposes the following measures to improve conditions in spatial development: strengthen regional centres, establish regions, enhance the role of spatial planning, and formulate land policy. The process of establishing regions is too slow, however, the path to constitutional changes has been cleared. A number of implementing regulations are being passed to make the new spatial legislation operational, while the Spatial Development Strategy is in preparation. Work has intensified in the area of land policy.

#### 4. Environmental development

THE SEDS' OBJECTIVE: Environmental development is defined here as the efficient utilisation of natural resources with the aim of achieving greater prosperity. Environmental capital is given significance by environmental services: growth, reproduction, differentiation and other environmental services that maintain and preserve the animate and inanimate worlds. Hence, there is an important difference between protecting and developing the environment, since the former is primarily concerned with managing excessive pressure on the environment, while the latter refers to the management of environmental capital with a view to maximising renewable environmental resources in the long term.

THE REPORT'S FINDINGS: Despite the number of measures taken in the last few years in the area of protecting and developing the environment, the current state is still unsatisfactory. Slovenia is handicapped by high energy intensity, high-emission industries, and intensive agriculture, whereas better results have been achieved in the areas of the environmental impact of transport and the share of renewable sources.

ANALYSIS: The quality of environmental development is assessed by four indicators. The first is **energy intensity**, which is the most problematic in Slovenia in terms of environmental impact. In view of its level of economic development, Slovenia uses much more energy than EU members, but less than most EU acceding countries. In 2002 Slovenia consumed almost three-quarters more energy than EU member-states on average to produce one unit of gross domestic product. In 1995-2002 energy intensity was on a downturn (by an average of 2.4% annually), however, this process has slowed down considerably over the last two years. The use of energy per unit of gross domestic product even increased slightly in 2001 (up 1% in Slovenia and 0.5% in the EU) and only edged down modestly in 2002 (by 0.6%) so the level of energy used was still higher than in 2000. The modest fall in energy intensity in 2002 was mainly due to replacing shortfalls in hydro-energy with greater primary consumption of coal and nuclear energy, as well as the expansion of energy-intensive industries. Total electricity production did not rise notably, while electricity consumption was up 6.9% (according to figures from the ELES). As much as 60% of this increase came from aluminium production, which is an energy-intensive industry, representing a small share of the value added of the total economy.<sup>32</sup> As a result of the gap between strong growth in consumption and low growth in output, net electricity exports fell by over one-third.

In Slovenia, renewable energy sources represent a relatively large share of total primary energy consumption. Renewable energy sources represented 11.2%<sup>33</sup> of total primary energy consumption in 2002, almost two times more than in the EU-15 in 2001 (6.2%). The average structure of renewable sources in the EU (wood and wood waste represented 49.5%, hydro-energy 31.7%, municipal solid waste 8.6%, geothermal energy 8.3%, biogas, wind energy and solar energy) differed from

<sup>&</sup>lt;sup>32</sup> The manufacture of metals and metal products, including aluminium production, generated just 14.0% of manufacturing's value added in 1999, while it consumed 43.6% of the total energy used by manufacturing.

<sup>&</sup>lt;sup>33</sup> According to the SORS' data on renewable sources which include industrial waste.

that of Slovenia (in 2001 wood and wood waste represented 54.8%, hydro-energy 44.6% and biogas 0.6%). The share of renewable sources in total primary energy consumption declined in Slovenia in the last two years, representing 11.9% in 2000 and 11.2% in 2002. The fall in 2002 was primarily due to dry weather and a good one-tenth lower energy production in hydro-electric power plants, as well as a modest increase in the exploitation of wood and wood waste. The EU increased modestly its share of renewable energy sources over the last ten years (from 5.4% in 1995 to 6.2% in 2001), while exploitation increased the most in wind energy and biogas after 2001.

The **share of road freight transport** is relatively low in Slovenia, accounting for 60% of total road and railway freight transport, whereas the EU as a whole recorded over 80% in the early 1990s and as much as 85.2% in 2002<sup>34</sup>. Among the EU acceding countries<sup>35</sup>, very large shares of road freight transport were seen in Malta and Cyprus in 1999; these shares were close to Slovenia's in Poland, the Czech Republic and Hungary and lower in the Baltic states and Slovakia. Road transport relative to total freight transport increased rapidly in Slovenia in the second half of the 1990s, but it fell significantly in 2002. This fall was due to the reduced volume of road transport and the increased volume of railway freight transport. Railway transport is encouraged by means of subsidies for intermodal and combined freight transport, so combined consignments represented as much as 11% of railway freight transport in 2001.

Production volumes of dirty industries have continued to rise relatively fast in Slovenia in the last two years. Dirty (pollution-intensive) industries account for over 86% of the total estimated emissions generated by Slovenian manufacturing. In 1995-2001, their production volumes increased faster than that of total manufacturing (up by an annual average rate of 3.4% and 2.5%, respectively). In the following two years, the gap between the production growth of dirty industries and manufacturing widened further. In 2002, production growth of dirty industries and total manufacturing was 4.8% and 2%, respectively, and 4.6% and 0.6%, respectively, in the first ten months of 2003. Despite the strong growth in the production of dirty industries, in 2002 their share in manufacturing's value added stayed unchanged at the level of the preceding two years. The relatively large share of dirty industries is a structural rather than a microeconomic problem of Slovenia. Namely, Slovenia has too many large consumers of raw materials and energy, which are otherwise relatively environmentally efficient (low emissions per unit of production compared to foreign competitors).

Agriculture has a significant negative impact on the environment, depending on the **degree of agricultural intensity**. The use of NPK fertilisers per unit of cultivated agricultural area<sup>36</sup> increased by 6% in Slovenia in 1995-2001 and fell by 3.5% in 2002. Agricultural companies used three times as many fertilisers as farms. The

<sup>&</sup>lt;sup>34</sup> Figures cover the volume of transport carried by vehicles registered in the individual country, which is compatible with the statistical coverage in Slovenia.

<sup>&</sup>lt;sup>35</sup> Figures cover the volume of road transport in the territory of an individual country.

<sup>&</sup>lt;sup>36</sup> During the same period, cultivated agricultural area fell from 538,000 hectares in 1995 to 510,000 hectares in 2001.

total sale of pesticides (in agriculture and other activities) rose by 10.3% in 1997-2001.<sup>37</sup> After edging down in 2001, the sale increased by 5.3% in 2002, mainly in insecticides (up by 35%) and herbicides (up by 5%) as a result of dry and hot weather. The growing agricultural intensity has been partly offset by the relatively fast rise in the number of farms and the area engaged in integrated and organic farming. One percent of all farms was involved in organic farming in 2001, while their number increased by 30% in 2002 and they covered 3% of total cultivated agricultural area. Compared to the agricultural intensity of the EU, Slovenia used slightly more NPK mineral fertilisers than the EU-15 on average (142 kg/ha in Slovenia in 2001 and 124 kg/ha in the EU), while Slovenia drew very close to the EU in terms of the share of organic farming (3.0% of total cultivated agricultural area in Slovenia and 3.5% in the EU on average).

Slovenia has transposed most of the environment-related *acquis* into its legislation and has introduced a number of economic mechanisms and instruments to regulate the operation of product markets in order to promote the rational use natural resources and reduce harmful emissions.

<sup>&</sup>lt;sup>37</sup> Data on the sale of pesticides have been collected by Slovenia's Administration for Plant Protection and Seeds since 1997.

#### 5. Social development

THE SEDS' OBJECTIVE: The SEDS notes three basic conditions which, if fulfilled, lead to an increase in people's welfare and facilitate human development: a long and healthy life, education and information, and access to the resources needed for an adequate standard of living. In addition to highlighting the growing number of unemployed women, the SEDS points to the problem of increasing wage differentials among different social groups, generations and regions. It moreover sets solid social security and social cohesion as the goals of social development policy.

THE REPORT'S FINDINGS: Positive changes have been achieved in social development. Life expectancy is increasing, the level of social protection is rising and the risk of poverty is falling, while income inequality has stopped rising. The effects of pension reform can be seen in the rising average retirement age and the falling ratio of pensions to wages.

ANALYSIS: Slovenia was ranked 29th among 175 countries in the human development index for the fourth year running in 2001, suggesting that conditions in areas that determine the value of the index are relatively stable. The gradual and steady rise in the value of the index points to improvement in the quality of living in Slovenia in areas incorporated in the index. Life expectancy, which is also an indicator of health (as well as one of the subindexes of the human development index), has been increasing since 1995 and totalled 72.3 years for men and 79.9 years for women in 2002 (the respective figures for the EU for 2001 were 75.5 and 81.6 years). While remaining wide, the gap between the EU-15 average and Slovenia is narrowing gradually. On the other hand, Slovenia's life expectancy is longer compared to Central and Eastern European countries. As far as **infant mortality** is concerned, which is a highly synthesised indicator of health and the quality of living, Slovenia outperformed the EU average in 2001 and 2002 (4.2 and 3.8 dead babies aged up to 1 year per 1000 live-born children). Sweden records by far the lowest infant mortality among EU-15 members, while Finland (3.0) and Spain (3.4) also enjoy lower infant mortality rates than Slovenia.

An important internationally comparable indicator of social development is **social protection** in its broad sense, showing the amount of funds appropriated through the systems of compulsory social, health, pension and disability insurance as well as other public systems of providing social protection for the elderly, sick, disabled, unemployed or poor, special protection for war veterans and victims of war, and ensuring a better quality of living for families through maternity, paternity and child protection. Slovenia appropriated 26.6% of gross domestic product for social protection in 2000, which put it in the middle of the EU-15, allocating an average of 27.3% of gross domestic product for this purpose. However, differences between EU members are significant. The percentage of GDP for social protection is the lowest in Ireland (14.1%) and the highest in Sweden (32.3%). Social protection expenditure is on a downturn in EU members on average (except in Greece, Austria and Spain), but it has been on the increase in Slovenia since 1996<sup>38</sup>.

<sup>&</sup>lt;sup>38</sup> However, social protection expenditure stayed unchanged in 2000 over the year before.

Slovenia's **risk of poverty** rate has been falling since 1997. It was 12.9% in 2000 (14% in 1997), over 2 percentage points lower than in the EU-15 where it stood at 15%. Figures show that poverty did not deepen, while the indicator of inequality of income distribution remained the same as the year before and was 0.8 of a percentage point below the EU-15 average. Excluding social transfers, the risk of poverty rate would have been 7.1 percentage points higher in Slovenia, implying a relatively high effectiveness of social policy, while in the EU the risk of poverty rate without social transfers would have been 9 percentage points higher.

**Poverty risk** measured by the share of the population living in jobless households was 8.7% in Slovenia in 2003. Exposure to poverty was higher in the EU-15, averaging 9.6%, however, it is tending to fall faster than in Slovenia. In EU candidate and acceding countries, the share of the population living in jobless households was 12.2% on average, ranging from 7.4% in Lithuania to 15.3% and 14.8% in Bulgaria and Poland, respectively. Slovenia is in the third place among EU acceding countries.

The **pension reform** has begun to take effect after three years of implementation. The average retirement age is rising: in 2003 it was 59 years and 11 months for men and 55 years and 8 months women. The ratio of the average old-age pension to the average wage fell from 75.3% in 2000 to 71.1% in 2003. The effects of pension reform can also be seen in public finances as the share of pension expenditure relative to GDP fell to 11.4% in 2002. The other part of the reform involves systemic changes: the reform has introduced the possibility of a capital-funded voluntary pension insurance which is financed by premiums of employees, employers or both. Insurance schemes are either individual or collective. Following the institutional regulation, pension funds began to operate in Slovenia's financial market, and they can offer voluntary supplementary pension insurance in addition to insurance companies. The number of the insured and the volume of premiums collected by pension funds have been on the increase, <sup>39</sup> while a further rise is expected when collective pension insurance is provided for public-sector employees.

<sup>&</sup>lt;sup>39</sup> At the end of 2002, supplementary pension insurance covered 173,044 people, 23% of the total active insured in compulsory pension insurance (about 80,000 at the end of 2001). Premiums totalled SIT 6.4 billion in 2001 and SIT 23.8 billion in 2002, recording a surge of 270.5%.

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# Analytical Appendix

# **Indicators**

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# GDP per capita in purchasing power standards

At the end of 2003, Eurostat published revised data on gross domestic product expressed in terms of purchasing power standards (GDP in PPS) for 31 European countries for 1995-2002. Data for 1995-2000 were obtained after the international revision of input data which served as a basis for calculating GDP in PPS; figures for 2001 are final, while those for 2002 are provisional. If we look at GDP figures expressed in PPS before and after the revision, Slovenia recorded 3% lower values in the last four years on average. The revised GDP in PPS for 2002 was up to 6.3% lower than the previous figure and totalled PPS 16,600, as against the previous PPS 17,710<sup>2</sup>.

In the last seven years (1995-2002), Slovenia narrowed the development gap behind the EU-15 average more than acceding countries on average. According to the latest Eurostat data, Slovenia's gross domestic product per capita in terms of purchasing power standards increased from 61% to 69% of the EU average in 1995-2002. In 1999, Slovenia overtook Greece, the least developed EU member, and drew closer to Portugal. In the five years from 1995 to 2000, Slovenia improved its position relative to the EU average more than other acceding countries (by 5 and 2 percentage points, respectively). Slovenia's gap behind the EU average continued to narrow in 2001 and 2002 (see table).

Given the impending enlargement of the EU in 2004, it is interesting to compare Slovenia's level of development measured by GDP per capita in PPS with the average of the future 25 EU members. GDP per capita in PPS of the ten acceding countries achieved 47% of the EU average, according to provisional figures for 2002. The average GDP of the 25 future members is lower than the average of the current EU-15, reaching 91% of the EU-15, as shown by provisional figures for 2002. Slovenia's GDP per capita in PPS amounted to 76% of the EU-25 average in 2002. The IMAD's preliminary calculations show that Slovenia should achieve 2.8 percentage points stronger annual GDP growth than the EU, given the current price ratios, in order to reach the average level of development of the enlarged EU (EU-25) in terms of GDP per capita in PPS in the next ten years.

However, Eurostat notes that the data on GDP per capita in PPS are not intended to rank countries strictly. Purchasing power parities, which are currency conversion rates and a means of calculating GDP in terms of purchasing power, are statistical constructs resulting from some conceptual assumptions, methodological determinations and derivation procedures. A 5% error should be taken into account when calculating purchasing power parities. The relatively small differences in GDP in PPS between countries are therefore the result of methodological factors rather than actual differences between countries.

Following these constraints, it is more appropriate to use data on GDP in PPS to divide countries into groups of a comparable level. Countries are divided into 6 groups (see Table 2) according to the volume of GDP per capita in purchasing power standards. Slovenia is ranked in Group V, the penultimate group, where GDP per capita in PPS ranges between 51% and 75% of the EU-15 average. This group also includes the Czech Republic, Greece, Hungary, Malta and Portugal. From the point of view of this grouping, Slovenia's position did not change throughout the given period, even after revising the GDP data.

Analytical Appendix - Indicators

Table 1: Gross domestic product in purchasing power standards, 1995-2002, volume indices, EU-15=100

		1995	1996	1997	1998	1999	2000	2001	2002°
1	Belgium	109	107	107	105	105	106	107	107
2	Denmark	113	114	114	113	116	116	115	113
3	Germany	108	107	105	104	103	102	100	100
4	Greece	65	65	66	65	65	66	67	71
5	Spain	79	79	80	81	84	83	84	86
6	France	104	103	104	104	104	104	105	105
7	Ireland	90	94	102	106	111	115	118	125
8	Italy	104	104	102	103	102	101	100	98
9	Luxembourg	161	161	168	175	189	199	194	189
10	Netherlands	109	109	110	110	110	111	113	111
11	Austria	114	115	113	113	114	114	112	111
12	Portugal	66	66	67	68	70	70	71	71
13	Finland	96	96	101	103	102	104	104	102
14	Sweden	107	107	106	104	108	109	106	105
15	UK	100	101	104	103	103	104	105	107
	EU-15	100	100	100	100	100	100	100	100
16	Cyprus	75	74	73	73	74	76	78	76
17	Czech Republic	-	-	-	-	-	60	61	62
18	Estonia	31	32	35	36	35	37	39	40
19	Hungary	45	45	46	47	48	49	51	53
20	Latvia	26	27	29	30	30	31	33	35
21	Lithuania	31	32	34	35	34	35	37	39
22	Malta	-	-	-	-	71	71	70	69
23	Poland	-	-	-	-	41	41	41	41
24	Slovakia	40	42	43	43	43	44	45	47
25	Slovenia	61	62	64	64	67	66	68	69
	ACC-10	43	44	44	44	45	45	46	47
26	Iceland	113	116	115	117	116	115	115	109
27	Norway	120	127	129	121	129	147	144	136
28	Switzerland	128	123	125	124	120	119	116	114
29	Bulgaria	29	26	24	24	24	24	26	26
	Romania	-	-	-	24	23	23	24	27
31	Turkey	28	29	30	29	27	28	24	25

Source: Eurostat. Statistics in focus, Economy and Finance, Theme 2 - 64 / 2003. Notes: P - provisional data, ACC-10 - EU acceding countries.

Table 2: Grouping of countries according to the volume of GDP per capita in PPS, 2002, provisional data

Group	Range in GDP per capita in PPS (EU-15=100)	Countries
Group I	≥126% of the EU-15 average	Luxembourg, Norway
Group II	≥111% and <126% of the EU-15 average	Austria, Denmark, Ireland, Netherlands, Switzerland
Group III	≥91% and <111% of the EU-15 average	Belgium, Finland, France, Iceland, Italy, Germany, Sweden, UK
Group IV	≥76% and <91% of the EU-15 average	Cyprus, Spain
Group V	≥51% and <76% of the EU-15 average	Czech Republic, Greece, Malta, Hungary, Portugal, Slovenia
Group VI	<51% of the EU-15 average	Bulgaria, Estonia, Latvia, Lithuania, Poland, Romania, Slovakia, Turkey

Source: Eurostat. Statistics in focus, Economy and Finance, Theme 2 - 64 / 2003.

<sup>&</sup>lt;sup>1</sup> The main purpose of this revision was to align the methodology for estimating GDP with the ESA 95 for the whole period of 1995-2000. The revision removed the causes of inconsistencies in GDP movements between different periods of time, mainly resulting from the gradual changeover of EU members from the ESA 79 to the ESA 95, and made data on gross domestic product in terms of purchasing power standards comparable for the whole period of 1995-2002.

<sup>&</sup>lt;sup>2</sup> The 'now-cast' estimate of GDP in PPS, which was first published in June 2003 (Statistics in Focus, 20/2003), was based on an extrapolation of the unrevised PPS from 2001 and Slovenia's higher GDP obtained from its own national revision. The result of the 'now-cast' forecast was a leap in the index of GDP in PPS per capita for Slovenia compared to the EU-15 average.

#### Human development index

The calculation of the human development index (HDI) for 2001 did not bring any major changes for Slovenia. Slovenia was ranked 29th among 175 countries for the fourth year running, while the total value of the index rose again slightly. The only component of the HDI recording a change compared to 2000 was the life expectancy index, which rose by 0.01 of an index point. A breakdown by components shows that Slovenia again saw its highest ranking in the education index (23rd place), while being placed much lower in the life expectancy index and gross domestic product per capita (33rd and 32rd places, respectively).

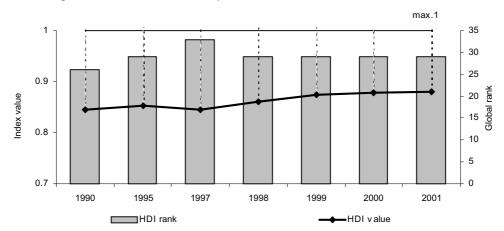
The calculation of the HDI for 2001 resulted in significant changes for other countries, including those ranked close to Slovenia. Norway was still in the lead, recording an index value of 0.944, while Iceland, obtaining a score of 0.942, climbed from 7th to 2nd place. Countries once ranked close to Slovenia underwent significant changes. Portugal improved the value of its index by 0.016 of a point in one single year (the only fall was seen in the gross enrolment ratio, but this did not reduce the value of the index because the level of literacy rose) and climbed by as many as five places. Malta, which was ahead of Slovenia in 2000, slipped from 30th to 33rd place because of a lower value of its gross enrolment ratio and lower GDP per capita. Slovenia was still ranked highest out of all EU acceding countries, however, both the Czech Republic and Poland drew close thanks to a continuing and marked rise in their overall HDI. Other acceding countries did not record any major positive changes. As before, Slovenia was behind all EU-15 members in 2001. Slovenia lagged behind in the life expectancy index and the index of gross domestic product per capita, as was the case in previous years.

Table: Values of the human development index (HDI) and its components for Slovenia in 1995-2001

	1995¹	1997¹	1998¹	1999²	2000²	2001 <sup>2</sup>
HDI	0.852	0.864	0.864	0.874	0.879	0.881
World rank (no. of countries covered)	28th	28th (174)	28th (174)	29th (162)	29th (173)	29th (175)
Life expectancy	74.52	74.90	75.00	75.30	75.50	75.9
Index	0.83	0.83	0.83	0.84	0.84	0.85
Gross enrolment ratio	79.1	82.0	82.0	83.0	83.0	83.0
Education index	0.924	0.93	0.93	0.94	0.94	0.94
GDP p.c. in purchasing power parity (PPP; USD)	12,600	14,000	14,800	15,977	17,367	17,130
Index	0.81	0.825	0.83	0.85	0.86	0.86

Sources: (1999) Human Development Report - Slovenia 1999. Hanžek, M. (ed.). UNDP, IMAD, p. 17. Ljubljana: (2001) Human Development Report - Slovenia 2000-2001. Hanžek, M. (ed.). Ljubljana: UNDP, IMAD, p. 24. (1999-2003) Human Development Report. UNDP, Oxford University Press: New York, Oxford.. Notes: 1 calculations by the IMAD, 2 calculations by the UNDP.

Chart: Changes in values of the human development index and Slovenia's world rank in 1990-2001



Source: (1998-2003) Human Development Report. UNDP, Oxford University Press: New York, Oxford.

### National competitiveness according to the WEF

After improving in 2002<sup>1</sup>, Slovenia's national competitiveness measured by the WEF's<sup>2</sup> growth competitiveness index and business competitiveness index fell notably in 20033. As a result, Slovenia dropped to the same place it had two years ago in the global ranking. While the value of the growth competitiveness index (GCI) edged up 0.05 of a point to 4.70 points, Slovenia fell from 28th to 31st place among 102 countries, i.e. to the place it had in 2001<sup>4</sup>. Slovenia's position also declined in the business competitiveness index (BCI), going down three places to 30th place out of 101 countries (Luxembourg is excluded from the BCI), which was still a better outcome than in 2001 (32<sup>nd</sup> place). Consequently, the gap between the BCI and GDP p.c. in PPP (27th place) widened by three places after narrowing in 2002, which the WEF saw as a cause for alert. Slovenia is moving away from countries where the created microeconomic foundations provide important growth potential while, according to the WEF, Slovenia's microeconomic foundations are too weak to support the achieved level of income so this level may become unsustainable in the future.

The fall in the GCI ranking was due to the poor quality of public institutions, while Slovenia's ranking improved in the technology index and the macroeconomic environment index. The value of the public institutions index fell by 0.22 and Slovenia lost 12 places compared to 2002. Within this, the subindex of contractual relations and law suffered the biggest fall, going down by 0.39, or from 26th place in 2002 to 43rd place in 2003. The corruption subindex also dropped, down by 0.04, so Slovenia lost six places compared to 2002. The biggest improvement within the aggregate GCI index was seen in the macroeconomic environment index, going up 0.32, which pushed Slovenia up from 50th to 37th place, however, this was mainly due to changes in the composition of the index. The subindex of government spending relative to GDP was replaced by the subindex of government waste<sup>5</sup>. Slovenia was placed 31st according to the latter in 2003 and as low as  $68^{\text{th}}$  according to the former in 2002. In other components of the macroeconomic environment index, Slovenia performed worse than in 2002, occupying 53rd place in macroeconomic stability and 29th place in credit rating. A positive shift within the aggregate GCI was seen in the technology index, whose value climbed by 0.08 and Slovenia improved its ranking by one place. Within the technology index, the subindex of information and communications technologies rose by 0.20 to 5.28 points and Slovenia climbed to 26th place, and the innovation subindex rose by 0.18 to 3.51 points, putting Slovenia in 23<sup>rd</sup> place<sup>6</sup>. Slovenia was still ranked low in the technology transfer subindex (Slovenia is considered a peripheral innovation country depending on technology transfer): while the value of the index edged down 0.07, Slovenia dropped markedly from 38th to 51st place.

The main factor behind the fall in business competitiveness (BCI) was the deterioration in the quality of Slovenia's business environment, while the competitiveness of company operations and strategies also fell. Slovenia dropped from 27th to 34th place in the index of the quality of national business environment. It fell by one place in the index of the competitiveness of company operations and strategies, but it was still ranked relatively high in 27<sup>th</sup> place.

Slovenia's ranking in 2003 was also affected by the higher number of countries under observation, up from 80 to 1027. This changed the relative value of ranks, with Slovenia losing two places in the GCI (29th place). Slovenia's rank in the BCI was not affected by the higher number of countries.

In 2003, Slovenia's level of competitiveness measured by the WEF was still relatively

high compared to the nine reference countries8, however, Slovenia also recorded relatively big negative changes in its competitiveness. As regards the GCI, only Hungary dropped more than Slovenia (with Portugal and Italy also losing a few places), and the two countries were exceptions to the average dynamics of the ten countries: they improved their GCI ranking by an average of 1 place and occupied the average 33rd place. Hungary was also the only country to record a fall in the value of the GCI index. Growth competitiveness improved the most in Greece, Estonia, Slovakia and the Czech Republic. The average value of the GCI index for these ten countries climbed by 0.14 of a point to 4.61 points. These calculations led to minor changes in the ranking of four countries: Estonia overtook Portugal, while the Czech Republic overtook Italy. Slovenia kept its 4th place from 2002 and was ahead of all EU acceding countries, except Estonia, and two EU members, Greece and Italy. As regards the BCI, the average rank of the ten countries dropped 4 places to 36th place, the most for Hungary, Austria, Slovenia and the Czech Republic. Improvement was only seen in Greece and Estonia; the latter was placed 3<sup>rd</sup> in this group and ahead of Slovenia.

Table: Slovenia's national competitiveness measured by the WEF's growth competitiveness index and the business competitiveness index compared to the nine reference countries1, 20022 and 2003

	1	WEF's	aggre	gate indi	ices				GCI com	ponents			BCI components			
WEF Report <sup>1</sup> 2003–2004	Growth competitiveness (GCI)			Business competiti- veness (BCI)			Technology index		Public institutions		Macroecono- mic environ- ment		Company operations and strategy		Quality of the natio- nal busi- ness envi- ronment	
	03	03	02	02	03	02	03	02	03	02	03	02	03	02	03	02
Countries <sup>6</sup>	r/v	r(02)4	r <sup>5</sup>	r/v	r	r	r/v	r/v	r/v	r/v	r/v	r/v	r	r	r	r
Austriaª	17/5.07	17	18	18/4.93	17	12	27/4.69	23/4.68	14/5.83	11/5.90	10/5.07	23/4.47	13	12	18	12
Portugal <sup>b</sup>	25/4.92	23	19	23/4.87	36	36	22/4.82	13/4.91	22/5.52	21/5.5	31/4.41	40/4.20	46	41	33	32
Estoniab	22/4.96	20	27	26/4.73	28	30	10/5.15	14/4.91	28/5.36	28/5.22	34/4.37	46/4.06	36	36	27	28
Slovenia <sup>b</sup>	31/4.70	29	26	28/4.64	30	27	24/4.73	25/4.68	35/5.11	23/5.33	37/4.27	50/3.95	27	26	34	27
Hungaryb	33/4.61	31	29	29/4.63	38	28	32/4.57	21/4.77	33/5.18	30/5.15	38/4.09	49/3.98	45	29	37	29
Greece <sup>b</sup>	35/4.58	33	31	38/4.32	39	43	30/4.64	30/4.41	42/4.7	44/4.53	33/4.38	47/4.02	39	47	40	41
Italy <sup>a</sup>	41/4.38	39	33	39/4.31	24	24	44/4.24	39/4.08	46/4.56	37/4.71	28/4.48	27/4.39	24	18	23	24
Czech Rep.b	39/4.48	37	36	40/4.26	35	34	21/4.84	20/4.81	47/4.51	50/4.20	39/4.08	59/3.77	33	34	38	34
Slovakia⁵	43/4.23	41	46	49/4.02	42	42	33/4.55	34/4.31	51/4.33	53/4.11	50/3.82	64/3.64	44	43	42	40
Poland <sup>b</sup>	45/4.15	43	50	51/3.98	46	46	34/4.44	36/4.21	58/4.17	61/3.83	49/3.83	54/3.90	43	46	44	45

Sources: WEF Global Competitiveness Report 2003-2004; Global Competitiveness Report 2002-2003; http://www.weforum.org. Sources: wer- Global Competitiveness Réport 2003-2004; Gilobal Competitiveness Keport 2002-2003; Interpretation of Competitiveness Report 2003-2004. The WEF changed the methodology and included more countries in its last report, which is indicated by New. 2WEF Global Competitiveness Report 2003/2004. 42003 GCI ranks calculated for 80 countries. 52002 GCI ranks calculated on the basis of the new methodology from 2003. 6The reference countries include EU acceding countries (those bordering Western Europe) and those EU member-states which are close to Slovenia's level of development (Greece and Portugal) and neighbouring countries (Austria and Italy).

a - corre-innovating economiles, b - non-core innovating economies; r - rank, v - index value.

Bold numbers indicate a rise in the country's competitiveness by at least three places. Dark cells indicate a fall in the country's competitiveness by at least three places.

WEF Global Competitiveness Report 2002/2003.

<sup>&</sup>lt;sup>2</sup> World Economic Forum.

<sup>&</sup>lt;sup>3</sup> WEF Global Competitiveness Report 2003/2004.

<sup>&</sup>lt;sup>4</sup> WEF Global Competitiveness Report 2001/2002.

<sup>&</sup>lt;sup>5</sup> It consists of three components: the extent of distortive government subsidies, diversion of public funds, public trust in the financial honesty of politicians.

<sup>&</sup>lt;sup>6</sup> In the subindex measuring a country's innovation capacity, the questionnaire was changed because of varying interpretations of the question 'Does continuous innovation play a major role in generating revenue for your business?', which was then replaced by the question 'Are companies in the country aggressive in absorbing new technology?'.

Developing countries were added in particular, mostly from Africa (up from 8 to 20), as well as countries relevant for comparisons with Slovenia: Luxembourg, Macedonia, Malta, Pakistan and Serbia

<sup>&</sup>lt;sup>8</sup> The reference countries include EU acceding countries (those bordering Western Europe) and those EU-15 members which are close to Slovenia's level of development (Greece, Portugal) and neighbouring countries (Austria and Italy).

<sup>9</sup> In 2002, Slovenia recorded the most positive shifts in competitiveness compared to the nine reference countries.

#### Variation of GDP across regions

Slovenian statistical regions differ in terms of the volume and structure of value added, with Central Slovenia standing out notably. In 2000 and 2001<sup>1</sup>, Central Slovenia generated over one-third of Slovenia's gross value added (GVA). A third of GVA came from Podravska, Savinjska and Gorenjska together, while the remainder was generated by the eight other regions. Almost three-quarters of Central Slovenia's GVA came from the service sectors, a share that was exceeded only by Obalno-kraška. Zasavska, Spodnjeposavska and Koroška generated large shares of GVA in manufacturing, mining, energy and construction, while Pomurska recorded an above-average share of GVA generated in agriculture.

Central Slovenia was also exceptional in its level of development measured by GDP per capita. In 2000 and 2001, GDP per capita was above the national average in Central Slovenia and Obalno-kraška, and close to the average in Goriška. Central Slovenia exceeded the national average by as much as 40%. The lowest GDP per capita was seen in Pomurska, which only achieved 71% of the national average. Relative gaps behind the average did not change much between regions in 2001 compared to the year before, with the exception of Zasavska, where this gap widened by 3.9 index points. Central Slovenia reached 92% of the EU-15 average in 2000 and 94% in 2001. Pomurska, recording the lowest GDP per capita in Slovenia, only achieved 48% of the EU-15 average in 2001.

Variation of gross domestic product per capita across regions measured by the coefficient of variation changed little in 2000 and 2001 and remained relatively low compared to international figures. The coefficient of variation is defined as a ratio of the standard deviation to the average, while this formula is modified to take into account the size of a region. The coefficient of variation was 23% for 2000 and 23.3% for 2001. If Central Slovenia, enjoying the highest GDP per capita, is excluded, the coefficient of variation comes in at about 15%. This suggests that this region, assuming the role of the core of the national economy, significantly contributes to regional disparities in Slovenia. It is currently impossible to make international comparisons of the coefficient of variation because EU member and accession countries only have figures for 1995-1999, which are not comparable to the figures for 2000 and 2001 in terms of methodology. A comparison of the coefficients of variation for 1995-1999 (the old methodology) shows that Slovenia is one of the countries where regional disparities are low and change little from year to year. Countries recording similar trends are Sweden, Greece and the Netherlands. We assume that a comparison of the revised GDP figures would reveal a similar relationship between Slovenia and other EU member and accession countries.

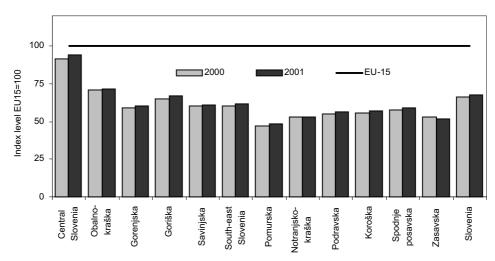
<sup>&</sup>lt;sup>1</sup> The revised regional GDP data are available for 2000 and 2001 and are not comparable with the unrevised data for 1995-1999.

Statistical regions	GDP per capita in thousand SIT		GDP per capita in PPS¹		Index, SLO=100		str	001	GVA <sup>2</sup> structure SLO=100%	
	2000	2001	2000	2001	2000	2001	A+B	C+D+E+F	G++P	2001
Central Slovenia	2,936	3,302	20,789	21,984	138.3	138.8	1.3	25.6	73.1	34.3
Obalno-kraška	2,261	2,512	16,025	16,723	106.5	105.6	1.6	24.0	74.4	5.4
Gorenjska	1,876	2,123	13,297	14,137	88.4	89.2	2.4	43.7	53.9	8.8
Goriška	2,080	2,346	14,746	15,623	98.0	98.6	3.4	40.5	56.1	6.0
Savinjska	1,930	2,129	13,674	14,177	90.9	89.5	4.0	46.1	49.8	11.5
South-eastern Slo.	1,923	2,158	13,610	14,368	90.6	90.7	5.7	49.4	44.9	6.3
Pomurska	1,509	1,692	10,693	11,263	71.1	71.1	9.9	35.8	54.3	4.4
Notranjsko-kraška	1,693	1,869	11,998	12,445	79.7	78.6	6.2	43.6	50.1	2.0
Podravska	1,757	1,975	12,458	13,151	82.8	83.0	4.1	36.1	59.8	13.3
Koroška	1,776	1,991	12,590	13,259	83.7	83.7	4.2	49.9	45.9	3.1
Spodnjeposavska	1,822	2,071	13,042	13,791	85.8	87.1	6.5	50.0	43.4	3.1
Zasavska	1,697	1,809	12,031	12,047	80.0	76.0	2.1	52.1	45.8	1.8
SLOVENIA	2,122	2,380	15,045	15,843	100.0	100.0	3.3	36.0	60.7	100.0

Source: SORS, the IMAD's calculations.

Notes: ¹ PPS - purchasing power standards, ² GVA - gross value added.

Chart: Gross domestic product per capita for Slovenian regions, 2000-2001



Source: SORS, the IMAD's calculations.

# Variation of unemployment across regions

After several years of decline, which varied from region to region, the regional unemployment rose again after 2001, whereas the gap between regions recording the lowest and highest unemployment rates narrowed slightly. The rates of registered unemployment fell as a result of the lower number of unemployed, which declined in all regions in 1997-2003. The number of unemployed fell because more jobs were offered in the regions; however, this fall was also largely due to deletions from unemployment registers for various reasons. After 1997, the registered unemployment rate fell the most in Podravska and South-eastern Slovenia (down by 6.2 and 5.4 percentage points, respectively) and the least in Pomurska and Koroška (down by just 0.3 and 0.4 of a percentage point). A comparison of 2003 with 2001 paints a different picture. Podravska and South-eastern Slovenia were still among regions where registered unemployment dropped the most, while unemployment increased in as many as five regions: Koroška, Zasavska, Pomurska, Spodnjeposavska and Goriška, mostly in Koroška (up 2.4%). In 2003, the highest registered unemployment rate was seen in Pomurska, which replaced Podravska, leading up until 2002, as the region hit hardest by unemployment. Pomurska was around 60% above the national average; further, Podravska, Zasavska, Spodnjeposavska, Savinjska and Koroška also exceeded Slovenia's average. The registered unemployment rate was 2.7 times higher in Pomurska than in Goriška, a region that still recorded the lowest registered unemployment rate. The ratio of the worstperforming to the best-performing region improved in 2001 from 1:3.1 to 1:2.7, however, this was mainly due to the rise in unemployment in Goriška.

Regional disparities in unemployment measured by the coefficient of variation increased after 2000 and began to narrow in 2003. The coefficient of variation is a better indicator than the ratio between regions at the two extreme ends. It is defined as a ratio of the standard deviation to the arithmetic mean, while this formula also takes into account the size of a region. The coefficient of variation was 30.2% in 1997 and edged down up until 2000. It began to rise slightly afterwards and then fell to 33.9% in 2003, but it was still higher than in 2001. If the current trend is sustained, regional disparities are likely to be reduced further.

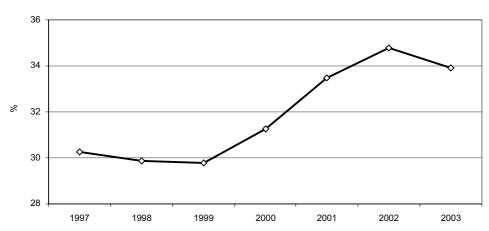
A major concern is structural unemployment, which is revealed specifically in each region, including regions with below-average registered unemployment rates. Long-term unemployment, which seems to be on a downward trend in all regions, is the biggest problem in South-eastern Slovenia whose registered unemployment rate is otherwise below the national average. Long-term unemployment is also high in Podravska and Pomurska, and tends to be related to the low education levels of the unemployed, as is the case in South-eastern Slovenia and Pomurska. On the other hand, people who completed a higher education may also find it difficult to get a job. The share of the unemployed with a higher education continued to increase in 2003; these shares were the largest as well as above the national average in Central Slovenia, Goriška, Obalno-kraška and Notranjsko-kraška. People with low employment prospects are also those aged over 40, whose share has shrunk since 2001, but continued to be above average in Gorenjska (over 50% of all unemployed), Spodnjeposavska, Koroška and South-eastern Slovenia. The share of women among total unemployed increased again in 2003 chiefly due to recent bankruptcies in the textile industry, mainly employing women.

Table: Registered unemployment rates by regions, 1997-2003

	1997	1998	1999	2000	2001	2002	2003
SLOVENIA	14.4	14.5	13.6	12.2	11.6	11.6	11.2
Central Slovenia	10.2	10.5	10.1	9.2	8.3	7.9	7.8
Obalno-kraška	11.0	10.6	10.1	9.2	9.0	8.6	8.3
Gorenjska	12.0	12.6	11.9	10.1	9.0	8.5	8.3
Goriška	9.6	9.2	7.7	6.2	5.8	6.3	6.4
Savinjska	16.1	16.7	15.3	13.6	13.5	14.0	13.5
South-eastern Slovenia	14.0	12.0	11.7	10.8	9.9	9.9	8.7
Pomurska	17.8	18.7	18.2	17.2	16.7	17.6	17.5
Notranjsko-kraška	12.0	12.5	12.2	10.8	9.7	9.1	8.9
Podravska	22.4	22.0	20.6	18.7	17.9	17.6	16.3
Koroška	13.0	13.0	11.7	10.3	10.2	11.6	12.7
Spodnjeposavska	16.4	15.9	14.9	13.9	14.3	14.4	15.0
Zasavska	17.9	19.2	17.5	15.5	14.7	15.3	16.2

Source: the SORS.

Chart: Variation coefficients of regional unemployment in Slovenia in 1997-2003



Source: SORS, the IMAD's calculations.

IMAD Development Report 2004 66 Analytical Appendix - Indicators

# Indicators of economic development

Macroeconomic stability
Knowledge-based society
Competitiveness of the economy
Developmental role of the state

IMAD Development Report 2004 68 Analytical Appendix - Indicators

# Macroeconomic stability

#### Real gross domestic product growth

In 2003, national accounts for 1995-2002 were revised in line with the European System of National Accounts from 1995 (ESA95). In addition to regular revisions, national accounts undergo major methodological changes every few years. The latest change, which was introduced in all EU members and acceding countries, involved the replacement of the European System of National Accounts from 1979 (ESA79) with the European System of National Accounts from 1995 (ESA95). The ESA95 has brought changes in the concept, definition and classification of national accounts, while these changes are being introduced gradually and differently from country to country. The new system was planned to be introduced within seven years after 1995, however, practically all countries were granted derogations, some of which extend to 2005. The transition from the ESA79 to the ESA95 was the main cause and reason for revising Slovenia's national accounts, while the aim was also to improve the coverage of all activities. Following this revision, which was first made in March 2003 for the 2000-2002 period and later on for the whole 1995-2002 period (SORS, SI, No. 308, 25 November 2003), estimates of nominal gross domestic product as well as its real growth rates changed compared to previous releases. The new average annual GDP growth in nominal terms is 5.2% higher for the period as a whole. The SORS' GDP figures for 1995-1999 are provisional until estimates by kind of activity and cost structure are completed.

After five years of relatively robust economic growth (1996-2000), real GDP growth slowed down in 2001 and 2002, while the contribution of international trade declined and that of domestic spending increased. The slowdown from average annual growth of 4.4% in 1996-2000 to 2.9% in 2001-2002 was due to deteriorated international economic conditions and their impact on Slovenia's exports on one hand, and low growth in domestic consumption and its weak strengthening after 2000 on the other. As a result, the net contribution of international trade shrank gradually (2.4 percentage points in 2000, 1.8 percentage points in 2001 and 0.8 of a percentage point in 2002), while the contribution of domestic consumption increased. In 2002, real GDP growth was largely underpinned by the rise in domestic spending, which added 2.1 percentage points to the 2.9% GDP growth (1 percentage point in 2001). However, out of all domestic consumption components, only the contribution of gross capital formation increased: after falling by 0.4% in 2001, gross fixed capital formation climbed by 1.3% in 2002, while the contribution of changes in inventories and valuables rose from -1 percentage point to 0.7 of a percentage point. Final consumption rose more slowly than in 2001: private consumption climbed by 1.0% in real terms (2.4% in 2001), while government consumption was up 2.5% (4.0% in 2001).

In the first three quarters of 2003, modest GDP growth continued, while the relative contribution of domestic consumption to economic growth continued to rise. According to the SORS' figures released in December 2003, economic growth was 2.2% in the first nine months of 2003. Domestic demand added 4.0 percentage points, while international trade weakened economic growth by 1.8 percentage points. Value added increased by 2.2% in real terms year on year (up 1.4% in primary production activities and 3.2% in service activities). A breakdown by quarters shows that private consumption strengthened after faltering for three quarters in a row: it rose by 2.3% year on year in the first quarter, 3.3% in the second and 3.1% in the third quarter. Real growth in gross capital formation also intensified. It was mainly underpinned by gross fixed capital formation in the first quarter, fully underpinned by this component in the second quarter, and largely driven

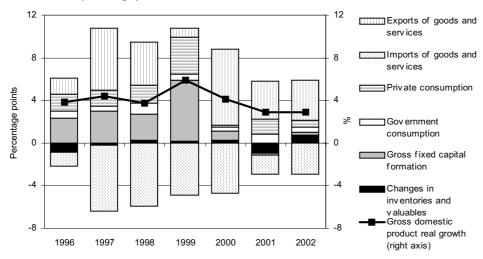
by the rise in inventories in the third quarter, when inventories added 4.2 percentage points to the 9.1% rise in gross capital formation. Given the robust domestic consumption, real growth in imports of goods strengthened gradually from 5.6% year on year in the first to 6.7% in the third quarter. Compared to the first nine months of 2002, imports of goods were up 6.0% (4.1% in the same period the year before). Following the modest economic growth in the EU and slowing exports to the countries of former Yugoslavia and the Soviet Union, exports increased by 2.9% year on year in the first nine months of 2003 (6.1% in the same period the year before). After declining from 3.3% in the first quarter to 2.3% in the second quarter, export growth again strengthened to 3.2%. These export-import flows led to a negative contribution of international trade to economic growth, which increased from -1.3 percentage points in the first to -2.2 percentage points in the second quarter and stayed roughly the same in the third quarter (-2.1 percentage points). Short-term indicators suggest a strengthening of economic growth in the last quarter, with the contribution of international trade increasing, while real GDP growth in 2003 as whole is estimated to be slightly weaker than in 2002.

Table: Real growth in gross domestic product and its main components in Slovenia in 1996-2002, %

	1996	1997	1998	1999	2000	2001	2002
Gross domestic product	3.8	4.4	3.7	5.9	4.1	2.9	2.9
Exports of goods and services	2.8	11.3	7.4	1.6	13.0	6.4	6.5
Imports of goods and services	2.3	11.5	10.3	8.0	7.6	3.0	4.9
Private consumption	2.6	2.5	3.0	5.9	0.3	2.4	1.1
Government consumption	3.4	2.4	5.4	2.9	2.3	4.0	2.5
Gross capital formation	6.1	12.5	11.3	22.4	3.3	-4.2	4.1
of which: Gross fixed capital formation	11.2	13.8	10.2	22.6	2.6	-0.4	1.3

Source: the SORS.

Chart: Contribution of individual consumption aggregates to gross domestic product growth in Slovenia in 1996-2002, percentage points



Source: SORS, the IMAD's calculations.

#### Inflation

After falling relatively fast in 1992-1999, the inflation rate then rose and persisted at a relatively high level of 7%-10% up until 2002. A restrictive macroeconomic policy mix combined with the implementation of structural reforms helped bring inflation down gradually after 1992 and, assisted by favourable conditions in the international environment, the inflation rate dropped to below 5% in the first half of 1999. Inflation's downward trend was interrupted in the second half of 1999 by rising primary commodity prices in world markets and the introduction of value-added tax in the middle of the year. As a result, inflation rose to 8% and drew close to 10% in the next two years. The inflation rate declined to 7.0% up until the end of 2001 and climbed again slightly to 7.2% by the end of 2002. Inflation remained at a relatively high level because of the failure of economic policies to respond to the changed macroeconomic conditions as well as due to unfinished structural reforms related to indexation, structure and volume of general government expenditure, and restructuring and raising the competitiveness of the economy.

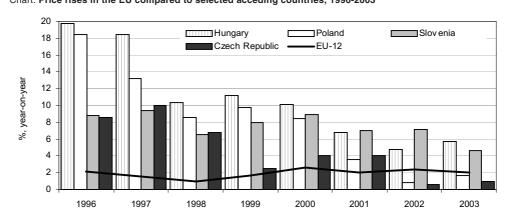
In 2003, inflation fell by 2.6 percentage points to 4.6% thanks to the increased restrictiveness of macroeconomic policies and the relatively favourable conditions in the international environment. After rising by 9.5% in 2002, administered prices climbed by 4.0% in 2003 and rose more slowly than freely-floating prices for the first time since 1996. Their contribution to inflation dropped by 0.6 of a percentage point, after adding 1.3 percentage points in 2002. The contribution of higher indirect taxes to inflation also fell compared to 2002, amounting to 0.7 of a percentage point, after tax and excise duty changes had added 1.7 percentage points in 2002. The biggest contribution, 0.4 of a percentage point, came from the process of harmonising excise duties on tobacco products with the tax system of the EU, while 0.2 of a percentage point came from higher excise duties on liquid fuels transport and heating. At the same time, the counter-cyclical adjustment of excise duties on liquid fuels helped reduce the indirect impact of higher oil prices and also helped calm inflationary expectations down. The slow rise in administered prices and counter-cyclical adjustment of excise duties reduced inflation by about 1.0 percentage point in the first quarter of 2003 alone, and inflation dropped by further 1.7 percentage points until the end of the year thanks to greater restrictiveness of both policies. At the end of the first quarter, the monetary policy stance also changed, leading to a slower rise in the euro's exchange rate against the tolar and therefore assisting a further fall in inflation. The euro's year-on-year appreciation slowed down by 1.2 percentage points to 2.8% at the end of December 2003. The euro's rise over the same months of 2002 increasingly decelerated towards the end of the year and, assuming the high pass-through effect of the exchange rate on consumer prices, which takes place with a six to nine month delay, the contribution of the euro's appreciation to inflation fell by about 0.8 of a percentage point.

The government and the Bank of Slovenia tightened their policies in the last quarter of 2003 and also took additional measures to cut inflation, as set out in the Programme for Entering the ERM2 and Introducing the Euro and the Plan of Adjusting Administered Prices for 2004-2005. Since these measures are carried out, inflation is expected to drop to the level which will allow Slovenia to meet the Maastricht criteria in 2005.

	1996	1997	1998	1999	2000	2001	2002	2003
Slovenia, year-on-year rise, %		•						
Consumer prices	9.0	8.8	6.5	8.0	8.9	7.0	7.2	4.6
Goods	8.0	8.5	5.6	7.8	8.8	6.2	6.4	3.9
Services	12.2	9.8	9.3	8.8	9.2	9.6	9.4	6.5
Administered prices	8.4	16.9	11.1	10.4	16.0	10.5	9.2	4.0
Energy	5.6	20.9	13.2	11.0	18.9	6.7	5.5	3.5
Other	10.6	12.4	8.6	9.6	12.0	17.0	14.7	4.8
Core inflation	7.2	6.4	5.0	4.1	6.9	7.4	6.9	4.2
European Union <sup>1</sup> , year-on-year rise	, %						•	
Consumer prices	2.1	1.5	0.9	1.7	2.6	2.0	2.3	2.1p

Sources: SORS (consumer prices), the IMAD's estimates (administered prices, core inflation), Eurostat (consumer prices in the EU). Notes: 1 the euro zone; p - provisional figure.

Chart: Price rises in the EU compared to selected acceding countries, 1996-2003



Sources: national statistical offices, Eurostat, EBRD.

### **Unemployment rate**

In 2003, the number of registered unemployed continued to fall, while the number of unemployed established by the labour force survey rose. The number of registered unemployed ranged at about 125,000 in 1993-1998 and the registered unemployment rate was between 14% and 14.5%. Up until 2001, the number of registered unemployed fell to an average of 102,000 and the registered unemployment rate to 11.6%. In 2002, both the number and rate of registered unemployment stayed at the level of the previous year, while they again dropped slightly in 2003. The average number of registered unemployed was 97,674 in 2003 (95,993 in December), while the average rate of registered unemployment was 11.2%. The number of unemployed established by the labour force survey ranged at around 70,000 in 1995-2000 and the survey unemployment rate came in at 7%-8%. The number of unemployed fell to 62,000 up until 2002, but it rose to an average of 65,000 in 2003. The survey unemployment rate, which had dropped to 6.4% in 2001 and 2002, climbed to an average of 6.7% in the first three quarters of 2003. Slovenia's unemployment measured by international methodology has been below the EU average ever since it began to be measured and has ranged at about the average level of the OECD countries.

In 2003, registered unemployment mainly fell due to deletions from unemployment registers for reasons unrelated to employment, while inflows into unemployment rose again. The number of registered unemployed again dropped because of high deletions from unemployment registers for reasons unrelated to hiring the unemployed. As regards deletions for other reasons, most were due to one's own volition or a failure to report at the employment service office (both can imply that they found a job by themselves), while 7,723 people were transferred to registers regulated by other laws¹. The trends of rising inflows into unemployment caused by dismissal and faltering recruitment of the unemployed continued into 2003. About 4.3% more people were made jobless than a year ago, mainly due to the termination of fixed-term employment (46.8%) which employers have used to shift some business risk onto the shoulders of their employees, while redundancies increased notably (14.3%, as against the 9.3% seen in 2002). At the same time, 3.2% fewer unemployed were hired than in 2002. The inflow of first-time job-seekers rose significantly. This number rose by as much as 18.7% from 2002. There were 13.8% first-time job-seekers who had completed higher education (15.0% in 2002).

The structure of registered unemployment changed: the shares of older, long-term and unskilled unemployed people shrank, while the shares of unemployed women and young people increased. This was partly due to high deletions from unemployment registers for various job-unrelated reasons, as well as targeted active employment policy measures, especially subsidies for new jobs and training programmes for the unemployed. The share of women increased from 51.2% in 2002 to 52.8% in 2003 on average, the share of first-time job-seekers climbed from 19.6% to 23.2%, and that of young unemployed people from 24.0% to 26.1%. The share of unemployed aged over 40 dropped under 45% (49.4% in 2002) and the share of unemployed aged over 50 to just 21.4% (25.4% in 2002). Long-term unemployed represented 48.6% (54.4% in 2002) and unskilled unemployed 44.2% of all unemployed (47.0% in the previous years on average). The average duration of unemployment shortened to 25 months (by close to 7 months compared to 2002). Both registered and survey female unemployment rates remained significantly higher than the respective male unemployment rates. The registered rate stayed the same as in 2002, while the survey rate increased (see table). Youth unemployment (people aged 15-24) remained relatively high, however, it was on the downturn. This was primarily due to low youth labour force participation, especially among women, resulting from higher enrolment in education. This was one of the reasons why the unemployment rate of young women continued to be higher than that of young men.

The government still pursued efforts to eliminate structural imbalances in the labour market, increase employment and reduce unemployment. The National Action Employment Plan for 2004, which follows the European employment strategy, stresses the need for the co-ordinated action of departmental policies whose aim is to accelerate economic growth and social development, thereby creating new jobs. According to this Plan, funding should primarily be channelled to underdeveloped regions with the aim of reducing development gaps which are, together with demographic problems, one of the main reasons for structural unemployment and differences between regional unemployment

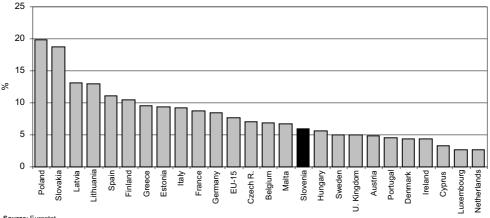
rates. Active employment policy programmes will continue to address the target groups of unemployed, enabling them to get a job or training. These programmes must be adjusted to the needs of both the unemployed and employers, which should in turn help reduce the shares of longterm and unskilled unemployed, as well as reduce unemployment among young people and people aged over 50. Particular attention will be also paid to women so as to maintain a balanced gender structure of unemployment. Another factor playing a significant role in improving conditions in the labour market is to further implement the changes introduced in vocational education<sup>2</sup>.

Table: Unemployment rates in Slovenia, the EU and OECD in 1995-2003, %

	1995	1997	1999	2000	2001	2002	2003
Unemployment rate according to survey					•		
Slovenia	7.41	7.4	7.6	7.0	6.4	6.4	6.7
Men	7.71	7.1	7.3	6.8	5.9	5.9	6.4
Women	7.0 <sup>1</sup>	7.6	7.9	7.3	7.0	6.8	7.1
Young people (aged 15-24)	18.8 <sup>1</sup>	17.6	18.1	16.8	18.1	16.1	15.4 <sup>1</sup>
EU	10.7	10.6	9.1	8.2	7.3	7.6	8.0
OECD	7.7	7.4	6.8	6.3	6.5	6.9	-
Rate of registered unemployment			•	•			
Slovenia	13.9	14.4	13.6	12.2	11.6	11.6	11.2
Men	14.1	13.6	12.4	11.1	10.4	10.4	9.7
Women	13.7	15.3	15.0	13.5	12.9	13.1	13.0

Sources: SORS, Eurostat, OECD. Note: 1second guarter

Chart: International comparison of survey unemployment rates in EU member-states and candidate-countries in 2002, %



Source: Eurostat

Pursuant to amendments to the Employment and Unemployment Insurance Act, Rules on the content and method of keeping official records in the area of employment were adopted on 4 October 2002. These Rules regulate the criteria for transferring people from unemployment registers to registers based on other acts. These criteria were established by the Employment Service of Slovenia in co-operation with the institution referred to in each particular act. The transfer to other records is to be  $carried \ out \ on \ the \ basis \ of \ an \ employment \ plan. \ Pursuant \ to \ the \ Rules, \ the \ Employment \ Service \ of \ Slovenia \ and \ the \ Pension \ and \ plan \ plan$ Disability Insurance Institute prepared a regulation for the working disabled who are recipients of a disability allowance. The two institutions began to examine the employment prospects of the disabled and establish criteria to transfer these people to other registers. The following categories were taken into consideration: (i) people registered at the Employment Service of Slovenia for at least two years; (ii) people who failed to get a job due to their handicap despite an interview being arranged with an employer; (iii) people for whom no suitable jobs were available; and (iv) people who remained jobless even after they participated in the active employment programme.

<sup>&</sup>lt;sup>2</sup> A system of certificates to obtain vocational qualifications and modernisation of formal vocational programmes to be implemented in line with the set objectives.

### **Employment rate**

The employment rate<sup>1</sup>, which was relatively high (around 63%) and stable in the second half of the 1990s, rose to 63.9% in 2001 and began to drop in the following two years. The male employment rate fell from around 68% to 67.2% in the second quarter of 2003, while the female employment rate dropped from 59% to 57.6% of the workingage population (people aged 15-64) of the same gender<sup>2</sup>. Compared to the EU average, where the employment rate rose relatively fast in this period, Slovenia's male employment rate was slightly lower and female employment rate was higher (see table). As far as age is concerned, youth employment (15-24 years of age) and employment of people aged over 50 was below the EU average. This was primarily due to the relatively high youth enrolment in secondary and tertiary education (see the indicator on the population with completed secondary education) and relatively high youth unemployment compared to the EU average as far as young people are concerned, as well as due to high structural unemployment, mainly concerning older unemployed people (see the indicator on the unemployment rate). The low employment rate among people aged over 50 was also the result of relatively early retirement. The average retirement age is rising - in 2002 it was 57 years and 8 months for old-age pension and 51 years and 8 months for disability pension (in 1999 the respective ages were 55 years and 7 months and 47 years and 1 month) – but it is still lower than in the EU on average (59.9 years). The low employment of older people was also influenced by extensive early retirement at the beginning of the 1990s.

Growth in the number of persons in employment slowed down for the second year running mainly due to fewer people in informal employment and farmers, while the number of employees continued to rise, albeit slowly. The number of persons in employment according to the labour force survey fell by 0.7% in 2002 and by 1.4% in 2003 over the year before. Growth in the number of employees, which began in 1999, decelerated in the last two years due to faltering economic growth. The number of employees rose by 0.4% in 2002 and by 0.2% in 2003. The number of employees only rose in enterprises and organisations (up 0.3% in 2003). In the small business sector, which recorded a robust increase throughout the transition period, thereby helping to offset employment contraction in enterprises and organisations, the number of employees dropped for the second year in a row. The number of private individual entrepreneurs continued to fall in 2003, a trend that began in 1996, while the biggest fall was seen in the number of farmers (down 19.5% in 2003). It seems that the small business sector and informal employment were hit hardest by the slowing economic growth seen in the last two years.

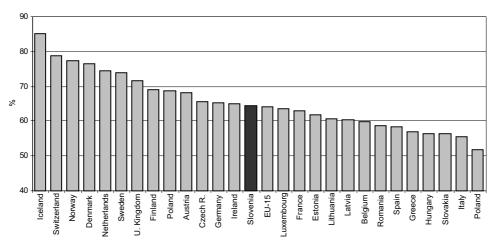
The number of persons in formal employment, according to monthly statistics, dropped the most in agriculture and rose the most in the public administration. According to monthly statistics (covering employees and self-employed), the number of persons in formal employment fell by 0.8% in 2003 over the year before. The biggest fall was seen in agriculture (down 16.5%), followed by manufacturing (down 1.6%), fishing, mining, electricity, gas and water supply, hotels and restaurants, transport, and financial intermediation. The number stagnated in health and social work, and increased in the public administration (up 4.5%, recording the biggest increase), business services, education, and other community, social and personal service activities.

Table: Employment rates (people aged 15-64) according to the labour force survey in Slovenia and the EU in 1995-2003, %

	1995¹	1997	1999	2000	2001	2002	2003¹
Slovenia	62.9	63.5	62.5	62.9	63.9	63.4	62.5
Men	67.7	68.0	66.9	67.2	68.7	68.2	67.2
Women	58.0	59.0	57.8	58.5	58.9	58.6	57.6
15–24	33.8	38.0	34.3	33.6	31.4	30.6	28.6
25–49	87.0	85.6	85.3	85.6	86.6	86.3	85.6
50–64	35.8	36.4	35.3	37.3	41.1	41.3	40.9
Agriculture	6.7	8.3	6.5	6.4	6.7	5.9	5.3
Industry and construction	27.7	26.2	24.4	24.4	25.0	25.0	23.6
Storitve	29.7	30.6	32.8	33.2	33.2	33.6	34.5
European Union	-	60.1	62.1	63.1	63.9	64.2	-
Men	-	69.9	71.6	73.4	74.0	72.9	-
Women	-	50.4	52.6	53.8	54.8	55.5	-
Agriculture	-	3.0	2.8	2.7	2.7	2.6	-
Industry and construction	-	17.7	18.4	18.5	18.6	18.4	-
Storitve	-	39.5	41.6	42.7	43.4	44.1	-

Sources: SORS, Eurostat Note: 1 second quarter.

Chart: Employment rates in Slovenia and selected European countries, 2002 (%)



Source: Eurostat.

<sup>&</sup>lt;sup>1</sup> Calculated from survey data, which include people in informal employment, who may also be either students among younger generations or retired people among older generations.

<sup>&</sup>lt;sup>2</sup> Comparison is made with persons in employment of the same age (15-64).

#### Public finance balance

Slovenia ran a fiscal deficit after 1996, which has widened slightly, except in 2003. General government expenditure relative to GDP increased by around 3 percentage points from 1996 to 2003 and totalled 43.3% of GDP in 2003 (also see the general government expenditure indicator). On the other hand, general government revenue averaged at around 41% of GDP. The share of compulsory levies, which depend on the current legislation, macroeconomic conditions and economic growth, ranged at around 40% of GDP while other revenue (grants, concession fees, profit-sharing etc) represented about 1% of GDP annually on average. In the revenue structure, the share of indirect taxes increased, while the shares of direct taxes and social security contributions fell. Throughout the period, except in 1996, the share of general government expenditure in GDP was bigger than the share of general government revenue. The average fiscal deficit was 1.3% of GDP. The strategic objective of the fiscal deficit not exceeding 1% of GDP was therefore not achieved. The gap between the shares of general government expenditure and revenue in GDP has widened in the last three years, so the fiscal deficit measured as a percent of GDP expanded by 0.1 of a percentage point annually.

In 2002, the shares of general government revenue and expenditure in GDP fell, while the fiscal deficit relative to GDP (excluding the 'compensatory deficit' resulting from alignment of the fiscal with the calendar year) widened slightly to 1.5% of GDP. After rising for six years, general government expenditure relative to GDP fell by 0.3 of a percentage point. Expenditure on wages and interest payments continued to rise faster than total expenditure, while expenditure on goods and services, subsidies and capital spending rose more slowly. General government revenue relative to GDP dropped by 0.5 of a percentage point. The share of compulsory levies in GDP increased by 0.4 of a percentage point because of the raising of VAT tax rates and excise duties, introduction of environmental taxes, and gradual decline in customs duty revenues, while the share of other (non-tax) revenues dropped. The fiscal year was aligned with the calendar year (value-added tax and excise duties collected in January 2003 were not included) and general government revenue fell by about 1.5% of GDP as a result (the 'compensatory deficit'). The total general government deficit - compensatory deficit and current deficit - reached around 3% of GDP. The fiscal deficit was also calculated in line with the EU methodology (ESA 95), according to which the deficit totalled 2.7% of GDP in 2001 and 1.9% in 2002.

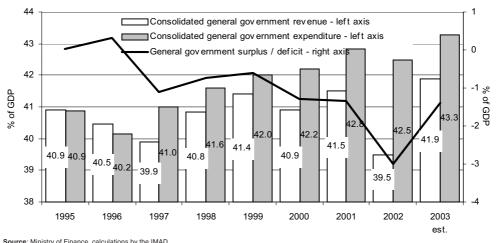
The preliminary assessment showed a deficit of 1.4% of the estimated GDP for 2003. Consolidated general government expenditure (provisional figures) totalled 43.3% of GDP, 0.8 of a percentage point more than in 2002. As far as its economic structure is concerned, the share of capital expenditure in GDP increased by 0.2 of a percentage point, as did the share of transfers to individuals and households. The shares of expenditure on wages and contributions, expenditure on goods and services and subsidies increased by an estimated 0.1 of a percentage point each. Expenditure on interest payments stayed at about the same level as in 2002. The share of pension expenditure shrank by 0.1 of a percentage point. Consolidated general government revenue totalled 41.9% of the estimated GDP, according to provisional figures. The share of compulsory levies was 40.6% of GDP, 0.9 of a percentage point more than in 2002. Revenues from indirect taxes and revenues from social security contributions rose more slowly than total compulsory levies. Revenues from customs duties and import taxes stabilised at 0.6% of GDP in the last three years after having fallen for some time. Revenues from corporate income tax rose the most because the changes in Slovenian Accounting Standards and

higher capital gains pushed tax assessments for 2002 up. As a result, the share of these revenues in GDP climbed by 0.5 of a percentage point. Revenues from personal income tax and payroll tax relative to GDP increased by 0.1 of a percentage point each. Revenues from fees and charges increased because of the introduction of new environmental taxes (their share in GDP was up 0.2 of a percentage point). The general government deficit was 1.4% of the estimated GDP, 0.1 of a percentage point less than the current deficit in 2002 (excluding the 'compensatory deficit').

After revising the 2004 national budget, the general government deficit should be 1.7% of GDP in 2004. According to the revised national budget and projections of the expenditure of local government, pension and health budgets, consolidated general government expenditure relative to the estimated GDP, including payments to the EU budget, should rise by 1 percentage point to exceed 44% (44.3%). Consolidated general government revenue (excluding receipts from the EU) should rise less than GDP; revenues collected from domestic taxes should total a good 41% of GDP, while receipts from the EU are estimated to be 1.3% of GDP. The fiscal deficit is estimated at 1.7% of GDP.

Budget documents for 2005 estimate a general government deficit of 1.6% of GDP. The proposed budget for 2005 already contains systemic changes. The rise in the share of financing public services will increase consolidated general government expenditure relative to GDP over 2004. If the current rules and relationship between public and private financing of public services remain the same, consolidated general government expenditure would rise less than in 2004 and less than GDP, while its share in GDP would shrink to about 43.5%. According to the preliminary budget, consolidated general government revenue collected from domestic sources should roughly equal the level of 2004, while inflows from the EU are estimated to total 1.6% of GDP. The general government deficit is projected to reach around 1.6% of GDP.

Chart: Consolidated general government revenue and expenditure, the GFS-IMF methodology (as a % of GDP)



Source: Ministry of Finance, calculations by the IMAD.

Note: The calculations used the revised GDP data (the SORS, Rapid Reports, No. 308, 25 November 2003)

### **Balance of payments**

The balanced current account turned into a deficit in 1997; the deficit peaked in 1999 and then began to narrow to turn into a slight surplus in 2001. In 1995-1997, the current account was balanced. The trade deficit totalled 4.6% of GDP, however, the surplus in trade in services (3.3% of GDP) and positive net factor incomes and current transfers put the current account into balance. The current account began to record a deficit in 1998 when Slovenia's real export growth slowed down following the impact of the Asian and Russian financial crises on economic growth of the main trading partners. As domestic investment activity increased, imports continued to rise strongly. In 1999. exports of goods slumped, which was caused by stagnant exports to the countries of former Yugoslavia, the sharp fall in exports to Russia, the relatively modest growth in exports to the EU, while imports of goods surged as a result of high domestic spending prior to the introduction of VAT. Therefore, the trade deficit reached 6.2% of GDP, the highest after 1992. The surplus in trade in services narrowed from 2.6% of GDP in 1998 to 1.7% of GDP mainly due to lower net foreign exchange receipts from tourism (the Kosovo crisis), net imports of construction services, and faster growth in imports of other (non-traditional) services. The current account deficit was 3.5% of GDP, while its sustainability was called into question. In 2000, export growth was fuelled by favourable international economic conditions (high foreign demand), while modest import growth was chiefly due to sluggish domestic demand. While the income effect measured by the expansion of export markets was positive, the price effect measured by the terms of trade was negative (the strong US dollar and rises in oil prices); as a result, the trade deficit remained relatively high (6% of GDP). The surplus in trade in services widened significantly (to 2.4% of GDP), which helped the current account deficit to narrow to 2.8% of GDP. In 2001, the dynamics of export flows were largely determined by relatively favourable foreign demand. Real growth in exports of goods and services (6.4%) halved compared to 2000 (13%), following the slowdown in economic activity of EU members, which represented about two-thirds of Slovenia's merchandise exports. The sluggish exports to the EU were offset by increased sales of goods in the markets of former Yugoslavia and Russia. Modest growth in imports of goods and services resulted from weak domestic demand. As the trade deficit narrowed further to 3.1% of GDP and the surplus in services increased, the current account turned into a surplus of 0.2% of GDP.

In 2002, the current account surplus widened significantly. The trade deficit narrowed from 3.1% of GDP to 1.1%. This was due to low import levels (sluggish domestic spending) and the sustained level of export growth and improved terms of trade (up 2.4 index points), chiefly resulting from the euro's rise against the US dollar. An analysis of the impact of price effect on the trade balance revealed that unchanged terms of trade (relative to 2001) would lead to a EUR 200 million higher trade deficit. High rates of export growth were maintained with the countries of Central and Eastern Europe. Expansion to these transition markets partly offset the slowing export growth to EU member-states, where economic growth decelerated further compared to 2001. The regional composition of trade shows that the trade deficit widened with EU members and narrowed with CEFTA countries, while the trade surplus increased further with the countries of former Yugoslavia and the former Soviet Union compared to 2001. Trade in services was much more robust than in 2001. Both exports and imports of services achieved strong growth, while the surplus in trade in services increased slightly to 2.7% of GDP. Factor incomes recorded a relatively wide deficit (0.7% of GDP), reinvested earnings rose, and current transfers recorded a surplus (0.6% of GDP), so the current account ran a surplus of 1.4% of GDP.

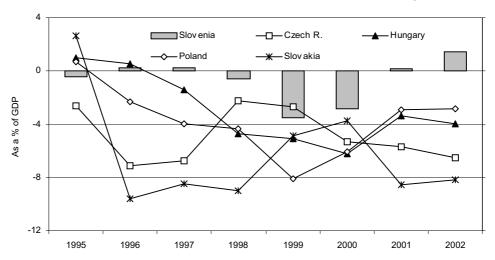
The current account surplus was maintained in 2003 (EUR 17 million), albeit at a lower level than the year before. Following unfavourable economic conditions in EU members, exports of goods slowed down markedly in 2003, going up by 3.1% over 2002 in nominal terms measured in euros (6% in 2002). Slovenian exporters offset modest earnings from exports to the EU by increasing sales in CEFTA countries, non-European OECD members and the Russian Federation. As domestic spending accelerated, imports increased by 5.5% year on year in the same period (up 1.9% in 2002). Trade in services rose more slowly than trade in goods, while exports of the three main groups of services (transport, travel and other services) increased less than their imports. The surplus in services trade was lower than in the same period of 2002 even though the terms of trade in services improved thanks to higher export prices of transport, and restaurant and hotel services. The deficit in factor incomes narrowed mainly because the estimated foreign investors' reinvested earnings dropped. The positive current transfers balance halved; transfers from abroad of both the government and other sectors fell, while the transfers abroad of other sectors increased (insurance and other transfers).

Table: Current account of the balance of payments in Slovenia in 1995-2002, % of GDP

	1995	1996	1997	1998	1999	2000	2001	2002
Current account	-0.4	0.2	0.3	-0.6	-3.5	-2.8	0.2	1.4
Trade balance	-5.0	-4.5	-4.2	-4.1	-6.2	-6.0	-3.1	-1.1
Services balance	3.1	3.4	3.5	2.6	1.7	2.4	2.5	2.7

Sources: SORS, BS, calculations by the IMAD

Chart: The current account balance in Slovenia and selected CEFTA countries in 1995-2002, % of GDP



Sources: SORS, BS, OECD Economic Outlook, December 2003

Gross external debt

As from September 2003, the Bank of Slovenia has been monitoring gross external debt in line with the new methodology, covering all debt financial instruments of private non-guaranteed debt and instruments emerging after full liberalisation of the capital and financial account of the balance of payments. In September 2003, the Bank of Slovenia began to compile figures on gross external debt in line with the International Monetary Fund's standards: gross external debt shows the outstanding amount of liabilities of residents to non-residents for each industry and financial instrument, standardised with the system of national accounts (SNA 93) and the Balance of Payments Manual, 5th Edition. The old external debt statistics put borrowing from banks and governments to the fore. The focus was on long-term debt, especially public and publicly guaranteed, while not all debt instruments were included. External debt was presented in US dollars. According to the new methodology, gross external debt is given in euros and incorporates, in addition to external debt compiled in line with the old methodology, all debt financial instruments of the private non-guaranteed debt and instruments emerging after full liberalisation of the capital and financial account (e.g. purchases of government bonds in the secondary capital market)2. At the end of 2002, external debt amounted to EUR 8,448 million (36.2% of GDP) according to the old methodology, while gross external debt according to the new methodology totalled EUR 11,483 million (49.2% of GDP). The IMF's new standards define net external debt as the difference between external liabilities in debt instruments (gross external debt) and external assets in debt instruments.

In 1995-2001, non-guaranteed private debt rose faster than public and publicly-guaranteed debt. Non-guaranteed private debt rose by an average annual rate of 17.6% and public and publicly-guaranteed debt by 15.3%. The latter also covered external debt incurred by entities outside the government sector in cases where this debt was guaranteed by the government. Most non-guaranteed private debt involved loans raised by other sectors (the non-financial corporate sector in particular), while the government sector mainly borrowed by issuing eurobonds. Public and publicly-guaranteed debt increased further when Slovenia assumed 18% of former Yugoslavia's non-allocated debt in line with the New Financial Agreement (NFA) of 1996 and 16.39% of Yugoslavia's non-allocated debt following bilateral negotiations with individual country-members of the Paris Club. Total debt assumed from former Yugoslavia was EUR 523 million according to the euro's current exchange rate, or 15.6% of the public and publicly-guaranteed debt, at the end of October 2003.

In 2002, public and publicly-guaranteed debt stagnated, while private non-guaranteed debt continued to rise. Slovenia's gross external debt totalled EUR 11,482 million at the end of 2002, going up by EUR 1,079 million from 2001. Growth in public and publicly-guaranteed debt came to a halt, while private and non-guaranteed debt rose further and almost doubled in 1998-2002 (going up from EUR 4,452 million to EUR 8,277 million). Hence, growth in gross external debt was fuelled by increased borrowing, mainly that of banks (up from EUR 1,998 million at the end of 2001 to EUR 2,467 million at the end of 2002) and other sectors (up from EUR 5,062 million at the end of 2001 to EUR 5,568 million at the end of 2002), while the government sector's borrowing fell compared to 2001. In the non-financial corporate sector, enterprises mainly raised long-term loans and offered short-term commercial credits for supplied goods and services. As regards the structure of debt liabilities, government sector debt represented 21.1% (24.1% in 2001), banking sector debt 21.5% (19.2%), debt of other sectors 48.5%<sup>3</sup> (48.7%), and the debt of affiliated enterprises 8.9% (8%). If liabilities to affiliated enterprises are excluded (they are not kept according to maturity and instruments), long-term debt represented 77.8% (76.8% in 2001). Slovenia's net creditor position improved by EUR 679 million in 2002 over the year before to total EUR 1,101 million. The latter was chiefly due to large capital inflows from foreign direct investment.

In 2003, gross external debt mainly rose because of domestic bank's borrowing. According to provisional figures from the Bank of Slovenia, gross external debt rose by EUR 1,506 million in the first eleven months and totalled EUR 12,988 million at the end of November. Borrowing of the banking sector (EUR 751 million) and other sectors (EUR 507 million) accounted for 83.5% of this growth; external borrowing was encouraged by the tolar's slow depreciation against the euro and the difference between domestic and foreign interest rates. The government sector repaid more loans than it raised. Liabilities to affiliated enterprises increased by EUR 323 million in the first

eleven months. At the end of November, Slovenia's net external assets totalled EUR 142 million. The government sector only recorded external liabilities, amounting to EUR 2,349 million, mostly in the form of bonds and notes. The Bank of Slovenia, which manages international reserves on behalf and on account of the government, only recorded external assets, totalling EUR 6,863 million. Other sectors (non-bank financial corporations, non-financial corporations, households and nonprofit institutions serving households) recorded net external liabilities in a total amount of EUR 2,918 million. Affiliated entities (legal persons affiliated to non-residents through equity capital which own 10% of more equity) recorded EUR 77 million of net liabilities to non-residents.

The concept of gross external debt assigns importance to dynamic external debt indicators or indicators of the sufficiency of foreign exchange reserves (a ratio of international reserves to shortterm debt, a ratio of total foreign exchange reserves to short-term debt, and a ratio of gross external assets in debt instruments to gross external debt). In 2000-2002, the indicators of solvency and liquidity improved steadily, while Slovenia's net creditor position fell in 2003.

Table 1: Slovenia's gross external debt broken down by maturity and liabilities to affiliated entities, 1995-2003, EUR million

	1995	1996	1997	1998	1999	2000	2001	2002	30 Nov 2003
Gross external debt, total	4,275	5,381	6,165	6,459	8,012	9,490	10,403	11,482	12,988
Short-term debt	1,470	1,503	1,819	1,838	2,155	2,283	2,223	2,319	2,451
Public and publicly-guaranteed debt	0	0	0	0	0	0	15	66	49
Private non-guaranteed debt	1,470	1,503	1,819	1,838	2,155	2,283	2,208	2,253	2,403
Long-term debt	2,083	2,968	3,347	3,726	4,811	5,895	7,348	8,140	9,190
Public and publicly-guaranteed debt	1,178	1,657	1,875	2,007	2,462	2,883	3,107	3,138	3,340
Private non-guaranteed debt	905	1,311	1,472	1,719	2,350	3,012	4,241	5,002	5,850
Liabilities to affiliated entities	722	910	999	895	1,045	1,312	832	1,023	1,347
Public and publicly-guaranteed debt	0	0	0	0	0	0	0	0	0
Private non-guaranteed debt	722	910	999	895	1,045	1,312	832	1,023	1,347

Source: Bank of Slovenia

Table 2: Dynamic debt indicators, year-end stock, EUR million

	1999	2000	2001	2002	30 Nov 2003
A. Short-term debt <sup>1</sup>	3,374	4,382	4,569	4,448	4,644
B. International monetary reserves	3,159	3,436	4,984	6,781	6,879
C. Foreign exchange	4,104	4,705	6,513	7,826	7,763
D. Gross external assets in debt instruments <sup>2</sup>	7,697	8,700	10,825	12,584	13,130
E. Gross external liabilities in debt instruments <sup>3</sup>	8,012	9,490	10,403	11,482	12,988
Debt indicators	•				
- international reserves to short-term debt (B/A)	0.94	0.78	1.09	1.52	1.48
- foreign exchange to short-term debt (C/A)	1.22	1.07	1.43	1.76	1.67
- gross external assets in debt instruments/gross external debt (D/E)	0.96	0.92	1.04	1.10	1.01

Notes: 1 short-term debt includes the value of short-term debt outstanding and the value of long-term debt outstanding falling due within one year. 2 gross external assets in debt instruments include all claims from Slovenia's balance of assets, except equity. 2 gross external liabilities in debt instruments include all debt liabilities from Slovenia's balance of assets (gross external debt).

<sup>1</sup> It followed the Grey Book of the World Bank, the Bank of International Settlements, the International Monetary Fund and the Organisation for Economic Co-operation and Development from 1998.

<sup>&</sup>lt;sup>2</sup> According to the old methodology, these liabilities were included under the international investment position as liabilities to affiliated enterprises in the form of short-term commercial credits (now incorporated in private non-guaranteed debt) and money market instruments of the government sector (now incorporated in public and publicly-guaranteed debt).

<sup>&</sup>lt;sup>3</sup> Households and non-profit institutions serving households accounted for just 0.8% of total gross external debt.

### General government debt

General government debt1 rose in 2002 mainly due to the rise in central government debt. The central government borrowed almost exclusively in the domestic market. General government debt totalled SIT 1,464.3 billion at the end of 2002, representing 27.8% of GDP, 1.2 percentage points more than the year before. Central government debt climbed by SIT 190.7 billion to total SIT 1,419.7 billion, or 26.9% of GDP (25.9% of GDP at the end of 2001). As much as 90% of this debt was long-term debt. In addition to the financing of A and B budget accounts in a total amount of SIT 147 billion, central government debt increased due to the transfer of RS21 and RS39 bonds to the Slovenian Indemnity Fund, totalling SIT 13.2 billion, early repayment of the RS15PRST bond using the proceeds from selling a stake in the NLB bank, totalling SIT 1.8 billion, and payments to the fiduciary account for commitments under the Osimo and Rome Agreements, totalling SIT 1.3 billion. Central government debt increased by SIT 42.6 billion in 2002. On the other hand, the debt stock fell by SIT 3.8 billion following corrections to the final budget account for 2002; these corrections were made to the debt stock of short-term securities as a result of the new method of recording short-term securities. Slovenia's internal debt was SIT 833.9 billion, while external debt was SIT 585.8 billion. Unlike in previous years, external debt fell because the government further increased borrowing in the domestic market (99.7% of total borrowing was made in the domestic market). Reducing the share of external debt and increasing the share of internal debt are part of the strategy to step up development of the domestic financial market. Internal debt accounted for 58.7% of total central government debt at the end of 2002.

In 2002, the share of central government debt in US dollars continued to fall, as did the share of debt carrying a fixed interest rate. Debt denominated in euros represented 50.8% of total debt at the end of 2002, debt in tolars 46.9% and debt in US dollars 1.8%. The debt's currency structure and its changes reflected the tendency to reduce risks related to exchange rate fluctuations and the adjustment of external debt's currency portfolio to foreign exchange inflows from exports. Hence, there was no new borrowing in US dollars, except disbursements of the existing loan of international financial organisations, totalling USD 41,000. As far as interest rates are concerned, debt carrying a constant interest rate represented 76.4% of total debt, while debt with a flexible interest rate made up 23.6% of total debt. The share of debt carrying a flexible interest rate (representing 17.6% of total debt at the end of 2001) increased as a result of using domestic bonds with a flexible interest rate to finance budget commitments. Interest rates continued to fall in 2002 from the year before, which is also evident from 5-year bonds: the RS31 bond issued on 15 January carried an interest rate of 4.20% + the tolar indexation clause (TOM), while the RS46 bond issued on 8 November carried an interest rate of 3.00% + TOM. The average interest rate on long-term securities was 9.8% in the primary market, while that on short-term securities was 8.9%. The average effective interest rate began to decline in 2001 and dropped to 6.6% in 2002. The gradual transition to nominal interest rates, which began in 2002 by issuing a tolar bond of maturity of three years and carrying a fixed interest rate, was concluded in 2003 by issuing a five- and ten-year nominal bond. The level of interest rates and returns in the ten-year bond primary market (5.75% annually) have already met the Maastricht convergence criteria concerning the level of long-term interest rates.

Local government debt and debt of the Pension and Disability Insurance Institute (PDII) and the Health Insurance Institute (HII) rose by a total of 0.2% of GDP in 2002. Following the restrictive statutory limits, the indebtedness of local governments has been low for several years and only composed of internal debt. At the end of 2002, local government debt amounted to SIT 14.1 billion, 0.3% of GDP. The two institutes also borrow exclusively in the domestic financial market. At the end of 2002, debt of the PDII and HII totalled SIT 30.5 billion, or 0.6% of GDP.

Slovenia's level of indebtedness is one of the lowest among EU acceding countries as well as EU members, according to all criteria (debt relative to GDP, interest relative to GDP, debt per

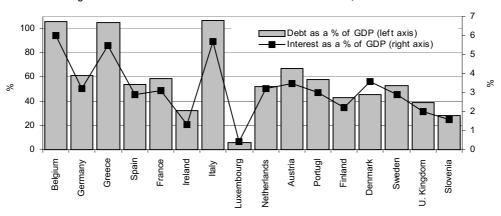
capita). Countries that were less indebted than Slovenia were Luxembourg, Estonia, Latvia and the Czech Republic. Further, Slovenia satisfies the Maastricht convergence criteria concerning the general government debt.

Table: General government debt in 1996-2002, SIT billion

	1996	1997	1998	1999	2000	2001	2002
Central government debt	580.7	673.2	771.3	893.3	1,013.4	1,228.9	1,419.7
as a % of GDP	22.7	23.2	23.7	24.5	25.1	25.9	26.9
Internal debt	355.5	399.6	475.5	498.5	505.1	635.1	833.9
as a % of GDP	13.9	13.7	14.6	13.7	12.5	13.4	15.8
External debt	225.2	273.6	295.8	394.8	508.3	593.7	585.8
as a % of GDP	8.8	9.4	9.1	10.8	12.6	12.5	11.1
Succession	106.7	106.9	26.2	26	25.2	23.2	18.7
as a % of GDP	4.2	3.7	0.8	0.7	0.6	0.5	0.4
Paris Club	14.9	10.8	8.1	7.6	7.3	6.8	6.1
as a % of GDP	0.6	0.4	0.2	0.2	0.2	0.1	0.1
London Club	91.8	96.1	18.1	18.4	17.9	16.5	12.6
as a % of GDP	3.6	3.3	0.6	0.5	0.4	0.3	0.2
Other external debt	118.5	166.7	269.6	368.8	483.1	570.5	567.1
as a % of GDP	4.6	5.7	8.3	10.1	12.0	12.0	10.7
Local government debt	4.5	4.3	4.2	4.4	4.2	8.1	14.1
as a % of GDP	0.2	0.1	0.1	0.1	0.1	0.2	0.3
Internal debt	4.5	4.3	4.2	4.4	4.2	8.1	14.1
as a % of GDP	0.2	0.1	0.1	0.1	0.1	0.2	0.3
External debt	0	0	0	0	0	0	0
PDII and HII	-	8.7	5	10	23.4	22.9	30.5
as a % of GDP	-	0.3	0.2	0.3	0.6	0.5	0.6
Internal debt	-	8.7	5	10	23.4	22.9	30.5
as a % of GDP	-	0.3	0.2	0.3	0.6	0.5	0.6
External debt	-	0	0	0	0	0	0
General government debt	585.2	686.2	780.5	907.7	1,041.0	1.259.9	1.464.3
as a % of GDP	22.9	23.6	24.0	24.9	25.8	26.6	27.8

Source: Ministry of Finance.

Chart: General government debt of Slovenia and EU member-states in 2002, % of GDP



Sources: Ministry of Finance, Eurostat.

General government debt (which is imposed on the budget financing cost) covers central government debt, local government debt, and the debt of social insurance funds (the Pension and Disability Insurance Institute and the Health Insurance Institute).

#### **Country risk**

Slovenia got the highest initial country risk rating of all Central and Eastern European countries in 1996. Slovenia's country risk¹ was first assessed in 1996, with assessments being made by three agencies: Moody's, Standard&Poor's and Fitch Ratings. All three gave Slovenia the highest initial rating of all Central and Eastern European Countries. This was due to the favourable assessment of all three country-risk components (political, social and economic risk). The initial high rating remained unchanged for several years despite the undermined general government balance in 1997 and external balance in 1999 because these indicators remained within the sustainable limits.

Up until the end of 2003, all three agencies corrected their initial country risk ratings upwards. Moody's assessment was first revised upwards in 2000, from A3 to A2, which was primarily due to enforcement of the Europe Agreement in 1999. The better assessment of further economic, social and political development was mainly the result of progress made in negotiations with the EU in addition to the current account surplus and modest general government deficit. In August 2002, the Moody's agency corrected the outlook for the future upwards from stable to positive. The successful conclusion of negotiations with the EU also contributed to Moody's upward revision of its country-risk assessment to Aa3 in November 2002, when the future outlook was again assessed as stable. This upward correction meant that Slovenia joined those countries enjoying a low-risk assessment with Moody's (high quality). According to available figures, this rating was unchanged until the end of 2003. Standard&Poor's high initial country-risk assessment (A) remained up to May 2003, while the outlook for the future was corrected from stable to positive in October 2002. After signing the Treaty of Accession between Slovenia and the EU, Standard&Poor's raised its country risk rating to A+ with a stable outlook in May 2003, suggesting that this agency considers accession to the EU as one of the key factors in improving a country risk assessment. Both Standard&Poor's and Moody's emphasise that implementation of structural reforms is also paramount for improving a country's rating (labour market reform, privatisation of the energy sector, development of the financial sector). This means that implementation of the main mechanisms to raise competitiveness and further building of macroeconomic stability will help improve Slovenia's country risk rating. The assessment of Fitch Ratings was corrected upwards twice: first in December 1999, from A- to A, and second in May 2003 from A to A+.

Slovenia enjoys the highest country risk rating of all EU acceding countries. Moody's country risk rating for Slovenia is the best out of all EU acceding countries ever since its upward correction in November 2002. The same goes for Standard&Poor's, where Slovenia was assessed as the same as Cyprus before the upward correction in May 2003. Moody's rating of Slovenia is now worse than that of Greece because it automatically raised Greece to the highest rating of Aaa after joining the EMU in January 2001 (previously, the ratings of Greece and Slovenia were the same). All euro-zone countries enjoy the highest rating, as do the other three EU member-states. Standard&Poor's ratings of Slovenia and Greece are the same, according to the latest available data. All other EU members are assessed better than Slovenia (Italy and Portugal with AA, Belgium, Spain and Sweden with AA+, and others with AAA).

This analysis focuses on the country risk assessment for issuing long-term government bonds denominated in a foreign currency, which is important for setting the spread when issuing long-term government securities.

Table 1: Slovenia's country risk assessments (long-term foreign currency rating) made by Moody's Investors Service, Standard&Poor's and Fitch Ratings

Standard&Poor's		Moody's Inve	estors Service	Fitch IBCA			
8 May 1996	A	8 May 1996	A3	8 May 1996	A-		
2 Dec 2003	A+	26 Dec 2003	Aa3	29 Oct 2003	A+		

Table 2: Initial and latest country risk ratings and the outlook for the future¹ made by Standard&Poor's for Slovenia and EU acceding countries and Greece, and the latest country risk ratings by Standard&Poor's and Moody's

	Initial ass	sessment	Latest as	sessment	
	Standard	d&Poor's	Standard&Poor's (2 Dec 2003)	Moody's (26 Dec 2003)	
Slovenia	A/Stable/	A/Stable/ May 96		Aa3/Stable/	
Hungary	BB+/Positive/	April 92	A-/Stable/	A1/Stable/	
Czech Republic	BBB/Positive/	July 93	A-/Stable/	A1/Stable/	
Poland	BB/Positive/	June 95	BBB+/Negative/	A2/Stable/	
Slovakia	BB-/Stable/	February 94	BBB/Positive/	A3/Stable/	
Estonia	BBB+/Stable/	December 97	A-/Stable/	A1/Stable/	
Latvia	BBB/Stable/	January 97	BBB+/Positive/	A2/Stable/	
Lithuania	BBB-/Stable/	June 97	BBB+/Positive/	A3/Stable/	
Cyprus	AA-/Stable/	August 91	A/Stable/	A2/Stable/	
Malta	A/Stable/	March 94	A/Stable/	A3/Stable/	
Greece	BBB/-/	September 88	A+/Stable/	Aaa/Stable/	

Note: 1 outlook for the future, i.e. an assessment of future economic, social and political development is given in the descriptive form: Positive, Stable and Negative.

IMAD Development Report 2004 88 Analytical Appendix - Indicators

# Knowledge-based society

# Average number of schooling years of persons in employment

The average number of schooling years of persons in employment continued to rise slowly in Slovenia in 2003; this was partly due to the rise in education levels in industry and high value added service sectors. In 20031, persons in employment completed an average of 11.4 years of schooling, according to the SORS' statistical employment register, and 11.6 years according to the labour force survey, 0.4 and 0.6 years more respectively than in 1995. The population's education level is likely to rise further because of higher enrolments in secondary and higher education and a higher number of pre-graduation students and graduates in these schools. The recruitment of more qualified job-seekers is increasing, while the recruitment of job-seekers with lower qualifications is declining. Unlike in 2002, when the education level mainly improved in public services, the education level rose significantly in mining, manufacturing, financial intermediation and business services in 2003, but fell in agriculture, fishing and construction (see table). Broken down by activities, the highest average number of schooling years was seen in education (13.6) and the public administration (13.4), activities that held the largest shares of employees who completed higher education (58.6% and 45.6%, respectively). A higher education level of people working in public services helps raise the quality of these services and improve productivity and competitiveness of the whole economy, however, contemporary production processes and competition in international markets call for a better skilled workforce in production activities and business services as well. Namely, education and the ability to use knowledge creatively are important components of the competitiveness of a particular activity. Yet it should be noted that the average number of schooling years is merely a formal indicator of education that says little about the quality of education and the actual know-how and skills possessed by a population.

Despite the positive trends seen in 2003, persons in employment with a higher education are still unevenly distributed among activities: they concentrate in the public administration and high value added service activities and dissipate in industrial sectors. Most of the highly educated workforce is employed in education, accounting for 21.5% of the total number of persons in employment who completed a higher education. Manufacturing industries employed 14.9% of these workers, followed by the public administration (14.0%), business services (12.8%), health and social work (10.7%), and wholesale and retail trade (7.8%). Throughout the period (1995-2003), the number of persons in employment with a higher education concentrated in the public administration, business services and financial intermediation (here, the concentration weakened in 2003 over the year before), but it fell in manufacturing, health and social work, education (here, the concentration increased in 2003 over the year before), agriculture, construction, and wholesale and retail trade.

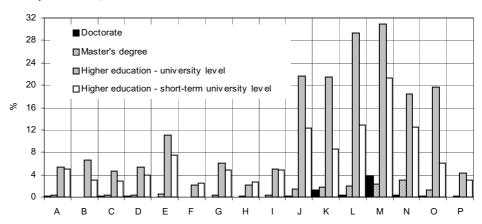
 $<sup>\</sup>overline{\phantom{a}}$  Figures from the labour force survey refer to the  $2^{nd}$  quarter of 2003, while the statistical employment register shows the situation as at end-September 2003.

Table: Average number of schooling years of persons in employment in Slovenia in 1995-2003

		Average	number	of schooli	ng years o	of persons	in emplo	ymentva	
	1995	1996	1997	1998	1999	2000	2001	2002	2003
Persons in employment according to the labour force survey	11.0	11.1	11.0	11.2	11.3	11.4	11.4	11.5	11.6
Persons in employment according to the SORS' register	11.0	11.0	11.1	11.1	11.2	11.2	11.3	11.4	11.4
Agriculture and fishing	10.3	10.5	10.5	10.6	10.6	10.7	10.6	10.4	10.3
Industry, mining, energy sector	10.1	10.2	10.2	10.3	10.3	10.4	10.4	10.4	10.5
Construction	10.2	10.1	10.0	10.0	9.9	9.9	9.9	9.9	9.9
Wholesale & retail trade, hotels & restaurants, transport	11.0	11.0	11.0	11.1	11.1	11.1	11.2	11.2	11.2
Financial intermediation, business services	12.2	12.2	12.2	12.2	12.3	12.3	12.4	12.5	12.5
Health and social work	11.9	11.9	11.9	11.8	11.8	11.8	11.9	12.0	12.5
Public administration, educatione	12.9	13.0	13.1	13.2	13.2	13.3	13.4	13.5	13.5
Other services	11.8	11.8	11.8	11.8	11.8	11.9	11.9	12.0	12.0

Source: the SORS.

Chart: Number of employees who completed a higher education broken down by activities, Slovenia in September 2003, %



Source: the SORS.

### Population with a completed secondary education

The trend of growing youth and adult enrolments in secondary and higher education continues. In the 2001/2002 school year, the number of students enrolled in secondary schools represented 95.3% of the total generation aged 16-19 (82.0% in 1995), while the number of adults in formal secondary education exceeded 20,000 (8,460 in 1995). In 2001, 79.2% of all people aged 16-19 completed a secondary education, of which 29.0% a vocational and 50.2% a technical or general secondary education, while 8.7% of the generation passed an additional final examination in 3+2 programmes. In 1995, for example, this share was 70.4%. Secondary school studies were also finished by 5,686 adults, 3.1 times more than in 1995. The number of students in higher education continued to rise. In the 2001/2002 academic year, undergraduate students (excluding pre-graduation students) represented over 50% of the total generation aged 20-24, while full-time students represented 34.4%. These shares increased further in 2002/2003. The number of enrolled students exceeded the goal of 35 students per 1000 people set in the National Higher Education Programme.

Hence, the high youth enrolment and increased adult enrolment in formal education helped improve the population's education structure. Those who have at least completed secondary education represented as much as 78% of the population aged 25-64 in 2002, according to the labour force survey (68.7% in 1995), and 75.9% according to the census (59.1% in 1991). The fastest increase was seen in the share of people who have finished the 4-5 year secondary school (general or technical programmes) and in the share of higher education graduates.

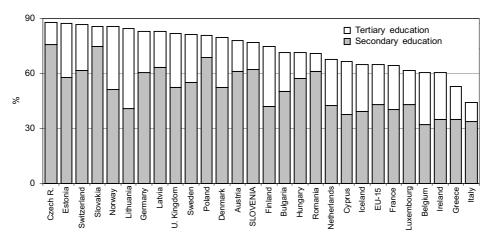
International comparisons are unreliable because of methodological differences, especially as regards secondary education, while the comparisons of tertiary education produce better results. Slovenia is still way behind the advanced and leading European countries as regards the share of its population with a completed tertiary education (see graph); further, the gap has increased over the last few years. The number of graduates remains relatively low despite the high level of enrolment. The average duration of education from enrolment to graduation is long, about 6 years, while the number of dropouts from tertiary education is still high.

Table: Percentage of the population aged 25-64 who completed secondary education in Slovenia in 1995-2002, %

			L	abour Fo	rce Surv	әу			Census
	1995	1996	1997	1998	1999	2000	2001	2002	2002
Population's education structure									
% of population with at least a secondary education	68.7	70.1	70.3	72.5	73.5	75.5	76.2	78.0	75.9
Secondary education:	54.5	56.7	56.4	57.2	57.9	59.5	60.0	60.5	58.8
vocational	28.8	30.5	30.4	30.6	30.0	28.3	28.9	28.9	31.0
technical or general	25.7	26.3	26.1	26.7	28.0	31.2	31.1	31.5	27.8
Tertiary education:	14.2	13.4	13.9	15.3	15.6	16.0	16.3	17.5	17.1
junior college	7.5	6.9	7.2	7.7	7.6	7.4	6.9	6.6	6.6
university	6.1	5.8	6.0	6.8	7.2	7.7	8.5	9.5	9.2
postgraduate studies	0.7	0.7	0.7	0.7	0.8	0.9	0.9	1.3	1.3
Indicators of youth education									
Finished secondary education (% of generation)	70.4	74.8	74.1	74.4	76.7	75.4	79.2	N/A	
Full-time graduates (% of generation)	17.8	19.9	19.9	19.6	22.4	21.7	22.0	27.3	
Enrolled in secondary school (% of total generation aged 16-19)	82.0	84.1	87.0	88.2	89.2	91.4	92.2	95.3	
Undergraduate students in higher education (% of total generation aged 20-24)	30.1	30.0	40.1	44.2	50.6	52.7	57.8	62.7	

Source: SORS, calculations by the IMAD Note: N/A - not available.

Chart: Percentage of the population aged 25-64 who completed secondary education in selected European countries in 2002



Source: Eurostat.

Analytical Appendix - Indicators

#### Internet use

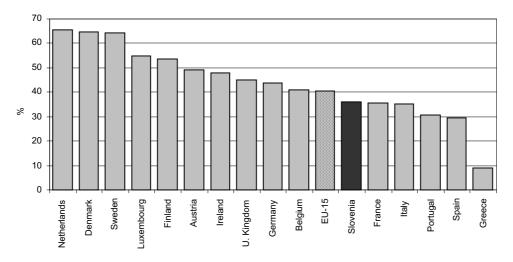
The latest figures show that Slovenia's gap in Internet use behind the EU average, typical of the period following 1998, narrowed slightly in 2002 and has stayed roughly the same since then. The information society experienced dynamic development in Slovenia in the second half of the 1990s. Slovenia was significantly above the average of EU candidate countries in terms of the share of Internet users and reached the EU average in terms of Internet penetration. In these comparisons, we used data on the number of general Internet users (those who have already used the Internet) relative to the total population aged over 15 from the Internet use survey for Slovenia (RIS); these data have been adjusted to the EU Flash Eurobarometer 135 survey. In 2003, there were 47% of general Internet users in Slovenia and 56.5% in the EU. The gap was 9.5 percentage points, about the same as in December 2002 (45% in Slovenia and 53% in the EU), but much less than in June 2002 (35% in Slovenia and 51% in the EU). Slovenia was still way above the average of acceding countries (excluding Malta and Cyprus), according to data from the SIBIS¹ project, but well below the highest ranking Estonia (59%), where Internet use was higher than in the EU on average (Vehovar, Jovan, Kragelj, 2003).

An important factor is access to the Internet, more specifically, access to the Internet from home, which has played an important role in expanding Internet use in the last few years as access costs have declined. Most Slovenian companies have access to the Internet (especially large and medium-sized ones<sup>2</sup>), as do schools. The share of households connected to the Internet is relatively low, however, it is rising. In June 2002, 36 out of 100 households had access to the Internet, 38% in December of the same year and 44% in October 2003.3 Throughout the given period, the gap behind the EU average (5 percentage points in 2003) was narrower than the gap in the number of Internet users because fewer family members used the Internet in Slovenia (Vehovar, Kragelj, 2003a). Important factors concerning Internet access from home are access costs and equipment; these costs have fallen in the past few years. In order to gradually introduce cost-recovery prices, the Telecommunications, Broadcasting and Postal Agency (TBPA4) lowered the price of access to the Internet in 2002 and concluded the process of lowering internetwork connection prices in 2003; these prices are now aligned with the EU average (TBPA). Inter-network connection prices are one of the key elements in creating competition in the telecommunications market, while the level of these prices has an important impact on shaping the price of communications services for the final consumer.

A factor of growing importance for further expansion of Internet use is broadband access; Slovenia still records a small share of users having broadband access, however, there are good opportunities for further development. In 2002, Slovenia recorded 0.84 connections to broadband Internet access (ADSL lines) per 100 people, which put Slovenia in the last third compared to the EU-15. Currently, there is only one provider of broadband access services (SIOL), which is owned by the dominant operator in the fixed telephony market (Telekom Slovenije). However, there is also an alternative broadband access network in Slovenia owned by ELES, an electricity distribution company, which could become a competitor to the ADSL connection. The TBPA is working towards encouraging competition in the broadband services market (ADSL technology) by having prepared a special model for leasing broadband access network capacities, mainly intended for niche operators.

The development of e-services plays an important role in expanding Internet use, however, Slovenia is way behind the EU average. The SIBIS research (Vehovar, Jovan, Kragelj, 2003) revealed that people show relatively high interest levels in using information society services in Slovenia compared to the EU, whereas the actual use of these services is much lower in Slovenia than in the EU, probably due to the inadequate supply of these services. The gap is the widest in using e-administrative services (e.g. tax returns, reporting to the police, car registrations, address changes etc), unsurprisingly, since these services are largely non-existent in Slovenia. Important changes in this field, leading to a further expansion of Internet use, may be stimulated by the E-administration Action Plan up until 2004. Wide differences between Slovenia and the EU are also seen in e-shopping (8% in Slovenia and 20% in the EU<sup>5</sup>), mainly due to the lack of supply of these services, and e-banking (7% in Slovenia and 14% in the EU).

#### Chart: Internet access of households in Slovenia and the EU-15, 2002



Sources: Eurostat (New Cronos) for EU members, and RIS for Slovenia.

Note: Data for Slovenia for June 2002. More recent data from the RIS are available for Slovenia (in October 2003, access reached 44% - see the text), while no data are available for the EU for the same period.

<sup>&</sup>lt;sup>1</sup> Statistical Indicators Benchmarking Information Society (SIBIS) is a project of the European Union within the Information Society Technology (1998-2002) programme.

<sup>&</sup>lt;sup>2</sup> Despite the relatively widespread access to the Internet among companies, they use complex technologies such as Intranet, Extranet and video conferences much less than their counterparts in the EU.

<sup>3</sup> The RIS data.

<sup>&</sup>lt;sup>4</sup> The TBPA began to operate in May 2002 in line with the Telecommunications Act.

<sup>&</sup>lt;sup>5</sup> Figures refer to January 2003 and show the share in the total population aged over 15.

### *Number of researchers per thousand labour force*

The number of researchers per thousand labour force edged up in 2001; Slovenia was still significantly below the EU average but ahead of all other EU acceding countries. In 1995-2001, the number of researchers (in the full-time equivalent) per 1000 labour force ranged between 4.2 and 4.8 in Slovenia. In 2001, the number was 4.6, higher than the year before (4.5) but equal to the number from 1999. As the number of researchers rose in the EU-15 in 1999-2001, Slovenia's gap behind the EU average increased from 0.7 in 1999 to 1.1 researchers in 2001. EU members with particularly big shares of researchers were Sweden and Finland, behind which Slovenia lagged by 5.5 and 9.2 researchers per 1000 labour force, respectively, in 2001. The lowest figures were seen in Italy, Greece, Portugal and Spain, all lagging behind Slovenia. Slovenia was also ahead of other EU acceding countries; it had 0.09 of a researcher more per 1000 labour force than Lithuania and 3.5 researchers more than Cyprus in 2001.

Young researchers provide important potential for a further rise in the number of researchers in Slovenia, however, their number rose modestly in the last few years and dropped significantly in 2001. The number of young researchers (in the full-time equivalent) fell by 11.9% in 2001 and their share shrank by 3.3 percentage points to 18.4% of all researchers. This interrupted the three-year trend of modest but steady growth in the number of young researchers, which began after a similar fall was seen in 1997. A sustained and strong rise in the number of young researchers could help Slovenia make important shifts in this area and reduce its gap behind the EU. The business sector should be actively engaged in both financing and employing young researchers (in 2001, out of 829 young researchers, only 45 or 5.4% worked in the business sector), which should be assisted by the government through appropriate mechanisms of encouraging mobility. In order to realise the Barcelona goals, both investment in R&D and the number of researchers will have to be increased.

After being interrupted in 2000, changes in the distribution of researchers across sectors evolved favourably in 2001: the share of researchers rose in the business and private non-profit sectors and fell in the government sector. The share of researchers working in the business sector rose gradually throughout the given period (1996-2001), except in 2000, and increased by 1.8 percentage points to 33.6% in 2001. The number of these researchers climbed by 9.5%. These trends are in line with priorities of the R&D sector, which envisage the share of researchers in the business sector to increase. The share of researchers employed in the private non-profit sector rose by a solid fifth in 2001, while the number of these researchers was up by as much as 26.4%. The number of researchers working in the government sector fell by 2.8%, while this sector's share shrank by 2.2 percentage points. In the higher education sector, the number of researchers rose by 3.1%, but this share stayed roughly the same (see table).

Despite the increase in the share of researchers employed in the business sector, the distribution of researchers across sectors is still widely different from that of the EU. Slovenia differs from the EU average mostly in its smaller share of researchers working in the business sector and its larger share of researchers in the government sector. In 2001, the share of the business sector was 17.7 percentage points smaller than in the EU (16.8 percentage points in 1996-2000 on average and 18.8 percentage points in 2000), while the share of the government sector was 19.6 percentage points larger (20.5

percentage points in 1996-2000 on average). A much smaller discrepancy was seen in the share of researchers working in the higher education sector; the EU's share was 5 percentage points larger than Slovenia's in 1996-2001 on average.

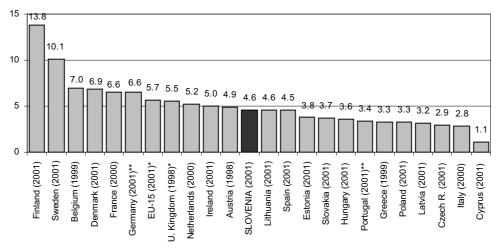
Table: Number of researchers in the full-time equivalent in Slovenia in 1996-2001

	No. of researchers		Resear	Researches broken down by sector of employment, %							
	per 1000 labour force <sup>1</sup>	No. of researches	Business sector	Government sector	Higher education sector	Private non-profit sector					
1996	4.8	4,489	30.5	35.2	31.4	2.8					
1997	4.2	4,022	34.0	34.8	28.4	2.8					
1998	4.4	4,285	34.0	35.0	28.8	2.2					
1999	4.6	4,427	34.8	34.1	29.5	1.6					
2000	4.5	4,336	31.8	34.5	30.9	2.8					
2001	4.6	4,498	33.6	32.3	30.7	3.4					

Sources: SORS, Rapid Reports (Research and Development, Science and Technology), various issues; Slovenia in Numbers 2003, p. 27, SORS; Eurostat, New Cronos database (Theme 9: Science and Technology, 18.11.2003); calculations by the IMAD.

Note: ¹ figures on the number of researchers per 1000 labour force for 1996-1999 are taken from the Eurostat's New Cronos database.

Chart: Number of researchers in the full-time equivalent per thousand labour force in Slovenia, other EU acceding countries and EU member-states



Sources: Eurostat, New Cronos database (Theme 9: Science and Technology, 26.04.2003); European Commission: Towards a European Research Area – Science, Technology and Innovation – Key Figures 2003-2004, p. 44; SORS: Slovenia in Numbers 2003, p. 27.

Notes: "Figures taken from Towards a European Research Area – Science, Technology and Innovation – Key Figures 2003-2004, "Figures are estimated, figures for matta are unavailable.

# Gross domestic expenditure on research & development

Gross domestic expenditure on research and development (expressed as a percentage of GDP) rose modestly in 1996-2000 and slightly more in 2001 when Slovenia's gap behind the EU average also narrowed. The average annual gross domestic expenditure on research and development (R&D) totalled 1.43% of gross domestic product in 1996-2001 and 1.57% of GDP in 2001 alone (the latest figure). Expenditure climbed by 0.1 of a percentage point in 2001 compared to 2000, the most after 1996 since when compatible data in terms of methodology have been available (see table). The value of this indicator rose more in Slovenia than in the EU, as a result the gap behind the EU average narrowed to 0.41 of a percentage point from 0.48 of a percentage point seen in 2000 (the same as in 1996-2001 on average). Compared to individual EU members, Slovenia lagged the most behind Finland and Sweden, with the gap totalling 1.83 and 2.70 percentage points, respectively, but was ahead of Ireland, Italy, Spain, Greece and Portugal. Slovenia was also ahead of all EU acceding countries: the gap ranged from 0.27 of a percentage point against the Czech Republic to 1.31 percentage points against Cyprus.

As regards the composition of sources for R&D expenditure, a rise was seen in the share of the business sector and a fall in the share of the government sector in 2001. The business sector has made over half of all investment in R&D in Slovenia, while its share has increased since 1996, except in 2000 when the business sector's investment in R&D fell in real terms. Investment of the business sector in R&D rose again in 2001, up 15.2% in real terms, recording the biggest rate of increase in the given period if 1999 is excluded. As a result, the share of the business sector in total expenditure increased by 1.3 percentage points to 54.7%, however, this was still less than in 1999 (56.9%). At the same time, the share of the government sector shrank by 2.9 percentage points. These structural shifts again brought Slovenia closer to its R&D priorities after diverging from the set objectives in 2000. Namely, the priority is to enhance the role of the business sector in promoting technological advancement. Slovenia's structure of R&D expenditure also drew closer to that of the EU (the share of Slovenia's business sector was 1.4 percentage points under the EU average, while the share of the government sector was 3.1 percentage points above the average). However, it should be noted that both the EU and Slovenia are lagging behind the Barcelona goals, according to which the business sector should account for two-thirds of all R&D expenditure, totalling 2% of GDP, by 2010.

As in the EU, most R&D activity is carried out by the business sector in Slovenia, however, this sector is lagging the most behind the EU average in terms of the level of expenditure allocated to R&D activity. In 2001, the Slovenian business sector allocated 0.90% of GDP for carrying out R&D, 0.08 of a percentage point more than in 2000. Hence, it reduced the gap behind the EU average by 0.05 of a percentage point (in the EU the business sector allocated an average of 1.30% of GDP in 2001 and 1.27% of GDP in 2000 for performing R&D); further, it contributed the most to the 0.07 of a percentage point narrower gap behind the EU in total gross domestic expenditure on R&D in 2001. The EU's business sector accounted for about two-thirds of total expenditure on performing R&D activity, while the share of Slovenia's business sector was close to 8 percentage points lower. Similar differences in the level of funding earmarked for performing R&D were seen in other sectors (the government and higher education sectors and funds from abroad), however, these gaps were smaller.

In 2001, positive shifts were seen in the structure of R&D costs. As in the past few years, most R&D costs were labour costs, but their share fell by 3.7 percentage points to 56.1%

compared to 2000. The share of investment costs (purchases of instruments and equipment, buildings and land, licences, commission of studies, and patent registrations) increased from 9.7% in 2000 to 12.4% in 2001. Other current costs made up close to one-third of all R&D costs

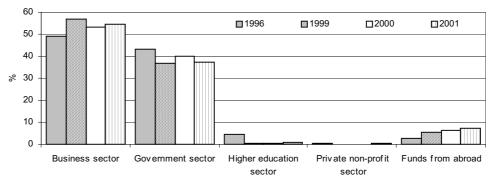
Table: Gross domestic expenditure on R&D in Slovenia, other EU acceding countries and EU member-states, as a % of GDP, 1996-2002

	1996	1997	1998	1999	2000	2001	2002
Slovenia <sup>2</sup>	1.36	1.35	1.40	1.44	1.47	1.57	-
EU-15	1.88	1.87	1.88	1.92	1.95	1.98	1.99
Austria	1.60	1.71	1.78	1.85	1.84	1.90	1.94
Belgium	1.80	1.87	1.90	1.96	2.04	2.17	-
Denmark	1.85	1.94	2.06	2.10	2.26	2.40	-
Finland	2.54	2.71	2.88	3.23	3.40	3.40	3.49
France	2.30	2.22	2.17	2.18	2.18	2.23	2.20
Greece	-	0.51	-	0.67	-	0.64	-
Irland	1.32	1.29	1.25	1.20	1.15	1.17	-
Italy	1.01	1.05	1.07	1.04	1.07	-	-
Luxembourg	-	-	-	-	1.71	-	-
Germany	2.26	2.29	2.31	2.44	2.49	2.51	2.51
Netherlands	2.03	2.04	1.94	2.02	1.90	1.89	-
Portugal	-	0.62	0.69 <sup>1</sup>	0.75	0.791	0.84	0.781
Spain	0.83	0.82	0.89	0.88	0.94	0.96	-
Sweden	-	3.55	3.62	3.65	-	4.27	-
U.K.	1.90	1.82	1.81	1.85	1.85	1.89	1.84
Acceding countries <sup>3</sup>	0.80	0.83	0.83	0.83	0.82	0.83	-
Lithuania	0.52	0.56	0.56	0.52	0.60	0.69	-
Latvia	0.47	0.42	0.45	0.40	0.48	0.44	-
Estonia	-	-	0.61	0.75	0.66	0.78	-
Cyprus	-	-	0.23	0.25	0.25	0.26	-
Czech Republic	1.04	1.16	1.24	1.24	1.33	1.30	-
Hungary	0.65	0.72	0.68	0.69	0.80	0.95	-
Poland	0.71	0.71	0.72	0.75	0.67	0.68	-
Slovakia	0.92	1.09	0.79	0.66	0.65	0.64	0.59

Sources: Eurostat - New Cronos Database (Theme 0: Data for Dissemination, 26.02.2004); OECD Science, Technology and Industry Scoreboard 2003, p. 164; SORS.

Notes: 'this figure is taken from the OECD's Science, Technology and Industry Scoreboard 2003; <sup>2</sup>figures for 1996-2000 are corrected in line with the revised GDP estimates for the same period; <sup>3</sup>data for Malta are unavailable.

Chart: Structure of financial sources for gross domestic expenditure on R&D in Slovenia in 1996, 1999, 2000 and 2001



Source: SORS

IMAD

Development Report 2004 100 Analytical Appendix - Indicators

# Competitiveness of the economy

#### Labour productivity

After rising relatively fast in the 1990s, labour productivity faltered in 2001 and picked up again in 2002 mainly due to the fall in employment. In 1993-2000, labour productivity increased by an average annual rate of over 4% and by over 7% in manufacturing. In 2001, productivity growth (expressed in terms of gross domestic product per person employed in the full-time equivalent) declined to 2.4%, recording the lowest rate of increase after 1993. This slowdown was mainly due to sluggish economic growth, while employment continued to rise from 1999 at the same time. The subdued productivity growth in 2001 interrupted the continuous trend and diverged from the scenario of the Strategy for the Economic Development of Slovenia 2001-2006. However, this was probably a cyclical development. In 2002, productivity growth strengthened to 3.5% and 6.6% in manufacturing. Given the still sluggish economic growth, this acceleration was mainly due to contraction in employment, similar to that seen in the early period of transition. In 2003, economic growth continued to be modest (2.2% in the first three quarters), while employment kept falling. This suggests that productivity growth was again relatively low: in the first nine months productivity increased by 2.5% over the same period the year before.

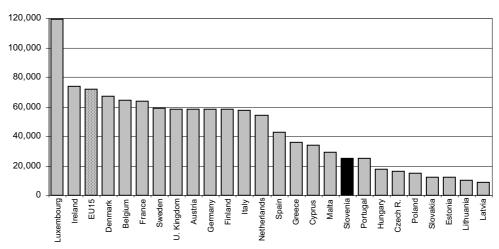
Slovenia's gap behind the average productivity growth in the EU continued to narrow, however, any further long-term narrowing will be impossible without raising the competitiveness of the Slovenian economy. After 1993, the average productivity growth in the EU was lower than that of Slovenia, while in 2001 and 2002 it was weaker than in the preceding years. Recording EUR 22,411 per person employed in the full-time equivalent, Slovenia achieved 46.6% of the average productivity of the EU in 2002 (current prices) and narrowed the gap by another 1.3 percentage points from the year before (see table). In order to catch up with the EU, Slovenia will have to sustain high productivity growth in the future. To this end, it will be necessary to boost competitiveness, which will enable greater export expansion and growth, while competitiveness should be underpinned by a qualified labour force and advanced technology in production.

Tabela: Labour productivity<sup>1</sup> in Slovenia and the EU in 1995-2002, %

	1995	1996	1997	1998	1999	2000	2001	2002
Real labour productivity growth, %								
Slovenia	3.0	4.8	5.0	3.7	4.6	2.9	2.4	3.5
EU	1.7	1.4	1.5	1.2	1.1	1.5	0.4	0.5
Slovenia's productivity level in current prices, EU=100	36.0	36.5	39.7	42.2	43.7	44.3	45.2	46.5

Sources: SORS, Eurostat.
Note: ¹ GDP per employee in the full-time equivalent.

Chart: Productivity (GDP per employee, current prices) in selected European countries and Slovenia in 2002



Sources: Eurostat, calculations by the IMAD.

#### Unit labour costs

In 1995-2000, labour costs relative to gross domestic product and value added per employee fell significantly in the Slovenian economy, and even more so in manufacturing. Unit labour costs expressed as labour costs to gross domestic product and value added fell by 12.3% and 14.5%, respectively, in the Slovenian economy, and by as much as 18.7% in manufacturing. Following the 2.1% fall in unit labour costs relative to gross domestic product in the EU-15 and the 3.8% fall in the EU-12, the Slovenian economy's competitiveness climbed by 10.2 percentage points against the former and 9.5 percentage points against the latter.

In 2001-2002, unit labour costs relative to gross domestic product and value added continued to decline slightly in both the economy and manufacturing. In the Slovenian economy, the average annual fall in unit labour costs was 0.7% relative to gross domestic product (down 2.6% in 1995-2000) and 0.6% relative to value added (down 3.1%). In Slovenian manufacturing, the average annual fall in unit labour costs relative to value added was slightly stronger than in the total economy (down 1.3%), but this fall slackened the same as in the total economy (down 4.1% annually in 1995-2000). The slow improvement in competitiveness, as measured by unit labour costs relative to gross domestic product and value added, resulted from the fast rise in compensation per employee and the slow rise in labour productivity. As in 2000, in 2002 one unit of gross domestic product was produced by 0.64 of a unit of labour costs (0.60 of a unit in the EU-15 and 0.59 of a unit in the EU-12), while one unit of value added was generated by 0.74 of a unit of labour costs. Slovenian manufacturing produced one unit of value added with 0.67 of a unit of labour costs (0.68 of a unit in 2000).

A comparison with EU members shows that the Slovenian economy's competitiveness continued to improve against the average of the EU-15 and EU-12 in 2001-2002, however, the pace of improvement slowed down significantly. Following the 0.1% average annual fall in unit labour costs relative to gross domestic product in the EU-15 and the 0.2% fall in the EU-12, the Slovenian economy's competitiveness climbed by 0.6 of a percentage point against the former (by 2.4% annually in 1995-2000) and 0.5 of percentage points against the latter (by 2.1% annually in 1995-2000). Compared to 14 EU members (data for Portugal for 2001 and 2002 is unavailable), the Slovenian economy's competitiveness measured by unit labour costs relative to GDP only fell against Ireland and, compared to the seven acceding countries for which data are available, it fell against Lithuania, Estonia and Poland (see chart).

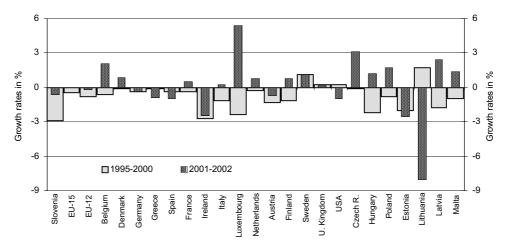
#### Table: Unit labour costs in Slovenia and the EU, 1996-2002

Growth rates, %	1996	1997	1998	1999	2000	2001	2002			
Unit labour costs per unit of GDP <sup>1</sup>										
Slovenian economy	-4.3	-5.0	-2.5	-2.5	1.4	-0.1	-1.2			
EU-15	-0.9	-0.8	-0.9	0.0	0.5	0.3	-0.4			
EU-12	-0.9	-1.2	-1.5	-0.1	-0.1	0.0	-0.3			
Unit labour costs per unit of value added <sup>2</sup>										
Slovenian economy <sup>3</sup>	-4.4	-6.3	-2.4	-1.8	-0.4	-0.4	-0.8			
Slovenian manufacturing³	-6.4	-7.9	-2.6	-2.6	-0.6	-0.9	-1.7			

Sources: SORS: National Accounts Statistics; Eurostat.

Notes: ¹ compensation per employee in current prices divided by gross domestic product per employee in current prices; ² compensation per employee in current prices divided by value added per employee in current prices; the IMAD's estimate for 2001; ³ manufacturing industries total.

Chart: Growth in labour costs per unit of gross domestic product in Slovenia and EU members in 1995-2000 and 2001-2002 (annual average values)



Sources: SORS: National Accounts Statistics; Eurostat.

#### Market share

Market share is an indicator of an economy's export competitiveness. It shows whether growth or a fall in exports is the result of an improvement or deterioration in its export competitiveness, or whether this is due to the growth or decline of export markets.

The fall in Slovenia's market share in the main trading partners (down from 0.60% in 1995 to 0.49% in 2000) reveals that the dynamic merchandise export growth in 1995-2000 (up by an annual rate of 8% in real terms) was more the result of export market growth than any improvement in the Slovenian economy's export competitiveness. In 1995-1998, Slovenia's competitiveness measured by the share of its merchandise exports in export markets deteriorated because of the worsening market position in some emerging trading partners, particularly Croatia, Russia and Hungary, while in 1999-2000 this was also due to reduced competitiveness in the main advanced markets. Among the advanced industrialised trading partners, Slovenia's market share suffered a big fall in the German, French and Italian markets. The drop in Slovenia's market share in 1995-2000 was at least partly due to the predominantly defensive restructuring of the corporate sector and the related processes of rationalisation, reducing capacity, discontinuing non-profitable product ranges, and other measures aimed at adjusting production to changes in market and other conditions. As far as EU candidate-countries are concerned, Hungary increased its market share in the EU in 1995-2000 about 1.3 times, Slovakia 0.9 times, while the Czech and Polish market shares were respectively about one-third and onefifth larger.

In 2001-2002, Slovenia's aggregate market share increased again (to 0.544%). Against the background of the slowing economic activity in the main trading partners, the sustained robust growth in exports of goods (up 6.7% in real terms annually) was the result of improved export competitiveness. The main factor leading to the reversal of the trend was the rise in Slovenia's market share in Germany, the most important trading partner, as well as Italy where the rise took place one year later. Growth in the French and Austrian markets continued from the previous years. In Central and Eastern Europe, Slovenia's market share shrank slightly in the Russian market in 2002 after two years of expansion, as it did in the Croatian market, but the market share increased notably in CEFTA-4 in the same year. Hence, in 2001-2002 the competitive edge of Slovenian exporters improved considerably in non-EU markets as Slovenia's global market share, albeit much smaller than that in Europe, rose twice as fast (in 2002 it was 0.165% in the world and 0.251% in the EU). Broken down by groups of industrial products, the biggest market share growth was seen in machinery and transport equipment, and textiles. Market share growth was below the average in iron and steel, chemicals (following the fall in the market share in the EU), other semi-manufactures, and other consumer goods. The market share of clothing articles continued to drop sharply. Slovenian exporters strengthened their position in EU markets compared to their counterparts from non-EU countries, however, the former increased their market shares less than CEFTA-4, Central and Eastern European countries, the Baltic States, and the former Soviet Union (by 7.9% compared to 24.6% and 18.2%).

In the first nine months of 2003, Slovenia's aggregate market share increased (0.551%), however, this increase was much weaker than in 2002 and 2001. This slow growth was due to the shrinking market shares in Germany and France and slowly growing market shares in CEFTA-4. Slovenia's market share continued to grow rapidly in the Italian and Austrian markets, and started rising again in the Russian market, albeit at a modest rate. The fall in market share in Croatia slowed down slightly. In the EU markets, growth in Slovenia's market share continued to lag behind the growth of the Czech, Hungarian, Polish and Slovakian market shares.

In the countries of former Yugoslavia, which are not included in the aggregate market share, Slovenia's market share continued to increase in all countries except Macedonia. In Serbia and Montenegro, Slovenia's market share grew from 4% in 2000 to 7.1% in the first half of

2003, and from 12.1% in 2000 to 13.6% in 2002 in Bosnia and Herzegovina. The market share in Macedonia fell to an all-time low in 2003 (6.6% in the first six months) after having risen modestly for two years (from 7.6% in 2000 to 7.8% in 2002).

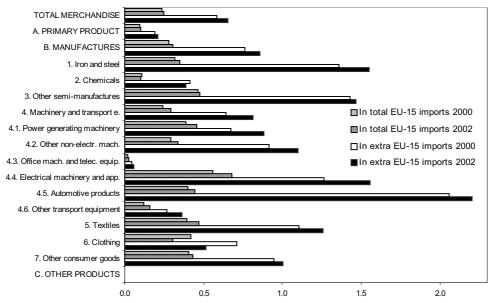
Table: Slovenia's market share<sup>1</sup> in the main trading partners, %, 1995-2003

	1995	1996	1997	1998	1999	2000	2001	2002	2003 <sup>2</sup>
TOTAL	0.596	0.579	0.578	0.581	0.520	0.488	0.510	0.544	0.551
EU-7	0.439	0.432	0.449	0.462	0.429	0.406	0.415	0.429	0.432
Germany	0.541	0.554	0.553	0.546	0.554	0.479	0.499	0.524	0.491
Italy	0.588	0.533	0.607	0.575	0.542	0.506	0.496	0.521	0.583
France	0.251	0.219	0.176	0.264	0.171	0.204	0.213	0.228	0.201
Austria	0.808	0.818	0.872	0.913	0.895	0.950	0.983	1.004	1.041
UK	0.086	0.056	0.048	0.051	0.053	0.055	0.078	0.074	0.077
Netherlands	0.066	0.068	0.069	0.076	0.076	0.076	0.079	0.089	0.099
Belgium	0.045	0.046	0.054	0.096	0.081	0.055	0.056	0.046	0.044
USA	0.034	0.030	0.027	0.027	0.024	0.021	0.021	0.024	0.034
Switzerland	0.089	0.087	0.092	0.097	0.111	0.123	0.116	0.204	0.181
Croatia	11.864	10.978	9.194	9.722	8.628	8.726	8.746	8.412	8.286
Czech Republic	0.523	0.530	0.541	0.518	0.566	0.468	0.461	0.466	0.450
Hungary	0.746	0.649	0.566	0.549	0.519	0.524	0.460	0.490	0.532
Poland	0.361	0.382	0.366	0.385	0.414	0.463	0.481	0.526	0.534
Slovakia	0.593	0.513	0.546	0.564	0.548	0.543	0.564	0.755	0.819
Russia	0.500	0.433	0.444	0.394	0.319	0.426	0.524	0.499	0.508

Sources: SORS, OECD, WIIW.

Notes: I market shares are calculated as the weighted average of Slovenia's merchandise exports in the imports of the 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). 2 data for nine months.

Chart: Slovenia's market shares in the EU-15 in 2000 and 2002, %



Sources: SORS, WTO, calculations by the IMAD.

# Composition of merchandise exports according to factor intensity

Monitoring changes in the structure of merchandise exports in relation to the factors of production used is very important from the aspects of the competitiveness of domestic production in international markets as well as the environmental impact. As indicated by theory, an economy with a small primary sector and few natural resources, such as Slovenia's, should specialise in making products with a high content of produced inputs (human resources, technology) and a low content of natural inputs (physical labour and natural resources).

Over the last few years, the structure of Slovenia's merchandise exports recorded the biggest increase in medium- and high-technology-intensive products (created or derived factors of competitiveness)<sup>1</sup>, which is favourable in terms of improving the economy's competitiveness. In 1995-1998, the share of these products in total merchandise exports increased more in Slovenia than in the EU (up by 5.3 and 3.7 percentage points, respectively) mainly due to increased exports of medium-technology-intensive products (passenger cars, household equipment, pumps and compressors). In 1998, medium- and high-technology-intensive products accounted for 52% of Slovenia's merchandise exports, 6.5 percentage points less than the average of the EU-15. In 1999-2002, growth in Slovenia's exports of medium- and high-technology-intensive products slowed down more than that of the EU-15 average. While the share of exports involving created factors of production increased by 1.8 percentage points annually in Slovenia in 1995-1998 (by 1.2 percentage points in the EU), growth in the share of these exports declined to 0.8 of a percentage point annually in 1999-2002 (0.9 of a percentage point in the EU). In 2002, medium- and high-technology-intensive products accounted for 54% of Slovenia's merchandise exports (61.9% in the EU-15); the gap behind the EU average was close to that seen in 1995 (about 8 percentage points), according to the latest available data. It is encouraging that hightechnology-intensive products relative to total exports increased more in Slovenia than in the EU on average over the last few years. In 2002, the share of high-technology-intensive products in total exports was modest in Slovenia compared to the EU-15 (16.5% and 29.0%, respectively), however, this share rose faster in Slovenia than in the EU-15 in 1999-2002 (up by an average annual rate of 0.5 and 0.4 of a percentage point, respectively) mainly thanks to the growing portion of pharmaceutical products and telecommunications equipment. In 2003, the share of these products increased notably (by 1.6 percentage points) so high-technology-intensive products accounted for 18.1% of Slovenia's total exports of goods.

The share of low-technology-intensive products and labour-intensive products<sup>2</sup> has been declining steadily since 2000. In 2002, these products accounted for 30.0% of Slovenia's exports of goods (16.7% in the EU-15) after their share had fallen by 1.6 percentage points since 2000 (by about 0.8 of a percentage point annually). The importance of these products in total merchandise exports continued to decline in 2003 (see table).

From the point of view of sustainable development, resource-based manufactures<sup>3</sup> are the most important. In 1995-1999, the share of these products in Slovenia's merchandise exports shrank more slowly than in the EU-15; this share has stagnated since then in Slovenia but has dropped intensively in the EU-15. In 1995-1998, the share of exports containing a high level of natural resources fell by about 0.4 of a percentage point each year, while in 1999-2002 the proportion of these exports fell by an average of just 0.2 of a percentage point annually. According to figures for 2003, resource-based exports retained the share of the preceding year. In 1995, Slovenia's resource-based exports relative to total exports of goods were 3.0 percentage points less than the EU-15 average. However, Slovenia's share equalled the average share of the EU-15 in 2002 (14.6%) because Slovenia's exports of resource-based products declined much less than in the EU. The main groups of resource-based products in Slovenia's exports of goods were: aluminium, finished mineral manufactures, electricity, rough and worked wood,

veneer and other manufactured wood, wood manufactures, and non-alcoholic and alcoholic beverages. The share of these products began to decline more slowly after 1999 as a result of growing shares of aluminium, electricity and beverage exports.

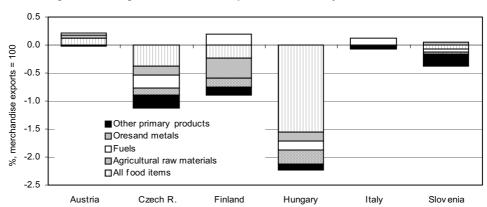
Table: Structure of merchandise exports by factor intensity in Slovenia and the EU in 1995-2003, %

		1995	1996	1997	1998	1999	2000	2001	2002	2003
	Slovenia	16.6	16.1	16.6	15.4	15.1	15.3	15.1	14.6	14.6
Resource-based	EU-15	19.6	19.5	18.8	17.3	17.3	18.0	17.5	14.6 14.6 20.1 9.9 9.9 6.8 37.5 32.9 16.5	-
Labour-intensive	Slovenia	25.6	24.2	23.0	22.5	22.8	21.7	21.4	20.1	18.6
	EU-15	11.8	11.6	11.6	11.3	10.9	10.2	10.3	9.9	-
	Slovenia	9.7	9.2	8.9	8.8	9.1	9.9	9.8	9.9	10.1
Low-technology intensive	EU-15	7.9	7.5	7.3	7.3	6.9	6.7	6.7	6.8	-
Medium-technology intensive	Slovenia	31.9	33.6	34.5	37.3	36.7	36.4	36.4	37.5	37.3
	EU-15	30.4	31.3	31.0	31.7	31.3	30.0	30.5	32.9	-
High-technology intensive	Slovenia	14.8	15.5	15.7	14.7	14.9	15.3	15.9	16.5	18.1
	EU-15	24.3	24.9	26.0	26.8	27.8	29.2	29.1	29.0	-

Sources: United Nations Conference on Trade and Development: "Handbook of Statistics 2003, Trade structure by product and country group, Classification of world merchandise exports: Trade and Development Report 2002, Annex 1 to Chapter III, Report by the secretariat of United Nations Conference on Trade and Development, IMAD's calculations.

Note: Classification of product groups into different categories is based on the work done by United Nations Conference on Trade and Development: Classification of world merchandise exports, Trade and Development Report 2002, Annex 1 to Chapter III; a few items are not classified so the sum of the five groups can be less than 100.

Chart: Average annual change of resource-based exports broken down by countries in 1997-2001, %



Source: UNCTAD, Handbook of Statistics, 2002

The group of technology-intensive manufactures comprises goods with the highest shares of R&D expenditure in value added (chemicals, plastic products, telecommunications equipment, medical, scientific and measurement equipment, photographic supplies and equipment). The distinction between technology-intensive products and human-capital-intensive products (Group IV) is the most difficult to make because both generally require more sophisticated inputs. Human-capital-intensive products only include products with low shares of R&D expenditure in value added relative to technology-intensive products (paints, rubber, paper, radio and television equipment etc).

<sup>&</sup>lt;sup>2</sup> The group of labour-intensive manufactures comprises products with the lowest value added per employee such as clothing, textile products, furniture, and glass.

<sup>&</sup>lt;sup>3</sup> The group of products involving intensive exploitation of natural resources is characterised by low value added per unit of production, a high content of natural resources, and relatively simple production technology: food, beverages, raw materials, mineral fuels, animal and vegetable fats, leather, veneers and other manufactured wood, ferrous and non-ferrous metals,

## Gross fixed capital formation relative to GDP

Investment demand increased significantly in Slovenia in the second half of the 1990s and peaked in 1999. In that year, gross fixed capital formation represented 26.4% of GDP, 6 percentage points more than in 1995. In 2000, investment activity slowed down and gross fixed capital formation relative to GDP shrank to 25.7%. As regards the technical structure of investment, investment in intangible fixed assets strengthened the most in 1995-2000, mainly investment in software, which otherwise represented a relatively small share of all investment in fixed assets. Growth was mostly fuelled by investment in buildings and constructions and investment in machinery and equipment. Growth was related to accelerated motorway construction, as well as the construction of industrial buildings and trade and services buildings, while growth in residential building construction was relatively modest, but still 32.6% higher in 2000 than in 1995. A strong increase was also seen in investment in electrical machinery and electronic equipment, chiefly in 1997-1999.

After faltering in 2000, gross fixed capital formation fell in 2001 and rebounded slightly in 2002, so its share in GDP dropped in both 2001 and 2002. The share of gross fixed capital formation relative to GDP was 24% in 2001, 1.7 percentage points less than in 2000, and fell by a further 1.4 percentage points in 2002 to 22.6%. In 2001, these negative trends were largely due to lower activity in constructing transport infrastructure and dwellings, while investment in machinery and equipment was sustained (the biggest growth was seen in investment in office machinery and computer equipment, while investment in other electrical machinery and electronic equipment slumped). In 2002, investment in machinery and equipment slowed down due to the unfavourable international economic conditions, while remaining positive. Investment in buildings and constructions was lower than the year before despite the intensified motorway construction. This was due to the fall in building construction, seen in both residential and non-residential construction.

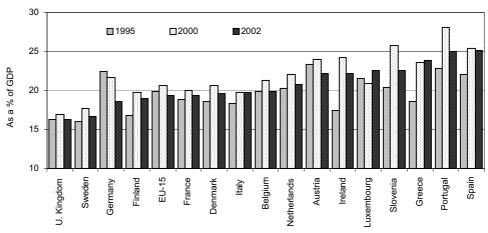
If we make an international comparison, Slovenia's share of gross fixed capital formation in GDP was above the EU average in 2002, the same as before, and somewhere in the middle of EU acceding countries. Compared to other EU acceding countries, in 1995 Slovenia's gross fixed capital formation relative to GDP was lower than in the Czech Republic, Malta, Estonia, Slovakia and Lithuania, however, the accelerated investment activity in the second half of the 1990s helped Slovenia to lag behind only the Czech Republic and Slovakia in 1999. The investment slowdown seen in the next two years again put Slovenia in 6th place in 2002, the same as in 1995, while Lithuania was replaced by Hungary in 5th place. As in 1995-2001, in 2002 Slovenia recorded a higher share of gross fixed capital formation in GDP than the EU average, which is not surprising given that the EU is better equipped with capital goods. Slovenia was furthest away from the EU average in 1999, however, the investment slowdown seen in the last two years caused this positive gap to narrow slightly, but it was still wider than in 1995.

Table: Gross fixed capital formation relative to gross domestic product in Slovenia, EU-15 and EU acceding countries in 1995-2002, %

	1995	1996	1997	1998	1999	2000	2001	2002
Slovenia	20.4	21.4	22.7	23.6	26.4	25.7	24.0	22.6
EU-15	19.8	19.6	19.4	19.9	20.2	20.6	20.2	19.4
EU acceding co	ountries		•	•	•	•		
Cyprus	19.2	20.4	19.0	19.2	18.1	17.5	17.3	18.7
Czech Rep.	32.0	32.0	30.6	29.1	27.8	27.4	27.5	25.9
Estonia	25.9	26.7	28.1	29.6	24.9	25.4	26.5	28.5
Hungary	20.1	21.4	22.2	23.6	23.9	24.1	23.6	23.0
Lithuania	22.0	21.9	23.5	24.6	22.6	19.2	20.6	20.7
Latvia	15.2	18.3	18.8	27.3	25.2	26.5	27.0	26.4
Malta	31.9	28.7	25.3	24.5	23.4	26.2	23.2	20.9
Poland	18.6	20.7	23.5	25.2	24.5	23.9	20.9	19.2
Slovakia	25.0	32.2	34.2	36.1	29.6	25.9	28.8	29.8

Source: Eurostat (New Cronos).

Chart: Gross fixed capital formation relative to GDP in 1995, 2001 and 2002 for Slovenia and EU memberstates



Source: Eurostat (New Cronos).

## Foreign direct investment

The share of inward FDI stock in GDP climbed from 9.5% to 16.8% in 1995-2002, while the share of outward FDI in GDP jumped from 2.6% to 6.1%. This shows the growing importance of FDI for the inward and outward internationalisation of the Slovenian economy, however, this conceals the stagnant FDI inflows up to and including 2000, the very low FDI inflows seen again in 2003, and the still modest FDI outflows. Both inward and outward FDI surged in 2001. Inward FDI registered record levels in 2002, when inflows totalled as much as EUR 1,706.9 million. The high FDI inflows were underpinned by foreign acquisitions, primarily the takeover of Lek, a pharmaceuticals company, by a Swiss company Novartis, and the purchase of a 34% stake in the NLB bank by a Belgian KBC bank. FDI outflows dropped from the record amount of EUR 161.2 million in 2001 to EUR 98.7 million in 2002. In 2003, when there were no major foreign acquisitions, barely notable FDI inflows were recorded, totalling EUR 160.4 million. This again confirms that Slovenia is unable to attract greenfield FDI. On the other hand, 2003 saw record levels of FDI outflows, totalling EUR 269.4 million.

As far as inward FDI is concerned, a comparison with EU member-states and EU acceding countries shows that Slovenia is among countries with the lowest shares of FDI stock in GDP. The only EU members to record lower shares in 2002 were Italy and Greece, while all candidate-countries recorded higher shares of FDI in GDP than Slovenia. EU candidate-countries with the highest shares of FDI in GDP were Estonia (65.9%), the Czech Republic (54.8%), Slovakia (43.2%) and Hungary (38.2%). All countries covered in the analysis significantly increased their shares of FDI stock in GDP in 1995-2002: up 18.2 percentage points in the EU as a whole and up 7.3 percentage points in Slovenia. EU members that saw weaker growth in FDI stock than Slovenia (expressed as a percentage of GDP) were just Greece and Italy. Most candidate-countries recorded increases of 15 percentage points or more, with the Czech Republic and Estonia seeing growth of over 40 percentage points. In addition to Slovenia, this share increased the least in Hungary, going up by 11.5 percentage points. Therefore, despite the significant rise in its FDI stock at the end of 2002, Slovenia is still a country with a relatively low share of FDI in its GDP.

Slovenia performed much better compared to other candidates in the area of outward FDI. Two candidate countries – Estonia and Hungary – nevertheless overtook Slovenia in 2002. Further, the shares of outward FDI in GDP rose much faster in Estonia and Hungary in 1995-2002. As expected, Slovenia was way behind EU member-states in terms of outward FDI relative to GDP.

The analysis of the degree of internationalisation of the Slovenian economy shows some interesting results if we look at Slovenia's shares in different global macroeconomic aggregates. In 2002, these shares were as follows: (i) global FDI inflows (2000-2002): 0.0750% (an increase of 0.0525 over the year before); (ii) global inward FDI stock: 0.0573% (an increase of 0.0104); (iii) global FDI outflows (2000-2002): 0.0119% (an increase of 0.0038); (iv) global outward FDI stock: 0.0215% (an increase of 0.0007); (v) global GDP: 0.0681% (an increase of 0.0091); and (v) global exports: 0.1632% (an increase of 0.0112). What stands out is the wide difference between the high share in exports and the low share in inward and outward FDI. *The Slovenian economy's internationalisation primarily takes place through international trade rather than FDI*. It should be noted that Slovenia increased its shares in all indicators in 2002 over the year before; the biggest rise was seen in FDI inflows as a result of the significant individual inflows seen in 2002.

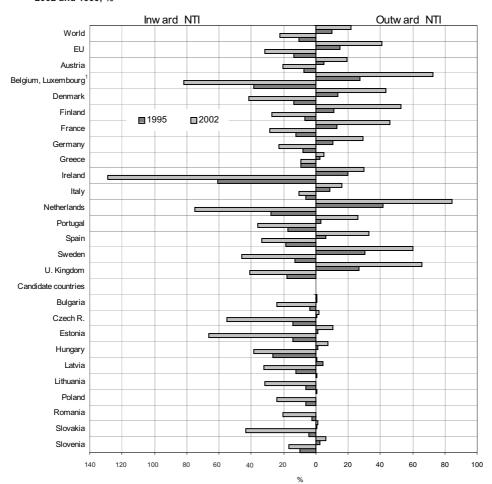
Table: Flows and stocks of inward and outward FDI¹ in Slovenia in 1994-2002², EUR million

	1994	1995	1996	1997	1998	1999	2000	2001	2002
Inward FDI	1001	1000		1001	1000	1000	2000	2001	
Year-end stock	1,080.8	1,376.0	1,611.6	1,999.8	2,369.5	2,675.0	3,109.8	2,952.4	3,918.1
Annual inflows <sup>3</sup>	98.3	117.4	138.2	294.9	194.3	99.2	149.1	412.4	1,706.9
Stock as % of GDP	9.2	9.5	10.7	12,4	13.6	14.2	15.1	13.5	16.8
Outward FDI									
Year-end stock	288.6	382.3	370.6	416.2	542.8	624.7	825.3	1,139.2	1,416.9
Annual outflows4	10.9	7.8	-5.6	-27.7	4.9	-44.7	-71.7	-161.2	-98.7
Stock as % of GDP	2.5	2.6	2.5	2.6	3.1	3.3	4.0	5.2	6.1

Source: Bank of Slovenia.

Notes: 'FDI whereby a foreign investor holds a 10% or higher stake in a company; <sup>2</sup>figures for the period after 1996 include the foreign direct investment of indirectly affiliated companies; <sup>3</sup>from 1995 onwards data on reinvested earnings are also included in inflows; <sup>4</sup>a negative sign denotes outflows.

Chart: Inward and outward FDI stock as a percentage of GDP in EU member-states and candidate-countries in 2002 and 1999, %



Source: UNCTAD 2003. Note: 1 a figure for 2001.

#### Total assets of banks

The banking sector's level of development measured by the total assets of banks relative to gross domestic product is increasing from year to year. In 2002, investment in securities rose fastest for the second year running, while lending activity strengthened notably in 2003. In 2002, the banks' total assets relative to gross domestic product increased by 4.6 percentage points to 86.4%, while the banking sector's total assets climbed by 17.5%. Loans to the non-banking sector represented the largest share of banks' total assets, equalling 47.7% (49.4% in 2001). They climbed by 13.5% and added 6.7 percentage points to the overall growth seen in banks' total assets. The biggest growth, on the other hand, was seen in investment in non-tradable debt securities, which rose by as much as 57.5% and represented 28.9% of banks' total assets, 7.3 percentage points more than in 2001. Contributing 12.4 percentage points, non-tradable debt securities fuelled growth in banks' total assets the most. The volume of tradable securities, representing 5% of banks' total assets, dropped by 15.7% and reduced overall growth in banks' total assets by 1.1 percentage points. Loans to banks, one of the important items on the asset side, fell by 5.6% and reduced growth in assets by 0.6 of a percentage point. In the first eleven months of 2003, banks' total assets increased by 10.1% in nominal terms. Contrary to 2002, growth was mostly fuelled by loans to the non-banking sector, contributing 6.8 percentage points; these loans rose by 14.3% mainly due to the high growth witnessed in foreign currency loans. Investment in non-tradable securities increased by 12% compared to the end of 2002.

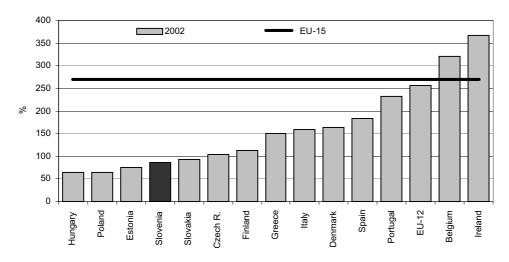
Despite the continued rise in banks' total assets relative to GDP, Slovenia was still way behind EU member-states in 2002, as well as other countries whose development levels are comparable to Slovenia. The ratio of banks' total assets to gross domestic product averaged 269.4% in the EU-15 in 2002, exceeding more than three times the total assets of Slovenian banks relative to GDP. Slovenia's ratio was also lower than in some countries acceding to the EU. The fact that some countries which are close to Slovenia's level of economic development record higher indicators (104.4% by the Czech Republic, 232.8% by Portugal, and 150.8% by Greece) suggests the relatively poor development of Slovenia's banking sector, which is further confirmed by certain other indicators (the interest margin and the share of interest income) (Hawtrey, 2003, Padoa-Schioppa, 2002). Given that safe investment is predominant in the structure of the banking sector's investment, and the volatility of the banks' assets is much lower than that of the capital market as a result, convergence with advanced banking sectors is unlikely to be quick in the near future. What is certain is that new quality and attractive banking services will have to be introduced in order to step up growth in banks' total assets; these services will in turn allow banks to have an adequate amount of resources and open up new investment opportunities.

#### Table: Structure of banks' total assets for 1998-2002, SIT million

	1998	1999	2000	2001	2002
Assets	2,350,359	2,687,600	3,192,792	3,876,768	4,556,637
% of GDP	72.2	73.9	78.8	81.8	86.4
Loans to the banking sector	227,331	252,615	364,388	396,245	381,208
Loans to non-banking sectors	1,072,015	1,331,852	1,636,557	1,913,914	2,182,147
Securities	714,566	708,622	793,180	1,109,316	1,547,139
Other assets	251,751	394,511	398,667	251,067	302,832

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

#### Chart: Total banks' assets in selected EU member-states and candidate-countries¹ in 2002, as a % of GDP



Source: Bank of Slovenia, central bank bulletins, annual reports of supervisory institutions, European Banking Federation. Note: 1 Those countries are included for which data are available.

#### Insurance penetration

The importance of the insurance sector measured by the level of insurance premiums relative to gross domestic product increased significantly in Slovenia in the 1990s. In the last few years, life insurance rose fastest, however, non-life insurance still represented most insurance premiums. After rising relatively fast in 1992-1995, when premiums rose at an average annual rate of 14.3% in real terms<sup>1</sup>, premiums increased more slowly in the following years, up by an average of 6% annually, which kept insurance premiums at 4.5%-5% of gross domestic product. In 2002, insurance premiums represented 5.1% of gross domestic product, 0.2 of a percentage point more than the year before. The nominal value of premiums climbed by 16.1% compared to 2001 and totalled SIT 267 billion. This growth was mostly underpinned by non-life insurance premiums, contributing 11.1 percentage points. Non-life insurance totalled SIT 206.4 billion after rising by 14.1% in nominal terms and represented 77.3% of all insurance premiums, or 3.9% of GDP. The remaining 5 percentage points came from life insurance premiums, which rose by 23.2% in nominal terms. In 2003, growth in insurance premiums slowed down: premiums climbed by 11.6% year on year in the first nine months in nominal terms, 7 percentage points less than in the same period of 2002. Life insurance premiums still rose faster than non-life insurance, up 13.6% and 10.5%, respectively, so their share in the structure of all insurance premiums increased.

International comparisons show that Slovenia's insurance sector is poorly developed compared to advanced industrialised countries. In the EU, insurance premiums relative to GDP averaged as much as 8.7% in 2002. Only two member-states recorded lower shares of premiums in GDP than Slovenia: Luxembourg (without international operations) and Greece (4% and 2.1%, respectively.) The biggest gap between the EU average and Slovenia was still seen in life insurance premiums (see chart), representing 5.3% of GDP in the EU, 4.2 percentage points more than in Slovenia. Life insurance made up 60.3% of total insurance premiums in the EU in 2002, 1.5 percentage points less than the year before.

As far as EU acceding countries are concerned (those for which data are available), Slovenia is at the top in terms of insurance premiums relative to gross domestic product mainly thanks to the large volume of non-life insurance, while Slovenia is behind some countries in life insurance. Insurance premiums represented 3.2% of GDP in EU acceding countries in 2002 (excluding Estonia, for which data are unavailable), 1.9 percentage points less than in Slovenia. On the other hand, the share of life insurance in GDP was 36.1% in acceding countries and 22.7% in Slovenia. Lithuania and Latvia recorded lower shares than Slovenia (18.8% and 4.3%, respectively). As shown by the chart, the biggest differences between countries are seen in life insurance in particular (the size of the bubble shows the volume of insurance premiums relative to GDP).

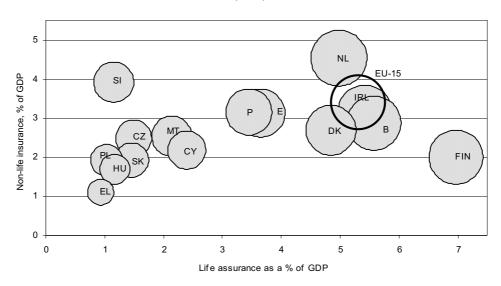
<sup>&</sup>lt;sup>1</sup> The average annual rise in consumer prices was used as a deflator.

Table: Insurance premiums by type of insurance, Slovenia 1996-2002

	1996	1997	1998	1999	2000	2001	2002
as a % of GDP							
Insurance premiums total	4.8	4.5	4.7	4.7	4.6	4.9	5.1
Life insurance	0.8	0.8	0.8	0.8	0.9	1.0	1.1
Other insurance	4.0	3.7	3.9	3.9	3.7	3.8	3.9
Structure, %							
Insurance premiums total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Life insurance	16.5	17.6	17.1	18.0	19.4	21.4	22.7
Other insurance	83.5	82.4	82.9	82.0	80.6	78.6	77.3
Year-on-year nominal growth rates, %							
Insurance premiums total	19.0	6.4	18.9	11.3	12.5	19.3	16.1
Life insurance	32.8	13.7	15.1	17.4	20.9	31.5	23.2
Other insurance	16.6	4.9	19.7	10.0	10.7	16.3	14.1

Source: Statistical Insurance Bulletin 2003.

Chart: The volume of all insurance premiums, life insurance and non-life insurance relative to GDP in selected EU member-states and candidate-countries, 2002, %



Sources: Swiss reinsurance company (Sigma No. 8/2003), Slovenian Insurance Association.

Note: the size of the bubble shows total premiums relative to GDP (both life and non-life insurance).

# Market capitalisation

In 2002, Slovenia's capital market revived, especially the secondary market, while the primary market recorded little progress. Turnover totalled SIT 481 billion on the secondary market, 38% more than in 2001 in nominal terms. Securities worth SIT 775.6 billion were offered on the primary market, almost three times as much as in 2001, 99.6% of which were securities of the Republic of Slovenia (99.2% in 2001) and the rest were bonds issued by a domestic bank. No corporate securities were sold on the basis of a public bid. Securities worth SIT 24.2 billion were sold to known investors, SIT 5.4 billion of which were shares, which was less than the average of the last five years.

The revival of the capital market had a positive impact on market capitalisation in 2002. The lively interest in securities on the Ljubljana Stock Exchange pushed their prices up (the SBI20 surged by 55.2%), which was reflected in a 45% nominal rise in the market capitalisation of shares. Market capitalisation¹ relative to gross domestic product increased by 5.5 percentage points to 23.4%. In the past few years, market capitalisation growth has been underpinned by two factors: the rise in the number of equities listed on the Ljubljana Stock Exchange and the rise in stock exchange indices. The number of shares traded on the Ljubljana Stock Exchange fell in the last two years so the rise in market capitalisation was chiefly due to higher prices of the existing securities, resulting from increased takeover activities, good financial results of companies listed on the stock exchange, and rapid falls in deposit interest rates.

In 2003, growth in market capitalisation slowed down. According to figures from the Ljubljana Stock Exchange, the market capitalisation of shares rose by 8.6% in nominal terms after having surged by 45.1% the year before. The market capitalisation trends were largely influenced by the withdrawal of shares of some major companies and, as a result, market capitalisation is not expected to have risen significantly last year despite the strong rise in indices seen in the second half of the year. Similar developments are expected in the upcoming years. Opportunities for further growth of the capital market may come from the listing of the most important domestic enterprises and enterprises from South-eastern Europe on the stock exchange. It is unreasonable to expect that Slovenia's capital market will be big enough to satisfy the growing interest of investors, so investors are likely to make some of their investments abroad.

International comparisons show that Slovenia has made considerable progress in the last two years as regards market capitalisation relative to GDP. Recording 14.9% of GDP, Slovenia was one of the lowest ranking countries at the end of 2000, only outperforming Lithuania (7.6%), however, Slovenia was only overtaken by Cyprus, Estonia and Malta in 2002. Following negative developments in advanced European capital markets, the gap between Slovenia and the EU average (57.8%) narrowed markedly, albeit remaining relatively wide.

<sup>&</sup>lt;sup>1</sup> Including the market capitalisation of shares listed on the Ljubljana Stock Exchange and excluding the shares of investment and authorised investment funds and bonds.

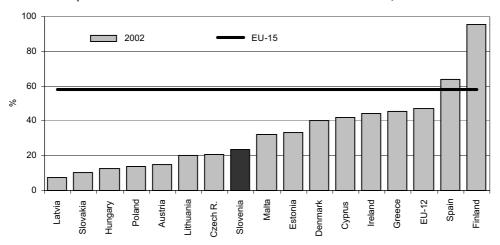
Table: Selected capital market indicators for Slovenia, 1995-2002

	1995	1996	1997	1998	1999	2000	2001	2002
Market capitalisation of shares, excluding PIDs and IDs, SIT billion	40.5	125.0	315.9	483.0	566.5	705.1	850.0	1,233.1
Market capitalisation of shares, excluding PIDs and IDs, as a % of GDP	1.9	4.9	10.9	14.8	15.5	16.7	17.9	23.4
SBI20	1,448.8	1,183.3	1,404.7	1,705.8	1,806.3	1,807.9	2,151.6	3,340.2
BIO	100.0	105.8	107.3	108.2	108.5	109.0	109.3	111.0
PIX	-	-	-	1,465.8	1.483.5	1.520.8	1.588.0	2.729.7
Number of securities	48	82	129	173	237	267	270	265
Shares	26	52	85	122	180	198	194	172
of which shares of authorised investment companies	0	0	0	30	46	44	38	33
Bonds	22	30	44	51	56	68	76	92
Pension coupons	0	0	0	0	1	1	1	1

Sources: Ljubljana Stock Exchange, the Securities Market Report for 2002 (Securities Market Agency), the IMAD.

Notes: PID - authorised investment company, ID - investment company, SBI - Slovenian stock exchange index, BIO - bond index, PIX - index of shares of authorised investment companies.

Chart: Market capitalisation in selected EU members and candidate-countries in 2002, as a % of GDP



Sources: Eurostat (New Cronos), Ljubljana Stock Exchange, SORS.

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# Developmental role of the state

## General government expenditure

In 2003, consolidated general government expenditure totalled 43.3% of the estimated gross domestic product according to provisional figures, namely 0.8 of a percentage point more than in 2002. As far as its economic structure is concerned, capital expenditure increased, with its share in GDP rising by 0.2 of a percentage point. The share of transfers to individuals and households increased by 0.2 of a percentage point. The shares of expenditure on wages and contributions, expenditure on goods and services and subsidies increased by an estimated 0.1 of a percentage point each. Expenditure on interest payments stayed at about the same level as in 2002. Expenditure on pensions relative to GDP fell by 0.1 of a percentage point.

In 1996-2003 general government expenditure relative to GDP increased by around 3 percentage points, going up from 40.2% in 1996 to 43.3% in 2003. In the period of six years, consolidated general government expenditure climbed by an average annual rate of 4.3% in real terms, faster than real GDP growth (3.8% annually). The Strategy for the Economic Development of Slovenia 2001-2006 set a limit for general government expenditure at 43% of GDP. Given the methodological changes in calculating GDP, the upper limit of general government expenditure will have to be determined anew, allowing balanced public finances without increasing the total fiscal burden.

The rise in the share of general government expenditure in GDP was mostly underpinned by expenditure on wages, contributions and allowances for employees in government and public institutions. The share of this expenditure increased from 8.7% in 1996 to an estimated 9.9% of GDP in 2003 (up 1.2 percentage points). The Act Regulating Wage Rates in Public Institutions, Government Departments and Local Government Bodies, which was passed in mid-1994, triggered the first wave of increases in public expenditure on wages. This was followed by wage supplements laid down in sectoral collective agreements and the government decree on wage supplements for government and administrative employees. Further, the number of employees rose, mainly because of new tasks related to Slovenia's accession to international associations. Expenditure on wages, contributions and allowances for employees in the administration and public institutions, which represented 21.5%-23% of all expenditure, recorded a 5.9% real average annual rise in 1996-2003.

The share of expenditure on social transfers to individuals and households climbed from 5.0% of GDP in 1996 to 6.1% in 2003 (up 1.1 percentage points). The relatively well-developed social security system was amended by new laws which expanded the range of social protection rights. A universal child benefit was introduced, while the new laws prescribed family benefits and parental allowance, the rights of war veterans and casualties of war, and introduced new social protection rights. All rights involve indexation mechanisms, which are linked to the guaranteed wage, average wage, or inflation. The number of beneficiaries to various forms of social transfers increased. Expenditure on social transfers to individuals and households, representing between 13% and 14% of all expenditure, recorded a 6.1% real average annual rise in the given period.

Pensions put significant pressure on public expenditure in the early 1990s owing to demographic, economic and social changes. This pressure was eased after 2000, when the pension reform halted further growth in expenditure on pensions. Expenditure on pensions, representing between 27% and 28% of all expenditure, recorded a 3.0% real average annual rise in 1996-2003.

Further, general government expenditure growth was also fuelled by domestic interest payments and interest payments abroad. This expenditure increased from 1.2% of GDP in 1996 to an estimated 1.6% in 2003. This involved the payment of interest on government external and domestic debt, which had been incurred by financing previous budgets, corporate

and banking sector restructuring, and obligations from succession. Expenditure on domestic interest payments and interest payments abroad, representing just 3% to 4% of all expenditure, recorded the biggest rise in 1996-2003, going up by an average of 9.1% in real terms a year.

Following the continuous efforts to curb expenditure on goods and services in both government and other public institutions, this spending remained relatively stable in 1996-2003, representing about 8% of GDP. Expenditure on goods and services, accounting for around 19% of all public expenditure, rose by a real average annual rate of 2.6%.

The share of subsidies in GDP had already fallen before 1995, representing 1.8% of GDP. *In* 1996-2003, expenditure on subsidies dropped by a good 1% in real terms a year and totalled an estimated 1.2% of GDP in 2003. It accounted for around 3% of total general government expenditure. It mainly involved subsidies for agriculture, active employment policy, and restructuring of the economy.

The share of capital expenditure in GDP increased from 4.0% in 1996 to an estimated 4.1% in 2003. General government expenditure on investment equalled about 4.1% of GDP in 1996-2003; this figure was only higher in 1999, amounting to 4.4% of GDP. In the process of negotiating general government expenditure, capital expenditure tended to be reduced on account of the traditional (and statutory) government spending, however, in 1996-2003 capital expenditure, representing about 10% of total expenditure, rose by a real annual rate of 4.6%, faster than GDP as well as slightly faster than total general government expenditure. This corresponds with the objectives of the Strategy for the Economic Development, which envisages restructuring of general government expenditure.

According to the national adopted budget for 2004 and 2005 and the projections of local government, pension and health budgets, including payments to the EU budget general government expenditure should rise faster than GDP in 2004, while expenditure should rise more slowly than GDP in 2005. Consolidated general government expenditure relative to the estimated GDP should rise by one percentage point in 2004 over the year before and drop to the 2003 level in 2005 (43.3%). In 2004, the share of capital expenditure in the projected GDP should rise slightly, while the shares of expenditure on wages and contributions (a new wage system for public employees, a changed adjustment mechanism, and employment restrictions) and transfers to individuals and households (a changed method of indexation) should fall. In 2004 and 2005, general government expenditure will rise due to payments to the EU budget, up by 0.7% of the projected GDP in 2004 and by 1.1% in 2005.

Table: Consolidated general government expenditure relative to GDP, %, 1995-2002

	1995	1996	1997	1998	1999	2000	2001	2002
General government expenditure, total	40.9	40.2	41.0	41.6	42.0	42.2	42.8	42.5
Wages and contributions	8.3	8.7	9.3	9.1	9.1	9.2	9.6	9.8
Purchases of goods and services	8.6	8.1	7.9	8.1	7.7	8.0	8.1	7.9
Interest payments	1.1	1.2	1.1	1.2	1.3	1.4	1.5	1.6
Transfers to individuals and households	5.0	5.0	5.4	5.3	5.4	5.7	5.9	5.9
Pensions	11.7	11.5	11.5	11.5	11.5	11.6	11.4	11.4
Subsidies	1.8	1.3	1.3	1.4	1.6	1.4	1.3	1.1
Other current transfers and reserves	0.4	0.5	0.5	0.8	1.0	0.9	0.7	0.9
Capital expenditure	4.0	4.0	4.0	4.1	4.4	4.0	4.2	3.9
Total general government revenue	40.9	40.5	39.9	40.8	41.4	40.9	41.5	39.5

Source: Ministry of Finance: Public Finance Bulletin; calculations by the IMAD.

Note: The calculations used the revised GDP data (the SORS, Rapid Reports, No. 308, 25 November 2003)

#### State aid

The synthesised indicator – state aid as a percentage of gross domestic product (GDP) – shows that Slovenia's state aid represented 1.45% of GDP in 2002, 0.51 of a percentage point less than in 2001 and 0.54 of a percentage point less than in 2000, but still 0.44 of a percentage point more than in EU member-states in 1997-2001 on average. This significant fall seen in 2002 over the year before was mainly due to less intensive industrial policy in the area of rescuing large, non-privatised enterprises and the steel industry. Namely, at the end of 2001 Slovenia stopped allocating rescue and restructuring aid through the Slovenian Development Corporation following European Union demands.

State aid per employee also dropped in 2002. It totalled EUR 433, 78.9% of the amount seen in 2001 (it totalled EUR 549 in 2000). No new data are available to compare state aid per employee with EU members; in 2001, Slovenia's state aid per employee was 2.5% below the EU average. This marked fall also increased the gap behind EU members in terms of state aid per employee.

In addition to the fall in state aid, 2002 saw important changes in the state-aid structure broken down by industries. Aid to agriculture and fishing, including state aid given to implement the common agricultural policy (financed from the agricultural fund in the EU), continued to rise in 2002 and represented as much as 60% of all aid (48.7% in 2001). Following the strong rise in aid to agriculture, aid to other industries fell. Aid to transport dropped to 6.5% of total aid (8.5% in 2001). Aid excluding agriculture, fishing and transport only totalled half of the amount seen in 2001 (0.49% of GDP in 2002 and 0.84% of GDP in 2001) and was just 0.11 of a percentage point above the annual average in the EU in 1997-2001 (0.38% of GDP). EU members that recorded much larger shares of aid, excluding agriculture, fishing and transport, than Slovenia were Denmark (0.68% of GDP), Germany (0.58%), Ireland (0.65%) and Portugal (0.77% of GDP). Following a rise in aid to mining in Slovenia (5% of all aid in 2002 and 0.05% in 2001), aid to manufacturing and other industries dropped from 42.8% of all aid in 2001 to 33.4% in 2002.

As a result of changes in the sectoral distribution of aid, the state's financial intervention in manufacturing and service sectors dropped to a level that is significantly below the average of EU members. In 2002, Slovenia's state aid represented just 1.7% of gross value added of these industries (3.5% in 2001), while the respective share in the EU was 2%. Among EU members, over half of them had a similar or higher share than Slovenia (4.7% in Spain, 2.9% in Denmark, 2.8% in Italy, 2.6% in Germany, 2.2% in Luxembourg, 2.1% in France, and 1.7% of gross value added in Belgium, Ireland and Finland). Aid was also much higher in the EU acceding countries. If we take note of the fact that Slovenian manufacturing's value added is much lower than in the EU on average, the Slovenian government seemed to provide inadequate levels of funding in 2001 to raise competitiveness of manufacturing before entering the EU internal market.

State aid excluding agriculture, fishing and transport was mainly given for horizontal objectives in Slovenia (74% of aid in 2002 and 68.6% in 2001), while its share in total aid was significantly higher than in the EU (59%). Among individual objectives, most aid was given to research and development, environmental protection, and employment. Compared to 2001, real growth was seen in aid to research and development and energy saving, while marked falls were seen in aid for rescue and restructuring. The latter was due to the EU's requirements to finish the defensive restructuring of large, non-privatised and largely non-profitable enterprises. The rise in state aid for research and development and the fall in aid for transitional restructuring are positive in terms of development, however, this is insufficient given that total aid to manufacturing is declining.

Aid given through regional objectives increased little in 2002 over the year before (10.6% of all aid excluding agriculture, fishing and transport in 2002 and 9.8% in 2001) and it was much lower than the aid the EU gave to the least developed regions according to its criteria of depressed areas.

Slovenia is pursuing a less intensive industrial policy through state aid than EU members on average, as well as some other countries close to Slovenia's level of development. Slovenia's level

of development is close to that of less developed EU member-states. Slovenia's industrial policy measured by state aid relative to GDP is at the EU average level (with structural aid being included in the EU) – way below the average if agriculture is excluded – but it is lower than in all less advanced EU member-states. Following the significant fall in total state aid relative to GDP and state aid per employee, Slovenia's industrial policy weakened in 2002 and became way too feeble in manufacturing and service sectors. Namely, state aid was lower than or equal to half of the EU members even though the gross value added generated by these industries there was much higher, what is more, the least developed members are also entitled to structural aid. The intensity of Slovenia's industrial policy (excluding agriculture) was also below the average of future EU member-states.

The nature of Slovenia's industrial policy continued to differ slightly from that of the EU in 2002. State aid earmarked for stepping up the development of backward regions was very low in Slovenia, significantly below the EU average and even lower than in less developed EU memberstates. Aid to support the market was much higher than in the EU on average, and Slovenia had one of the highest levels of this aid compared to EU members. Aid to create the market (excluding agriculture) was above the EU average in previous years, but it fell significantly below the EU average in 2001 and 2002. According to theoretical assumptions, Slovenia as a country in transition could conduct an industrial policy aimed at creating the market for a certain period of time. The empirical evidence, however, shows that advanced EU member-states conduct a more active industrial policy than Slovenia with the aim of creating the market.

In 2002, industrial policy almost failed completely in the field of raising the competitiveness of manufacturing and service industries because it did not have enough appropriate instruments at its disposal. Grants for horizontal objectives alone dropped by 18% in nominal terms and the volume of other instruments also fell in real terms. The only positive change was the substantial drop in aid for rescue and restructuring; according to research done by international institutions (OECD, EU) they neither benefit economic growth and competitiveness nor resolve the problems of employment and unemployment. Any further pursuing of this policy cannot bolster the Slovenian economy's competitiveness and economic growth, whereby competitiveness and economic growth are the priorities set in a number of national development programmes, including the Strategy for the Economic Development of Slovenia. The Development Report 2003 stated that this was reflected in poor economic performance, which the government took into consideration in its Programme for Effective Integration into the European Union adopted in July 2003. The results of changes in underlying orientations will be seen next year when the new figures are examined.

Table: Synthesised and analytical state aid indicators for Slovenia and the European Union

		Slovenia		EU
	2000	2001	2002	1997-2001 <sup>1</sup>
Synthesised indicator				
Total state aid, % of GDP	1.99	1.96	1.45	0.99
Analytical indicators				
Total state aid per employee, EUR	533	549	433	
State aid (excluding agriculture, fishing and transport), % of GDP	0.81	0.84	0.49	0.38
State aid for agriculture and fishing, % of total state aid	45.6	48.7	60.0	15.0
State aid for manufacturing and services, % of total state aid	40.7	42.8	33.4	24.0
State aid for manufacturing, % of gross value added	3.2	3.5	1.7	2.0
State aid for horizontal objectives, % of total state aid excluding agriculture, fishing and transport	86.2	68.6	74.0	59.0
State aid for regional objectives according to criterion (a), % of total state aid excluding agriculture, fishing and transport	3.8	9.8	10.6	33.0
State aid for restructuring, % of total state aid excluding agriculture, fishing and transport	15.5	20.2	2.2	

Source: the IMAD's calculations based on data from the Ministry of Finance: Fifth Annual Survey on State Aid in Slovenia (for 2000, 2001 and 2002), Ljubljana, May 2003, and data from the European Union).

Note: 1 annual average in 1997-2001.

## **Court backlogs**

According to the judicial statistics for 2002 and the first half of 2003, the number of pending court cases and court backlogs continued to fall, however, the number of unresolved minor cases rose, a trend seen for over a decade, and the number of backlogs in enforcing judgements in civil matters began to rise again. The number of cases brought before the judiciary rose by 2.5% in 2002, court backlogs also increased, mainly owing to minor cases, while the number of backlogs in important cases dropped by 12.8% in county courts and 15.1% in district courts (see Graph 1). What raises concern is the growing number of backlogs in enforcing judgements in civil matters; they surged by 31.1% in 2002 after falling by 14.3% in 2001. In 2003, the volume of new cases rose by an estimated 6.1%. Minor cases were again in the lead, recording a 7.1% rise, while important cases were up by 2.4%. The number of unresolved cases in the total judiciary is estimated to have climbed by 3.6% in 2003<sup>2</sup>.

While the number of unresolved important cases fell, the productivity of judges and judicial staff dropped by 6.5% in important cases and rose by 12.3% in minor cases. This implies that the judges and judicial staff resolved about two minor cases in place of one important one. About 85% of this increase in productivity was probably due to the computerisation of the land registry. From 30 June 2002 to 30 June 2003, the number of judges rose by 1%, or seven, to 769.

A comparison of data shows that the volume of new cases increased the most in county courts. The total caseload increased by 6.6% in local courts in 2002 and is estimated to have risen by 11% in 2003. Conversely, demand for services of district and high courts fell, going down by 8.6% and 7.7% in 2002, respectively. If we compare the volume of important and minor cases in 2002 and 2003, minor cases rose more than important ones, while most minor cases involved the land registry and enforcement of judgements in civil matters in county courts. In 2002, court backlogs rose by 33.1% in civil matters and by 1.3% in the land registry. The estimate for 2003 shows a further 25% rise in the number of court backlogs in civil matters. The situation in the land registry improved in 2003, with 170,000 cases remaining unresolved at the end of the year. The number of unresolved cases dropped by 25,000 compared to 2002<sup>3</sup>.

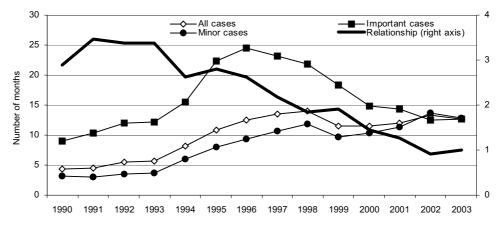
Movements in the number of court backlogs are closely linked with the number of new cases. It might be useful to develop a methodology for forecasting new cases, which could help law courts improve the allocation of resources in dealing with incoming cases. We have seen that efforts to reduce court backlogs have mainly been concentrated on important cases, while unresolved minor cases have been rising for over a decade. In the early 1990s, it would take about three times longer to deal with an unresolved important case than to deal with an unresolved minor case, provided that the courts did not receive any new cases; this ratio has ranged at around one to one in the last few years. This means that the courts need as much time to settle a minor case as they do to settle an important case, the former of which tends to be easy and the latter difficult (see Chart).

Generally, the situation is improving, however, some areas remain critical (e.g. the land register and compulsory enforcement), which were also pointed out in the report on Slovenia's progress towards accession to the EU. Unresolved cases, particularly court backlogs in the given areas, raise transaction costs in society, reduce legal protection, and encourage the emergence of alternative (legal and illegal) ways of resolving disputes. This in turn reduces the number of transactions in society<sup>4</sup> and undermines the level of welfare (ceteris paribus). This was also pointed out in the Comprehensive Monitoring Report on Slovenia's Preparation for Membership (2003), stating that the judiciary continues to have

a high degree of independence and that implementation of the Government Action Plan to speed up court procedures, adopted in May 2002, has continued. The Hercules Project, set up by the government and the Supreme Court to cut backlogs in courts, continues to provide for the possibility of rotating judges to assist overburdened courts in dealing with caseloads, however, this has been used to a limited extent and will not provide a solution to the problem of backlogs. The Report concludes that a more comprehensive approach to the reform of the judicial system is needed to improve the efficiency of courts, including targeted measures in those courts suffering most from backlogs. Measures that have been recommended include increasing the obligatory workload of individual judges, increasing the number and responsibilities of court support and management staff, and further changes in procedural legislation in order to speed up court procedures. This should improve the productivity of courts, which is lagging behind the rise in demand for court services.

In addition to improving the functioning of the judiciary, it is necessary to examine whether backlogs may be reduced by alternative methods, or whether backlogs encourage illegal ways of resolving disputes. As far as alternative methods are concerned, the permanent arbitration board operates within the Chamber of Commerce and Industry, which is relatively active, while the District Court of Ljubljana introduced the mediation procedure in 2001. The court provides mediation in traditional civil matters and guarantees that the mediation procedure is launched within three months after consent has been given by the two parties to the dispute. The court also provides mediation in family matters and commercial litigations as well as neutral assessments in copyright disputes.

Chart: Duration of resolving important and minor cases1 in Slovenia and the relationship between the two, 1990-2003



Source: Judicial statistics.

Note: ¹ assuming that no new cases are brought before the courts for settlement.

<sup>&</sup>lt;sup>1</sup> This analysis was prepared by Dr Katarina Zajc (School of Law, Ljubljana) and Aco Trampuž (Ministry of the Economy), using the judicial statistics for 2002 and the first half of 2003 (Ministry of Justice). For detailed methodological explanations (the difference between unresolved cases and court backlogs, the definition of important cases), see Development Report 2002.

<sup>&</sup>lt;sup>2</sup> We cannot make any definite estimates of court backlogs before the ending of the year.

<sup>&</sup>lt;sup>3</sup> The project of computerising the land registry should be finished in 2004. Until the end of 2003, about 70% of land-registry entries was processed electronically

<sup>&</sup>lt;sup>4</sup> The number of transactions can fall because of higher costs of dealing with disputes, either caused by waiting for a decision or establishing alternative ways of resolving a dispute.

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# Indicators of environmental development

# Share of "dirty industries" in manufacturing

Manufacturing's economic and environmental characteristics are one of the main determinants of Slovenia's economic sustainability due to: (i) its size and spatial expansion; (ii) its close links with non-industrial activities: crafts, agriculture, production services and information technologies; and (iii) (social) consequences brought about by transition and the introduction of a new generation of technologies which are more environmentally friendly

Production volumes of dirty industries continued to rise relatively fast in Slovenia in the last two years. 'Dirty industries', i.e. sectors that rank highest as regards the intensity of emissions per unit of output, 'accounted for over 86% of manufacturing's total estimated emissions in Slovenia. In 1995-2001, their production volumes increased faster than that of total manufacturing (up by an annual average rate of 3.4% and 2.5%, respectively). In the following two years, the gap between the production growth of dirty industries and manufacturing widened further. In 2002, production volumes of dirty industries increased by 4.8% and those of total manufacturing by just 2%. The gap widened further in 2003: manufacturing's production volumes edged up 0.6%, while the production of dirty industries rose by as much as 4.6%.

Despite the strong growth in the production of dirty industries, in 2002 their share in manufacturing's value added stayed unchanged for the second year running. The share of dirty industries in manufacturing's value added stagnated in 1995-1998, it increased by 0.6 of a percentage point in 1999 (in the manufacture of metals and cement) and by a further 0.7 of a percentage point in 2000 (in the manufacture of metals, and pulp, paper and paper products). As a result of qualitative changes in the rest of manufacturing, resulting in higher growth in value added than production volumes, the share of dirty industries remained at the level of the preceding two years in 2002 (20.6%) despite the strong rise in their production volumes. The share of the metal industry shrank slightly, while the share of chemicals increased.

Following the qualitative changes in manufacturing's development, energy intensity fell after 1994, however, this downward trend slowed down markedly in the last two years. Consumption of final energy per unit of value added, the main energy-related indicator of qualitative changes, fell at an average annual rate of 6.0% in 1995-2001. In 2002, consumption of final energy per unit of value added fell by just 4.7%, and a further slowdown is expected in 2003 when final energy consumption per value added is estimated to have fallen by a mere 1.1%. The reason that the reduction of manufacturing's energy intensity faltered was the bigger consumption of electricity (chemicals and metal industries) in 2002 and the bigger consumption of electricity and gas in 2003 (metal and non-metal industries, and non-metal and paper industries, respectively). As a result of increased use of final energy, manufacturing's CO, emissions are estimated to have increased by 1.1% in 2003.

The relatively large share of dirty industries is more a macroeconomic than a microeconomic problem. As shown by the graph, the contribution of dirty industries to manufacturing's value added started to rise after 1998. Slovenia currently records too many large consumers of raw materials and energy even though they are relatively environmentally efficient (low levels of emissions per unit of production). Priority should be given to the better integration of economic and environmental concerns within energy intensive companies and activities. In the recession phase of transition, improvement in environmental and economic integration was spontaneous (bankruptcy of economically and environmentally inefficient companies), but improvement in the expansion period of transition was impossible without focused efforts aimed at bringing environmental criteria

into investment and business decisions, as required by the EU's legislation.

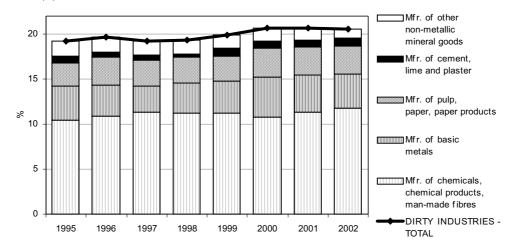
Important changes in the field of reducing greenhouse gas emissions are expected to be effected by the draft Environmental Protection Act (EPA). The draft law introduces a compulsory environmental permit needed to install and operate certain types of machinery or carry out certain activities that cause pollution by emissions. The draft law also introduces an economic instrument, that is emission trading. The object of trading is emission coupons, the right to emit greenhouse gasses expressed in tonnes of a CO, equivalent, which the government grants to machinery operators as part of its efforts to implement the Kyoto protocol and this law. Pursuant to the draft EPA, machinery operators causing greenhouse gas emissions will have to obtain a permit to emit these gasses after 1 January 2005 in order to be allowed to operate. To obtain the permit, the operator will have to submit evidence that it will monitor emission levels and report on the state of greenhouse gas emissions. If an enterprise causes greater emissions than allowed by the coupons, it will have to buy more coupons to cover the difference. The European emission coupon market should be operational on 1 January 2005.

Table: Index of growth in production volumes and value added in manufacturing and dirty industries, 1995-2003

	1995	1996	1997	1998	1999	2000	2001	2002	2003¹
Index of manufacturing's value added growth	102.5	101.6	106.6	104.6	103.1	108.6	104.5	104.6	102.9
Index of manufacturing's production volumes growth	102.8	100.9	100.2	103.9	100.0	107.0	102.8	102.0	100.6
Index of production volumes growth in dirty industries	102.4	100.5	100.4	104.5	102.4	108.2	105.4	104.8	104.6
Pulp, paper and paper products	98.0	98.0	99.0	101.9	98.0	104.7	99.0	108.1	94.1
Chemicals, chemical products, man-made fibres	103.2	103.4	103.8	105.1	101.6	110.4	108.1	105.9	106.6
Other non-metallic mineral products	101.0	106.3	104.8	106.7	103.9	96.4	100.1	100.8	99.6
Basic metals	103.3	89.5	88.5	102.4	105.8	111.9	104.5	102.9	107.4
Index of manufacturing's production volumes growth excluding dirty industries	102.9	101.0	100.1	103.8	99.4	106.7	102.2	101.3	99.6

Source: SORS, the IMAD's calculations

Chart: Value added of dirty industries as a percent of manufacturing's value added in Slovenia in 1995-2002 (%)



<sup>&</sup>lt;sup>1</sup> Iron and steel, non-ferrous metals, industrial chemicals, paper and pulp, and non-ferrous mineral products.

## **Energy intensity**

From the point of view of sustainable development, it is essential to reduce energy intensity. Today's society primarily depends on exploiting fossil fuels, the most important of which are expected to be in short supply in the next few decades (oil). Economic growth will therefore have to be achieved by lowering the input of energy, or by substantially lowering growth in energy consumption.

Slovenia consumes much more energy than EU member-states given its level of economic development, while Slovenia's energy intensity is lower than in most EU acceding countries. In 2002, Slovenia¹ consumed 337 toe (tonnes of oil equivalents) of primary energy to produce 1 million of GDP expressed in constant 1995 EUR prices, as against the 194 toe in the EU in 2001, meaning that Slovenia consumed over three-quarters more energy than the average EU member-state to produce one unit of GDP. There were wide differences between the 15 EU member-states as regards energy intensity but Slovenia was behind each of these countries (see chart) despite the recent GDP revision, which reduced Slovenia's energy intensity by a good 5% for the whole time series. The least energy wasteful GDP was that of Denmark and Austria (below 150 toe/mioEUR<sub>1995</sub>), while the most energy wasteful were those of Finland and Greece (over 250 toe/mio EUR<sub>1995</sub>). Differences between the EU acceding countries were wide, however, they were all more energy wasteful than any EU member. While Malta and Cyprus used less than 300 toe of energy per GDP unit, other acceding countries used more energy than Slovenia, with Slovakia, Lithuania and Estonia using as much as over 1000 toe.

Slovenia's relatively high energy intensity can partly be explained by structural factors such as a large share of energy wasteful industries and an unfavourable structure of fuels. The 27% share of manufacturing (where energy-intensive industries are concentrated) in total value added is one of the highest compared to EU member-states and acceding countries. Further, as regards the composition of final energy consumption Slovenia records a 5 percentage points larger share of liquid fuels than the EU, resulting from the relatively high fuel consumption in transport, and over a 9 percentage points lower share of gas. Energy intensity may be reduced by increasing the share of natural gas consumption and through the expansion of combined electricity and heat production, whose energy efficiency is better.

The energy intensity of the Slovenian economy fell in 1995-2002, however, this fall was too modest and the downward trend has slowed down markedly in the last two years. In this period, energy intensity fell by an annual rate of 2.4%, which is too slow given the high level of energy consumption compared to the level of economic development. In 2001, Slovenia was 15.3% behind the EU average in terms of energy consumption per capita but as much as 52.0% behind in terms of GDP per capita (EUR 1995 prices). Discouraging developments were seen in the last few years in particular, when Slovenia's energy consumption per GDP unit increased slightly in 2001 (up 1% in Slovenia and 0.5% in the EU) and fell very little in 2002 (down 0.6%) so that it was still above the 2000 level. In 2002, the fall in energy intensity was achieved with 2.9% GDP growth and a 2.3% rise in energy consumption.

The modest fall in energy intensity in 2002 was mainly due to replacing shortfalls in hydro-energy with greater primary consumption of coal and nuclear energy, as well as the expansion of energy-intensive industries. Consumption of primary energy increased by 155 thousand toe. Growth was fuelled by electricity supply, contributing 200 thousand toe (+108 thousand toe from coal consumption, +70 thousand from nuclear energy, -33

thousand from hydro-energy, and +55 thousand from reduced net electricity exports), and greater consumption of biomass, contributing 15 thousand toe, while growth was reduced by the lower consumption of liquid fuels and gas, each falling by 30 thousand toe. Production by hydro-electric power plants dropped as a result of low water levels, while production was increased in thermal plants and the nuclear power plant (partly due to new steam generators). Total electricity production did not rise notably, while electricity consumption was up 6.9% (according to figures from the ELES). As much as 60% of this increase was the result of modernised and expanded aluminium production. This is an energy-intensive industry whose share in energy consumption is much larger than its share in the economy's value added<sup>2</sup>. As a result of the gap between strong growth in consumption and low growth in output, net electricity exports fell by over one-third.

Slovenia could follow the European Union's example in reducing energy intensity. Energy intensity fell by an annual average of 1.1% in the EU in 1991-2001, the most in Luxembourg (by 4.6% annually) and Ireland (3.9%). In the 1990s, the EU achieved good results in this field mainly by replacing obsolete technologies (the *länder* of former East Germany), strong economic growth in energy non-intensive and service sectors in particular (Ireland), and by reducing the volume of heavy industry (Luxembourg).

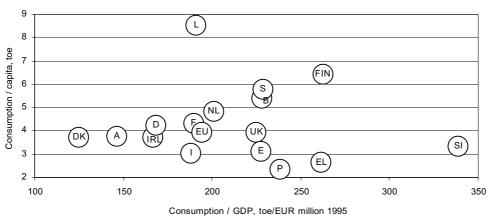
Table: Energy intensity of primary energy consumption in Slovenia and the EU in 1993-2002, toe/mio EUR<sub>1995</sub>

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
SI <sup>1</sup>	N/A	N/A	399.3	402.0	391.9	369.7	341.7	335.3	338.6	336.7
EU	213.1	207.3	206.9	211.0	204.8	203.4	198.2	193.2	194.2	N/A

Sources: Eurostat (New Cronos): Ministry of Economic Affairs, Statistical Yearbook of the Energy Sector; SORS; calculations by the IMAD.

Note: 'data on energy consumption and GDP for Slovenia taken from the SORS (data on energy consumption for the period up to 1999 taken from the Ministry of Economic Affairs); calculations in EUR constant prices by the IMAD.

Chart: Primary energy consumption per GDP and per capita in Slovenia¹ and EU member-states in 2001, toe/ mio EUR<sub>1995</sub>



Sources: Eurostat (New Cronos); SORS; calculations by the IMAD.

Note: 1 data on energy consumption and GDP for Slovenia taken from the SORS; calculations in EUR constant prices by the IMAD.

We used the SORS' data on primary energy consumption.

<sup>&</sup>lt;sup>2</sup> The manufacture of metal and metal products, where aluminium production belongs, generated 14.0% of manufacturing's value added in 1999 but it used 43.6% of all the electricity consumed by manufacturing.

# Renewable sources

In Slovenia, renewable energy sources (RES) represent a relatively large share of total primary energy consumption. RES represented 11.2% of total primary energy consumption in 2002, almost two times more than in the EU-15 in 2001 (6.2%). The highest shares of renewable sources were seen in Sweden, Finland and Austria (over 20%), and the lowest in the UK, Luxembourg and Belgium (below 2%). Among EU accession countries, the shares of renewable sources were 35.3% in Latvia, 13.9% in Turkey, 10.7% in Estonia, 8.3% in Lithuania, 4.5% in Poland, 3.9% in Slovakia, 1.7% in the Czech Republic, 1.6% in Hungary and 1.2% in Cyprus. These differences mainly stem from a country's factor endowment.

The structure of renewable sources varies significantly from country to country; the most common are traditional renewable sources such as wood and hydro-energy. The average structure of RES in the EU was as follows (also see the chart): wood and wood waste represented 49.5%, hydro-energy 31.7%, municipal solid waste 8.6%, geothermal energy 3.7%, biogas 2.7%, wind energy 2.5% and solar energy 0.4%. According to the SORS' figures for 2001, Slovenia's RES structure was as follows: wood and wood waste represented 54.8%, hydro-energy 44.6% and biogas 0.6% (other sources are not included). In Finland, wood and wood waste accounted for as much as 83.7% of total RES, while Austria had the largest share of hydro-energy (53.5%). In the Netherlands, the most important RES was municipal waste (65.8%), while geothermal energy was widely exploited in Italy, representing 23.7% of total RES. In the UK, biogas represented one-third of total RES, while wind energy made up as much as 16.8% of all RES in Denmark. A significant share of solar energy was seen in Greece (7.6%). Non-traditional RES – municipal waste, geothermal energy, biogas, wind and solar energy – accounted for about 18.8% of total RES and satisfied less than 1.2% of total energy needs.

The RES share in total primary energy consumption has declined in Slovenia in the last two years after having increased up until 1997. RES provided as much as 11.9% of primary energy in 2000, however, this share dropped to 11.7% in 2001 and 11.2% in 2002. The latter fall was primarily due to dry weather and below-average water levels of Slovenian rivers, leading to a solid one-tenth fall in hydro-energy production. Exploitation of wood and wood waste increased, albeit at a low rate of 3.3%, while the total exploitation RES dropped by 2.3% (at the same time, total consumption of primary energy increased at the same rate).

Similarly, the share of RES has increased slowly in the EU in the last eight years, while strategic orientations for the period up to 2010 envisage renewable sources rising much faster. The share of RES climbed from 5.4% in 1993 to 6.0% in 2000, and by another 0.2 of a percentage point to 6.2% in 2001. In the same year, exploitation of RES rose the most out of all energy sources, going up by 4.6%. Exploitation of wind energy increased by over one-fifth and the use of biogas by a good one-tenth. Contributing 38%, hydro-energy mostly underpinned the 4 million toe rise in the exploitation of RES, followed by wood and wood waste with 29% and wind energy with 10% (408 thousand toe). In order to meet the Kyoto commitments, the EU plans to double the share of RES to 12% by 2010. Countries enjoying favourable natural conditions should increase the use of renewable sources more than others. In view of the current trends, these objectives are unlikely to be met without additional finance such as aid, tax relief and financial assistance.

In Slovenia, the most important instruments for encouraging the exploitation of RES are investment subsidies for RES projects, the CO<sub>2</sub> emission tax, and the priority dispatching of electricity generated by qualified producers. The Agency for Efficient Energy Use has introduced various activities to raise the exploitation of RES; for example, it

subsidises investment in RES as well as households to use RES. In 2002, about EUR 2 million of budgetary funding was allocated by the Agency to promote efficient energy use and exploitation of RES. The CO<sub>2</sub> emission tax is still one of the key instruments helping Slovenia meet the Kyoto commitments. Relief from this tax is granted on the basis of measures taken to increase energy use efficiency in industry, introduce the combined production of heat and electricity, replace fossil fuels with renewable sources, rebuild heat distribution systems etc. Price incentives are, among others, provided through the priority dispatching of electricity generated by qualified producers (mainly involving small hydroelectric power plants): the difference between the (higher) production price and the (lower) market price is compensated.

Slovenia still has plenty of opportunities to expand the use of traditional renewable sources. Slovenia will continue to exploit its hydro-energy potential in the next ten years by constructing a chain of hydro-electric power plants on the Sava river, so the share of used hydro-energy potential should climb from the current 43% to 52% in 2013 (the National Energy Programme). Forests cover 54% of Slovenia's territory, one of the largest percentage shares in Europe, while the increase in wood stock is bigger than tree-felling. Hence, growing attention has recently been paid to the exploitation of wood biomass. Some plans have also been made to build a large number of wind farms.

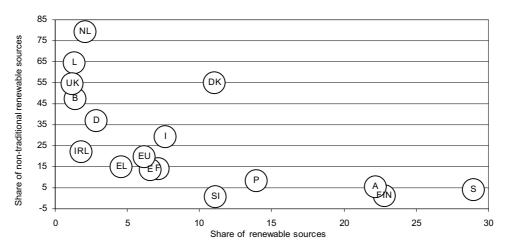
Table: Renewable sources relative to total primary energy consumption in Slovenia and the EU in 1993-2002 %

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
SI¹	N/A	10.3	8.9	9.1	8.2	8.9	9.5	11.9	11.7	11.2
EU	5.4	5.4	5.4	5.3	5.5	5.7	5.8	6.0	6.2	N/A

Sources: Eurostat (New Cronos); Ministry of Economic Affairs, Statistical Yearbook of the Energy Sector; SORS; calculations by the IMAD.

Note: 1 data from the MEA for the period up to and including 1999, data from the SORS for 2000 and onwards (renewable sources include industrial waste).

Chart: Renewable sources¹ relative to total primary energy consumption and non-traditional² renewable sources relative to total renewable sources in Slovenia and EU member-states in 2001, %



Sources: Eurostat (New Cronos); SORS; calculations by the IMAD.

Note: 1 excluding industrial waste; 2 solar, wind and geothermal energy, biogas, municipal waste (excluding hydro-energy and wood and wood waste).

We used data on renewable sources from the SORS which include industrial waste.

## Road freight transport

Even though road transport prevails in most countries, railway transport has a number of advantages. The large share of road freight transport in most European countries is the result of the great flexibility of this type of transport (door to door) and higher external costs not included in the price of transport. These unpaid costs ultimately become social costs. If they were included, the economic advantage of railway freight transport over road transport would become evident. Further, railways burden the environment much less than roads. The construction of railways requires significantly less space than motorways, while rail transport is much less polluting and uses less energy per unit of service, while also ensuring safer transport.

Compared to other countries, Slovenia enjoys a low share of road freight transport, with international transport prevailing, which is typical of small countries. In 2002, the share of road freight transport was 60% in Slovenia<sup>1</sup>, while this share already exceeded 80% in the EU as a whole in the early 1990s to total 85.2% in 2002<sup>2</sup>. Among the EU-15, Sweden and Austria had the lowest shares of road freight transport, ranging between 60% and 70%, while the highest shares were seen in the Netherlands, Ireland and Greece, exceeding 95%. Among the EU acceding countries<sup>3</sup>, very large shares of road freight transport were seen in Malta and Cyprus in 1999, exceeding 95%, these shares were close to Slovenia's in Poland, the Czech Republic and Hungary and were lower in the Baltic states and Slovakia. Differences between countries are to a large extent due to historical and geographical factors. Looking at the composition of road freight transport, large countries tend to record a big share of inland transport, while small countries record more international transport. A comparison of this composition between countries supports this finding; the only important exceptions are Greece and Ireland, probably due to geopolitical factors (see graph). In Luxembourg, for example, almost all road freight transport is international, while Slovenia records a figure of 69%.

Road transport relative to total freight transport increased rapidly in Slovenia in the second half of the 1990s, but it fell significantly in 2002. The share of road transport in total (road and railway) freight transport increased from 51.8% in 1995 to 66.0% in 2001, but it shrank to 60% in 2002. This year, the volume of road freight transport dropped by 16.3%, while the volume of railway transport increased by 8.6%. Both international and inland road freight transport shrank, going down by 17.9% and 12.3%, respectively. Railway freight transport largely increased because of a 14.4% rise in the volume of transit transport, while inland railway transport fell by 7.6%. Road freight transport accounted for 86% of inland transport, which is not surprising given the small size of the Slovenian territory and the greater efficiency of road transport in short destinations.

Transport policy, whose goal is to increase or at least maintain the share of railway transport in both Slovenia and the EU, has several options. The EU is trying to revitalise railway transport through the greater harmonisation of rules and procedures regulating this area (licences, permissions) and liberalisation of the EU's transport services market so as to create a single EU railway system that will be more competitive with road transport. Slovenia's railway services market will be liberalised upon accession to the EU, while the only national transport operator (Slovenske železnice) will have to be restructured before foreign trains are allowed to freely use the national railway network. Factors that may help prevent any further increase in the share of road freight transport in Slovenia are adequate price and tax policies, which should set the complete price

Analytical Appendix - Indicators

structure for road and railway transport (inclusion of external costs, minimising subsidies, the introduction of taxation based on differentiated environmental criteria). One incentive for the further development of railway transport is to subsidise inter-modal and combined freight transport. In 2001, combined consignments represented as much as 11% (1.6 million tonnes) of railway freight transport in Slovenia. This indicator may be improved by further developing the port of Koper, to which rail transport is closely linked, and by upgrading the Slovenian railway network (construction of the second rail track on the Divača-Koper railway line) so as to allow increased volumes of railway transport. The Strategy for the Economic Development of Slovenia envisages a more even distribution of investment funding between roads and railways, however, no shift towards a larger share of railway infrastructural investment has been seen (except in 2000, when one section leading towards Hungary was built).

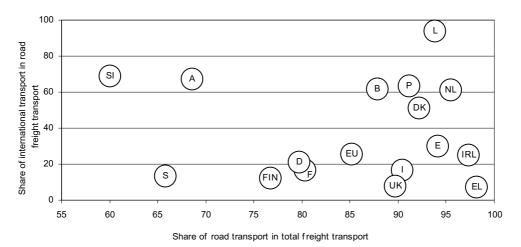
Table: Share of road transport<sup>1</sup> in total freight transport (roads and railways) in Slovenia and the European Union in 1995-2002 (tkm), %

	1995	1996	1997	1998	1999	2000	2001	2002
SLO	51.8	57.6	57.6	57.3	60.4	64.8	66.0	60.0
EU <sup>2</sup>	83.3	83.8	83.0	83.5	84.3	83.9	84.6	85.2

Sources: Eurostat. New Cronos; Eurostat. Statistics in Focus. Transport. 7-2/2002. 7-5/2003; SORS; calculations by the IMAD

Notes: ¹ in road transport, reports are compiled by countries where vehicles are registered; ² some road transport figures which were missing for individual EU members were assessed by the IMAD using interpolation or a close figure.

Chart: Share of road transport¹ in total freight transport (roads and railways) and the share of international road transport in total freight transport in Slovenia and EU members in 2002 (pkm), %



Sources: Eurostat. New Cronos; Eurostat. Statistics in Focus. Transport. 7-2/2002. 7-5/2003; SORS; calculations by the IMAD. Note: \(^1\) in road transport, reports are compiled by countries where vehicles are registered.

According to figures from the SORS.

<sup>&</sup>lt;sup>2</sup> Data refer to the volume of transport by vehicles registered in individual members, which is fully comparable with the SORS' coverage.

<sup>&</sup>lt;sup>3</sup> Data refer to the volume of road freight transport in the territory of individual countries.

## Agricultural intensity

In addition to many positive effects, agriculture has a significant negative impact on the environment, depending on the degree of agricultural intensity. Slovenia's agricultural policy, which follows the EU's common agricultural policy, tries to restrict and reduce the negative impact of agriculture on the environment by implementing the Slovenian Agricultural Programme. Agricultural intensity is measured by two main indicators: the use of mineral fertilisers and sale of pesticides, and the volume of integrated and organic farming.

Agricultural intensity measured by the use mineral fertilisers and pesticides increased in Slovenia in 1995-2001, while the volume of integrated and organic farming also rose. In the given period, the total use of mineral fertilisers rose by 4.2%, within which use of the three main macro-nutriments (nitrogen, phosphorous and potassium – NPK) climbed by 0.6%. The use of phosphorous and potassium fell, while the use of nitrogen rose by a substantial 7%, which is critical because of nitrogen penetration in ground waters. The use of NPK fertilisers per unit of utilised agricultural area rose markedly, going up by 6%. The total sale of pesticides rose by 10.3% in 1997-2001², however, it should be noted that this figure includes sales to non-agricultural sectors (used for roads, railways, sports and communal areas). A particularly strong increase was seen in the use of herbicides, a slightly weaker one in the use of fungicides, while the use of insecticides fell. At the same time, the number of farms and agricultural area engaged in integrated and organic farming increased relatively fast. Integrated farming has been established for a relatively long time in orchards and vineyards, while the first organic farms began to emerge in 1998. Their number climbed to 883 by 2001, representing 1% of all farms.

In 2002, NPK fertiliser use fell for the third year running, the positive trends continued in organic farming, while pesticide sales increased. Almost 177,000 tonnes of mineral fertilisers were sold, 171,000 tonnes of which were of mineral and 6,000 tonnes of organic origin, with the former falling by 4.3% from 20023. The same rate of decrease was seen in the total use of NPK nutriments of mineral origin; phosphorus, nitrogen and potassium use fell by 6%, 5%, and 2%, respectively. Farmers used 337 kg of mineral fertilisers per hectare of utilised agricultural area<sup>4</sup>, 3.5% less than in 2001. What mainly raises concern is the uneven distribution of fertiliser use between agricultural companies and farms, with the former using three times as much fertiliser as the latter. The sale of pesticides climbed to 1,472 tonnes of active substance in 2002 after falling slightly the year before. A strong rise was seen in insecticide sales, going up by 35%, herbicide sales were up 5%, while the sale of fungicides was roughly stagnant. We can assume that these high sales were due to problems with insects experienced in dry and hot summers of the preceding years, while 2002 saw no major invasion of insects. The number of farms included in organic farming controls continued to rise in 2002 to total 1,150, 30% more than the year before. They represented a good 1% of all farms and 3% of all cultivated agricultural area in Slovenia.

Compared to the agricultural intensity of the EU, Slovenia used slightly more NPK mineral fertilisers than the EU-15 on average, while Slovenia drew very close to the EU in terms of the share of organic farming. In 2001, NPK mineral fertiliser use per unit of utilised agricultural area totalled 142 kg/ha in Slovenia and 124 kg/ha in the EU-15. Countries recording higher use were the Netherlands, Belgium, the UK and Germany. In 1995-2001, fertiliser use generally fell in countries recording high consumption and, conversely, rose in countries recording low consumption. There is no sense in making a comparison of pesticide sales (in the chart only growth rates are compared) because the figures are the sum of active substances with varying levels of toxic intensity. The biological effect of new types of pesticides is increasingly stronger so they are effective in small quantities, while

old types of pesticides (based on copper and sulphur) are generally weak and therefore used in larger quantities. The former represented about a third of total sales in Slovenia, so a rough comparison may show higher pesticide sales in Slovenia than in the EU on average. As far as the share of organic farming is concerned, Slovenia is approaching the EU average fast, representing 3.0% of all cultivated agricultural area in Slovenia and an average of 3.5% in the EU in 2002. Seven EU members were ahead of Slovenia: Austria and Italy (as much as 12% and 8% of total utilised agricultural area), Finland, Denmark, Sweden, the UK, and Germany.

Table: Agricultural intensity indicators for Slovenia for 1995-2002

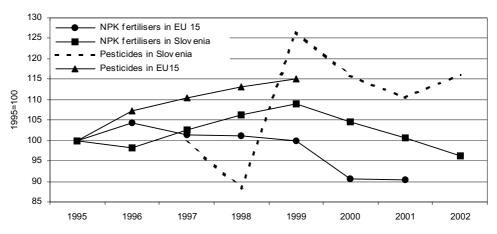
	1995	1996	1997	1998	1999	2000	2001	2002
NPK fertiliser use				•	•	•		•
thousand tonnes	72.1	70.8	74.0	76.6	78.6	75.4	72.5	70.0
per unit of agricultural area, kg/ha	133.9	135.0	149.7	156.0	157.6	148.1	142.2	138.3
Pesticide sales								
active substance, thousand tonnes	-	-	1.27	1.12	1.61	1.47	1.40	1.47
per unit of agricultural area, kg/ha	-	-	2.6	2.3	3.2	2.9	2.7	2.9
Organic farming								
number of farms	-	-	-	41	331	596	883	1,150
area, thousand of hectares	-	-	-	-	-	5,280	10,828	15,404

Sources: SORS, Ministry of Agriculture, Forestry and Food, the Plant Protection and Seeds Administration, Agriculture and Forestry Institute from Maribor, calculations

by the IMAD.

Note: calculations based on cultivated agricultural area (Statistical Yearbook 2003).

Chart: Comparison of growth in NPK fertiliser use and pesticide sales between Slovenia and the EU-15, 1995-2002 (1995=100, except in pesticides where Slovenia 1997=100)



Sources: EEA (http://themes.eea.eu.int), EUROSTAT (New Cronos database), SORS.

<sup>&</sup>lt;sup>1</sup> At the same time, the cultivated agricultural area shrank from 538,000 ha in 1995 to 510,000 ha in 2001.

<sup>&</sup>lt;sup>2</sup> Data on the sale of pesticides have been collected by the Administration of the Republic of Slovenia for Plant Protection and Seeds since 1997.

<sup>&</sup>lt;sup>3</sup> The SORS first collected and processed data on the use of mineral fertilisers of organic origin in 2002. Since no data for the preceding years are available, we only compare data on the use of mineral fertilisers of mineral origin.

<sup>&</sup>lt;sup>4</sup> In 2002, the total cultivated agricultural area fell by 0.8%, shrinking from 510,000 ha to 506,000 ha.

# Tree felling intensity

Tree-felling intensity<sup>1</sup>, the main indicator of the economic utilisation of forests, is relatively low in Slovenia and keeps dropping, while forest area is expanding randomly. Tree-felling intensity is important for Slovenia because wood is one of its few natural resources. In 1995-2001, the annual gross increment was 16% while the annual tree removal surged by 25% (see table). In spite of this surge in the level of tree felling, tree-felling intensity remained low, only averaging 38.5%. It was up to 21 percentage points behind the EU average in 1995-2000, the period for which the latest figures are available (Development Report 2002). The forest area, covering over half of Slovenia's territory, keeps expanding even though this is not planned (the Forest Programme of Slovenia). In 1995-2001 alone, the forest area increased by 4% or 45,000 hectares. Remote areas and areas unsuitable for agricultural production are still overgrowing faster than forests in suburban and intensive agriculture areas are shrinking. What is encouraging is that the growing stock is increasing even more quickly (up 17% in 1995-2001), undoubtedly as a result of the professional work of foresters.

In 2002, trends from the preceding years were sustained: tree-felling intensity dropped further, while the forest area and growing stock increased. The forest area totalled 1,149,633 ha at the end of 2002, 0.6% more than the year before. The growing stock increased by 3.2%, the wood increment was 2.6%, while tree felling rose by 1.2%. Since the annual gross increment was higher than tree removal, the tree-felling intensity again dropped, going down from 37.7% to 37.3%, and lagged behind the forestry plans by close to 22 percentage points. A total of 2,646,000 m³ of trees were cut in 2002, 57% of which were conifers and 43% were non-conifers. This volume of tree removal was the highest seen in the last few years, but still 65% below the planned annual tree felling levels planned by the forestry plans for 2001-2010. As usual, most of the total removal was due to tending, i.e. thinning for the purposes of natural or artificial regeneration, but this share fell slightly compared to the year before (from 73% to 71%). This was followed by sanitation, whose share climbed from 19% to 21% mainly due to extensive damage by insects and disease.

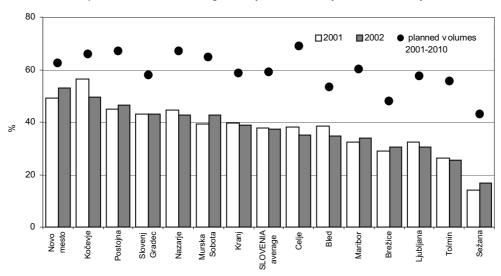
Forest management differed significantly from one forestry unit to another. Slovenia has 14 forestry units, which differ greatly in terms of size, the planned and actual exploitation of forests. We will examine a few of them. The three largest units in terms of forest area, growing stock and annual increment - the Ljubljana, Tolmin and Maribor Units – accounted for a quarter of all tree removal in Slovenia (672,000 m<sup>3</sup> in 2002), however, their levels of tree-felling intensity were one of the lowest in the country (see graph). Their tree removal only achieved 52% of the planned levels (65% in Slovenia as a whole), while their tree-felling intensity was just 30% (37% in Slovenia), so it lagged the most behind the planned level (including the Celje Unit). Conversely, tree removal was closest to the planned levels in the second two largest units -Kočevje and Novo Mesto - which also cut one-quarter of total trees (653,000 m<sup>3</sup> in 2002) and achieved 83% of the planned levels. They recorded the highest tree-felling intensity (51%), lagging the least behind the plans. The smallest forestry units - Murska Sobota and Sežana differed markedly in terms of economic exploitation of forests; the former was above the average while the latter was the worst. From the point of view of sustainable development, the low levels of tree removal have considerable negative consequences, especially in areas recording the lowest tree felling intensity, not only for the stock of renewable resources and the structure of raw wood categories, but also for job opportunities in rural areas.

Table: Tree-felling intensity in Slovenia in 1995-2002

	1995	1996	1997	1998	1999	2000	2001	2002	GGN* 2001–2010
Forest area, thousand ha	1,098	1,099	1,110	1,111	1,116	1,134	1,143	1,150	1,142
Growing stock, thousand m <sup>3</sup>	228,493	231,521	231,663	232,688	237,276	262,795	267,912	276,574	266,704
Annual increment, thousand m <sup>3</sup>	5,995	6,086	6,124	6,140	6,248	6,872	6,925	7,102	6,923
Annual removal, thousand m <sup>3</sup>	2,092	2,330	2,567	2,470	2,396	2,609	2,614	2,646	4,101
Removal intensity, %	34.9	38.3	41.9	40.2	38.3	38.0	37.7	37.3	59.2
Removal intensity, annual growth, %	-12.5	9.7	9.5	-4.0	-4.7	-1.0	-0.6	-1.3	-

Source: SORS, Forest Service of Slovenia.
Note: \*Forest Management Plan 2001-2010.

Chart: Actual and planned levels of tree-felling intensity broken down by Slovenia's forestry units



Source: Forest Service of Slovenia

Tree-felling intensity is the ratio of annual removal levels to the annual gross increment.

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# Indicators of social development

# Life expectancy

The favourable trends in life expectancy continued in 2002, while the difference between male and female life expectancy increased for the second year running. After stagnating in the first half of the 1990s, life expectancy began to increase rapidly after 1995, with life expectancy for men increasing slightly faster than that for women up until 2000. In 2002, life expectancy was 72.3 for men and 79.9 for women. The difference between male and female life expectancy, which had already narrowed from 8 to 7.2 years in 1996-2000, increased again in 2001 and 2002. In 1995-2000, the mortality rate for men fell in almost all age groups; it dropped slightly faster in the age group of up to 65 and somewhat more slowly in the age group of over 65. The mortality rate for women aged up to 30 (which is low) stagnated, it fell more slowly than in men in the age group of 30-64, and fell faster than in men in the age group of over 65. In 2001 and 2002, female mortality rates continued to fall in practically all age groups, while male mortality rates dropped more slowly. In 2002, male mortality rates were 15% and female mortality rates 16% lower than in 1995; as regards men, they were the same or higher in the age groups of 5-9, 25-29 and 85 and over, and in the age groups of 1-4 and 10-14 as regards women. The difference between male and female life expectancy widened from 4 years in 1995 to 4.4 years in 2002 at the age of 65 and from 0.8 of a year to 1.4 years at the age

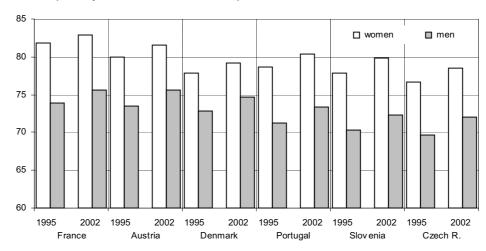
Slovenia's life expectancy continued to be shorter than in the EU on average, but it was longer than in Central and Eastern European countries. In the EU in 2001 (the latest available data), life expectancy was 75.5 years for men (3.4 years longer than in Slovenia) and 81.6 years for women (2 years longer than in Slovenia). In Europe, women enjoyed the longest life expectancy in San Marino (84 years) and in EU members in Spain (83.1 years) and France (82.9 years). Men continued to record the longest life expectancy in Iceland (78.5 years) as far as Europe is concerned and in Sweden (77.7 years) as far as EU members are concerned. Slovenia continued to have a longer life expectancy than other Central and Eastern European countries. The Czech Republic came second, with male life expectancy equalling that of Slovenia in 2001 for the first time in the last ten years (the latest figure) and that of women being 1.2 years shorter.

Table: Life expectancy in Slovenia and the EU, 1995-2002

	1995	1996	1997	1998	1999	2000	2001	2002		
Slovenia										
men	70.3	70.3	71.0	71.1	71.4	71.9	72.1	72.3		
women	77.8	78.3	78.6	78.7	78.8	79.1	79.6	79.9		
difference	7.5	8.0	7.6	7.6	7.4	7.2	7.5	7.6		
European Union										
men	73.9	74.2	74.6	74.6	74.9	75.3	75.5	-		
women	80.4	80.6	80.9	80.9	81.2	81.4	81.6	-		
difference	6.5	6.4	6.3	6.3	6.3	6.1	6.1	-		
Gap between the EU and Slovenia										
men	3.6	3.9	3.6	3.5	3.5	3.4	3.4	-		
women	2.6	2.3	2.3	2.2	2.4	2.3	2.0	-		

Sources: SORS, Eurostat.

Chart: Life expectancy in Slovenia and selected European countries in 1995 and 2002



Sources: SORS, Eurostat.

# Infant mortality

*Slovenia's infant mortality was at its lowest level in 2002.* The number of dead babies aged up to 1 year per 1000 live-born children dropped from 15.3 in 1980 to 5.5 in 1995. In the second half of the 1990s, infant mortality ranged between 4.5 and 5.5, and dropped to 3.8 in 2002, the lowest level so far. Like in most industrialised countries, infant mortality levels are on a downward trend in Slovenia primarily due to specific preventive measures taken in the area of prenatal and neonatal health care.

Since infant mortality fell in the last two years, Slovenia is now placed above the EU average. In the European Union, infant mortality fell by 0.2 from 2000 to 2002 when it was 4.5. Sweden recorded the lowest infant mortality in the European Union (2.8); there were just two other members ahead of Slovenia, namely Finland (3.0) and Spain (3.4), as well as Iceland (2.2) and Liechtenstein (2.5) as far as non-EU members are concerned. Among countries in transition, the Czech Republic had the lowest infant mortality (4.1 in 2002 and 4.0 in 2001) together with Slovenia, while Eastern European countries still recorded high levels of infant mortality, exceeding 10 and reaching as much as 17.3 in Romania.

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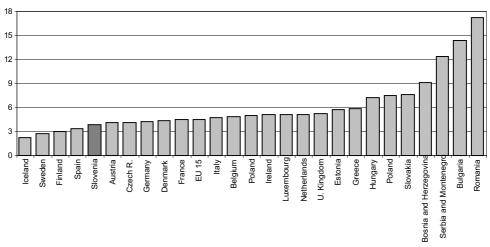
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#### Table: Infant mortality (per 1000 live-born children) in Slovenia and the EU, 1995-2002

	1995	1996	1997	1998	1999	2000	2001	2002
Slovenia	5.5	4.7	5.2	5.2	4.5	4.9	4.2	3.8
EU average	5.6	5.5	5.3	5.2	5.0	4.7	4.7	4.5

Sources: SORS, Eurostat.

#### Chart: Infant mortality per 1000 live-born children in selected European countries, 2002



Source: Eurostat.

Analytical Appendix - Indicators

## Population in jobless households

The jobless households indicator (the share of people living in households without any member in employment) is a structural indicator of social cohesion used for measuring poverty risk. Namely, unemployment is the most important factor of poverty risk in addition to poor education. Owing to the lack of material resources, the population living in jobless households have limited access to the means required for a decent standard of living – one of the principal objectives of social development advanced by the Strategy for the Economic Development of Slovenia 2001-2006. A better education structure of the population, brought about by enrolling young people in education, as well as through the increased formal and informal education of adults, would contribute to improving material wealth and, in turn, the social position of households in combination with the active employment policy.

In Slovenia, the share of people living in a jobless household increased in 2003 after having fallen for several years in a row. According to data from the SORS, 8.8% of people aged 18-59 lived in a jobless household in Slovenia in 1996. This share increased to 9.6% up until 1999, it shrank gradually from 1999 to 20021 to 8%, and climbed again to 8.7% in 2003. The differences between women and men were significant, while the value of the indicator fell slightly in 1996-2003 for both women and men. In 2003, 7.8% of men (8.4% in the EU-15) and 9.6% of women (10.9% in the EU-15) lived in a jobless household.

Poverty risk measured by the share of people living in jobless households declined faster in the EU than in Slovenia, however, this share was still higher in the EU. Further, Slovenia was ranked better than EU acceding countries on average. In 1996-2003, the share of people living in jobless households dropped by an average of 2 percentage points in the EU and was 0.9 of a percentage point bigger than in Slovenia in 2003. In EU acceding countries, poverty risk measured by this indicator was 12.2% in 2003 on average. It was the lowest in Lithuania, recording 7.4% of people who lived in a jobless household, Slovenia was placed third, while Poland and Bulgaria, recording 14.8% and 15.3%, respectively, were at the bottom (see chart).

<sup>&</sup>lt;sup>1</sup> This series differs slightly in terms of methodology from the previous one published in the Development Report 2003. The new calculation was made by Eurostat using national labour force data (the labour force survey). Changes mainly involve the definition of labour force participation.

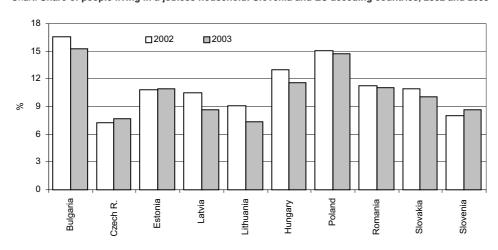
Table: Share of people living in a jobless household in Slovenia and the European Union, 1996-2003, %

	Slovenia	EU-15
1996	8.8	11.6
1997	8.7	11.6
1998	8.3	11.1
1999	9.6	10.5
2000	9.0	9.9
2001	8.2	9.7
2002	8.0	9.7
2003	8.7	9.6

Source: Eurostat (New Cronos).

Note: All figures for the EU-15 are Eurostat's estimates.

Chart: Share of people living in a jobless household: Slovenia and EU acceding countries, 2002 and 2003



Source: Eurostat (New Cronos),
Notes: Provisional data for Lithuania (2003), Poland (2002, 2003) and Romania (2002); a break in data series for Latvia (2002), Lithuania (2002) and Hungary (2003).

# **Poverty risk**

The risk of poverty rate is a structural indicator used in the fight against poverty and social exclusion. It is one of 18 indicators that measure progress in the wider area of social cohesion and is part of the European Commission's indicators adopted in Laeken in December 2001. The risk of poverty rate before and after social transfers can be used to measure the efficiency of the social state and the effectiveness of its social policy. Poverty reduction is the first step towards greater social inclusion, which is one the important goals of social development policy in Slovenia.

In 2000, the poverty rate fell slightly, as it did in preceding years, while the risk of poverty increased among socially and economically disadvantaged groups. In 1996-2000, Slovenia's risk of poverty rate averaged 13.3%; it was highest in 1997 (14%), but has been on a decline since. In 2000, the risk of poverty rate dropped to 12.9%. The risk of poverty rate was higher among women than men, however, this difference narrowed slightly in 2000. The risk of poverty rate of women was 1 percentage point higher than that of men (the difference was 1.2 percentage points in 1999). The socio-economic groups faced with the highest poverty risk have changed little over the years, while some changes can be seen within these groups. Poverty was on the decline in single elderly households and on the increase in single-parent households, jobless and large households. In 2000, the highest rates of poverty risk were seen among single elderly people (37.2%; 39.3% in 1999), the unemployed (39.9%; 38.2% in 1999), single-parent households with children (17.3%; 23.6% in 1999) and households with three or more children (19.0%; 17.6% in 1999). The relative gap of poverty risk<sup>1</sup>, which shows the distance from the threshold of poverty risk and best illustrates the depth of poverty, was 22.2% in 2000 and stayed at the same level as in 1999.

Slovenia records better results than the EU on average or EU acceding countries, however, the efficiency of social transfers is slightly below the EU average. In 2000, Slovenia's 12.9% rate of poverty risk was 2.1 percentage points lower than the EU average (15% according to Eurostat), but differences between individual EU members were large. The gap between Slovenia and the EU was even wider in the risk of poverty rate before social transfers, suggesting that the EU's social policy is more effective than Slovenia's. Namely, the risk of poverty rate without social transfers would have been 7.1 percentage points higher in Slovenia and 9 percentage points higher in the EU. Slovenia also recorded lower inequality in income distribution, expressed as a ratio of the highest to the lowest income quintiles. In 2000, income inequality was 3.6% in Slovenia and 4.4% in the EU on average (Eurostat). As regards poverty risk, Slovenia performed even better compared to EU candidate-countries for which data are available. These data include income in kind because it helps reduce poverty risk significantly in these countries (see chart).

<sup>&</sup>lt;sup>1</sup> The relative gap of poverty risk is the difference between the threshold of poverty risk and the median of equivalised income of people living below the threshold of poverty risk; it is expressed as a percentage distance to the threshold of poverty risk.

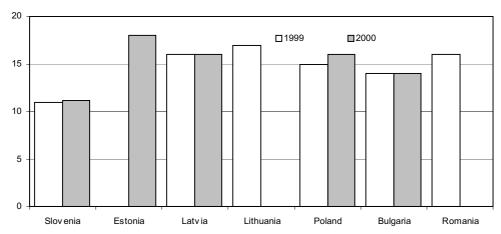
Table: Risk of poverty rate before and after social transfers in Slovenia and EU member-states in 1996-2000 (excluding income in kind)1

	Risk of poverty rate after social transfers					Risk of poverty rate before social transfers					
	1996	1997	1998	1999	2000	1996	1997	1998	1999	2000	
Slovenia	12.2	14.0	13.8	13.6	12.9	N/A	N/A	N/A	20.5	20	
EU-15	16 s	16 s	15 s	15 s	15 s	25 s	25 s	24 s	24 s	23 s	
Austria	14	13	13	12	12	25	24	24	23	22	
Belgium	15	14	14	13	13	27	26	26	25	24	
Denmark	9	9	12	11	11	28	27	27	24	23	
Germany	14	12	11	11	11	22	22	22	21	20	
Greece	21	21	21	21	20	22	23	22	22	22	
Spain	18 p	20 p	18 p	19 p	18	26 p	27 p	25 p	23 p	22	
France	15	15	15	15	16	26	26	25	24	24	
Ireland	19	19	19	18	20	34	32	32	30	31	
Italy	20	19	18	18	18	23	22	21	21	21	
Luxembourg	11	11	12	13	12	24	22	23	24	23	
Netherlands	12	10	10	11	10	24	23	21	21	21	
Portugal	21	22	21	21	21	27	27	27	27	27	
Finland	8	8	9	11	11	23	23	22	21	19	
Sweden	N/A	9	10	9	11	N/A	28	28	28	27	
UK	18	18 p	19 p	19 p	19	29	30 p	30 p	30 p	29	

Sources: Eurostat, New Cronos database (for EU members), SORS, First Release, No. 126, October 2003 (for Slovenia). For Slovenia, we used figures that exclude income in kind to allow a comparison with the EU-15. Data published by Eurostat for Slovenia include income in kind and are therefore incomparable with data for the EU-15.

Notes: data for Slovenia published on Eurostat's homepage (New Cronos database, structural indicators) as well as data published by the SORS in its First Release No. 4 dated 15 January 2003 (Structural Indicators) are incomparable with data for the EU-15 because income includes income in kind. This is why we used data for Slovenia that exclude income in kind. "p" a country's assessment, "s" Eurostat's assessment, "N/A" not available.

Chart: Risk of poverty rate after social transfers in Slovenia and selected EU candidate-countries in 1999 and 2000 (including income in kind)<sup>1</sup>



Source: Eurostat (New Cronos).

Note: 'Figures for all countries include income in kind and are therefore comparable.