

RECENT TRANSFORMATION OF ECONOMIC INEQUALITY IN NUTS 3 REGIONS IN SLOVENIA

SUVREMENA PROMJENA GOSPODARSKIH NEJEDNAKOSTI U NUTS 3 REGIJAMA SLOVENIJE

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The restructuring of the economy and transition to a market economy have had different impacts on the economic position of regions. The level of impact that changed economic and socio-political circumstances caused in the individual regions depended on various factors: the economic structure of the regions, their ability to reroute onto foreign markets, development potentials, development strategies, and their strategic decisions.

Development problems are distinctive predominantly in areas suffering from structural backwardness and economic weakness with predominantly rural orientation, areas facing demographic problems, low income per inhabitant and high unemployment rate. The peripheral nature of the underdeveloped areas caused the emptying of the countryside and concentrating of the population in urban centers. Unfavorable demographic picture, emigration of the young, poor educational structure and shortage of adequate staff, and absence of strategic decisions had led to an increasing setback of the underdeveloped regions compared to the developed ones.

The results of empirical analyses of division NUTS 3 regions in Slovenia into groups, taking into account the selected development indicators, lead to the conclusion that economic development has not been conducted in the context of modern understanding of balanced regional development and in accordance with the principle of integrity of implementing regional policy in the entire state territory. The existing regional developmental differences confirm the thesis that market mechanism on its own will not reduce economic inequality and substantiate the need for efficient conduct of regional policy.

Key words: Slovenia, regional disparities, development, regional policy, transition, economic inequality

Prestrukturiranje gospodarstva i prijelaz na tržišno gospodarstvo imali su različit utjecaj na gospodarski položaj regija. Utjecaj promijenjenih gospodarskih i društveno-političkih okolnosti u pojedinim regijama ovisio je o brojnim čimbenicima: gospodarskoj strukturi regija, njihovoj sposobnosti da se preorijentiraju na strana tržišta, razvojnim potencijalima, razvojnim strategijama te strateškim odlukama.

Razvojni problemi su posebice izraženi u područjima koja obilježavaju strukturno nazadovanje i gospodarske slabosti vezane uz ruralnu orijentaciju, u demografski ugroženim područjima, te u područjima s niskim prihodima po stanovniku i visokim stopama nezaposlenosti. Periferan položaj slabije razvijenih područja uzrokovao je demografsko praznjenje ruralnih područja i koncentraciju stanovništva u urbanim centrima. Nepovoljna demografska slika, iseljavanje mladog stanovništva, nepovoljan obrazovni sastav stanovništva, nedostatak stručnih kadrova, te nedostatak strateških odluka rezultirali su sve većim zaostajanjem slabije razvijenih regija za razvijenim regijama.

Rezultati empirijskih analiza podjele NUTS 3 regija u Sloveniji u grupe, uzimajući u obzir odabrane razvojne pokazatelje, pokazali su da gospodarski razvoj nije bio u skladu sa suvremenim poimanjem ujednačenoga regionalnog razvoja ni u skladu s principom integriteta primjene regionalne politike na čitavom državnom teritoriju. Postojeće regionalne razvojne nejednakosti potvrđuju tezu da tržišni mehanizam sam po sebi ne može smanjiti gospodarske nejednakosti i nadomjestiti potrebu za učinkovitim provođenjem regionalne politike.

Ključne riječi: Slovenija, regionalni dispariteti, razvoj, regionalna politika, tranzicija, gospodarske nejednakosti

Introduction

Regional disparities can be studied from a variety of different angles. Looking across the EU, the Member States display a range of preoccupations, reflecting their very different geographical circumstances, levels of economic development and extent of social problems, as well as different scales of their internal regional disparities. The conceptualisation of regional problems varies from country to country, but there are essentially three types of disparities addressed (Fig. 1):

- physical disparities (those associated with geographical or natural conditions),
- economic disparities (those concerned with differences in the quality or quantity of output of a region),
- social disparities (those concerned with the income or standard of living of the population) (WISHDALE, YUILL, 1997).

The paper addresses regional economic disparities in the period 1996–2008 at the statistical regions (NUTS 3) level. The work is based on the analysis of regional GDP per capita and GVA shares across main economic sectors. The overview of literature shows that Slovenian geographers have not discussed this topic intensively enough,

which was particularly the case after the period of accession of Slovenia to the EU and the Euro Area.

Slovenian geographers have dedicated more efforts to tackling regionalisation and setting up the foundations for establishing regions than to studying regional disparities. Most works mentioning regional disparities do not belong to the actual works dedicated to analysing the causes for the creation of regional disparities. What is missing in particular are the analyses of changes in economic activities by individual regions.

The article is a contribution intended to cover the gap created by the long postponing of regional division of Slovenia to cohesion regions since Slovenia only had two cohesion regions at NUTS 2 level to establish a basis for the EU strategy for studying regional disparities as late as 2008. The reason for this delay lies in the fact that Slovenia as a small country still is not divided into regions officially. Thus, we have the state on one side, and twelve (NUTS 3) statistical regions and 211 municipalities on the other (Fig. 2).

In recent years up to the day, the new Member States of the EU have received in-depth analyses of regional disparities. The approach for the majority of new Members was similar. Analyses of regional

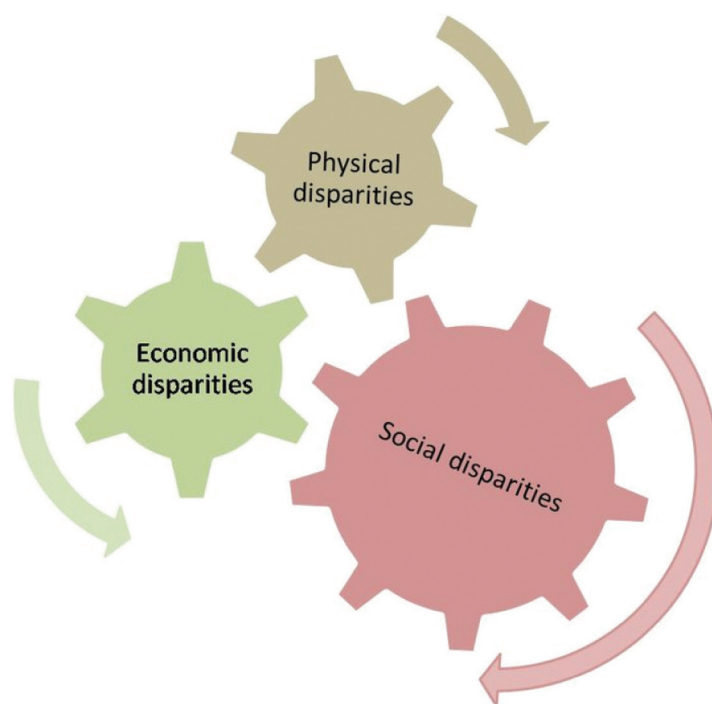


Figure 1 Different Types of regional disparities

disparities are based on Gross Domestic Product (GDP) per capita and other significant indicators. There are very few works in which authors use Gross Value Added (GVA) structure by sectors as a starting point for an analysis of regional disparities.

Conclusions of all their analyses are rather identical and overlap with the theoretical works of top-class authors who tend to conclude that regional disparities are widening in countries experiencing fast economic growth. In all the new countries, the regions where the capital city is situated are at considerable advantage. GVA structure by sectors in these regions is similar to that in the most developed countries, and these regions significantly exceed the national average in GDP per capita. In Slovenia, which entered the transition period as the most developed new member country, regional disparities have widened the least, considering its slower general economic growth.

According to the administrative division of Slovenia into two NUTS 2 regions, it can be noted that regional disparities at this level are among the lowest in Europe (EC- EUROSTAT, 2011). In analysing regional disparities, it is important to recognise that measured inequality increases with the level of spatial disaggregation, which could be

noted when regional disparities at a lower NUTS 3 level were analysed.

Analyses of regional inequalities rest on the examination of differences in abstract/general characteristics that regional economies share. Most attention is paid to their relative income and wealth, and to the way in which they change over the course of time: if inequalities get smaller, convergence or catch-up occurs, and if they get wider, divergence is said to occur (DUNFORD, 2007). In the article, regional GDP per capita and distribution of GVA by major economic sectors were analysed.

Gross Domestic Product (GDP) is a measure of aggregate value added. As new wealth created in production is distributed among those who participate in economic life, GDP is also a measure of primary incomes (profits, interest, rents and wages) accruing to those who contribute to a region's economic activities. The primary distribution of income is subsequently modified by state-administered redistribution. The result is the secondary distribution of income. These secondary incomes are saved and/or spent, and thereby permit the establishment of claims over the goods and services produced. Measurement of these expenditures (conventionally divided

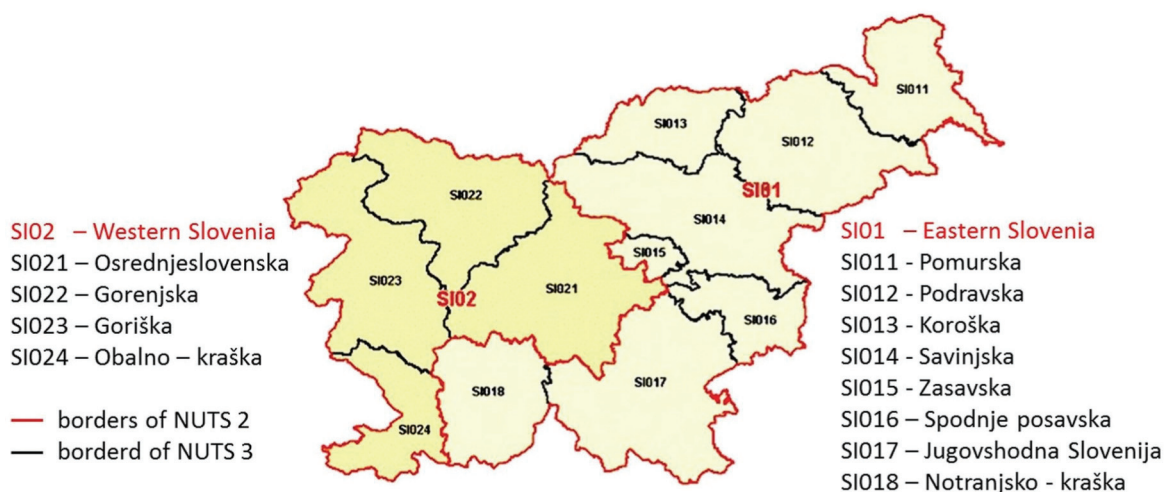


Figure 2 Slovenian NUTS 2 units (cohesion regions) and NUTS 3 units (statistical regions); Valid from 1 August 2008

into consumer and government expenditure, investment/savings and net exports) offers a third way of measuring GDP (WISHDALE, YUILL, 1997). In order to be able to compare GDP among different regions according to their size and population, data on GDP per capita were used.

In order to find an explanation as to why there are inequalities between GDP per capita changes in GVA shares by major economic sectors were examined during this research phase. At the same time, the situation before the changes which were a result of the fall of the Berlin Wall in 1989 and of transition to market economy was taken into consideration. Reactions to the challenges differed among the regions (statistical units). Regions experienced a particular problem regarding the predominantly conventional structure of industrial production and the less developed service sector. The Osrednjeslovenska Region SI021 with its modern economic structure and the city of Ljubljana was at a significant advantage over other regions. Therefore, it is not surprising that all indicators are in favour of this region which deviates significantly from the national average, even more so after the turn of the millennium.

Previous researches and data

At the end of the 1960s, the standard of living of the Slovenian population has risen due to a more rapid development of light processing industry and an increased production of consumable goods after 1966. Economic prosperity of this period resulted in investments in infrastructure, which was reflected in visible changes of the landscape, urban areas in particular.

Large regional differences in development were already pointed out as early as in 1969 in a collection of selected papers by a group of intellectuals, *Siti in lačni Slovenci* (The Full and the Hungry Slovenians). The political circles responded to this by adopting legislation to promote less developed areas. The state was giving allowances to promote investments in infrastructure and opening of new posts, particularly in labour-intensive industrial sectors with lower GVA. The results of investments did not meet the expectations and had no significant effect on lessening regional disparities since the trend of emigration of younger, educated population to the more developed urban areas continued.

In his work *Spatial Influences of Slovenian Regional Policy* (NARED, 2007), the author divided the post-war period into three periods. The first period of promoting less developed areas (between 1971 and 1991) began in the seventies when the government at the time adopted the Act on measures to accelerate development in less developed areas of the SR of Slovenia (1971), thus beginning the implementation of an active policy on lessening regional disparities. The Act explains the criteria for defining less-developed areas and instruments provided to improve the conditions given. The used approach was a top-to-bottom one which in effect, during the first phase of moving the labour-intensive sectors to the rural areas, generated many new jobs. By that time, the developed global economy had already transited to the post-industrial stage. The beginning of transition of Slovenian economy which coincides with the social changes in Eastern European countries and Slovenian independence revealed structural weaknesses of the economy and its unpreparedness for transition to market economy (NARED, 2007).

The second period (1991–1999) started with the adoption of the Development Promotion in Demographically Endangered Areas Act as an answer to sharp deterioration of the demographic situation in the Republic of Slovenia. When defining the problem areas, economic criteria were discarded entirely and the process of defining was based on demographic indicators at the level of local communities and, consequently, even at the level of local settlements. Considering the lack of funding and a perfected strategy, such an approach was necessarily bound to fail (NARED, 2007).

According to the European legislation, Slovenia's preparations for entering the EU called for a changed approach to solving regional disparities. Therefore, the Promotion of Balanced Regional Development Act, adopted in 1999, put regional policy on a completely new set of foundations. It asserted the principle of endogeneity and partnership with the newly established institutional structure (NARED, 2007).

Professionals in the field, especially the geographers, have not been addressing the topic of regional disparities in a methodical way. The reason probably lies in the fact that Slovenia has never been administratively divided into regions. Therefore, written works of Slovenian geographers have been focused more on theoretical research of creating the regions than on studying regional disparities. Statistical regions, which are actually represented

by NUTS 3 regions today, were introduced as late as after the gaining of independence.

Statistical Office of Republic of Slovenia (SORS) published the first set of data on regional GVA as late as in 1999. From that year on, official data have been made available. The Institute of Macroeconomic Analyses and Development (IMAD) has been collecting data for the purposes of planning the regional development policy in accordance with the EU guidelines. The area of regional issues is now being addressed by Janja Pečar who publishes economic indicators by regions in the form of workbooks (PEČAR, 2008).

Since officially there were no regions in Slovenia, Slovenian geographers paid more attention to the role of municipalities in studying inequalities within the country which is now overlapping with the modern trends of research by world geographers under the influence of the OECD guidelines, where influence of urban centers on polycentric development and lessening of regional disparities are being studied.

Ravbar was one of the first to address regional disparities at the end of the 1990s. For him, the term "regional disparities", according to a formal and simplified definition, refers to deviations and discrepancies in selected, especially important (typical) features of social life at a particular functionally, naturally, and geographically rounded territory.

These discrepancies are usually measured by quantitative and/or qualitative indicators which are, simultaneously, "control" mechanisms in (extensive) regional planning and a test of efficiency of the realisation of the plans made. At the same time, he concludes that regional disparities implicate "multiple dimensions and, in particular, spatial consequences that need to be considered when establishing a uniform concept of facilitating regional development" (RAVBAR, 1999).

Černe thus states that disparities between municipalities are even much larger than disparities between statistical regions. This holds true for demographic data (growth rate, ageing index, and density of population) and even more for socio-economic indicators (ČERNE, 1999).

The new municipalities in Slovenia (since 1995) are small. If we exclude Ljubljana and Maribor they average less than 9,000 inhabitants. The Parliament passed a series of laws on the basis of which the reform of local self-government and the national administration was carried out in 1995.

The administrative division was changed essentially many times, from 1945 to the abolishment of districts in 1965, and it underwent as many as 32 changes altogether. There were no changes from 1965 to 1994. Before, there were 62 communes. Slovenia now has 211 municipalities, 11 of which are city municipalities. Deciding on small municipality level on radical planning measures (such as location of industrial zones, of tourist objects, waste disposal areas) cannot always lead to the best solution for the municipality nor for the whole region and country (ČERNE, 1999).

There is no regional public administration. The national and the local level are the two formally established levels of administration. The State has transferred part of its responsibilities to 58 administrative units, the centres of former communes, linking national ministries and local administrative bodies. Individual ministers reorganised their services into 8-12 regional offices, covering the territory of the whole country (ČERNE, 1999).

In his paper Questions of regional development in Slovenia, the author discusses the polarisation between Slovenian regions. "In the period 1991-1997 the polarisation of the Slovenian regions has become quite obvious: on the one hand there is a group of economically more developed and medium developed regions whose relative position has improved, on the other hand there is a group of less developed and medium developed regions whose relative position has worsened" (ČERNE, 1999).

Studies made in the early 1990s (ČERNE, 2005) have distributed Slovenian regions according to the level of economic development, economic structure and evaluation of natural, human, financial and infrastructural potentials into different groups:

- economically developed regions with perspective economic structure and positively evaluated development potentials: Osrednja, Obalno – kraška and Gorenjska region;
- economically medium developed regions with fairly prospective economic structure and mostly positively evaluated development potentials: Savinjska, Dolenjska and Goriška region;
- medium developed regions with a problematic economic structure, but with some positively evaluated development potentials: Podravska, Koroška, Posavska region;

- less developed regions with a prospective structure of the economy: Pomurska in Notranjsko-kraška region;
- and Zasavska region as a region in industrial decline.

In preparations for Slovenia's accession to the EU, accelerated cross-border cooperation began through the EU programmes. Bufon has been involved in an intense study of cross-border cooperation during the past years. "Our spatial analysis of European programmes for cross-border cooperation in Slovenia revealed significant differences in their implementation in different territorial units. What is more, a case-by-case analysis shows notable differences in the structure of interest fields benefiting from financial assistance in individual border areas. Thus, in Slovenian-Italian and Slovenian-Hungarian border areas, the main part of resources from cross-border cooperation programmes was allocated to environment protection and improvement, as well as tourism development, while in Slovenian-Austrian border areas, the bulk of resources was allocated to provide support for economy and the development of rural areas" (BUFON, MARKELJ, 2010).

Lorber is engaged in research of transition issues of the new members of the EU after the year 1989 with emphasis on Slovenia. Within the scope of the analysis of restructuring the economy, regional disparities of the new member states were soon encountered. At the beginning of the nineties, Lorber dedicated her research to industrial geography and examined the impact of industry (LORBER, 1993), as well as processes of restructuring on development of Maribor and on transformation of space (LORBER, 1999). Structures of the economies of the new EU member states with the emphasis on Slovenia and its regions (LORBER, 2008, 2010a, 2010b) addressing the border regions of north-eastern Slovenia in particular were studied.

Methodology

Examining economic disparities between Slovenian NUTS 3 regions was based on the movement of GDP per capita and GVA by major sectors of economy.

Amongst the indicators, the following were chosen:

- regional GDP per capita in statistical regions NUTS 3,
- structure of GVA in statistical regions NUTS 3.

Time-wise, the data between the years 1996 and 2008 were included. These data were divided as appropriate into three time lines:

- 1996–1999 – period of intensive restructuring of manufacturing activities and ownership transformation,
- 2000–2004 – period of intensive adaptation of the economy and legislation in pre-accession negotiations with the EU,
- 2005–2008 – period after the accession to the EU and introduction of EURO until the beginning of the monetary crisis.

Indicators and calculations

Regional accounts represent a subsystem of national accounts where specified spatial units (in our case statistical regions NUTS 3) are the main object of the survey. Concepts used in regional accounts are the same as those used in national accounts.

GDP - Gross domestic product equals the sum of gross value added at basic prices of all activities and net taxes on products (taxes less subsidies on products) (SORS).

Regional GDP per capita – Regional GDP, divided by the population of the region; it is the most frequently used indicator for measuring the level of development. It does have a range of deficiencies, but at the moment, there is no better indicator and that is why we kept it in our method as well. Data sources used for the calculation of regional BDP were: regional accounts data, Statistical Register of Employment, Monthly report on wages and employed persons in companies, enterprises and organisations, Business Register of Slovenia, turnover Tax Declaration, data on production and different statistical data. The calculation comprises all activities in accordance with the concept of production according to the System of National Accounts (SNA 93) and European system of national and regional accounts (ESA 95) systems (KAVAŠ ET AL., 2005). ESA95 is broadly consistent with the System of National Accounts of the United Nations (SNA 93) with regards to definitions, accounting rules and classifications. But due to greater accuracy requirements for definitions and the accounting rules, it also has some particularities, especially in its presentation, which is more in line with EU practices (EC EUROSTAT, 2011).

The data were obtained from SORS.

$$\text{GDP per capita}_i = \frac{\text{GDP}_i}{P_i}$$

$$\text{GDP}_i = \text{GDP region}_i$$

$$P_i = \text{population of region}_i$$

Regional inequalities in GDP per capita were calculated in the form of indexes. The basis for calculation was GDP per capita of Slovenia. Average indexes were calculated for individual time periods and percentage differences were determined. The results were presented in tables and figures.

Regional gross added value and gross domestic product were calculated by an indirect method. National GVA figures by activities and income components were allocated to regions by adequate keys.

The GVA includes regional estimates on three major sectors including their sub-sectors, namely:

- agriculture, fishery and forestry,
- industry sector: mining and quarrying, manufacturing, construction, electricity and water,
- service sector: transport, communication and storage, trade, finance, ownership of dwellings and real estate, private and government services.

The data on three major sectors were obtained from SORS data bases and divided into three timelines. Individual GVA figures by main sectors were added up and divided by the number of years in the line.

$$\text{GVA}_{tl-m} = \sum_{tn}^{tl} \text{GVA}_{tl+..,tn} / n$$

n = number of years

Obtained results were arranged in tables and shown in figures.

Based on the calculations, the regions were categorised into:

- economically developed regions with perspective economic structure,

- economically medium developed regions with fairly prospective economic structure,
- economically medium developed regions with problematic economic structure,
- less developed regions with a prospective structure of the economy,
- less developed regions with problematic economic structure.

Results

In 1999, SORS published official data on Regional GDP for the first time (year 1995) and Regional GVA for Slovenian Statistical Regions (year 1996).

In 1995, the difference between the most developed Osrednjeslovenska Region SI021 with the index 138.0 and the least developed Pomurska Region SI011 with the index 74.9 was 61.1. The most developed region's GDP per capita was 1.84 times higher than that of the least developed one (Tab. 1).

Slovenian regions were distributed according to the level of economic development into five different groups:

- economically developed regions with perspective economic structure, (SI021, SI024 and SI023),
- economically medium developed regions with fairly prospective economic structure, (SI022, SI014 and SI017),
- economically medium developed regions with problematic economic structure, (SI015, SI012 and SI016),
- less developed regions with a prospective structure of the economy, (SI018 and SI013),
- less developed regions with problematic economic structure (SI011).

Table 1 Indexes of Regional GDP per capita, year 1995, Slovenia = 100

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
1995	100.0	108.5	99.3	89.2	138.0	78.7	88.7	80.9	84.8	93.0	79.6	81.6	74.9

Sources: SORS

Period 1996–1999

In the period 1996–1999, Slovenia's economic growth was on average 4.4%, while its average export growth was 5.7% (data by SORS and authoress' own calculations). In 1999, the difference between the most developed Osrednjeslovenska Region SI021 with the index 138.8 and the least developed Pomurska Region SI011 with the index 70.7 was 68.1. The most developed region's GDP per capita was 1.96 times higher than that of the least developed one (Tab. 2).

In the period, the fastest growing regions were Spodnje-posavska Region SI016 (the share of GVA increased in energy sector) and Jugovzhodna Slovenia Region SI017 (the share of GVA increased in manufacturing activities – pharmacy and automobile industry), while two

regions, Osrednjeslovenska SI021 and Goriška SI023, also decreased regional setbacks, and six regions' situations worsened – the largest setback was experienced in the less developed Pomurska Region SI011 (significant fall of GVA in agriculture and manufacturing activities in 1999) and, surprisingly, Obalno-kraška Region SI024 (problematic structure of the manufacturing activities). A significant setback occurred in 1999 when Slovenia's GDP growth was as high as 5.6%, and its export growth was relatively low, merely 1.6%. These data had a direct impact on widening regional disparities between the most developed and the least developed regions, from 62.7% in 1998 to 68.1% in 1999. Data on annual movement of regional GVA by regions indicate that the SI011 region experienced a significant setback, which is a result of the decrease in GVA in agriculture and industry sectors (Tab. 3).

Table 2 Indexes of regional GDP per capita, years 1996–1999, difference between index for years 1999 and 1996, Slovenia = 100)

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
1996	100.0	109.1	99.9	89.0	137.9	79.1	88.6	80.8	83.9	92.1	79.7	81.9	75.1
1997	100.0	108.0	100.5	90.2	136.6	80.4	90.4	82.4	84.2	92.2	79.4	82.2	74.5
1998	100.0	107.6	99.2	89.8	136.6	80.9	81.5	86.0	83.2	91.8	79.9	82.1	74.0
1999	100.0	105.8	100.1	88.0	138.8	78.7	91.1	83.5	82.4	91.6	79.7	82.9	70.7
I 1999 – I 1996		-3.3	+0.2	-1.0	+0.9	-0.4	+2.5	+2.7	-1.5	-0.5	0.0	+1.0	-4.4

Sources: SORS, authoress' own calculation

Table 3 Average GVA share in percentages per major economic sectors – agriculture, industry and service, from 1996 to 1999 for Slovenia and NUTS 3 regions

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
A	3.93	1.97	4.36	3.02	1.56	8.89	7.28	7.79	2.17	4.60	5.70	4.91	10.56
I	35.94	23.87	38.91	42.99	27.54	40.71	47.21	45.19	52.13	45.84	47.66	34.10	36.52
S	60.13	74.16	56.73	53.99	70.90	50.40	45.51	47.02	45.70	49.56	46.64	61.00	52.92

Sources: SORS, authoress' own calculation

Period 2000–2004

In the period between 2000 and 2004, Slovenia was involved in intense preparations for access to the EU. During this period, its average annual GDP growth was 3.7%, while export growth was 8.4%. Compared to the previous period, the average annual GDP growth rate was lower by 0.7%, while export grew by 2.7% at the annual level. In 2004, the difference between the most developed Osrednjeslovenska Region SI021 with the index 143.4 and the least developed Pomurska Region SI011 with the index 67.9 was 75.5. The most developed region's GDP per capita was 2.11 times higher than that of the least developed one (Tab. 4).

The role of Osrednjeslovenska Region SI021, whose growth was 4.9% faster than the Slovenian

average, grew significantly; the largest setback was noticeable in Zasavska Region SI015, namely by - 8.6%. Typical of this period was also the fact that, in addition to SI021, only Podravska Region SI012 (0.6%) and Jugovzhodna Slovenia SI017 (0%) experienced positive growth. Development of SI021 can be attributed entirely to favourable GVA structure and the development of Ljubljana as the capital city, while SI012 and SI017 as two medium developed regions with favourable industrial structure achieved minimum growth on behalf of export. All remaining regions receded. Vulnerability of the medium developed regions with problematic economic structure was especially exposed in cases such as SI015 (abandonment of coal mining), Koroška Region SI013 (problems in metallurgy) and Spodnjeposavska Region SI016 (problems in paper and textile industries) (Tab. 5).

Table 4 Indexes of regional GDP per capita, years 2000–2004, difference between index for years 2004 and 2000, Slovenia = 100)

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
2000	100.0	105.4	99.0	87.6	138.5	80.5	91.7	85.0	79.3	90.6	82.7	83.7	69.6
2001	100.0	104.0	99.0	88.6	140.0	79.6	91.9	85.0	75.0	88.7	82.2	83.3	69.7
2002	100.0	104.9	97.3	88.0	140.4	80.2	90.7	84.2	72.6	89.6	80.3	84.2	68.8
2003	100.0	104.0	95.5	86.7	144.1	77.9	89.9	79.7	71.0	88.7	78.0	83.6	68.0
2004	100.0	103.3	95.7	85.6	143.4	77.1	91.7	80.2	70.7	88.9	77.5	84.3	67.9
I 2004 – I 2000		-2.1	-3.3	-2.0	+4.9	-3.4	0.0	-4.8	-8.6	-1.7	-5.2	+0.6	-1.7

Sources: SORS, authoress' own calculation

Table 5 Average GVA share in percentages per major economic sectors – agriculture, industry and service, from 2000 to 2004 for Slovenia and NUTS 3 regions

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
A	2.98	1.61	3.37	2.41	1.16	6.92	5.44	6.00	1.98	3.60	4.21	3.51	8.70
I	35.15	23.89	39.06	42.87	24.92	42.70	48.56	49.06	49.27	45.77	49.28	34.93	35.98
S	61.87	74.50	57.57	54.72	73.92	50.37	46.00	44.94	48.75	50.62	46.51	61.56	55.31

Sources: SORS, authoress' own calculation

Period 2005–2008

The period after Slovenia's accession to the EU until the beginning of world financial crisis was the most successful one with regard to annual economic growth movement (5.3%) and export growth (10%). In 2008, the difference between the most developed Osrednjeslovenska Region SI021 with the index 141.6 and the least developed Pomurska Region SI011 with the index 65.0 was 76.6. The most developed region's GDP per capita was 2.18 times higher than that of the least developed one. The largest regional inequality occurred in 2007 when it was 2,204:1 (Tab. 6).

Regional inequalities in 2008 compared to 2005 remained at the same level, which was the result of fall of GDP and the export in 2008.

On the basis of the comparison between average values, the most successful regions in this period were Obalno-kraška Region SI024 with 4.2%

growth (growth in transport and logistics - Luka Koper, real estate market), Podravska Region SI012 (1.8%), Jugovzhodna Slovenia SI017 (0.2%) and Savinjska Region SI014, all of them being medium developed regions with favourable export-oriented industry. All the remaining eight regions receded (Tab. 7). The largest setback was experienced in SI015 (-4.4%) due to inadequate structure of economic sectors, SI013 (-2.2%) mainly due to the downturn of industrial production in 2006, Notranjsko-kraška Region SI018 (-1.9%) as a result of decrease in industrial production mainly for export in 2008, following are SI021 and SI011, both with -1.8%. Region SI016 receded at a minimum rate (-0.1%), mostly because of the year 2008 when it had a growth of 2.2% on behalf of larger industrial production both in processing activities and in power generation. The least fluctuation was detected in Goriška Region SI023, the fall (-0.4%) being the consequence of the beginning of the crisis in 2008.

Table 6 Indexes of regional GDP per capita, years 2005–2008, difference between index for years 2008 and 2005, Slovenia = 100)

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
2005	100.0	101.8	96.3	85.3	143.4	76.0	92.7	82.5	69.7	89.6	78.7	83.5	66.8
2006	100.0	102.3	96.3	84.3	144.3	74.8	92.9	80.8	68.1	88.9	76.7	84.2	65.7
2007	100.0	104.0	96.4	84.7	143.7	75.4	93.1	80.2	66.1	87.9	76.9	85.1	65.2
2008	100.0	106.0	95.9	84.0	141.6	74.1	92.9	82.4	65.3	89.7	76.5	85.3	65.0
I 2008 – I 2005		+4.2	-0.4	-1.3	-1.8	-1.9	+0.2	-0.1	-4.4	+0.1	-2.2	+1.8	-1.8

Sources: SORS, authoress' own calculation

Table 7 Average GVA share in percentages per major economic sectors – agriculture, industry and service, from 2005 to 2008 for Slovenia and NUTS 3 regions

	SVN	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
A	2.53	1.62	3.01	2.24	0.98	6.49	4.49	4.98	2.07	3.08	3.82	2.90	7.41
I	34.21	23.86	38.42	40.34	24.02	41.37	47.55	49.13	46.17	46.02	49.32	34.42	36.08
S	63.26	74.52	58.57	57.42	75.01	52.14	47.95	45.89	51.76	50.90	46.85	62.68	56.51

Sources: SORS, authoress' own calculation

Changes between 1996 and 2008

Figure 3 was created where the situations of individual regions and changes of their average GDP were drawn in the form of points.

$$\text{x-axis} = \overline{\text{GDP}}_T - \overline{\text{GDP}}_{T-1} ;$$

$$\text{y-axis} = \overline{\text{GDP}}_{T+1} - \overline{\text{GDP}}_{T-1}$$

The x-axis shows the difference between the average regional GDPs per capita in the T period (2000 to 2004), minus the average of regional

GDPs per capita in the T-1 period (1996 to 1999). The y-axis shows the difference between the T+1 average (2008 to 2005), minus the T-1 average (1996 to 2000).

Based on the analysis of data from Figure 3, it is evident that only three regions were able to adapt their economy structures during the observed period. The leading one is Osrednjeslovenska Region SI021 whose GDP per capita in the observed period grew by 5.8% (Tab. 8). Its advantage is based on modern structure of economic activities (major economic sectors) which mainly draws from the fact that the capital city is also situated in this

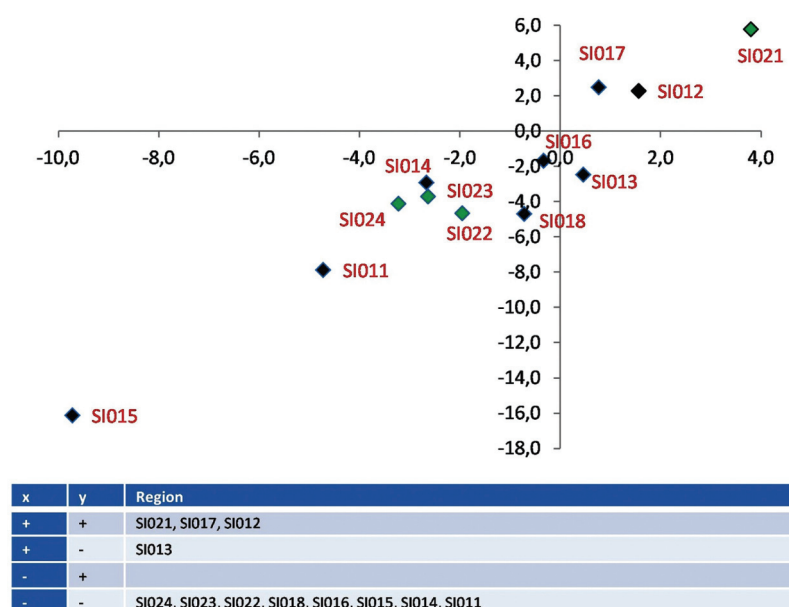


Figure 3 Changes in regional GDP per capita (%) in the period 1996–2008, NUTS 3 regions (green – NUTS 3 regions of NUTS 2 - Western Slovenia and black – NUTS 3 regions of NUTS 2 - Eastern Slovenia)

Sources: SORS, authoress' own calculation

Table 8 Average changes in regional GDP per capita (SVN = 100) in three observed periods

GDP per capita	SI024	SI023	SI022	SI021	SI018	SI017	SI016	SI015	SI014	SI013	SI012	SI011
T-1 Average, 1996-1999	107.6	99.9	89.2	137.5	79.8	90.4	83.2	83.4	91.9	79.7	82.3	73.5
T Average, 2000-2004	104.4	97.3	87.3	141.3	79.1	91.2	82.8	73.7	89.3	80.1	83.8	68.8
T+1 Average, 2005-2008	103.5	96.2	84.6	143.2	75.1	92.9	81.5	67.3	89.0	77.2	84.5	65.7
X axis	-3.2	-2.6	-2.0	3.8	-0.7	0.8	-0.3	-9.7	-2.7	0.5	1.6	-4.7
Y axis	-4.1	-3.7	-4.7	5.8	-4.7	2.5	-1.7	-16.1	-2.9	-2.5	2.3	-7.9

Sources: SORS, authoress' own calculation

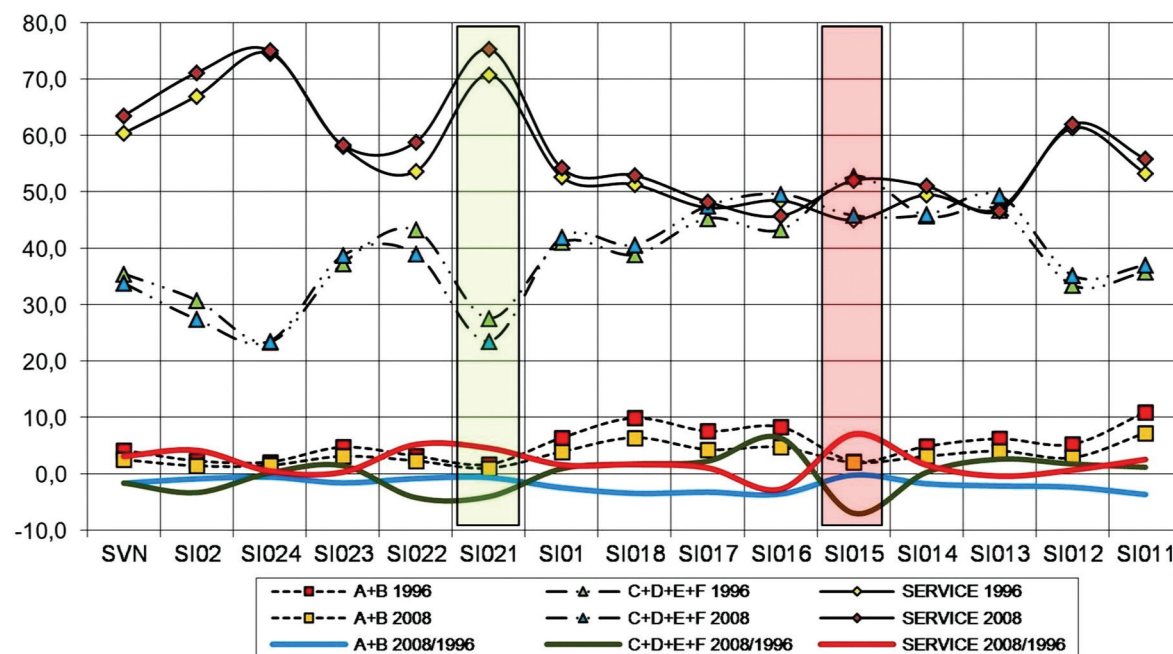


Figure 4 Changes in GVA by economic sectors on NUTS 1, 2 and 3 levels
 Explanation of Figure 4: A+B – agriculture, C+D+E+F – industry and construction
 Sources: SORS, authoress' own calculation

region (Fig. 4). The share of agriculture is lower than 1%, industry 24% and services 75%, which is comparable to the most developed countries of the world. Jugovzhodna Slovenia SI017 and Podravska Region SI012 with their positive GDP per capita growth compared to the Republic's average belong to the economically medium developed regions with fairly prospective economic structure. Region SI017 is one of the most distinctive industrial regions; the share of agriculture is 4.5%, industry 47.5% and service barely 47.95%. This region is at the fourth place according to GDP per capita, mainly due to the manufacture with high added value (pharmacy and automobile industry) which is focused on foreign markets. Characteristic of the region SI012 whose sectoral structure is more favourable: agriculture (2.9%), industry (34.5%) and service (62.6%), is that it is lagging behind the Republic's average. This is due to the fact that it was a leading industrial region with a well-developed traditional industrial structure. After gaining independence, the first one experienced a large downturn of production, but has been showing a slow yet constant progress since 1995.

However, the largest development decline was experienced by the smallest region, the Zasavska Region SI015. In the period 1996 to 1999, it was

the only region to generate more than half of its GDP per capita in industry (52.1%). Closure of coal mines and the adjoining industrial facilities were main reasons for the region's setback and a large downturn of industrial production. In 1995, the region reached as much as 84.8% of the Republic's average GDP per capita and achieved the seventh place, only to fall back in year 2008 to 65.3% of the Republic's average when it occupied the next to last place, merely 0.3% higher than SI011.

Slovenia managed to compensate for the loss of the former common Yugoslavian market by breaking into foreign markets. In 1999, its economic growth of 5.4% was a record one and for the first time after a long period, regional disparities between the most developed and the least developed regions have widened rapidly from 1.85:1 (in 1998) to 1.96:1 (in 1999). In the period from 1996 to – and including – 1999, five regions on average lessened regional disparities, two retained the same level, while five regions receded. Region SI016 gained the most on behalf of the increased share GVA in the Energy economic sector, SI017 gained the most on behalf of export-oriented industry (pharmacy, automobile industry) during the years of fast export growth; the regions to recede the most were SI015 and SI011. Average

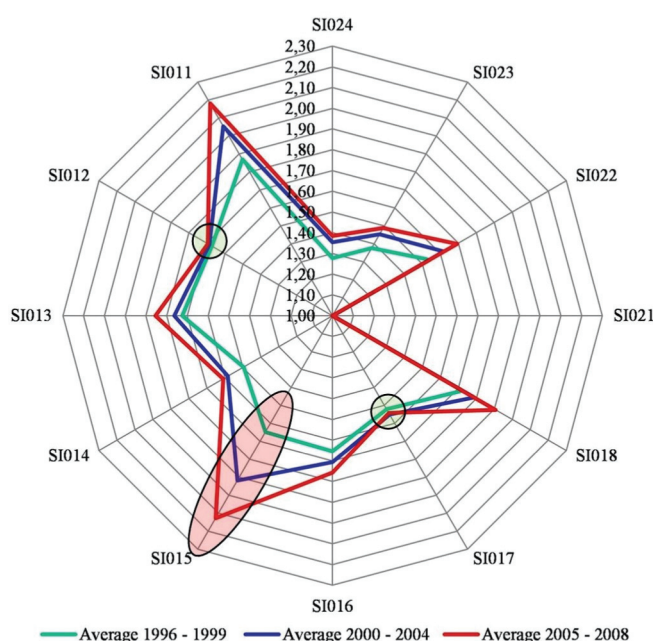


Figure 5 Average changes in regional disparities ratio between NUTS 3 regions in periods 1996–1999, 2000–2004 and 2005–2008

deviations were moving between +2.3 (SI016) and -1.3 (SI015 and SI011).

In the period between 2000 and 2004, there were alternating years of fast economic growth of 4.0% and those with 2.8% growth. The year 2000 was a record year in terms of both, economic growth (4.4%) and export growth (13.1%). During this period, only four regions (SI021, 3.8%; SI012, 1.6%; SI017, 0.8% in SI013 0.5%) experienced GDP per capita growth that was faster than the Republic's average. The regions to recede the most were SI015 (-9.7%) and SI011 (-4.7%). Simultaneously, the inequality between the most and the least developed regions grew from 1.99:1 (in 2000) to the record 2.11:1 in the year 2004 (Fig. 5).

After Slovenia accessed the EU, the period of considerably fast economic growth and – in particular – export growth began. In these four years, regional disparities between the most and the least developed regions widened in 2005 from 2.15:1 (SI021, 143.4% : SI011, 66.8% of the Republic's average GDP per capita) to the record 2.20:1 in the year 2007 (SI021, 143.7%; SI011, 65.2%) only to decrease to 2.18:1 (SI021, 141.6%; SI011, 65.0%) in 2008 along with the

decline in economic growth from 6.9% to 3.7% and the decline of export to 3.3%.

The results of the analysis imply an immediate connection of widening regional disparities to higher economic growth and higher export. The overview among the regions points to the fact that during the years of the highest export growth, regions with an adequate structure of industrial production were the ones to gain. During these periods, the Osrednjeslovenska Region, as the most developed region, progressed at a slower pace than the industrially developed regions. And during the times of fast growth and slower export, Osrednjeslovenska Region was the one to gain the most and the inequality between the most and the least developed regions was widening.

The results indicate that the most endangered region of Zasavska is drawing close the least developed Prekmurska Region fast. In the period since 1995, the Zasavska Region, which at the time generated 84.8% of average GDP per capita, fell to a mere 65.3% (by considerable 17%) in 2008. Its influence on the overall GDP is less dramatic due to its smallness, and there is obviously no political will to address the problem of negative economic trends in the region from top to bottom.

Therefore, the region itself will have to find its own opportunities using the endogenous method and put a stop to negative economic trends.

In the past years, the Pomurska Region was considered the least developed and the most neglected region in Slovenia. In 1995, it generated merely 74.9% of the Republic's average. Its decline was less dramatic.

During the observed period, it fell by 9.2% and it still holds the last place with 65.0%. The reason for this is its geographical position at the outermost north-eastern part of the country at the Hungarian border, where the Iron Curtain was put up for the time until the fall of the socialist systems of the CEE countries. SI011 is a traditionally marginal region with poor transport connections and the least favourable GVA sectoral structure. The region is focused on agriculture and its industry structure is inadequate. Its advantages lie in further development of spa tourism and – after having built the motorway at the Fifth Corridor Axis – in development of logistic activities.

Conclusion

During all historic periods, the area of the Republic of Slovenia represented an important transition area in transport, geographic, economic, and cultural senses. In this important political and geographic space on the European scale and by gaining independence in 1991, the Slovenians managed to establish an administrative and political territory.

The newly established state faced the loss of its former traditional markets, its structurally inadequate economy, and significant decline of the GDP with the increase in unemployment.

The interweaving of processes, which are dictated by globalisation of the world, encroaches onto all spheres of man's life and creations and establishes new relations between space units. Economic development enables inclusion in modern integration processes and the development of individual regions. During the last few years, global economic links, technological development and political changes have triggered changes in the Slovenian space structures as well.

It is necessary to create conditions for higher economic growth and comparable sectoral economic structure to advance economies in all Slovenian regions NUTS 3 that would bring us

closer to the level of economic development in Europe. That means that Slovenian regions must quickly master the internal market of the European Union and, at the same time, continuously develop the potentials of their enterprises at the level of general development trends, which are ongoing in countries of the European Union, our main foreign trade partners. It is mainly about strengthening investments in modern equipment and technology, investment in human capital, mastering micro development potentials, technologically more demanding programs, and creating higher added value on employees.

Regional disparities between Slovenian NUTS 3 regions are the result of structural inadequacy of regional economies. As the figures show, only two regions exceed the average of Slovenia. Osrednjeslovenska statistical region and Obalno-kraška statistical region have similar sectoral structure of economy to those of developed countries. All other regions have problems, larger or smaller ones. The most endangered are border regions and those which have no adequate transport links to the motorway network.

In 2009, Slovenia fell into a deep economic crisis. Rapid growth after entering the EU was based on rapid growth of export and cheap money, which promoted excessive growth in building of homes and business and sports facilities on a mortgage basis. In 2009, the breakdown of building industry began, which affected building materials and equipment industry as well. Access to money was made extremely difficult practically overnight. Difficulties of large building companies transferred to their subcontractors, which resulted in a great number of bankruptcy processes in small enterprises. The time of recession should be used for implementation of deep structural economic changes which will enable the creation and growth of high-quality jobs. In order to do so, flexibility of the labour market and educational reforms will need to be implemented. Missed restructuring of the public sector is supposed to be a future priority for ensuring social cohesion which is the European Union's global advantage in the context of quality of life and development of democracy.

The regions that make the most of their development potentials and develop their economies using the endogenous approach will come out as winners in the end.

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