

INEQUALITIES OF REGIONAL DEVELOPMENT IN UKRAINE: CAUSES, CONSEQUENCES, AND PROSPECTS

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ABSTRACT

The problems of regional inequality are important for both developed and developing countries. The country in transition to market economy is an increasingly important subject for the research on spatial inequality. The existence of regional disparities in the Central and Eastern European countries has been shown in a number of studies, however few analyses have been done on regional inequalities of the post-Soviet countries, and particularly on Ukraine. The present study attempts to identify inequality in regional development in Ukraine and to test for a convergence/divergence process in Ukrainian economic regions. The research focuses on factors such as initial level of economic development, education, and capital investments as important factors of regional development and economic growth. The study employs the cartographic method to depict a pattern of "core-periphery" in economic development in Ukraine. Statistical methods help to reveal convergence/divergence tendencies and spatial differences in the process of economic growth.

Keywords: regional inequality, regional development, economic convergence, economic growth, Ukraine.

INTRODUCTION

Regional development and regional inequality are important national issues in both developed and developing societies. Few analyses have been done on regional inequalities of the Post-Soviet countries, and particularly on Ukraine. This lack of research can be explained by the ‘socialist’ regional policy of equality that was dominant during the Soviet time. According to this policy, there shouldn’t be any significant differences in income distribution, and consequently in quality of life in different regions. One of the major goals of ‘developed socialism’ was elimination of inequality between urban and rural areas and different social groups such as industrial and agricultural workers. The evidence suggests that this goal wasn’t realized during the Soviet period, and during the transition to the market economy inequality has further increased. It entails significant differences in the quality of life in different regions and between different categories of population.

Ukraine is a typical example of a Post-Soviet economy in transition that experienced a deep economic crisis right after the Soviet Union ended in 1991. On the other hand, it is different from the other Post-Soviet economies in transition because of its rapid economic growth that started in 2000-2001 and reached 12% of real GDP growth in 2004.

Although Ukraine consists of nine economic regions and two regional cities, the distinctive feature of the country is the existence of an East-West development dichotomy in both physical and economic characteristics, and in ethnic composition of the population. It’s been several years since the process began to form a core region with the center in Kyiv. After the Soviet Union breakup, the existence of regional differences became obvious. Eastern regions, which used to be the most advanced in terms of manufacturing production, became the most devastated. Demographic indicators (life expectancy, birth rate) declined in the east, indicating a lowering of quality of life. The situation in the western part of the country was equally depressing. Positive change started after 2000 when real GDP started to grow. However, the process of growth is not even. Some regions are growing faster than the others provoking growing differences in the quality of life in different regions.

The goals of this study are: to identify inequality in regional development of Ukraine in a dynamic time framework; to establish the system of phenomena that provoke this inequality; to analyze the relationship between economic growth and regional inequality based on a theoretical framework of development economics using statistical methods, and to formulate recommendations for regional policy-makers.

HISTORICAL OVERVIEW OF THE REGIONAL DEVELOPMENT PROBLEMS IN THE USSR

Regional economic development was an important goal for the USSR government. During the Soviet period, state policy proclaimed the goal of equalizing levels of economic development and living standards among the country's administrative regions and ethnic groups. Regional planning policy was focused on reconciling the spatial inequality between the distribution of population and economic activities. During the 1950s, the approach of uniform development was heavily dominant. Based on this approach, the process of "forced migration" was taking place in the country. The even level of economic development was supposed to be reached by a shift of population closer to sources of energy and raw materials. A significant part of the population was resettled to the remote regions of Siberia, Kazakhstan, and Far East. Later on, during the 1960s, a new regional development approach became popular. It was focused on the "old" or "historical" areas of economic activities with lower priority for the remote resource-based regions. By that time, officially, republics of the USSR were given more independence in terms of their regional policy. In reality, the republics' authorities were strictly controlled by the federal government. Since market mechanisms were not involved in the economic growth process, economic development of backward regions was made possible due to the capital flow directed to them by the central authorities. Usually, it was done without compensation to capital producing regions. According to some researchers, the most significant progress in reduction of differences in economic development and the equalization of living standards among the USSR regions was done in the pre-war and early post-war period (Ozornoy, 1991 p. 382).

By the end of the 1980s, regional inequality in the USSR was quite significant. Due to the lack of statistical data in appropriate format, it was problematic to conduct research on measuring regional disparities, however, some authors (Ozornoy, 1991 p. 385) used a proxy GNP per capita indicator to measure the level of economic development. This measure summarizes total consumption expenditures, fixed investment, and services for each region. Table 1 demonstrates some indicators that reflect the level of economic development and quality of life (through the measure of infant mortality).

These indicators reveal significant disparities among the republics. The Asian republics are far below the Russian Federation. Ukraine is ranked as quite successful in terms of total output and quality of life, however, the living standards were growing slowly there because of transfer budgetary funds to the less developed republics.

Table 1. Economic development of the Soviet republics in the late 1980s

Republics	GNP proxy per capita (1988)	Urbanization, % (1989)	Labor involved in agriculture, % (1987)	Labor involved in industry and construction, % (1987)	Infant mortality, per 1,000 birth (1988)
Estonia	108	71.6	13	42	12.4
Russia	100	73.5	14	42	18.9
Lithuania	100	68.0	18	41	11.5
Latvia	95	71.2	15	40	11.0
Byelorussia	91	64.7	22	40	13.1
Georgia	83	55.7	27	29	21.9
Kazakhstan	81	57.2	23	31	29.2
Moldavia	78	46.9	35	28	23.0
Ukraine	77	66.9	20	40	14.2
Armenia	65	68.8	19	39	25.3
Turkmenia	65	45.4	41	21	53.3
Azerbaijan	59	53.8	34	26	27.0
Kyrgyzia	56	38.2	34	27	36.8
Uzbekistan	54	40.7	38	24	43.3
Tadzhikistan	46	32.6	42	21	48.9

Source: Ozornoy, 1991 p.385

When M.Gorbachev came to power in the middle of the 1980s, he started the process of reforms directed at involving market mechanisms in economic development. During this period, more decision-making freedom was given to the regional governments. It promoted centrifugal tendencies at the very beginning, when every region and republic wanted to be more independent from the center. National economies were arranged in the way that they were highly dependent on the more developed industrial core with its centers in Russia. After the Soviet Union collapse, industrial links were broken. National economies became vulnerable facing severe economic problems in their efforts to establish new economic links on the regional scale. Under these conditions, the most viable industries have survived. During this time, spatial inequality within the regions has increased. The center-periphery pattern became dominant in the majority of former Soviet countries including Ukraine.

As it follows from this overview, spatial inequality in the post-Soviet countries is a consequence of a centrally planned economic and administrative system as well as severe economic conditions associated with transition to the market economy.

UKRAINE IN TRANSITION; CONSEQUENCES OF ECONOMIC CRISIS

During the ‘socialist’ time Ukraine was one of the most advanced Soviet republics in terms of economic and social development. It was rated as second (after Russian Federation) according to the level of industrial and agricultural output, quality of training and education of specialists, labor productivity, and industrial diversification. In 1991 Ukraine became independent, and faced the problem of transition to market economy that assumes a breakdown of the old centrally-planned system. This transition period has been a challenge for the country’s economy, and painful for the people. GDP dropped dramatically between 1990 and 1994, and this decline corresponds to a sharp decline in the quality of life of the population. Figure 1 illustrates percentage of GDP change and its interaction with the Human Development Index as a measure of quality of life in Ukraine during the transition period.

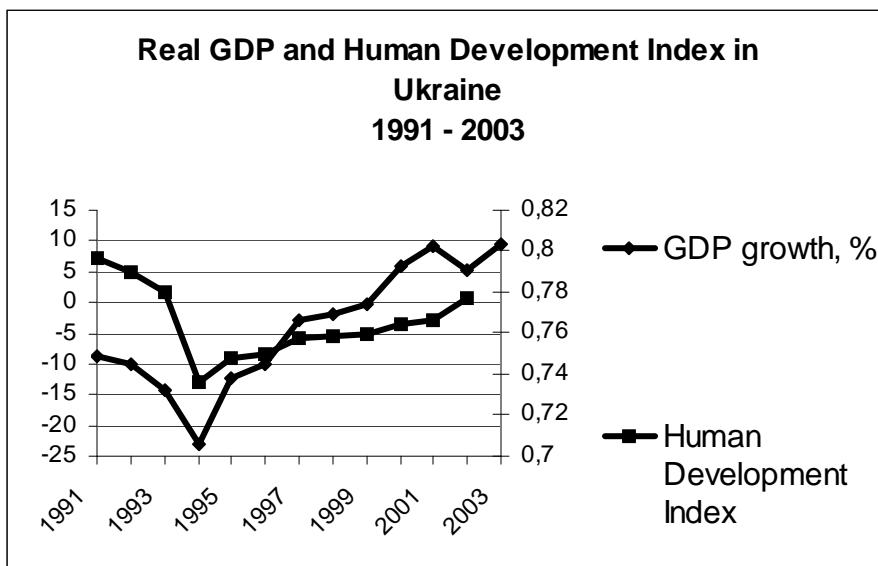


Figure 1. Real GDP and Human Development Index in Ukraine in 1991 - 2003

Decline of GDP is strongly associated with a decline in the life quality that occurred between 1991 and 1994. As a consequence of economic decline, population has dropped from 51.94 mln in 1990 to 47.3 mln in 2004. The population in 2004 is 14.3 % less than in 2003. During 13 years after 1990 the value of natural increase (per thousand of population) changed from 0.5 to – 7.5. This is the result of decreasing crude birth rate (from 12.6 in 1990 to 8.5 in 2003) and increasing crude death rate (from 12.2 in 1990 to 14.3 in 2003). In 1995 the value of crude death rate was 5.26, which is the lowest during the transition period. The economic indicators were as well the lowest in 1995. Figures 2 and 3 demonstrate the population dynamics in Ukraine during the last decade.

There are significant differences in population decline in a regional scope (Figure 4). These differences reflect some factors of economic development such as GDP per capita growth, quality of life, and maturity of social infrastructure.

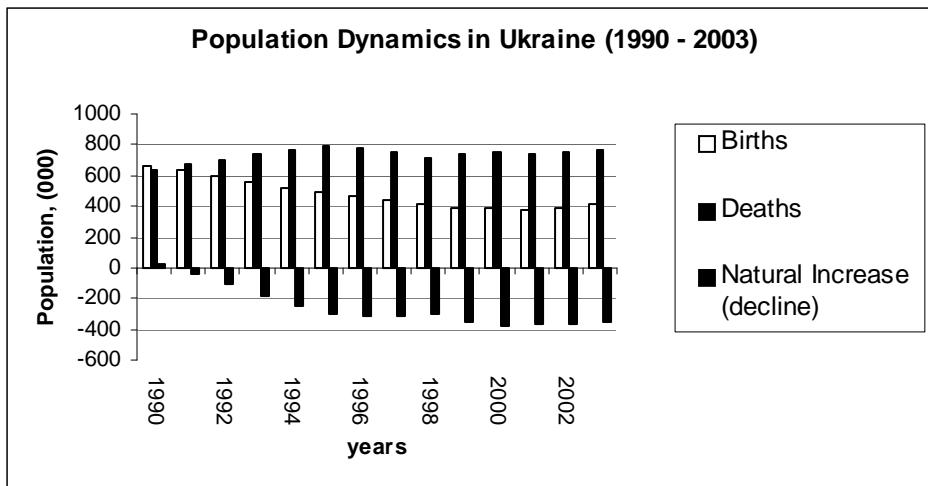


Figure 2. Population dynamics in Ukraine in 1990 - 2003

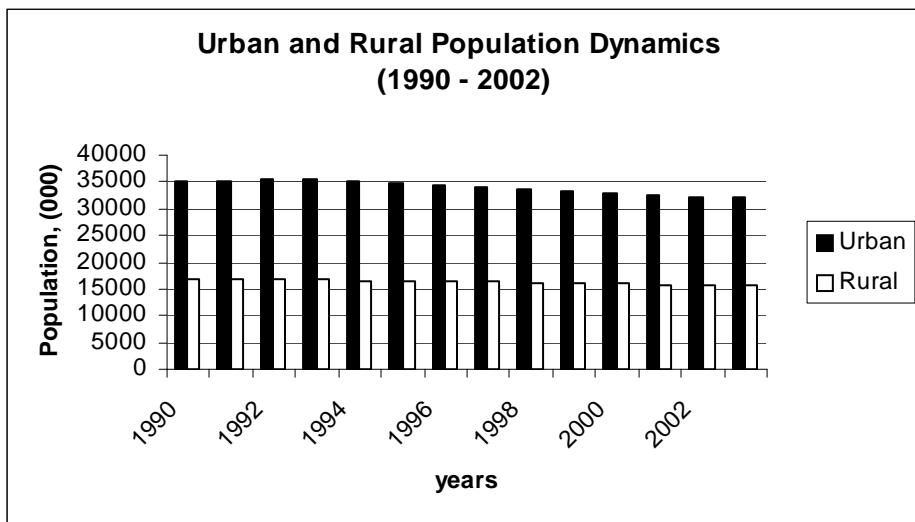


Figure 3. Urban-Rural Structure Dynamics in Ukraine in 1990-2003



Figure 4. Population decline in Ukraine (1989 – 2003). Regional differences

The highest decline is observed in Chernihiv region (13,5%). This region experienced the Chernobyl nuclear disaster (1986) that affected thousands of people who lived in the region, and is part of a “core-periphery” effect, which is taking place around the city of Kyiv. As it is indicated on the map, all surrounding regions had higher decline in population than the city of Kyiv.

The eastern part of the country has experienced significant population decline (9 – 12%) due in part, to an economic crisis in the mining and manufacturing industries. During the Soviet times, a majority of the population of this eastern Ukraine was involved in coal mining (Donetsk region) and heavy industry (Luhansk, Zaporizhia and Dnipropetrovsk regions). In the early 1990s, many of these industries were shut down, causing a dramatic decline in living conditions throughout the region. The unemployment rate increased, reaching 10 – 13% according to the official statistics. In reality, it was much higher because of “hidden” unemployment when officially people were employed but in reality they did not produce anything and they were not paid, because of the collapse of their enterprises.

Western Ukraine demonstrates a lower level of population decline, which may result from cultural differences and ethnic composition of the population. Also, the environment is less polluted there, making the health indicators a little better compared

to the rest of the country. There are two areas that experienced a small increase of population. These are Zakarpattya (western Ukraine) and the city of Kiev. The reasons that determine population increase are different for these regions. The city of Kyiv is a capital region, and benefits from this advantage as seen in most transition countries. Zakarpattya's growth may be related to the ethnic differences as well as to the natural and location differences.

Regional disparities in the quality of life have increased. For this particular study we use Human Development Index (HDI), which was developed by United Nations and modified by the Ukrainian Council on Productive Forces Study, with support of UNDP, as a measure of quality of life. According to the United Nations framework, the constituent components of HDI are life expectancy, education (literacy and school enrollment), and welfare (per capita incomes). In this general form the HDI indicator is more appropriate for cross-country comparison. Regional analysis requires a more detailed approach for measuring quality of life because of multiple factors that comprise differences between regions on the local scale. The regional index is based on a broader range of sub-indicators. It consists of nine individually weighted components. The highest weights are assigned to education, living conditions, and material wellbeing. Less weight is given to the factors like labor markets, demographic trends, healthcare, social conditions, and environmental situation.

This study compares HDI for Ukrainian regions starting from 1994 to 2001. Since the methodology for calculating regional HDI was developed after 1994, the HDI regional indicators for 1994 are not comparable with the latest HDIs because they include fewer factors. To avoid discrepancies, the HDIs for different years were ranked according to their value. Rank 1 corresponds to the highest value of quality of life, and rank 27 corresponds to the lowest value. Ranked values of HDI are presented in Table 2. The regions that experienced the highest decline are highlighted. These are Luhansk, Zaporizhya, and Donetsk, which comprise the highly industrialized eastern region. Figure 5 illustrates changes in regional HDI.

Also, we would like to emphasize the fact that at the beginning of the 1990s the indicators of quality of life in Ukraine were more homogeneous than ten years later. This indicates that spatial inequality of development is growing.

Table 2. HDI ranks. Ukrainian regions (oblast)

Region	HDI Rank, (1= highest)			
	1994	1999	2000	2001
Donetsk	1	27	26	26
Zaporizhya	2	11	17	16
Luhansk	3	26	27	27
Poltava	4	2	3	3
Ivano-Frankovsk	5	10	15	18
Mykolayiv	6	25	25	23
Kyivskiy	7	8	13	8
Khmelnitsk	8	6	8	12
Sumi	9	22	22	25
Kharkiv	10	18	9	6
Cherkasi	10	4	7	9
Rivne	11	9	24	13
Odesa	12	19	16	21
Mykolayiv	6	25	25	23
Odesa	12	19	16	21
Chernihiv	13	17	14	15
Kirovograd	14	24	18	20
Vinnitsa	15	3	4	4
Ternopil	16	5	10	10
Chernivtsi	17	12	11	14
Zhitomir	18	20	21	19
Kherson	18	23	23	22
Lviv	19	7	12	11
Volyn	20	13	19	17
Dnipropetrovsk	20	21	20	24
Krim	21	16	2	2
Kherson	18	23	23	22
Zakarpattyia	22	14	6	7
City of Kyiv	-	1	1	1
City of Sevastopol	-	15	5	5

Source: Compiled by author from the United Nations Development Program data.

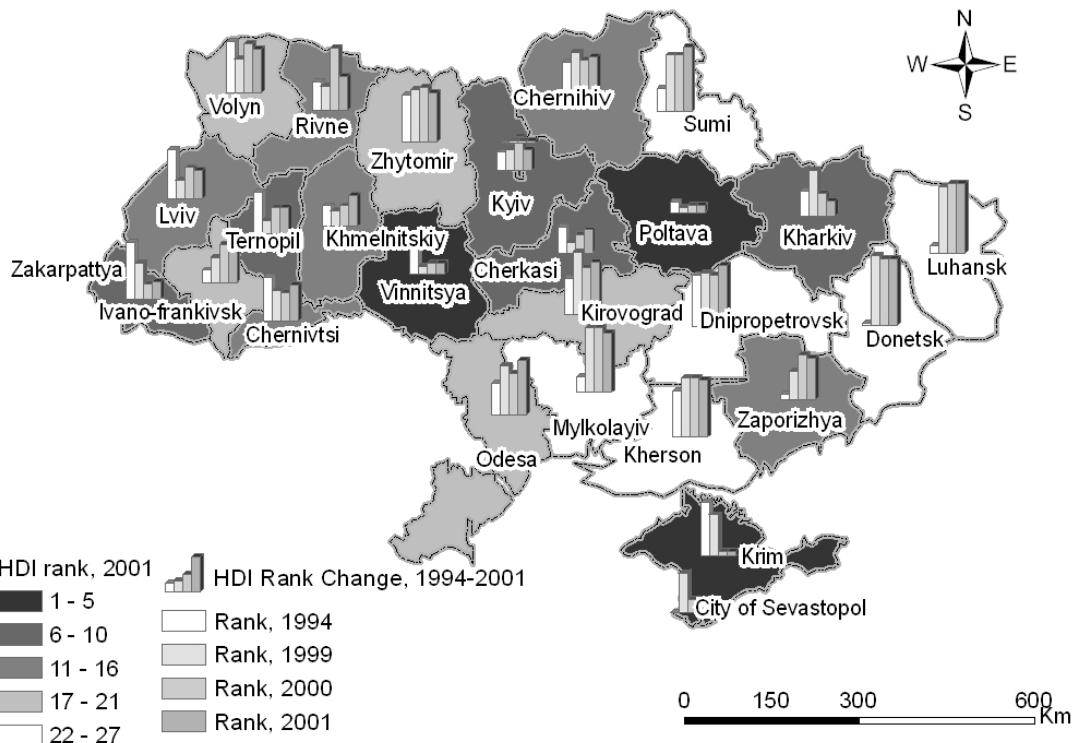


Figure 5. Changes in HDI (1994- 2001)

THEORETICAL BACKGROUND

The questions about spatial inequality have become important in recent years because of the process of growing inequality between and within countries and regions. In this regard, spatial inequality attracts attention of scientists and governmental authorities. In the recent literature, the questions on spatial inequality and its evolution have been addressed by both economists and geographers.

There are two dominating approaches within the field of spatial distribution of economic development; the spatial equilibrium approach, which is based on the neo-classical model; and the spatial disequilibrium approach, which comprises ideas from the liberal economic theory and the neo-Marxian theory (G. Lipshitz, 1986). The representatives of the spatial equilibrium school claim that regional inequality is a “temporary phenomenon” that comes from the spatial distribution of economic development and disparity in national or regional economic growth. These disparities could be overcome going through the convergence process. Followers of disequilibrium school argue that spatial distribution of economic development tends toward inequality. Some studies on US regions and in European Union countries show a decrease in regional inequalities

(Barro and Sala-I-Martin, 1995; Button and Pentecost, 1995). There is empirical research that supports disequilibrium approach, showing that inequality in countries such as Indonesia, Mexico, Tunisia, and Tanzania has increased (Ginneken, 1976).

Early research on regional inequalities of the “ex-socialist” countries and the countries in transition shows that inequality exists and it is increasing (Petrakos, 2001; Zimon, 1979). Recent research on regional inequalities in Russia (Yemtsov, 2005 p. 348) indicates a growing divergence among the regions on one hand, but on the other hand, the regions converge in their inequality levels. Another research on Russian regional inequalities of Bradshaw and Vartapetov (2003) indicates divergent trend of increasing regional inequalities for economic variables and some degree of convergence for social indicators. Social capital that was formed during the Soviet times still demonstrate some stability to compare to rapidly declining economic conditions (Bradshaw and Vartapetov, 2003).

Ukrainian regional differences became obvious long before the break up of the Soviet Union. However, the negative influence of this east-west dichotomy started to take place just during the 1990s. Quite large number of publications on Ukraine has emerged right after the Orange Revolution. The leading topic of these publications is economic and social differentiations within Ukraine, and the way they influence political preferences of Ukrainian population (Aslund, 2005).

Economic convergence is a subject that has been discussed in the literature for quite a long time, especially during 1960s, and then later during 1990s. According to Barro and Sala-I-Martin (1991), there are two principal concepts of economic convergence; σ - convergence, which is a decline in the regional dispersion of real income per capita over time across the regions, and β - convergence, which assumes that the regions with initially low level of development grow faster than the rich, well developed regions.

This paper will examine regional inequality trends in Ukraine since independence, and will look for evidence of regional convergence/divergence processes in economic growth among the regions.

We expect an increase of inequality between administrative regions and within economic regions. This expectation is based on the theoretical approach of spatial disequilibrium school, which states that the distribution of economic development tend toward inequality. Since this study depicts a country in transition, we presume that market competition will increase during next years. This means that the regions with well-developed industrial and service infrastructure will experience more growth than traditional agricultural regions. Also, we expect the capital region to grow more rapidly than peripheral areas, enhancing the pattern of the “core-periphery” in Ukraine’s regional development.

DATA AND METHODS

This study employs statistical data for Ukrainian administrative units (oblast) provided by the State Statistical Committee of Ukraine. United Nations Development Program data is used for Human Development Index analysis. Ministry of Economy and European Integration provides data on regional policy and regional development concepts.

The research is based on the following methods and techniques:

1. *Cartographic analysis*; uses choropleth maps produced in GIS to detect any possible patterns of development including core-periphery or east-west patterns.
2. *Statistical analysis*; uses measures of disparities such as Williamson's index of inequality (V_w), coefficient of variation (SD/Mean), β - and σ -convergence coefficients, single and multivariate regression analysis.

A measure of inequality employed in this study is Williamson's weighted standard deviation index (Williamson, 1965). It can be expressed by equation:

$$V_w = \sqrt{\frac{\sum_i (y_i - \bar{y})^2 f_i}{\bar{y} n}}, \text{ where } f_i \text{ is population of the } i^{\text{th}} \text{ region, } n \text{ is national}$$

population, y_i is GDP per capita (or any other variable per capita) of the i^{th} region, \bar{y} is national GDP per capita (or any other variable per capita).

Ukraine consists of 24 administrative units (oblast), one Autonomous Republic of Crimea, and two regional cities, Kyiv and Sevastopol. According to the regional development policy dominating in Ukraine in 1990s, it was considered useful to divide Ukraine into 9 large economic regions based on the principle of territorial-and-economic complexes. Further analysis is based on both administrative and economic units.

RESULTS

Regional inequality of economic well-being was calculated based on the variable GDP per capita for 5 years. Also, inequality was calculated for capital investment and educational attainment variables. These are the factors that presumably influence economic growth. Results are presented in Table 3 and Figures 5,6, and 7.

Table 3. Ukraine. Between-regions (oblast) inequality

Variables	1994	1996	1999	2000	2001	2002	2003
	Index of Inequality, V_w, Ukraine						
GDP per cap	0.29		0.34	0.36	0.30	0.56	
Capital investment per cap		0.35		0.59	0.65	0.55	0.57
Educational attainment		0.955		0.948		0.950	0.951

Source: Compiled by author.

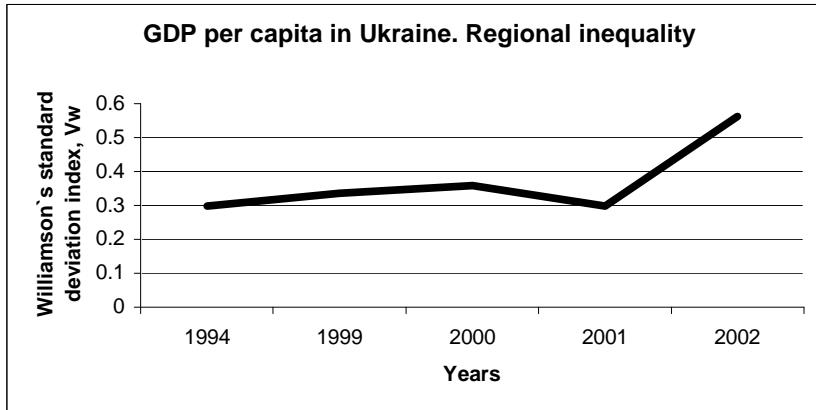


Figure 5. GDP per capita in Ukraine. Regional inequality.

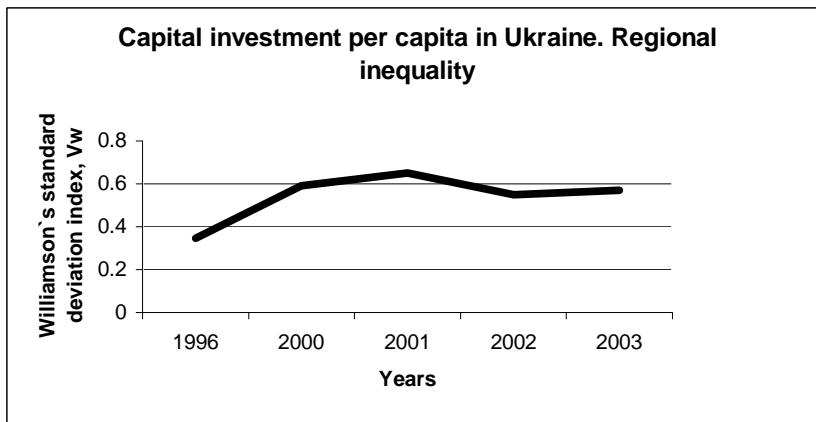


Figure 6. Capital investment per capita in Ukraine. Regional inequality.

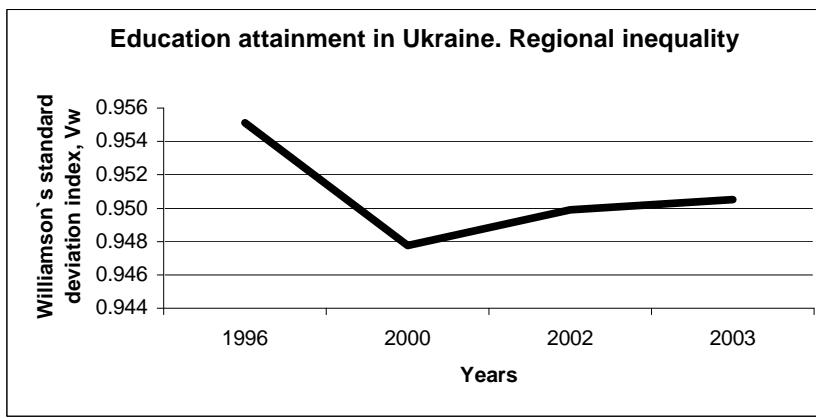


Figure 7. Educational attainment in Ukraine. Regional inequality.

Inequality in regional GDP per capita grew in Ukraine starting from 1994. Capital investment per capita inequality, as well, has general trend of growth. As to the educational attainment inequality, it is difficult to say. The sharp decline in inequality of educational attainment is followed by a little growth starting from 2000.

The same procedure was used to calculate inequality indices for 9 economic regions.

Figure 9 demonstrates change in spatial inequality in regional GDP per capita.

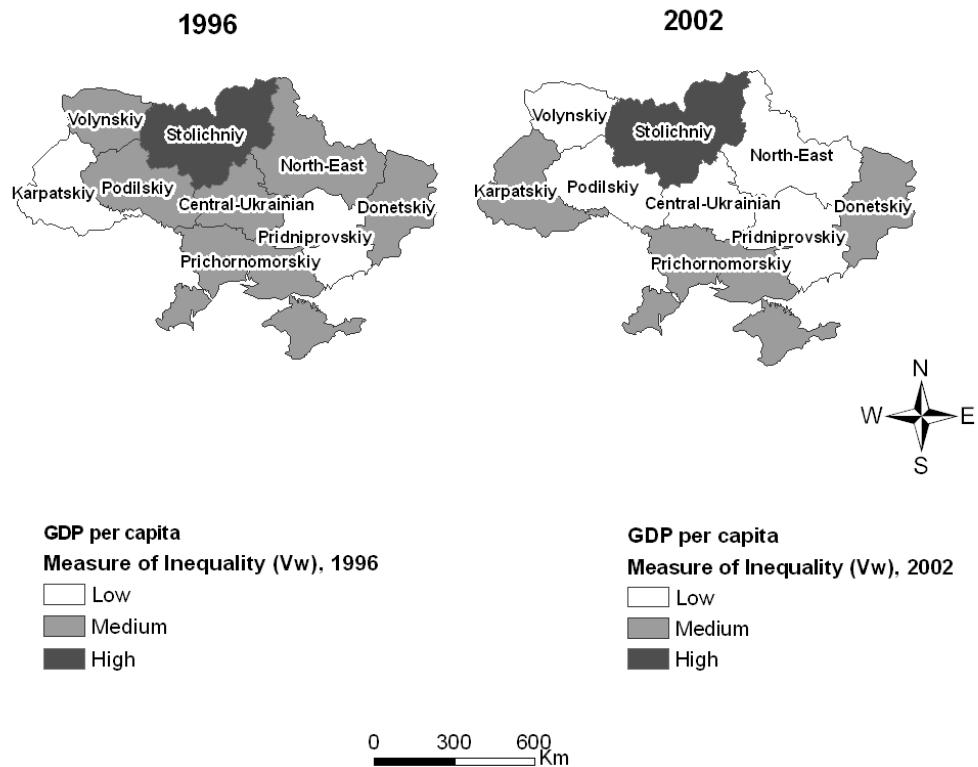


Figure 9. GDP per capita. Inequality within economic regions.

Next we examine the tendencies in regional inequalities using tests for convergence tendencies at the level of economic region. These tests are: σ -**convergence test** that involves the coefficients of variation, which is SD over MEAN, for 9 economic regions for different years. The coefficient of variation is an index that allows cross-region, cross-variable comparison over time of the level of regional disparities. The greater the value of this index, the greater the level of regional disparities (Barro and Sala-I-Martin, 1991; Petrakos, 2001). β -**convergence test** that involves β -convergence coefficient, which is estimated from the regression model: $Y_t / Y_0 = \beta_0 + \beta_1 Y_0 + \varepsilon$, where Y_0 is a variable at the beginning of the time period and Y_t is the same variable at the end of the time period. The ratio Y_t / Y_0 indicates the change of the variable. If the value of β_1 is

positive, it implies that regions with high initial level of Y have a higher growth performance. Negative value of β_1 indicates that the regions with initially low level of economic development have higher rate of growth. This means that positive values of β_1 are associated with divergence (non-convergence) process, and negative values are associated with regional convergence (Petrakos, 2001).

We expect to find areas of convergence of economic development as well as areas of non-convergence. Considering recent economic growth in Ukraine, the areas of non-convergence are expected to be significant.

Empirical results demonstrate that there are three economic regions that show a decline over time in the dispersion of per capita GDP (σ -convergence). These are all peripheral regions. Six economic regions show non-convergence (divergence) process. Their coefficients of variation are increasing over time. Figure 10 illustrates areas of convergence/non-convergence.

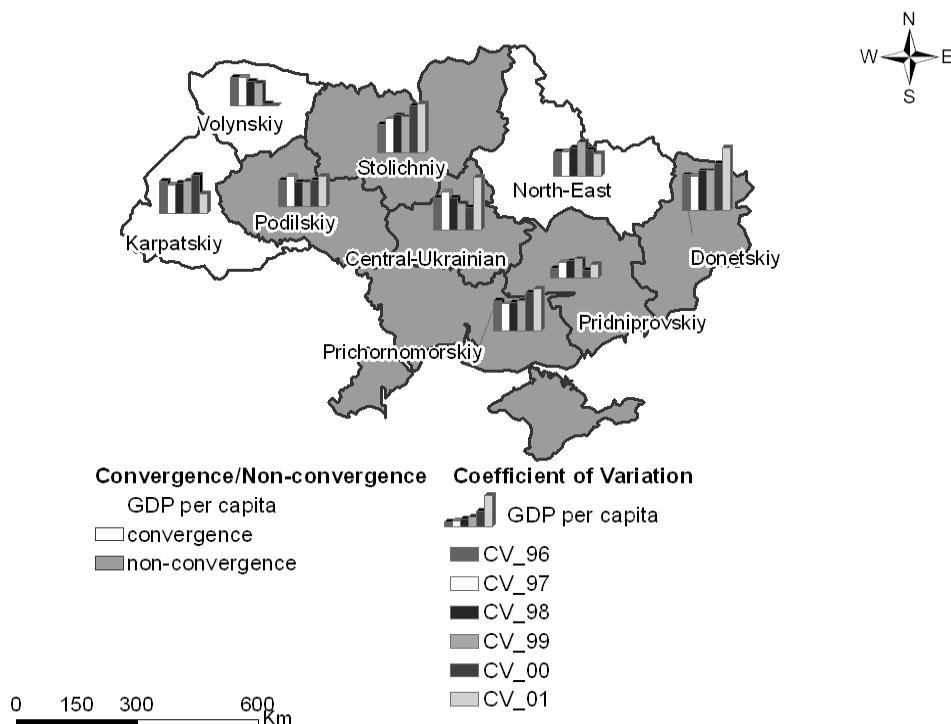


Figure 10. GDP per capita. Area of convergence and non-convergence.

The β -convergence coefficient estimated from the model in the tradition of Barro and Sala-i-Martin (1991). The general model is presented by equation (1).

$$Y_t / Y_0 = \beta_0 + \beta_1 Y_0 + \varepsilon \quad (1).$$

Several different models, which include explanatory variables, were tested to get better estimates:

$$Y_t / Y_0 = \beta_0 + \beta_1 Y_0 + \beta_2 X_1 + \varepsilon \quad (2)$$

$$Y_t / Y_0 = \beta_0 + \beta_1 Y_0 + \beta_2 X_1 + \beta_3 X_2 + \varepsilon \quad (3)$$

$$Y_t / Y_0 = \beta_0 + \beta_1 Y_0 + \beta_2 X_1 + \beta_3 X_2 + \beta_4 X_3 + \varepsilon \quad (4)$$

$$Y_t / Y_0 = \beta_0 + \beta_1 Y_0 + \beta_2 X_4 + \varepsilon \quad (5)$$

Y_0 is a variable (real GDP per capita) at the beginning of the time period (1995),

Y_t is the same variable at the end of the time period (2002),

Y_t / Y_0 indicates the growth of the variable,

X_1 is a share of industrial output in total regional output (1995). This variable attempts to capture regional dominant economic activity (Button, Pentecost, 1999),

X_2 is a value of per capita capital investment (2000),

X_3 is an unemployment rate (% of unemployed population to the total population of working age (15-70)),

X_4 is a quality of human capital . It is defined as a share of employed population that have complete high education .

Also, several single variable regression models were tested to identify the degree of correlation between dependent and independent variables. These models are presented by the equations 6 , 7, 8 and 9.

$$Y_t / Y_0 = \beta_0 + \beta_1 X_1 + \varepsilon \quad (6)$$

$$Y_t / Y_0 = \beta_0 + \beta_1 X_2 + \varepsilon \quad (7)$$

$$Y_t / Y_0 = \beta_0 + \beta_1 X_3 + \varepsilon \quad (8)$$

$$Y_t / Y_0 = \beta_0 + \beta_1 X_4 + \varepsilon \quad (9)$$

Estimates for the models that are considered to be more useful are reported in the Table 4. The sign of the β_1 coefficient indicates whether a convergence or divergence trend is present . The value of the correlation coefficient (R^2) indicates how strong is the trend, that means how strong is the relationship between dependent and independent variables.

Table 4. Regression models estimates

Model	Variable	Estimates		
		β	R^2	Sign.
(1)	Constant	-10.216 (-1.411)	0.229	0.017
	GDP_initial_95	0.006 (2.782)		0.001
(3)	Constant	3.504 (0.388)	0.442	0.702
	GDP_initial_95	-0.008 (-1.646)		0.011
	Ind_Out_95	-0.003 (-0.015)		0.988
	Cap_inv_00	0.048 (2.952)		0.008
(5)	Constant	-15.419 (-1.715)	0.258	0.099
	GDP_initial_95	0.003 (1.180)		0.0014
	Empl_high_ed_95	0.622 (0.976)		0.338
(6)	Constant	10.705 (1.557)	0.004	0.132
	Ind_Out_95	-0.68 (-0.310)		0.759

Source: Compiled by author.

Model 3 indicates existence of β -convergence. Convergence coefficient in this case is equal -0.008. The negative sign means that this is convergence process. However, the estimates of Model 6 indicate that *industrial output* variable is not really appropriate. That's why the regression results are not reliable. Models 1 and 5 indicate divergence. The β -coefficient is positive here. Summarizing this example, we should note that there is still some degree of uncertainty with respect to whether disparities have increased or decreased for this time period. However, looking at Williamson's coefficient of variation (V_w) described above we can conclude that disparities have increased. For the future research there should be more models with different explanatory variables tested.

CONCLUSIONS

The present study contributes to the existing study on regional inequality by depicting regional inequality trends found in Ukraine. It is worth more attention because the regional inequalities in this country are evolving through different socio-economic conditions such as socialism, transition period, and market economy.

- Regional inequalities *within* and *between* economic regions in Ukraine exist. It is found to be significant for GDP per capita, capital investment per capita, and educational attainment variables.
- Inequality between regions (oblast) is growing starting from 1994.
- Inequalities within economic regions tend to follow the “core-periphery” pattern. The capital economic region that comprises the city of Kyiv and surrounded oblasts has the highest inequality in GDP per capita distribution. The pattern “core-periphery” tends to be more obvious, and may demonstrate the extent of Kyiv’s influence within Ukraine.
- There are areas of convergence and non-convergence (divergence) of economic development. In the case of Ukraine, it is more likely that diverging areas experience economic growth more than converging areas. As to the converging areas, it is more likely they experience less economic growth or even decline, so their economic indicators become more similar.

Growing inequality within and between economic regions in Ukraine is a dominant process, which is associated with economic growth. It results in economic divergence for the period of rapid growth. We expect that later, when regional output reaches higher level, the process of economic convergence might take place. These results are consistent with the theoretical framework presented above. Also, the research reveals phenomena typical for the transition countries that is different from what has been found in the research on well-developed European Union countries. It is possible to conclude that initial intrinsic social conditions make a significant difference between countries in terms of the path of their economic development.

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