THE INCOME INEQUALITY IN THE EASTERN EUROPEAN COUNTRIES: A COMPARATIVE STUDY FOR THE PERIOD 1990-2010

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Abstract:
This paper realizes a comparative study among Eastern European countries regarding their ways of economic growth characterized by a higher or lower increase of inequality in their income distribution. The market liberalization from the early 1990s in the former communist countries have resulted in new distributions of income and wealth, the new structural sources of poverty and inequality being often more extreme. The paper will focus on the factors that contributed to the rising social inequality in ten post communist countries, from 1990 to 2010, emphasizing on four main macroeconomic performance indicators, the annual economic growth rate, income distribution as Gini coefficient, Human Development Index, and gross fixed capital formation rate for showing the level of investments.
We will conclude at the end of the paper that in the last twenty years, between the former communist countries from Eastern Europe, the gaps in distribution between the high and low income groups tend to enlarge, especially since all of them are developing countries. Although none of the countries from this region exceeds the critical upper level of 40% on the Gini scale coefficient, together with a continuous degradation of the human development index in the last two decades, the evolution of these countries is at least questionable.

Keywords: income inequality, poverty, Eastern Europe, globalization, transition, economic liberalization.

JEL Classification: I3, O11, O15, P3, R11.

INTRODUCTION

The present paper aims to realize a comparative study among the Eastern European countries and to determinate the income distribution and economic inequality's evolution in the last two decades, once with the economic liberalization of the former communist countries.

Although there is any poverty or income inequality's tendency analyzed until now which can be solely, and probably not even largely, attributable to the consequences of globalization without a rigorous analysis of the phenomenon, it has to be admitted at least that globalization, in its practical application so far, may have had at least some adverse effects on poverty and income distribution. These concerns are some of which have generated worldwide debates and a strong anti-globalization movement, being thus a research matter with multiple nuances and solutions.

The relationship between globalization and poverty is examined in several studies. Cornia and Court (2001) found that an increased income inequality will affect the growth and poverty reduction objectives. The result of Agenor (2005) suggest that a globalization applied not to the entire national economy will further deteriorate the living standards, and Ravallion (2006) believes that reducing income inequality through the opportunities of an developing country is the most essential element for maximizing the potential of globalization to eradicate poverty. Also, several specific issues regarding globalization have been published in time by Oxford Development Studies, Journal of World-System Research, Journal of African Economies or by the World Bank Economy Review, which, for example, contains a study on income distribution among the world countries (Atkinson and Brandolini, 2010), the recent comparative perspective of Galbraith on economic and political change and inequality (Galbraith, 2010), or some relatively older but original studies, like „Who is Not Poor? Dreaming of a World Truly Free of Poverty" (Pritchett, 2006) and „Elite Perceptions of Poverty and Inequality" (Reis, Moore and Books, 2006).

Further, we will realize a comparative study for ten countries considered to be part of Eastern Europe, focusing on four macroeconomic indicators: the economic growth, income inequality level in the form of Gini index, Human Development Index and the levels of investment for each country. In the end we intend to present the economic evolution of the ten eastern

European countries during the liberalization process to the global capitalism, as well as the degree of each income inequality once with the globalization of their national economies.

SAMPLE

Comparative studies of the region require precise calculations and estimations, as well as a very good definition of the two key concepts, globalization and poverty, criticized so far on the technical and econometric grounds. The sample is made for ten countries that are considered part of Eastern Europe under the proposed geographic boundaries of the United Nations Statistics Division [25]. Four economic indicators will be analyzed for each country and on average over the region, namely, growth rate, Gini coefficient of income inequality, human development index and gross fixed capital formation.

The economic growth indicates an ascending evolution of the macro economical result of gross Domestic Product, and is generated by the quantity and quality of existing jobs in a country. In Table no. 1, the annual growth is calculated as the annual rate of GDP in the years 1990, 2000 and 2009, and during that period the annual average of ten years for the intervals 1990-2000 and 2000-2009.

Table no. 1. Economic growth and income inequality for the period 1990-2010.

	Annual GDP growth (%)					**Income inequality**			
	1990	**1990-2000**	**2000**	**2000-2009**	**2009**	**2001**	**2005**	**2009**	**2000-2010**
Belarus	-	-1,61	5,8	7,25	1,4	21,7	30,4	27,9	28,8
Bulgaria	9,1	-3,03	5,7	4,58	-4,9	26,4	31,9	29,2	29,2
Czech Republic	-	0,00	3,6	3,36	-4,2	25,4	25,4	25,8	25,8
Hungary	-3,5	0,01	6,2	2,69	-6,3	24,4	26,9	30,0	30,0
Poland	-	3,83	4,3	3,95	1,7	31,6	34,1	34,9	34,9
Moldova Republic	-2,4	-9,45	2,1	4,66	-6,5	40,6	36,9	35,6	37,4
Romania	-5,6	-2,28	2,1	4,55	-8,5	28,2	30,4	31,5	32,1
Russian Federation	-3,0	-4,91	10,0	5,42	-7,9	48,7	31,0	37,5	43,7
Slovakia	-2,7	0,25	1,4	4,50	-6,2	19,5	25,8	25,8	25,8
Ukraine	-6,3	-8,89	5,9	4,67	-15,1	29,0	29,0	28,2	27,6
AVERAGE	**-2,57**	**-2,61**	**4,72**	**4,56**	**-5,65**	**29,55**	**30,18**	**30,64**	**31,53**

Source: *World Bank, World Development Indicators at http://data.worldbank.org/indicator - accesed on 8.04.2011; United Nations, Human Development Report 2001/2005/2009/2010.*

The income inequality or its distribution in a society measures the income's dispersion in that country. The objective causes of income inequality may be: the different performances at work, waging differences as result of their economic activity in specific working conditions, differences in education and training, differences in risk-taking, wealth inherited differences, different abilities or chance differences, in the same economic and social conditions some individuals may have the chance of a gain, while others do not. Among the most widely used measures of income inequality is the Gini coefficient, Theil index and Hoover index. Further, we will choose to analyze the Gini coefficient for income inequality since is the most often used being easier to understand. Gini coefficient is a ratio between the two areas of the Lorenz curve. The high income inequalities affect the levels of trust and civic engagement and increase the homicide rates. Also some recent comparative studies have found that less equal countries have an inefficient economy, with low productivity and competitiveness (Deaton, 2001). It is nevertheless true that too much equality, i.e. below a Gini coefficient of 25, negatively impacts growth due to incentive traps, free-riding, labor shirking and high supervision costs. (Cornia and Court, 2001) On the other hand, high levels of inequality, i.e. above a Gini coefficient of 40, negatively impacts growth, due to the incentive traps, erosion of social cohesion, social conflicts and the uncertain property rights. One of the Gini

coefficient disadvantage is that it fails to capture precisely where the social inequality appears in the distribution process of income, so that two very different income distributions might end with the same Gini coefficient.

Even if economic growth and inequality are not the only desirable components of development, they are core values (Kohli, 2009), and this is because a rapid growth with low inequalities will improve the quality of life to the population as a whole and not just the statistical data of a country's welfare. But for a meaningful analysis, it should be taken into consideration the human development evolution, as well as the levels of investment. Table no. 2 summarizes the rates of two specific indicators for three years, 1990.2000 and 2010.

The Human Development Index HDI is a complex index because is composed from data on life expectancy, education levels and standard of life. It is used usually to rank countries according to the level of human development, being divided into countries with "very high human development", "high human development", "medium human development" and "low human development". The three dimensions of development included in index are: life expectancy at birth as an indicator for long and healthy lives, the education access evaluated as years of schooling and average estimated years of schooling, and the standard of living calculated as national income GDP per capita.

Table no. 2. Human Development Index and level of investition for 1990-2010

	Human Development Index			HDI Differnces	Gross fixed capital formation		
	1990	2000	2010	1990-2010	1990	2000	2008
Belarus	0,861	0,788	0,732	0.13	21,93	25,20	32,48
Bulgaria	0,854	0,779	0,743	0.11	21,26	15,72	33,35
Czech Republic	0,892	0,849	0,841	0.05	25,29	27,97	23,94
Hungary	0,887	0,835	0,805	0.08	19,26	22,96	20,12
Poland	0,831	0,833	0,795	0.04	20,99	23,74	21,94
Moldova Republic	0,758	0,701	0,623	0.14	18,66	15,43	34,03
Romania	0,709	0,775	0,767	-0.06	19,79	18,90	31,11
Russian Federation	0,862	0,781	0,719	0.14	28,70	16,86	22,14
Slovakia	-	0,835	0,818	0.02	31,25	25,81	26,07
Ukraine	0,844	0,748	0,710	0.13	23,03	19,65	25,66
AVERAGE	**0,833**	**0,792**	**0,755**	**-**	**23,01**	**21,22**	**27,08**

Source: *World Bank, World Development Indicators at http://data.worldbank.org/indicator - accesed at 8.04.2011; United Nations, Human Development Report 1993/2000/2005/2010.*

Last analyzed indicator refers to the investments made by each country, calculated as gross fixed capital formation as a percentage of gross national product. Gross fixed capital formation within a region represents the net difference between purchases and disposals of fixed assets made by the residents of one region. For comparative analysis among nations, the relevant indicator is the ratio between gross fixed capital formation and gross domestic product. The higher the ratio is, the more attractive will be the investments in that country. But there is important to emphasize that fixed assets can be both tangible and intangible [18, p. 31]. Differences in investment rates between countries often show different levels of economic development and economic catching-up processes between developed and emerging countries. A higher level of investments will lead eventually, in a medium and log term, to a national economic growth and, hence, higher living standards.

THE INFLUENCE OF GLOBALIZATION UPON INCOME DISTRIBUTION

In the last two decades, the world economy has experienced a major leap not only quantitatively, in terms of volume and international trade and financial transactions, but also an

important qualitative transformation of the way different countries around the world interacts with each other. National economies become increasingly interdependent through the liberalization of international markets, information flow, technology and know-how, all of which led to an increased cross-border flow of goods, services and labor. Therefore, globalization is probably the most significant factor of progress which had in the last decades a decisive influence on developing countries.

Globalization has become, generally speaking, the universal way of describing changes in the international economy and world politics. Globalization occurred as a result of transportation and communication cost reduction, decreasing trade barriers and accelerating communication rhythm, capital flows and competition (Stiglitz, 2007). This process helped the emerging countries to catch-up with developed ones, while increasing the degree of interdependence among them. All this are exposing states and individuals to a much more complex market economy through its own global dimension.

Although globalization offers new opportunities for participating countries to accelerate economic growth and development, it incorporates, in the same time, a number of challenges and constraints. The problems arising from globalization refer to the existence of a high degree of heterogeneity in the extent to which different countries or regions of the world have managed to benefit from globalization over the past decades (Nissanke and Thorbecke, 2007, pp. 20-22), and whether the overall national economic opening and integration to the international trade is reflected in more positive or negative effects for that national economy. The heterogeneity of globalization causes disparities in economic development leading to an increasing inequality both within the same country and between countries, and thus draws the attention to the need of identifying the sources of disparities and quantifying its magnitude and impact on the living conditions of world's population. Although the opportunities offered by globalization can be significant, the natural question is whether the distribution of benefits is correctly done and, in particular, whether the poor countries have a lower proportion of benefits when compared to those developed, or even if, in some circumstances, their economies had more to suffer from the liberalization process? Therefore, the costs and risks that accompany globalization can be, in some cases, important for the fragile developing economies and the world's poorest countries.

In general, we expect globalization to reduce poverty at a pace much faster in the integrated economies than in the nationalistic and autarkic ones. The researches made in the pre-globalization period on the causal link between globalization and inequality emphasized the lack of any structural link between growth and the latter, and an inequality trend almost immobile. In any case, despite the great importance that the process of globalization has, the sources, channels and its consequences, it has so far remained relatively poorly understood (Heshmati, 2007, p. 60). Channels through which globalization affects the income inequality in the world have been identifies as equalization of prices for comparable goods and services, factor price convergence, capital mobility, marginal differences in yields and dynamic convergence of per capita income growth.

Opening through trade and financial liberalization leads to an increased flow of goods and capital across national borders which can contribute significantly to the growth of one nation (openness - growth relation). But the subject gives rise to a fierce controversy regarding the direction of causal relationship is relatively uncertain, as the way in which the capital flows can be interconnected in a vicious circle. In addition, the relationship between openness and growth benefits are not automatically guaranteed, so although it is likely that poor countries to benefit from growth, the ultimate effects of poverty reduction strategies depend on how the particular growth model affect distribution. When economic growth leads to an increase in income inequality, the poor will be adversely affected by globalization, being thus several consequences and phenomena associated with inequality which might impede future growth and poverty reduction, such as the spread of social and political instability has negative effects on investment rates.

THE ECONOMIC PERFORMANCES OF EASTERN EUROPEAN COUNTRIES

At the beginning of Eastern European countries' transition to free market, the region was recording negative rates of economic growth, having an average of -4.65%. The highest negative rates were recorded by Belarus and Ukraine, with -9.1%, respectively, -6.3%. Until the year 2000, all Eastern European countries succeed in achieving positive economic growth, among which Russian Federation and Hungary have the highest ones. The high annual GDP growth rate of Russia can be explained by the large quantity of its natural resources, thus Russia's development was based on raw material exports, mainly oil and gas.

In the transition period, the eastern European countries have, in general, an increase in their investment levels, covering both the primary and manufacturated goods. This fact appears as a natural consequence of trade market liberalization from the early '90s and the integration of several eastern countries into European Union. During 1990-2000, the region was not considered to be the best location for foreign direct investments, and it was only between 1997 and 2003 when investments started to increase, at firs only by 10 billion dollars, reaching $ 30 billion. Next six years have seen a genuine boom as the FDI rates increase five-fold, to 156 billion dollars. The main beneficiary had been the Russian Federation and the newly integrated states. If by 2003, eastern European countries did not appear among the proffered location for multinational companies, after their integration into European Union their situation have changed radically. Overall, during 1997-2008, direct investment in the region accounted 4% of GDP; the economic growth depended on most of these transactions in Bulgaria and the least in Russia. The highest rates of gross fixed capital formation as a percentage of GDP is found in Bulgaria which has a percentage of 33.35, Belarus, 32.48%, and Romania, 31.11%, and the lowest in Hungary 20.12%, Russian Federation, 22.14% and the Czech Republic, 23.94% (table no. 1)

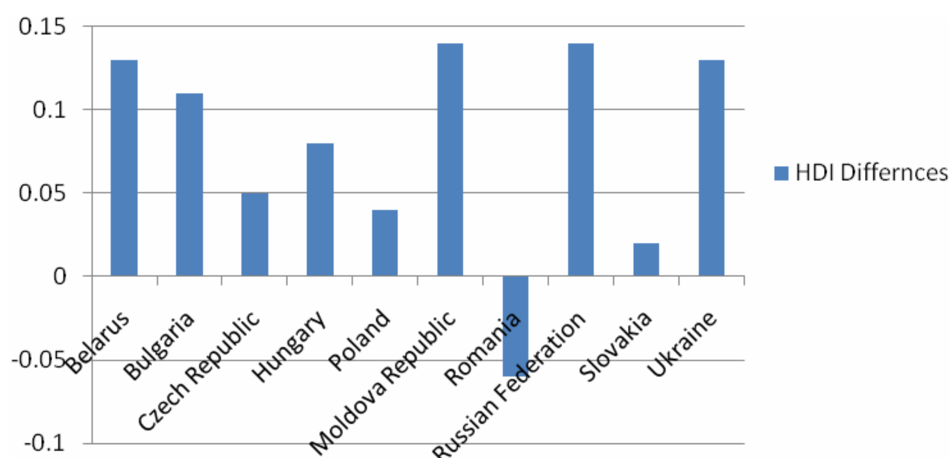

Figure no. 1. The HDI coefficient differences in 2010 from 1990

In 2009, because of the global financial and economic crisis, most eastern European countries were strongly affected, as it can be seen from the economic growth rates. Regionally, the annual economic growth rate recorded in 2009 an average level of -5.65%. Apart from Belarus and Poland, all eastern European countries recorded a negative growth; the most serious economic decline taking place in Ukraine which had a economic rate of -15.1% (Table no. 1), being the only country with a two decimals decrease. Belarus and Poland were the only ones that had a positive annual growth in 2009. But it should not be overlooked that the two have some very particular features regarding their economical system, the first being for the most part still in a state controlled, while the Polish economy had been liberalized at once at the beginning of '90s, after the shock therapy prescription. Thus, in Belarus, 51.2% of the population is employed by the state, 47.4% by national private companies, and only a small percentage of 1.4 being employed in

foreign companies. Therefore, it is not surprising that Belarus was not affected by the global crises as the rest of eastern European liberalized economies exposed to external risks.

Interesting to note is also that despite the economic growth and increasing foreign investments, human development index decreased continuously in the last two decades in all eastern European countries, except Romania and Poland. The negative trend cannot be attributed to some cyclical events such as the world economic crisis from 2008 since the trend is maintaining throughout the twenty years of transition. Also, it cannot be associated solely with the transition process as has been observed in other developing regions, only Eastern Europe has experienced depreciations of its HDI coefficient (Susanu, 2011). Among the most significant declines in living standards are in Moldova republic and the Russian Federation where the index felt from 0.758 to 0.623, respectively, from 0.862 to 0.719 (table no. 2), and among the lowest in Romania and Poland where the index changes from 0.709 to 0.767, respectively, from 0.831 to 0.795 (for Slovakia, the difference is calculated between the coefficient in 2000 and 2009). The fact that Romania had an increase in its HDI indicator should not be interpreted as having the highest standard of living in the region because at the beginning of transition, Romania registered a HDI coefficient of only 0.709 [19], the smallest in the entire region. Its increase of the last two decades made Romania the fifth of the ten analyzed countries, after the Czech Republic, Slovakia, Hungary and Poland, and ahead of Bulgaria, Belarus, Russia, Ukraine and Moldova.

THE INCOME INEQUALITY EVOLUTION

By the late 1990s, few eastern European countries in transition had made strides in regard of the deep economic restructuring needed for development, and for some of them the structural tension was lightened by the substantial inflows of external capital. The lack of deep restructuring maintained a high degree of tension in the system and stressed the rent seeking culture (Dăianu, 2000). The conversion from communism to capitalism in Eastern Europe followed a process of privatization, in many cases based on widespread pillage, illegal seizures of public resources and precipitous fall in domestic living standards and production during the first half of the 1990's (Petras, 2009). Poverty and inequality disempower people and open them to discrimination in many aspects of life and to additional violations of their rights.

During the past decade, the income inequality rates had an oscillating trend. Income inequality, as can be seen in table. 1, recorded a relatively small increases compared to 1990, but most of them still remain with coefficients over 30%, but not exceeding the critical upper level of 40% on a scale of 1 to 100. The highest coefficient of the indicator is made by Russia, Moldova and Poland, with a percentage of 37.5, 35.6 and 34.9, while the lowest are in the Czech Republic and Slovakia, both with a rate of 25.8%. Among the main causes of deterioration of living standards and the rise of income inequality is declining productivity, hyperinflation, rising unemployment and ineffective policies of macroeconomic stabilization.

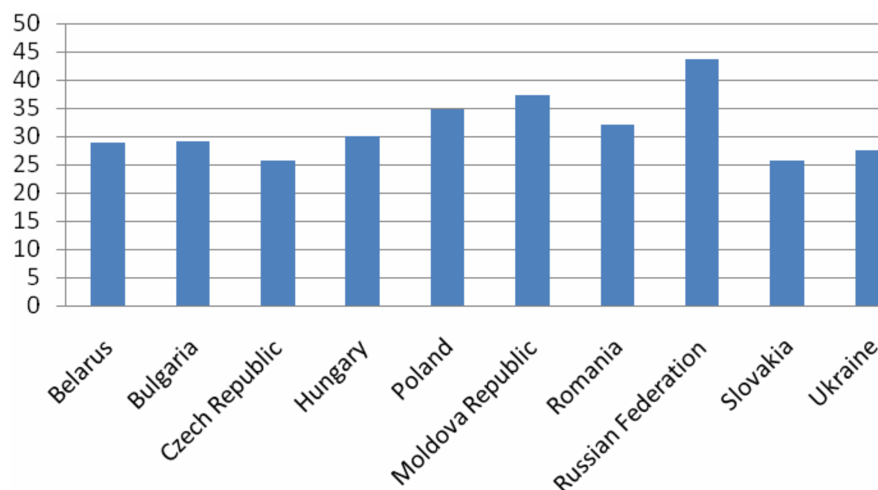

Figure no. 2. Income inequality level during 2000-2010.

In most Eastern European states liberalization was achieved almost overnight as in Poland and Czechoslovakia, and shortly afterwards, prices with the exception for those of utilities and real estate were left to be formed by the markets' forces, and foreign trade monopolies were eliminated boosting thus both exports and imports (Lavigne, 2000). But problems arose from the process of the structural changing with the privatization of state-owned enterprises and of the banking sector. Eastern European countries began the transition with some of the lowest levels of inequality in the world. During the transition however the inequality increased steadily in all of the economies from the region [24]. Gaps between rich and poor are widening in many countries—in the Russian Federation the Gini coefficient rose from 0.24 to 0.48 between 1987–88 and 1993–95. It is tempting to attribute increasing inequality to reforms and liberalization, but this is only one perspective. While inequality has increased almost everywhere, the more advanced reforms show much equal rather than unequal outcomes compared with less advanced reformers. And this difference cannot be solely explained by different conditions across the countries at the start of transition (Susanu, 2011). A World Bank study from 2000 shows that positive developments largely explain the rise in inequality in Eastern Europe: rising returns to education, decompressing wages, and emerging returns to risk taking and entrepreneurship. These forces are welcome despite the increase in inequality because they signal that the market is now rewarding skills and effort, as in the more mature market economies.

Simai believes that without major changes in economic and social policies, the inequality and human capital erosion will continue in most Eastern European countries (Simai, 2006). For such changes to take place, Simai argues that a change in the government power structure is imminent, and in spite of the current uncertain and problematic way to progress, a new middle class is needed. Transition has eroded employment guarantees and ended extensive state employment. Before the fall of the Berlin Wall, 9 of 10 people in socialist countries were employed by the state, compared with 2 of 10 in Organisation for Economic Cooperation and Development economies [23]. While the privileged elite often attained higher material well-being, the measured differences in income were narrow. We conclude therefore that, overall, in Eastern Europe the gaps in health between highland low-income groups tend to be large, especially since all of the countries in the region are developing. It is not less true that a slightly high income inequality in emerging countries can also signal that the market is now rewarding skills and effort, as in the more mature market economies, income inequalities being just a natural effect of liberalization.

CONCLUSIONS

The market liberalization from the '80s and globalization, in general, are subjects that are always raising a series of questions about their effectiveness, fairness and ethics. Globalization, through the market liberalization and economic privatization, managed to facilitate the development of several post-communist countries and their integration into international economic organizations, like many eastern European countries which entered into NATO and European Union, the Latin Americans which associated as Mercosur and ALADI or the Southeast Asian countries which formed organizations such as ASEAN or APEC. Although globalization has enormous potential to accelerate economic growth and development through integration into the global economy, technology transfer and knowledge dissemination, the impact of globalization on poverty reduction was uneven, and in some cases, even marginal.

In Eastern Europe, the transition process had a more negative trend with results such as increasing income inequality, de-industrialization, de-modernization and spread of poverty. The evolution of the capitalist economic system in this region remains dominated by a few financial-industrial groups with strong political influence focused on raw material exploitation and small and medium sector. Income inequality in Eastern Europe had a relatively low increased during the last two decades, but the human development index recorded a continuous degradation of the living standards from the region. The questions that arose from this are related to the direction of causal relationship between liberalization and economic growth, or the effect of income inequality in developing countries.

In conclusion, we believe that the economic globalization process has many economic and financial levers to accelerate growth in developing regions of the world, and if they will be used efficiently and morally, globalization is likely in the next decade to succeed in reducing the extreme poverty, which according to World Bank refers to individuals who live on less than $ 1 per day. And the degree at which globalization will succeed in reducing poverty will be determined by the way in which the next economical growth will be or not accompanied by increasing income inequality.

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