Globalisation and poverty

Globalizácia a chudoha

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Abstract: Transitional process in Central and Eastern European countries has been affected by globalisation. Evaluation of poverty and inequality become an integral part of economic thinking a few years ago. The importance of this topic is documented in the 2000 World Bank Report. In comparison with living standards of developing countries (especially Africa, South Asia, partially Latin America), Slovakia does not belong to the group of countries with the highest absolute poverty and according to the World Bank Report, the Slovak Republic is one of the countries with the lowest level of inequality. The paper presents an assessment of poverty and inequality in the Slovak Republic and a comparative analysis of indicators of selected countries. From 1992 the poverty in the Slovak Republic was evident, lasting and befalling more and more inhabitants. Household living costs were affected by price liberalisation. Inequality increased too. In 1996, inequality was correlated with the size of settlements and reached the highest level in settlements with over 50 thousand inhabitants. The share of population under poverty line has been increasing as well. Poverty assessment depends on the poverty line, which changes over time and across the regions. Distribution of household income in the Slovak Republic by the size of settlements (Microcenzus 1996) is shallow and densely concentrated around the poverty line. Therefore high sensitivity of poverty incidence, its depth and severity is observed. Contrary to the situation in developing countries, where the highest share of poor is observed in rural areas, the share of the Slovak Republic population under the poverty line was the highest in the settlements with 5 thousand to 10 thousand inhabitants in 1996.

Key words: spatial analysis, income inequality, poverty, Slovak Republic

Abstrakt: Nezvratný proces globalizácie sprevádza aj transformáciu ekonomík strednej a východnej Európy. Hodnotenie chudoby národov a rozdelenia dôchodku v spoločnosti je súčasťou ekonomického myslenia relatívne krátko. Aktuálnosť problematiky dokumentuje správa Svetovej banky za rok 2000, ale stáva sa aktuálnou aj v našich podmienkach. Na rozdiel od obyvateľov rozvojových krajín (najmä Afriky a južnej Ázie, čiastočne aj Latinskej Ameriky) sa nedá hovoriť o chudobe väčšiny obyvateľov Slovenska. Slovenská republika bola Svetovou bankou považovaná za jednu z krajín s najnižšou nerovnosťou. V práci sa zaoberáme hodnotením chudoby a nerovnosti rozdelenia dôchodku v Slovenskej republike a komparáciou vývoja týchto ukazovateľov vo vybraných krajinách. Po roku 1990 sa chudoba v Slovenskej republike stáva zjavnou, pretrvávajúcou a postihuje čoraz viac obyvateľov. Vývoj spotrebiteľských cien tovarov a služieb rastie a odráža sa v životných nákladoch domácností. Nerovnosť od roku 1992 rastie, pričom v roku 1996 jej úroveň korelovala s veľkosťou obce a bola najvyššia v obciach nad 50 tis. obyvateľov. Rastie aj podiel chudobných v populácii. Kvantifikácia chudoby závisí od hranice chudoby, ktorá sa mení v čase aj priestore. Rozdelenia domácností podľa príjmov a typu obcí Slovenskej republiky (Mikrocenzus 1996) sú plytké, kladne zošikmené. Indikátory chudoby sú tak značne citlivé na malú zmenu hranice chudoby. Na rozdiel od situácie v rozvojových krajinách, kde bol najvyšší podiel chudobných pozorovaný vo vidieckych oblastiach, bol v roku 1996 podiel chudobných v Slovenskej republike najvyšší v obciach od 5 tis. do 10 tis. obyvateľov.

Kľúčové slová: priestorová analýza, nerovnosť, chudoba, Slovenská republika

INTRODUCTION

There is a revival of interests in income inequality and poverty assessment for a number of reasons. Recent empirical work found a negative relationship between inequality and growth, especially when looking at the impact on growth of asset distribution and capital market imperfections. The second reason is a slowness of poverty reduction in many countries. Therefore, the at-

tention is devoted to poverty reduction public policies, including social safety net and social expenditure. Third area of research focuses on the impact of inequality, independently from poverty level, on health, or as a cause of violence.

While the world population has grown from 3.4 billion to 5.8 billion, real world GDP has tripled over the period 1965–1996. Over the same period, the ratio of developing countries to industrialised countries GDP per capita has

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remained more or less at the level of 1 to 20 in dollar terms and 1 to 7 in PPP (Purchasing Power Parity) (Working document of the EU 1999).

Developing countries' performances in terms of growth rates of GDP per head have considerably varied from one region to the other. While South East Asia and China have recorded an annual increase of GDP per head of more than 5% over the period 1965–1996, Sub-Saharan Africa, the Middle East, and the former Soviet Union have suffered a deterioration of their living standards. The share of poor in developing countries living on less then 1 USD a day declined, in 1993 to 29.4% of the population of those countries, but the absolute number of poor has increased from 1.2 billion in 1987 to 1.3 billion in 1993 and could have reached 1.5 billion today (Working Document of the EU 1999).

Globalisation has been one of the main factors contributing to world growth over the last decades through an unprecedented wave of technology innovations and more efficient international division of labour. However, freer trade and increased foreign direct investment (FDI), as well as short-term capital flows have only a limited impact on global development. The missing link between globalisation and development is the lack of adequate domestic policies. Development depends first of all on domestic policies, although these should be supported by international economic co-operation.

THE AIM AND METHODOLOGY

The aim of the paper is to analyse development of poverty and income inequality in Slovak Republic on the base of available data, in the context of global and regional tendencies of globalisation, liberalisation and economic growth.

Poverty and income inequality in the Slovak Republic (SR) were estimated based on the Microcensus (1977) data of the Statistic Office of SR (ŠÚ SR), Consumers' barometer ŠÚ SR, data published by the World Bank, the OECD, the IFAD and other international institutions. The World Bank POVCAL Software (Chen, Datt, Ravallion 2000), data of WIID UNDP (2000) and the database by Deininger-Squire (World Bank, 1997) were used in the analysis.

Income inequality was quantified by the Gini coefficient (GINI)

$$Gini = \frac{1}{2n^2} \sum_{j=1}^{n} \sum_{i=1}^{n} \sum_{j=1}^{n} |y_i - y_j|$$
 (1)

$$\overline{y} = (1/n) \sum y_i \tag{2}$$

where

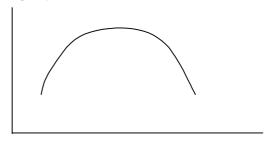
n – the number of individuals in the sample;

 y_i - income of individual $i, i \in (1, 2,..., n)$;

 \overline{y} - the average income

Another frequently used inequality indicator is the income share of the poorest 20% and the richest 20% of

Inequality



Income per capita

Figure 1. A Stylized Kuznets curve

population (the lowest and the highest quintils). Poverty incidence was quantified by the Headcount Index (H), depth of poverty by the Poverty Gap Index (PG) and severity of poverty by the Foster-Greer-Thorbeck Index (FTG).

Classical economy devoted appropriate attention to the relation of growth and income inequality. The best established view on linkages between growth and income distribution was the Kuznets hypothesis (1955) expressed by U curve – the Kuznets curve (Figure 1). Growth first leads to an increase, and then to a decrease in income inequality.

Kuznets investigated time-series of inequality indicators for England, Germany and the United States. In the 1950s, these were basically the only countries for which sufficiently long time series were available. By that time, inequality was falling in all three countries, after having risen earlier. Economic explanation was the transfer of workers from low productivity sectors and average inequality, to sectors with high productivity and low inequality. Inequality between sectors was higher then within sectors. With the available data, it was not possible to reject the Kuznets hypothesis. It was only recently that tests of the hypothesis based on much larger data sets (Deininger-Squire, 1996) have consistently refuted it.

Using data of 67 developing and transitional economies of Central and Eastern Europe and Middle Asia from 1981 to 1994, Ravallion and Chen (1997) found a significant negative correlation between economic growth and changes in inequality. Pakistan government (2001) published similar conclusions related to the rapid economic growth of East and Southeast Asia countries.

The negative link between economic growth and inequality described in Ravallion and Chen (1997) can be rather specific to the circumstances of transition in Central and Eastern Europe and Central Asia, where both negative growth and increasing inequality prevailed since 1990. There is no evidence of a systematic relation between growth and changes in inequality for countries outside that region.

In spite of Kuznets prediction (1995), inequality in many high-income countries persists, or even grows (OECD 1995). Inequality means different things to different people. The World Bank defines it as the dispersion

of income or consumption distribution, or other welfare and demographic indicators. Obviously, poverty and inequality are very closely linked. The more unequal the income distribution, the larger the percentage of the population living in income-poverty. Ravallion and Chen (1997) also indicated a significant negative correlation between economic growth and poverty reduction for all observed countries.

The basis for any poverty measurement is a poverty line definition. Discussions related to the selection of the poverty line have been growing, as the poverty is a multi-dimensional concept. Some scholars prefer for the measurement of poverty physical measures of nutrition or health, where higher consensus is expected. For the purpose of global aggregation and comparison, the World Bank uses reference lines set at 1 USD and 2 USD per capita per day in 1993 PPP terms. According to the World Bank estimates, 24% of developing countries population had consumption below 1 USD a day in 1998.

RESULTS AND DISCUSSION

The share of population in the SR living on 2 USD a day, at about 5 percent in 1996, is well above that of other Central European countries, although income distribution remains overall relatively egalitarian. On the contrary, those living below 4 USD a day represent about 11 percent of the population, a much lower share than in other Central European countries (Memorandum 2001). Similarly, relative poverty or income inequality, as measured e.g. by the share of households having incomes below 50 percent of the median equivalent income, is also much lower than in other Central European countries.

Inequality in the SR and other transitional countries has been increasing over time (Table 1, Figure 2). Nevertheless, according to the World Bank (2001), Slovakia and the Czech Republic belong to the low inequality coun-

tries, inequality being measured by the lowest and the highest quintil (Table 2) and the Gini coefficient (Table 1).

Changes in the Gini coefficient (Table 1) show a decline of inequality in Czechoslovakia since 1958 and its growing after 1992. Gini coefficients differ by sources. Gini coefficient in SR (Bartova, 2001b) was comparable with that of Hungary and Austria in 1996. Inequality in Poland, Slovenia, Czech Republic was higher. A remarkably high inequality in developed countries is observed in the USA (Gini = 40.8). The highest levels of inequality are most often observed in Latin America, e.g. in Bolivia (Gini = 58.7).

The distributions of households according to the income level and size of settlement (Figure 3) show a further specific feature of income inequality in SR in 1996. The average income increases together with the size of settlements. The positive skewness of the income distribution of all groups of settlements is observed too. Typical shallow pattern of distribution with mean higher than median was also recorded by analysts of the World Bank in Hungary (1996) and in Poland (1994).

Incomes are highly concentrated around the poverty line which resulted in a rapid increase of poverty incidence when a higher alternative poverty line was used (Bartova 2001a). Inequality assessed on the base of households net monthly income in year 1996 (Bartova 2001b) grows with the size of settlements (for settlements over 50 thous. inhabitants Gini equals 33.25).

Poverty line was defined as a minimal monthly income of 2700 Slovak crowns (Sk) in 1996 (Act No. 90/1996 Coll. on minimal wage and Act no. 463/1991 Coll. and amendments). Average paid unemployment benefit was 1881 Sk a month in 1996 (Správa 2000). An alternative poverty line was set at 1800 Sk (Bartova 2001b). Headcount index (a share of population living under the poverty line) in settlements from 5 thousand to 10 thousand inhabitants was 10.6% and 30.8%, respectively.

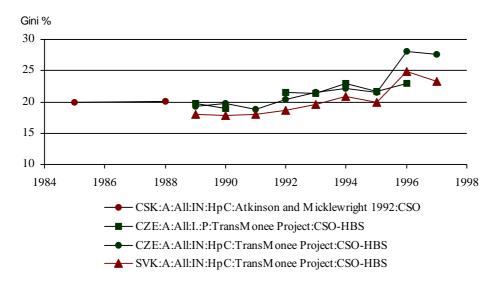


Figure 2. Inequality development in Czechoslovakia (CSK), Czech Republic (CZE), Slovak Republic (SVK)

Table 1. Income or consumption distribution and inequality in selected countries

	Year	GINI	1. quintil	2. quintil	3. quintil	4. quintil	Source	
CSR	1958	27.19	0.0816	0.2232	0.4098	0.6481	Czechoslovakia, SY	
	1965	22.61	0.1010	0.2510	0.4410	0.6750	Czechoslovakia, SY	
	1970	22.50	0.1029	0.2548	0.4426	0.6713	Czechoslovakia, SY	
	1973	21.01	0.1090	0.2640	0.4530	0.6810	Czechoslovakia, SY	
	1976	20.71	0.1140	0.2680	0.4540	0.6790	Czechoslovakia, SY	
	1977	19.37	0.1263	0.2838	0.4667	0.6880	UN 1981	
	1980	20.67	0.1140	0.2680	0.4540	0.6790	Atkinson and Micklewright 1992	
	1981	23.92	0.1018	0.2239	0.4309	0.6672	Czechoslovakia, SY	
	1985	19.86	0.1161	0.2743	0.4605	0.6847	UN 1985	
	1988	20.07	0.1190	0.2740	0.4580	0.6800	Czechoslovakia, SY	
	1991	24.60	0.1086	0.2484	0.4230	0.6450	Czechoslovakia, SY	
	1992	24.51	0.1094	0.2529	0.4277	0.6443	Milanovic and Ying 1996	
SR	1989	18.30						
	1990	18.00					Cornia 1994	
	1991	18.00					Cornia 1994	
	1992	18.90					Cornia 1994	
	1992	19.49	0.1186	0.2770	0.4645	0.6865	Cornia 1994	
	1992	27.71	0.0816	0.2215	0.4082	0.6416	WDR 1996	
	1992	23.38	0.1062	0.2536	0.4359	0.6604	LIS Data base	
	1992	20.79	0.1163	0.2716	0.4556	0.6750	LIS Data base	
	1992	25.82	0.0900	0.2352	0.4217	0.6518	LIS Data base	
	1993	21.50	0.1146	0.2647	0.4474	0.6711	LIS Data base	
							Milanovic and Ying 1996	
CR	1989	18.50						
	1990	20.10					WDR 1996	
	1991	22.20					Milanovic and Ying 1996	
	1992	18.10					Cornia 1994	
	1993	26.60	0.1050	0.2440	0.4130	0.6260	Cornia 1994	
	1994	28.26	0.0966	0.2318	0.4018	0.6190	Cornia 1994	
Hungary ^{a,b}	1998	24.4	0.100	0.247	0.430	0.657	WDI, 2001	
$Poland^{a,b} \\$	1998	31.6	0.078	0.206	0.377	0.603	WDI, 2001	
Slovenia ^{c,d}	1998	28.4	0.091	0.225	0.398	0.623	WDI, 2001	
Austria ^{c,d}	1987	23.1	0.104	0.252	0.437	0.666	WDI, 2001	
Germany ^{c,d}	1994	30.0	0.082	0.214	0.389	0.616	WDI, 2001	
USA ^{c,d}	1997	40.8	0.052	0.157	0.313	0.537	WDI, 2001	
Bolivia ^{c,d}	1997	58.7	0.019	0.078	0.189	0.382	WDI, 2001	

a - refers to consumption shares by percentiles of population

Sources: Deininger and Squire Data Set 1996; World Development Report 2000/2001, 2001; World Development Indicators 2001

Table 2. Income distribution in selected countries (income share of the poorest and the richest 20% of population)

High inequality countries	Lowest 20% (A)	Highest 20% (B)	B/A	Low inequality countries	Lowest 20% (C)	Highest 20% (D)	D/C
Honduras	1.6	61.8	38.625	Slovak Republic	11.9	31.4	2.639
Bolivia	1.9	61.8	32.526	Japan	10.6	35.7	3.368
Paraguay	1.9	60.7	31.947	Austria	10.4	33.3	3.202
Brazil	2.6	63.0	24.231	Czech Republic	10.3	35.9	3.485
Swaziland	2.7	63.4	23.482	Bulgaria	10.0	36.8	3.680

Source: World Bank, World Development Indicators 2001; own calculations

b - ranked by per capita consumption;

c - refers to income shares by percentiles of population;

d - ranked by per capita income

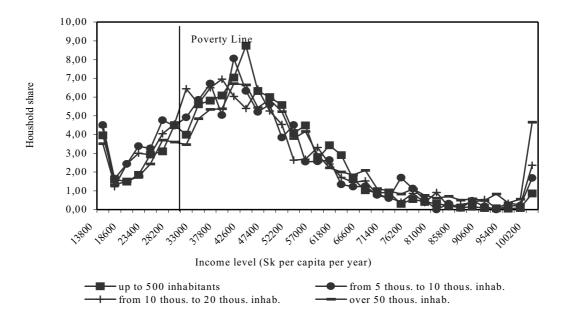


Figure 3. Household distributions in SR according the size of settlements and income level (1996)

Situation in transitional countries was affected by the break up of the central planning system accompanied by a rapid fall in output and high rate of inflation. Hence, poverty in the Russian Federation (according the national definition) had jumped from 11% during the Soviet period to 43% in 1996, and probably increased further in more recent years. Inequality measured by the Gini coefficient increased over the region from an estimated 0.24 in 1988 to about 0.49 in 1998 (Income Poverty 2001).

The World Bank observed growing poverty in transitional economies in the Roma minority population. In Bulgaria, more then 84% of the Roma population lived under the poverty line in 1997. In Hungary, one-third of the long-term poor consisted of Roma population (Poverty Trends, 2000). Situation of the Roma population in Slovakia (close to 10% of population) represents a core challenge to poverty reduction and social justice. According to the Ministry of Labour, Social Affairs and Family of the SR (2000), 12.5% of total unemployed in 2000 were Roma. Together with 60% of the dependants (children and housewives) and 7% of the retired, 80% of the Roma population depended on the social safety net and a support provided by non-governmental non-profit organisations.

According to many studies, globalisation has had a rather negative impact on rural poverty. According to IFAD (1992), rural poverty in 114 observed countries increased. The level of poverty in Sri Lanka, expressed by the headcount index, changed from 13% in 1965 to 46% in 1988, which means a growth by 254%.

The highest incidence, depth and severity of poverty in SR were observed in settlements from 5 thousand to 10 thousand inhabitants, which are not recognised as rural. Even if poverty in settlement over 20 thousand inhabitants was relatively low, results do not comply with

the findings in developing country studies (World Bank, 2000) which show an evident higher share of rural than urban poverty.

Growth of poverty in SR, "shallow" pattern of income distribution could be explained by a decline in economic development, growth of unemployment and other specific conditions of a slowdown transition (e.g. impact of price liberalisation, decline of real income, social safety net deterioration, growth of regional disparities).

Even if the economic theory has not empirically confirmed relations between growth and inequality, there are no doubts that economic growth reduces poverty. Poverty decline was observed in countries with rapid economic growth. This decline was, however, slowed down by the increase of inequality (China, India). The growth of poverty was identified in countries in which economies stagnated or contracted (Poverty Trends, 2000). From this point of view, a stabilisation of the economy, increasing its efficiency and competitiveness, under the condition of globalisation would have a positive impact on poverty alleviation in SR.

CONCLUSION

Measuring and analysing inequality and poverty became more important in transitional countries, where economic development after 1990 led to inequality and poverty growth. The estimation of indicators and deeper analysis of their causes and relations with economic growth are constrained by lack of high quality data, and lack of representative household consumption or income surveys. In spite of that, the World Bank still lists the Slovak Republic among the lowest inequality countries. Since 1992, inequality increased, similarly as poverty in-

cidence, depth and severity. The relation between growth and inequality was not confirmed. Nevertheless, under the assumption of the stabilisation of economy, the growth of efficiency and competitiveness, decline of poverty observed in rapid economic growth countries could be observed in future in the Slovak Republic, too.

REFERENCES

- Attacking Poverty (2000): World Development Report 2000/2001. September 12, 352 p. World Bank and Oxford University Press; ISBN 0-19-521129-4.
- Bartová Ľ. (2001a): Chudoba a nerovnosť. Zborník vedeckých prác. MVD 2001, Nitra, s. 585–589; ISBN 80-7137-868-2.
- Bartová Ľ. (2001b): Analýza dôchodkovej disparity domácností v SR. Sborník Demografické, sociální a hospodářské důsledky desetiletí transformace ekonomik ČR a SR. Mezinárodní vědecký seminář, Boršice u Buchlovic, září, s. 9–15; ISBN 80-7157-519-4.
- Deininger K., Squire L. (1996): A New Data Set Measuring Income Inequality. World Bank Economic Review, 10: 565–591.
- Economic Survey 2000–2001. Income Distribution and Poverty (2001). Government of Pakistan; http://www.finance.gov.pk/.
- Chen S., Datt G., Ravallion M. (2000): POVCAL A program for calculating poverty measures from grouped data. World Bank; http://www.worldbank.org/LSMS.
- IFAD (1992): The State of the World Rural Poverty. Income Poverty Recent regional trends (1991). http://www.worldbank.org/poverty/data/trends/regional.htm#trans.

- Koncepčné zámery vlády SR na riešenie problémov Rómov (2000). MPSVaR SR, 30 s.
- Kuznets S. (1955): Economic Growth and Income Inequality. American Economic Review, 45, (1): 1–28.
- Measuring Development Progress: A Working Set of Core Indicators. OECD; http://www.oecd.org/dac/indicators/htm/list.htm.
- Memorandum prezidenta Medzinárodnej banky pre rekonštrukciu a rozvoj a medzinárodnej finančnej korporácie (2001). O stratégii pomoci Slovenskej republike prostredníctvom skupiny Svetovej banky; http://www.government. gov.sk.Mendis P. (1997): Impact of Globalisation: The Incidence of Poverty and Food Security Policies in Sri Lanka. University of Minnesota, 40 p.
- Mikrocenzus (1997). Údaje o príjmoch domácností za SR. I. diel. ŠÚ SR.
- Ravallion M., Chen S. (1997): What Can New Survey Data Tell Us about Recent changes in Distribution and Poverty? World Bank Economic Review, *11*, (2): 357–382.
- Spotrebiteľský barometer (2000). Infostat, november 2000.
- Working document of the European Commission (1999). Guidelines for the participation to the 10th United Nations Conference on Trade and Development, 23 p.; http://europa.eu.int/eur-lex/en/com/wdc/1999.
- World Development Indicators (2001). http://www.worldbank. org/data/wdi2001.
- World Income Inequality Database/WIDER. UNDP (2000).
 Social Development and Poverty Elimination Division.
 Zákon č. 90/1996 Z. z. o minimálnej mzde.

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