

# *Poverty, Inequality, and Vulnerability in the Transition and Developing Economies of Europe and Central Asia*

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This paper does not necessarily reflect the views of UNDP, the United Nations, or its member states.

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# Why this paper? Why this topic?

- *income poverty* data offer important but **incomplete insights** into the **sustainable development** challenges facing the region of Southeast Europe and Central Asia
- reductions in **income poverty and inequalities go together**, and are broadly consistent with the development trends apparent in the region
- Explore alternative **approach to monitoring vulnerability to income poverty**

# Poverty trends

- Absolute income poverty levels fell significantly across the region after 1990 sharp rise (Turkey is an exception); Trends since 2008 are more nuanced;
- When measured against poverty thresholds (that reflect higher living costs in the northern hemisphere) data suggest that income poverty levels remain disturbingly high, even in some upper middle-income countries.;
- Moreover, those countries that are today facing difficulties in poverty eradication also tend to be experiencing growing income inequalities

# Income poverty and inequality: measurements

- **Measures of the extent to which people are deprived** of the goods, services, capabilities, and opportunities they need to live long, healthy, prosperous **lives—are too complex** to be effectively captured in a single composite indicator
- **Measures of absolute, relative, and subjective levels of poverty**, based on individual reports of income, consumption, or perceived levels of welfare, **are the most commonly used instruments.**
- **Absolute income poverty** in most of the **developing and transition economies** is defined relative to the income needed to purchase **a minimum** basket of consumer goods
- **European countries** are more likely to use relative poverty standards, measured vis-à-vis some average living standard (generally 50-70% of median income or consumption), either in addition to, or in lieu of, absolute poverty thresholds.

### Poverty indicators, thresholds in Europe and Central Asia

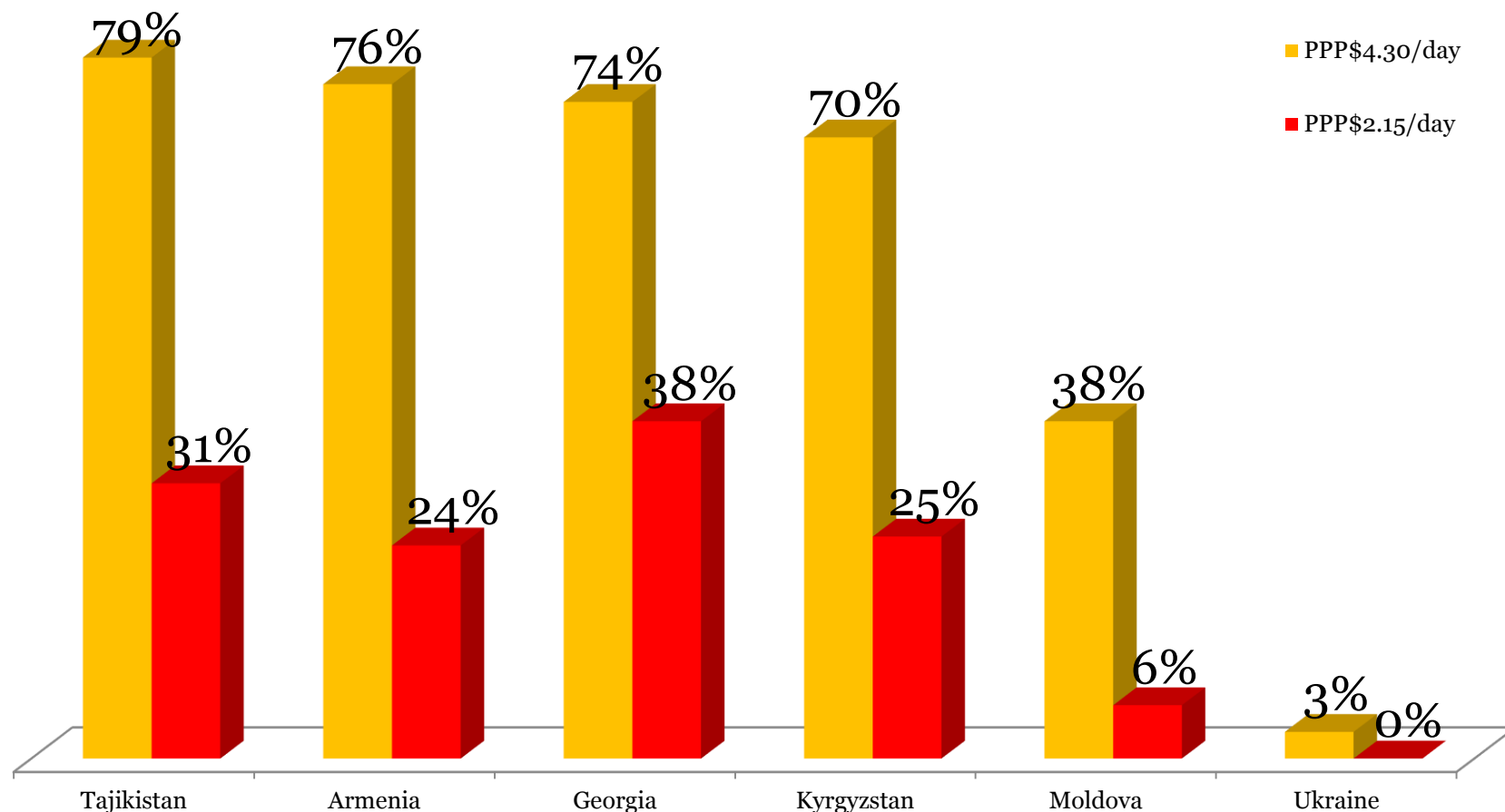
<i>Country</i>	<i>Indicator, threshold</i>
Albania	<i>Cost of basic needs</i>
Armenia	<i>\$4.30/day</i>
Azerbaijan	<i>Cost of basic needs</i>
Belarus	<i>Cost of basic needs</i>
Bosnia and Herzegovina	<i>Cost of basic needs</i>
Kazakhstan	<i>Cost of basic needs</i>
Kyrgyzstan	<i>Cost of basic needs</i>
Macedonia, Former Yugoslav Republic	<i>70% of median income</i>
Moldova	<i>Cost of basic needs</i>
Montenegro	<i>Cost of basic needs</i>
Serbia	<i>Cost of basic needs</i>
Tajikistan	<i>Cost of basic needs</i>
Turkey	<i>Cost of basic needs</i>
Turkmenistan	<i>50% of median income</i>
Ukraine	<i>75% of median income</i>
Uzbekistan	<i>Cost of food basket</i>

*Compiled by UNDP from various sources.*

# Methodology: PPP\$4.30/day is the income poverty threshold

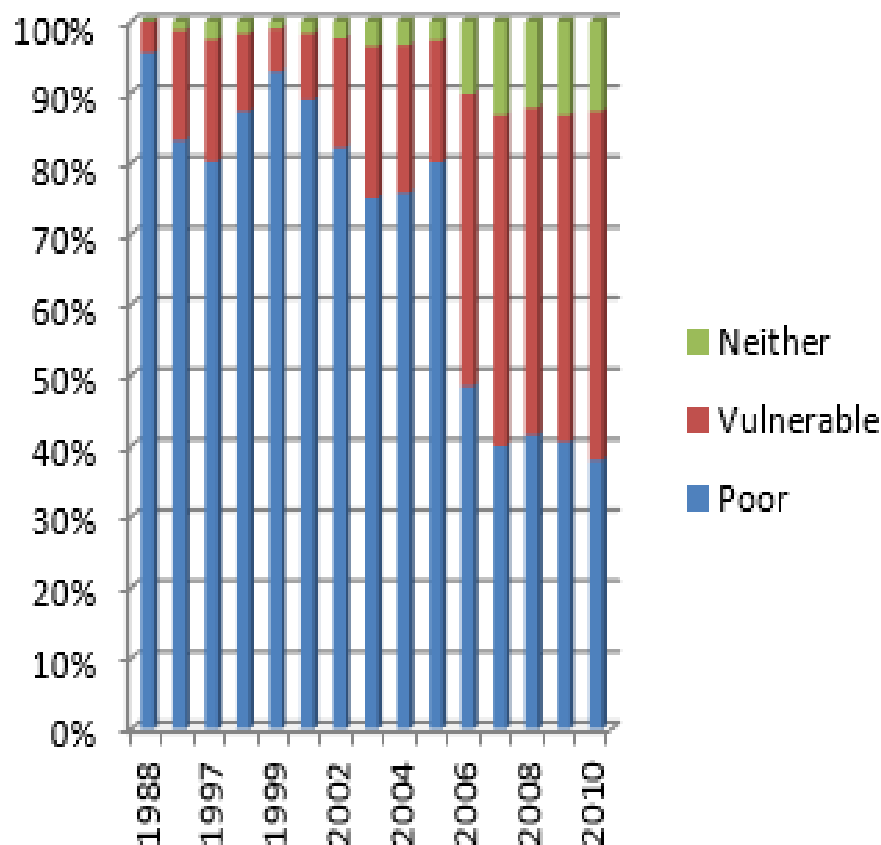
- In this paper, the **PPP\$2.15/day** is a regional threshold for **extreme income poverty**
- the **PPP\$4.30/day** is treated as a **regional income poverty threshold**
- **PPP\$ 5.40/day and PPP\$10/day** used as **thresholds to measure vulnerability**
  
- **Reason:**
- (i) subjective views about how much daily income is in fact necessary to keep individuals out of poverty in much of the region; and
- (ii) possession of a POVCALNET data set extending back to 1981

# Income poverty rates in low- and lower middle-income countries in Europe and Central Asia (for last available year)

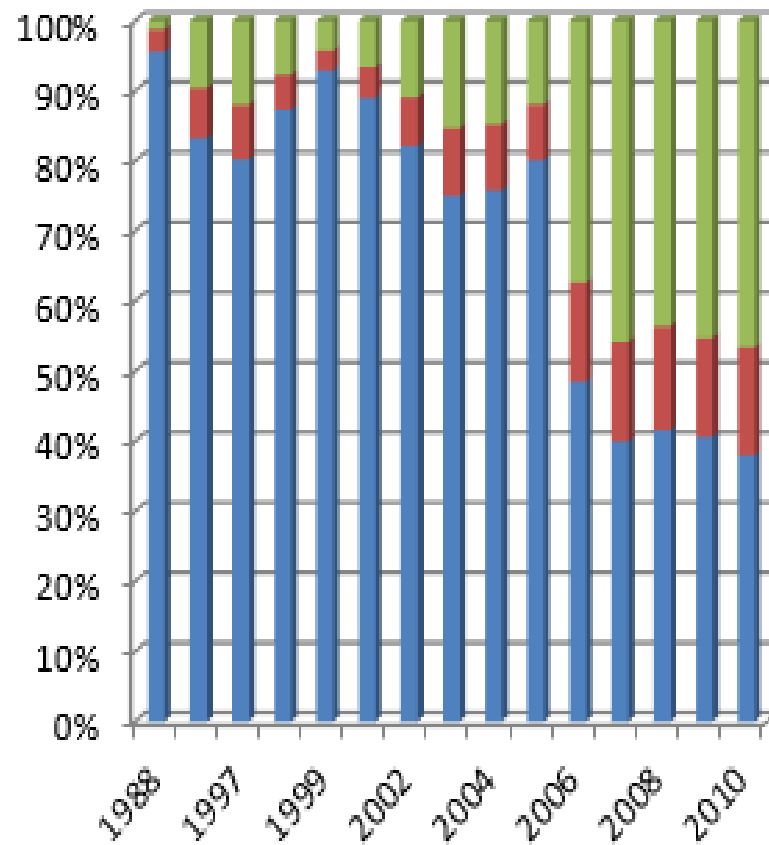


# Poverty, vulnerability in Moldova

PPP\$10/day vulnerability threshold



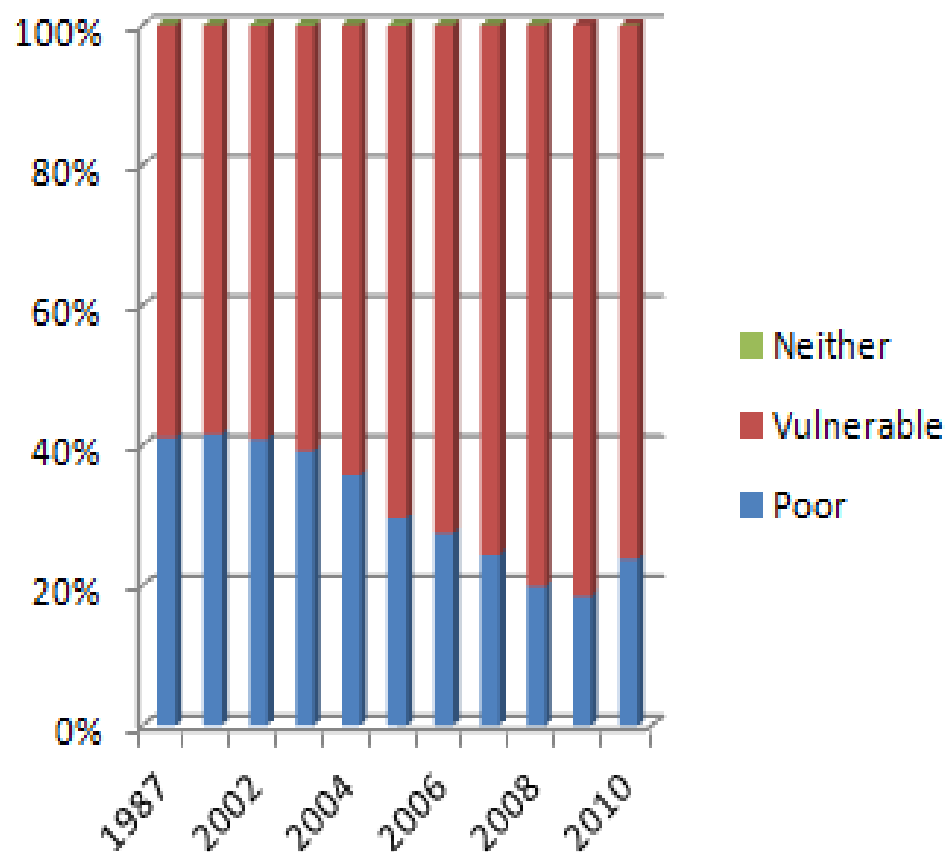
PPP\$5.40/day vulnerability threshold



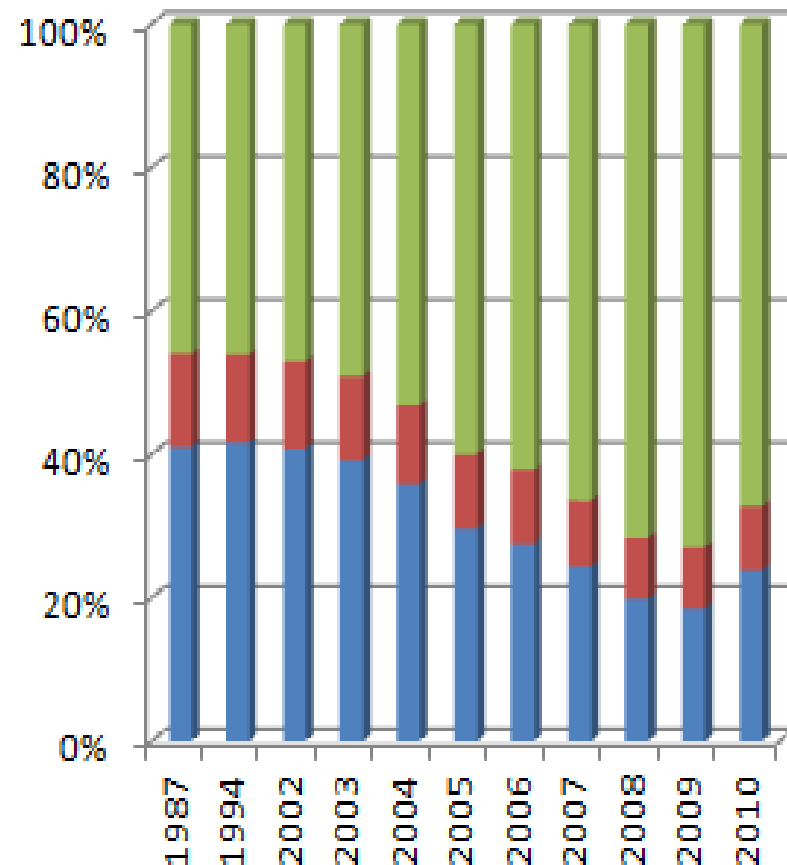


# Poverty, vulnerability in Turkey

PPP\$10/day vulnerability threshold



the PPP\$5.40/day vulnerability threshold



UNDP calculations, based on POVCALNET data.

## 3 similarities

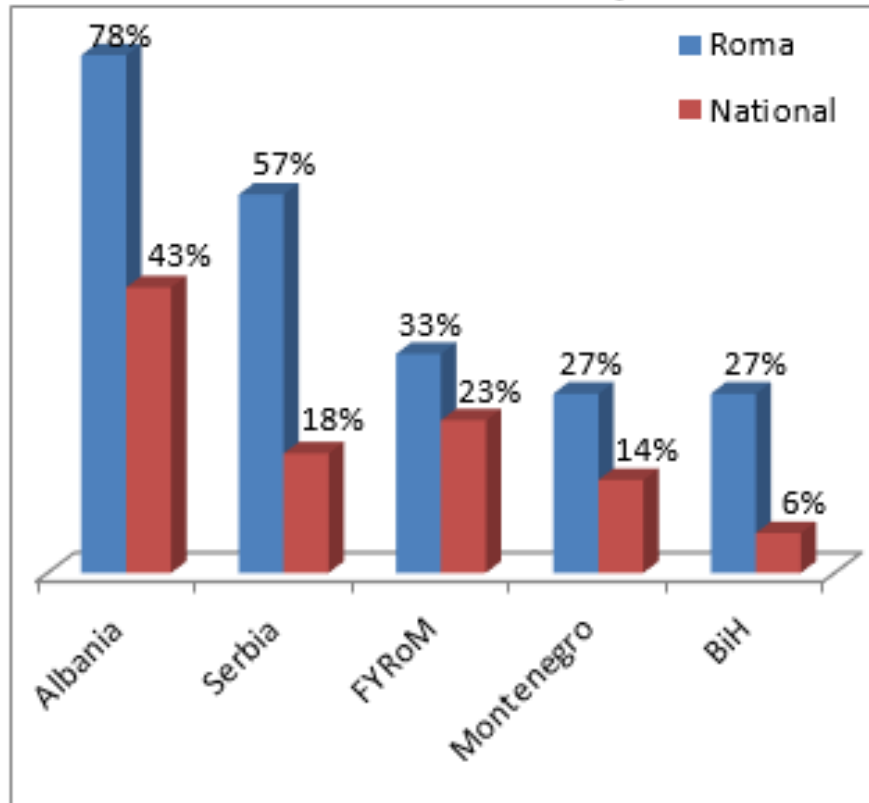
# Poverty measurement and monitoring in Southeast European economies

1. All are currently negotiating for membership in the European Union;
2. All (except for Kosovo\*) are now classified by the World Bank as upper middle-income countries;
3. Low reported income poverty rates mask significant pockets of poverty and exclusion..

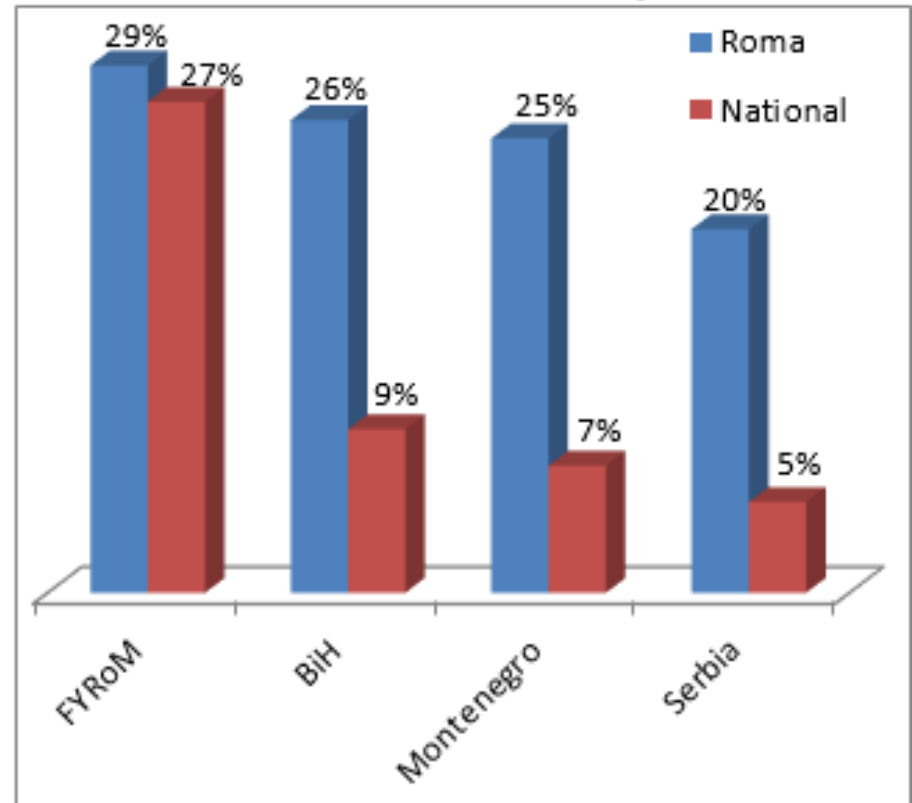
\*as per UNSCR 1244 (1999)

# Income poverty rates in Southeastern Europe

2004, at PPP\$4.30/day



2011, at PPP\$4.30/day



Sources: POVCALNET, and the UNDP/EU/WB Roma regional database. National data reported for 2011 are from 2010 for Montenegro and Serbia; from 2008 for the Former Yugoslav Republic of Macedonia; and from 2007 for Bosnia and Herzegovina. National data reported for 2004 for Montenegro are from 2005.

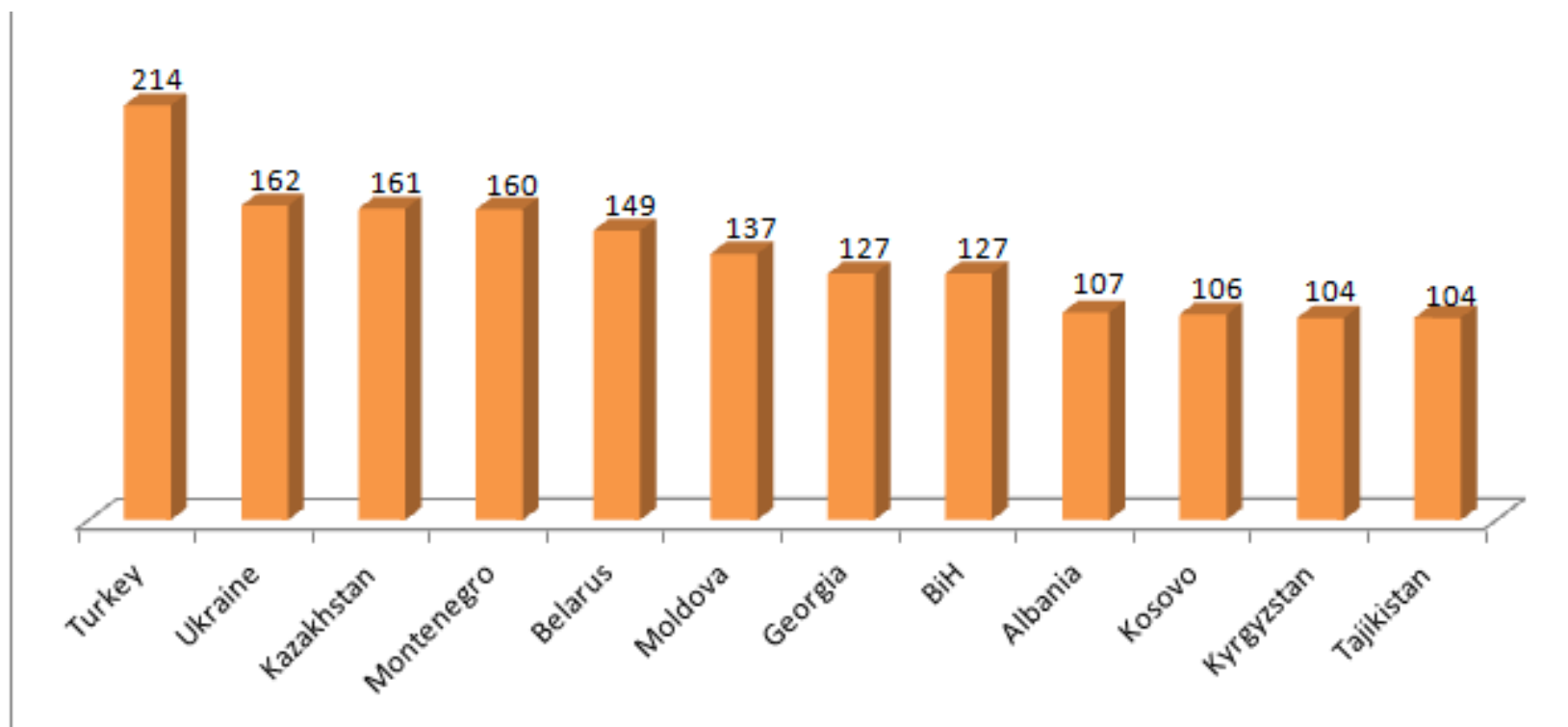
# *The Social Exclusion Index - Regional HD Report 2011 for Southeast Europe and Central Asia*

- *Business climates matter more than education*
- *Location matters for social inclusion.*
- *Corruption and social exclusion go together.*
- *Large shares of respondents in seven countries (Serbia, Kazakhstan, Ukraine, FYR of Macedonia, Tajikistan, Moldova) reported that **being well connected politically**, in order to get ahead in life, is more important than it was 25 years ago*
- *Language limits access to education and employment opportunities*

# Drivers of poverty and inequality— Location, gender, age

- The **risks of poverty** are particularly high for
  - **residents of rural areas**
  - **those unable to work**
  - **individuals living alone**
  - **single-parent families**
  - **families with many children.**
- They are also high for the “**new poor**” of the transformation, such as:
  - **the unemployed** (including officially employed workers on unpaid or partly paid leave) and their families;
  - **the working poor**, including public servants in such sectors as education, health, science, and the arts, as well as farm workers and petty traders, particularly in rural areas (and their families);
  - **residents of “company towns”** where local economies rely heavily on small numbers of large companies; and
  - **refugees and internally displaced persons.**

# Ratios of rural to national income poverty rates in Europe and Central Asia



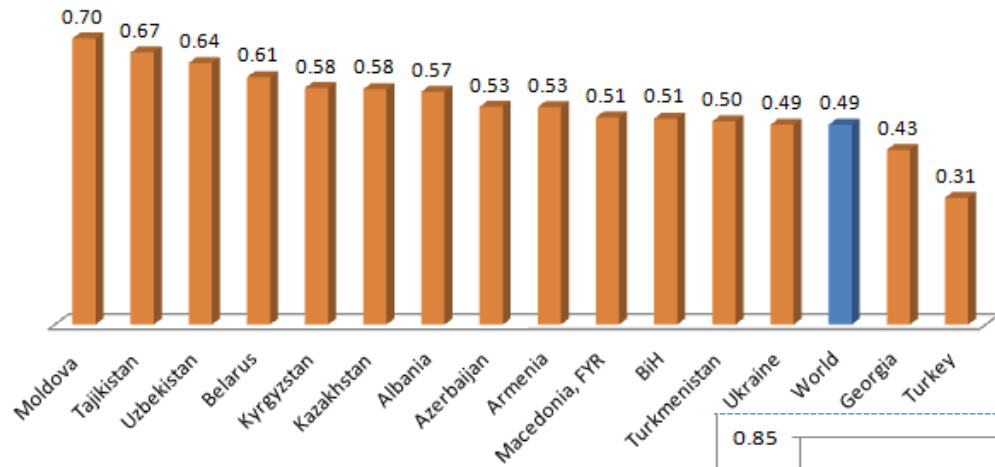
Note: An indicator value of 100 implies no difference between rural and national (urban) poverty rates. An indicator value greater than 100 means that rural poverty rates exceed national (urban) rates.

\* Based on national poverty definitions.

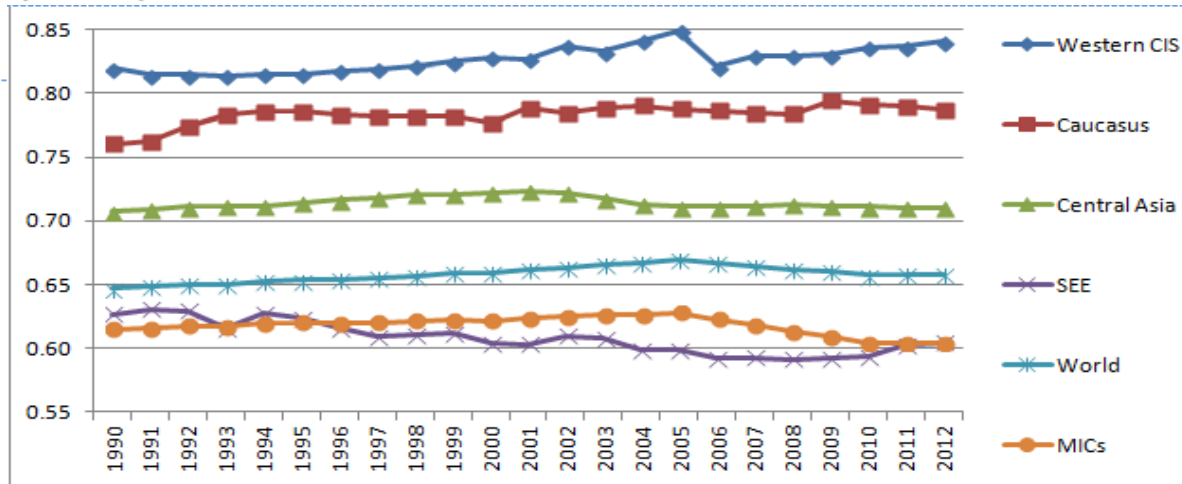
Source: UNDP calculations, based on World Bank World Development Indicators data (2012, or most recent year).

Women continue to face **large inequalities** vis-à-vis men, particularly in terms of incomes and access to the labour market.

**“Gender gap”**: Ratio of female to male per-capita gross national income GNI (2013)



**Ratios of female to male labour force participation rates (1990-2012)**

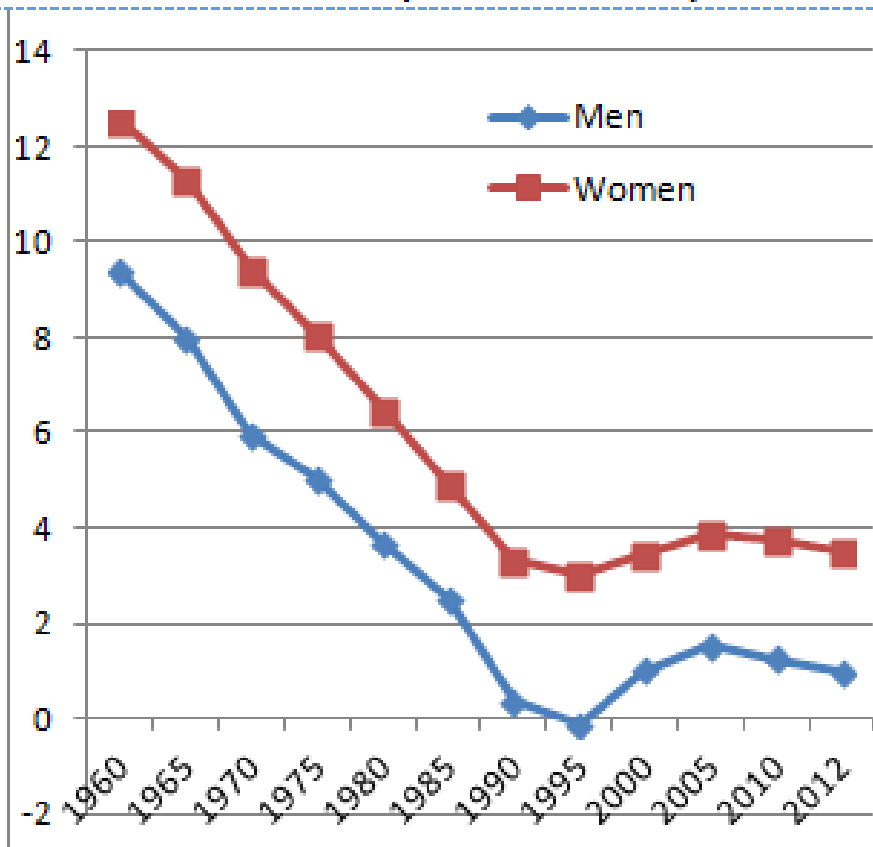


HDRO estimates.

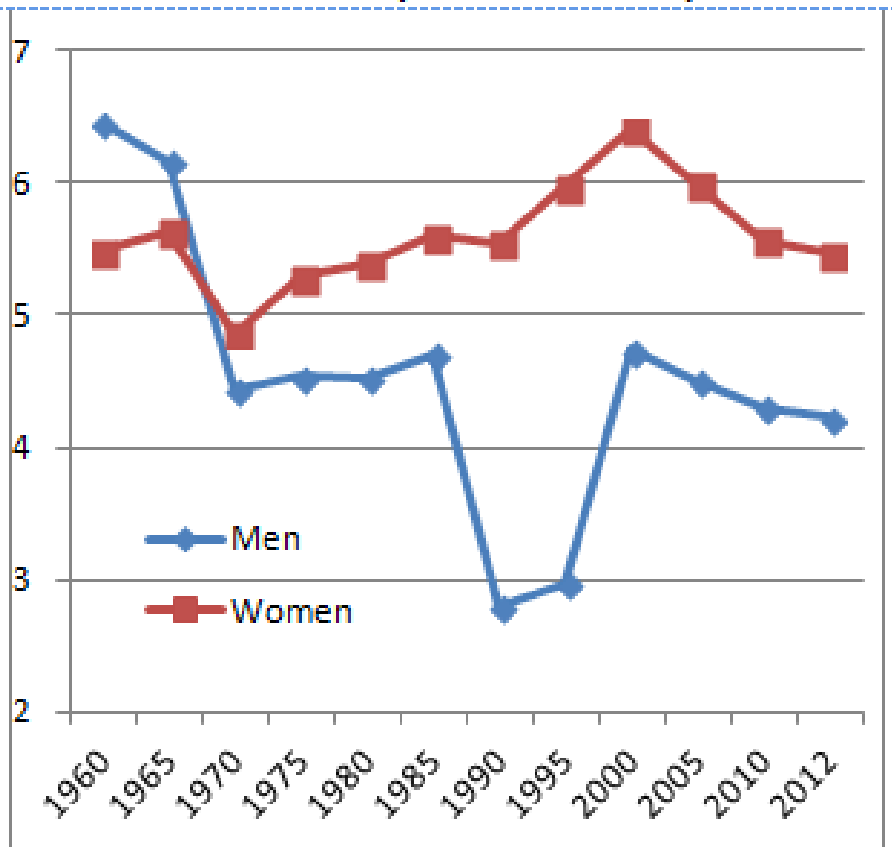
UNDP calculations of unweighted averages, based on data from the World Development Indicators database.

# Trends in Life expectancy at birth tell different story..

Southern Caucasus, relative to global averages (in number of years, 1960-2012)



Southeast Europe, relative to global averages (in number of years, 1960-2012)



UNDP calculations of unweighted averages, based on World Development Indicators data.



# Income inequalities: some insights

- For 10 of the 15 countries favourable poverty reduction trends correspond to declining, or low, levels of income inequality.
- Reductions in income inequality and poverty therefore seem to go together.
- 
- The UN national and regional post-2015 consultations conducted during 2013 in the region pointed to inequalities as a major concern.
- For a number of countries, income inequalities are no longer low, or even moderate, by global standards.

# Income inequalities: Gini/POVCALNET

Income inequality trends: Gini/POVCALNET (1981-2010)											
Country	1981	1984	1987	1990	1993	1996	1999	2002	2005	2008	2010
Albania	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.28	0.33	0.35	<u>n.a.</u>
Armenia	0.44	0.44	0.44	0.44	0.44	0.44	0.36	0.36	0.36	0.31	0.31
Azerbaijan	0.35	0.35	0.35	0.35	0.35	0.35	0.36	0.37	0.17	0.34	<u>n.a.</u>
Belarus	0.23	0.23	0.23	0.22	0.22	0.25	0.30	0.30	0.28	0.27	0.26*
<u>BiH</u>	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.36	0.36 <sup>^</sup>	<u>n.a.</u>
Georgia	0.37	0.37	0.37	0.37	0.37	0.37	0.41	0.40	0.41	0.41	0.42
Kazakhstan	0.26	0.26	0.26	0.29	0.33	0.35	0.33	0.35	0.32	0.29	0.29#
Kyrgyzstan	0.26	0.26	0.26	0.37	0.54	0.43	0.35	0.32	0.39	0.37	0.33*
Macedonia, FYR	0.28	0.28	0.28	0.28	0.28	0.28	0.31	0.39	0.39	0.44	<u>n.a.</u>
Moldova	0.24	0.24	0.24	0.29	0.35	0.36	0.39	0.37	0.36	0.35	0.33
Montenegro	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	0.30	0.30	0.29
Serbia	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	0.33	0.33	0.28	0.30
Tajikistan	0.32	0.32	0.32	0.32	0.32	0.32	0.29	0.33	0.34	0.33 <sup>^</sup>	0.31#
Turkey	0.44	0.44	0.44	0.43	0.42	0.42	0.43	0.43	0.43	0.39	0.40
Ukraine	0.23	0.23	0.23	0.25	0.26	0.35	0.29	0.28	0.28	0.28	0.26

Sources: POVCALNET database.

\* 2011 data.

<sup>^</sup> 2007 data.

# 2009 data.

# Income inequalities: Gini/SWIID

Gini coefficients of income inequality from the SWIID database

Country	1981	1984	1987	1990	1993	1996	1999	2002	2005	2008	2009	2010	2011
Albania						0.282	0.286	0.298	0.315	0.341			
Armenia			0.248	0.242	0.384	0.410	0.385	0.354	0.327	0.327	0.344	0.354	0.368
Azerbaijan	0.221	0.241	0.270	0.309	0.403	0.459	0.395	0.240	0.188	0.313			
Belarus	0.219	0.224	0.221	0.212	0.245	0.262	0.272	0.295	0.258	0.268	0.265	0.260	0.258
<u>BiH</u>					0.351	0.323	0.295	0.295	0.343				
Georgia	0.224	0.244	0.262	0.246	0.432	0.439	0.440	0.434	0.413	0.455	0.492	0.485	0.505
Kazakhstan	0.228	0.231	0.233	0.234	0.312	0.328	0.327	0.321	0.345	0.301	0.286	0.282	0.282
Kyrgyzstan	0.223	0.222	0.220	0.226	0.411	0.447	0.356	0.306	0.337	0.367	0.356	0.360	0.350
<u>FYRoM</u>				0.273	0.321	0.309	0.325	0.343	0.366	0.411	0.414	0.426	
Moldova	0.217	0.228	0.236	0.243	0.355	0.386	0.421	0.416	0.394	0.364	0.355	0.354	0.346
Montenegro								0.320	0.309	0.298	0.300	0.293	
Serbia								0.319	0.320	0.288	0.285	0.287	
Tajikistan	0.222	0.244	0.270	0.296	0.302	0.308	0.314	0.324	0.327	0.316	0.314		
Turkey	0.615	0.509	0.430	0.445	0.460	0.471	0.480	0.455	0.465	0.402	0.399	0.398	0.401
Turkmenistan	0.231	0.219	0.215	0.240	0.291	0.361	0.410	0.419	0.405				
Ukraine	0.236	0.256	0.222	0.212	0.405	0.372	0.325	0.279	0.277	0.272	0.264	0.256	0.003
Uzbekistan	0.223	0.229	0.238	0.248	0.336	0.367	0.371	0.337	0.352				

SWIID standardizes the United Nations University's World Income Inequality Database, the OECD Income Distribution Database, the Socio-Economic Database for Latin America and the Caribbean generated by CEDLAS and the World Bank, Eurostat, the World Bank's PovertyNet, the UN Economic Commission for Latin America and the Caribbean, the World Top Incomes Database, national statistical offices around the world, and many other sources. It seeks to minimize "problematic assumptions by using as much information as possible from proximate years within the same country".

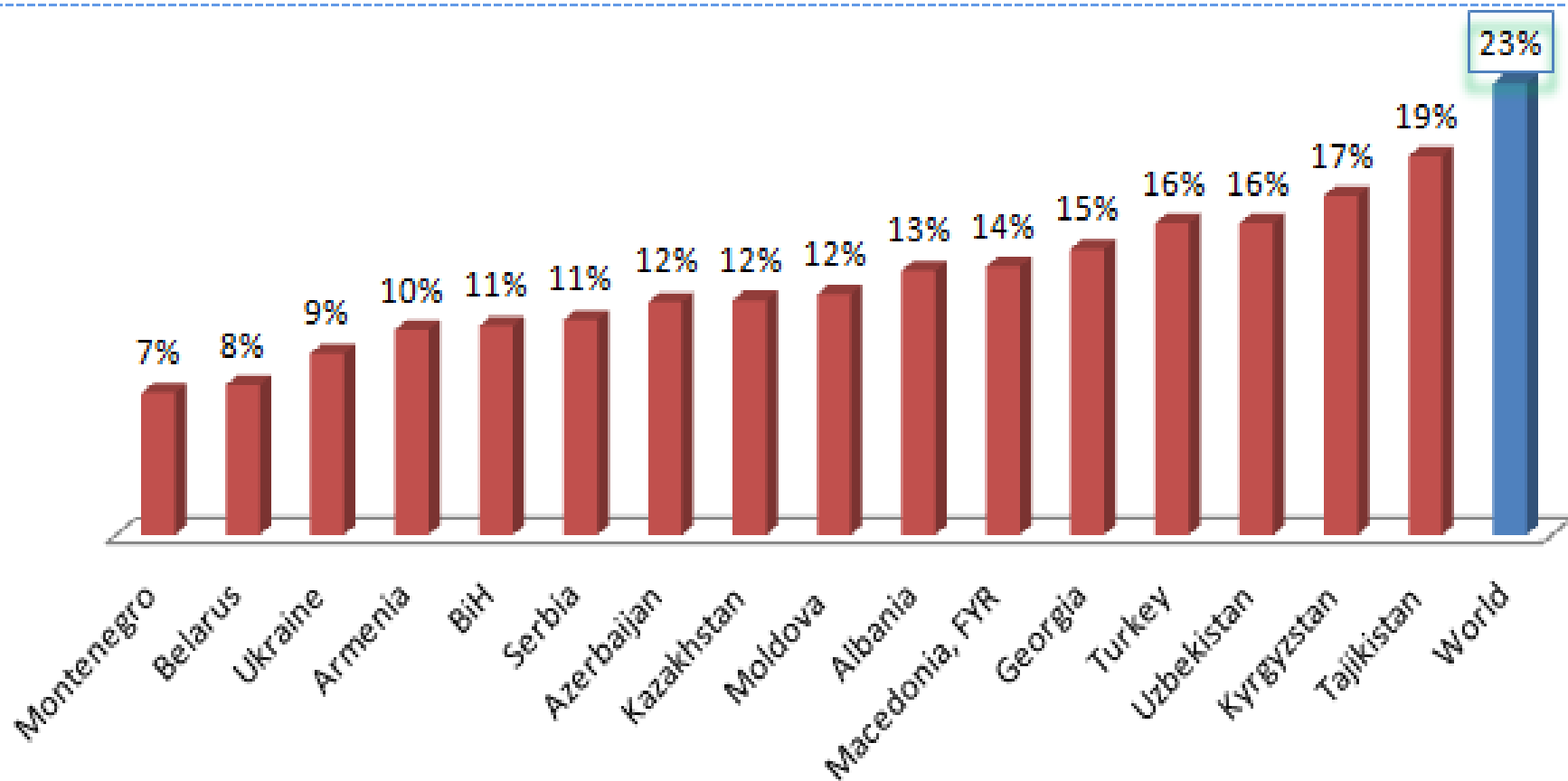
# Income inequalities: PALMA/POVCALNET

Income inequality trends: Palma ratios (1981-2010)											
Country	1988	1993	1996	1999	2001	2002	2005	2007	2008	2009	2010
Albania	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.00	1.30	<u>n.a.</u>	1.44	<u>n.a.</u>	<u>n.a.</u>
Armenia	<u>n.a.</u>	<u>n.a.</u>	2.36	1.53	1.55	1.51	1.56	1.14	1.18	<u>n.a.</u>	1.22
Azerbaijan	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.57	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.36	<u>n.a.</u>	<u>n.a.</u>
Belarus	.76	.73	<u>n.a.</u>	<u>n.a.</u>	1.15	1.11	.99	1.04	.95	.99	.98
BiH	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.00	<u>n.a.</u>	<u>n.a.</u>	1.52	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>
Georgia	<u>n.a.</u>	<u>n.a.</u>	1.60	1.98	1.97	1.90	1.98	1.81	2.01	2.05	2.09
Kazakhstan	.87	1.26	1.44	<u>n.a.</u>	1.99	1.43	1.18	1.18	1.09	1.07	<u>n.a.</u>
Kyrgyzstan	.90	4.21	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.21	1.81	1.35	1.62	1.53	1.55
Macedonia, FYR	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.74	1.77	<u>n.a.</u>	2.34	<u>n.a.</u>	<u>n.a.</u>
Moldova	.81	<u>n.a.</u>	<u>n.a.</u>	1.81	1.74	1.58	1.54	1.46	1.47	1.35	1.30
Montenegro	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.12	1.14	1.12	1.13	1.02
Serbia	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.28	1.32	1.08	1.01	.98	1.08
Tajikistan	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.05	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	1.26	<u>n.a.</u>	1.16	<u>n.a.</u>
Turkey	2.25*	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	<u>n.a.</u>	2.16	2.15	1.79	1.76	1.74	1.87
Ukraine	.78	<u>n.a.</u>	1.45	1.05	<u>n.a.</u>	1.02	1.01	1.09	.98	.93	.89

UNDP calculations, based on POVCALNET data.

\* 1987 data.

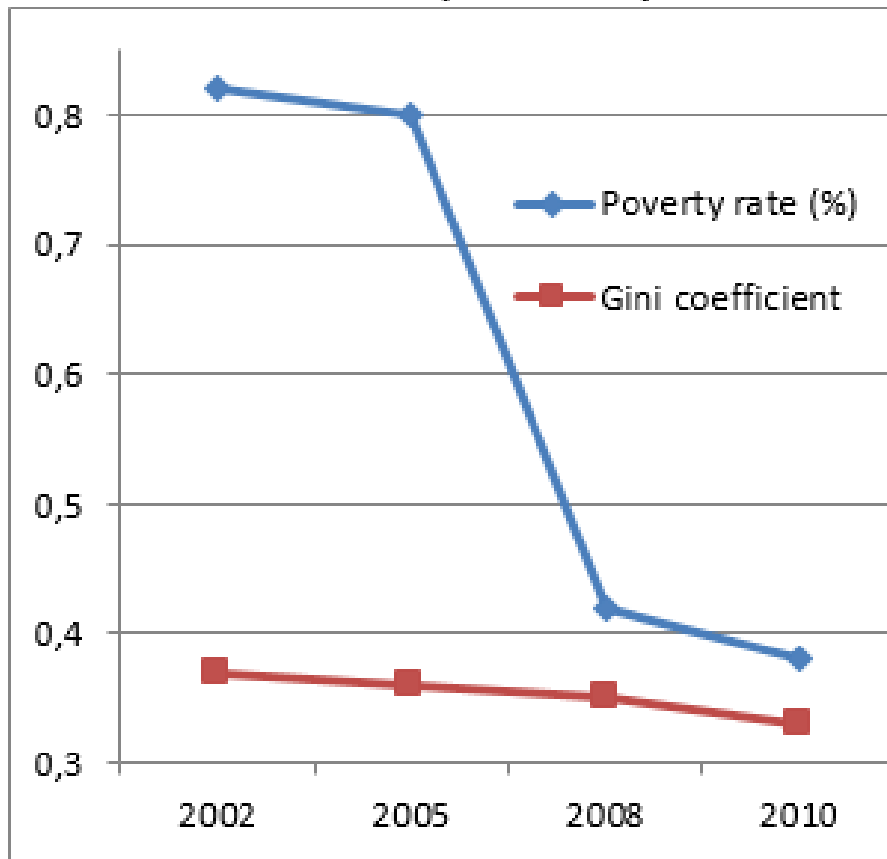
# Losses in national HDIs due to adjustment for inequalities



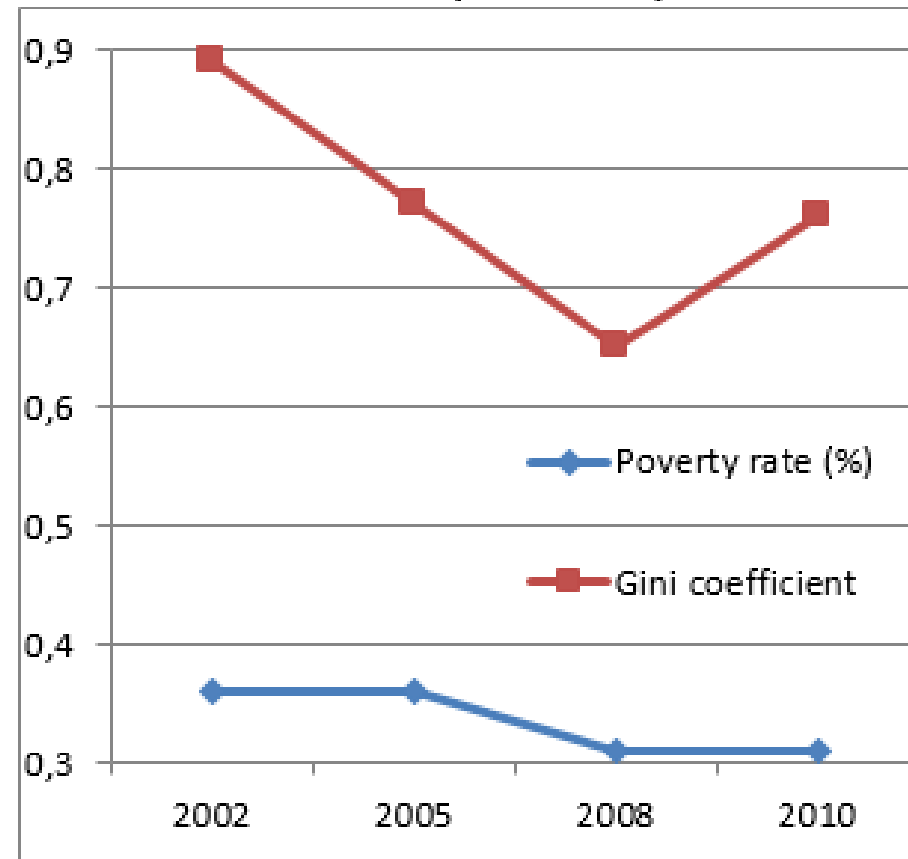
Source: HDRO (2012 data). National HDIs, adjusted for degrees of inequalities in their component indices.

# Poverty and Inequality trends

Moldova (2002-2010)



Armenia (2002-2010)

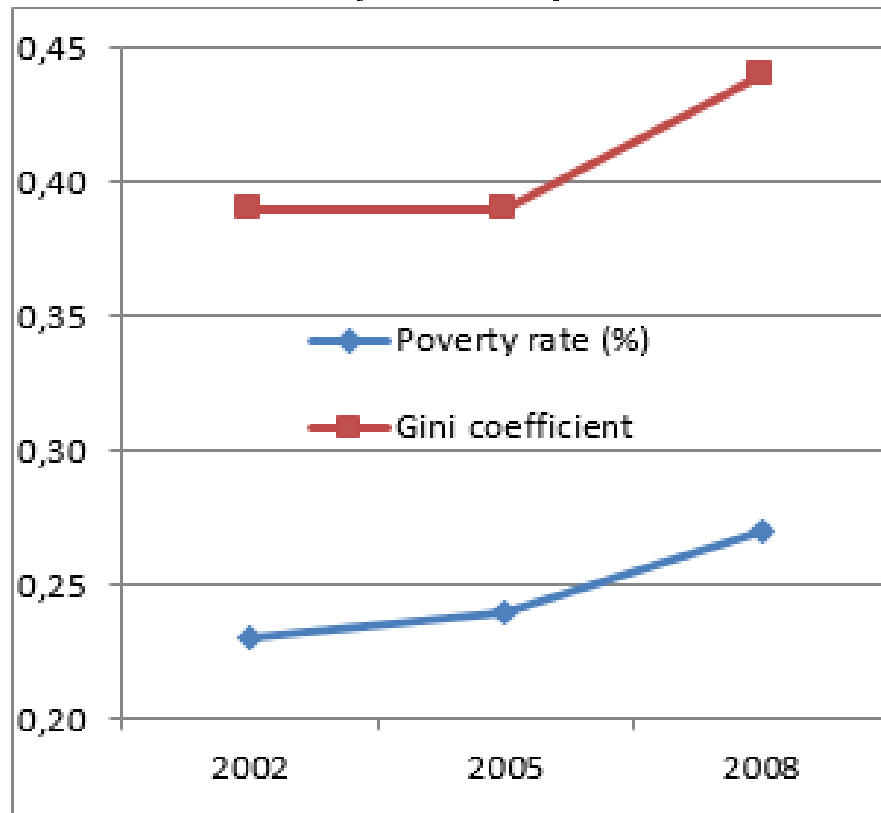


POVCALNET data. Note—poverty rate percentages are:

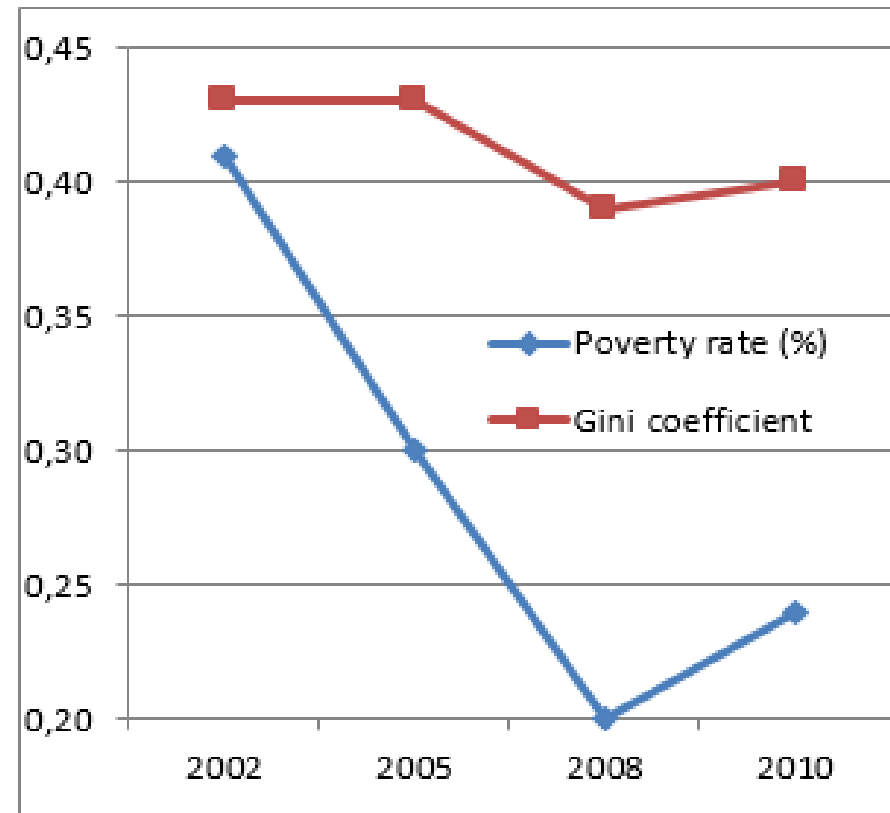
- Relative to the PPP\$4.30.day threshold; and
- As a rule greater than 1 (i.e., a .50 value implies a poverty rate of 50%, not 0.5%).

# Poverty and Inequality trends (continued)

The Former Yugoslav Republic of Macedonia  
(2002-2008)



Turkey (2002-2010)



POVCALNET data. Note—poverty rate percentages are:

- Relative to the PPP\$4.30/day threshold; and
- As a rule greater than 1 (i.e., a .50 value implies a poverty rate of 50%, not 0.5%).

# Other measures of inequality, deprivation, and exclusion

Multi-dimensional versus income poverty indicators in Europe and Central Asia

Country	MPI (HDRO)*		Income poverty** (POVCALNET)	
	Headcount rate	Year	Headcount rate	Year
Serbia	0%	2010	9%	2010
Belarus	0%	2005	1%	2011
Armenia	1%	2010	76%	2010
Ukraine	1%	2007	3%	2010
Kazakhstan	1%	2011-2012	30%	2010
<u>FYRoM</u>	2%	2011	27%	2008
Georgia	2%	2005	74%	2010
Albania	1%	2008-2009	46%	2008
Moldova	1%	2005	40%	2010
<u>BiH</u>	2%	2011-2012	5%	2007
Azerbaijan	2%	2006	34%	2008
Kyrgyzstan	3%	2005-2006	70%	2011
Turkey	7%^	2003	24%	2010
Tajikistan	8%	2012	79%	2009

\* As reported in the 2014 Human Development Report.

\*\* Measured at the PPP\$4.30/day threshold.

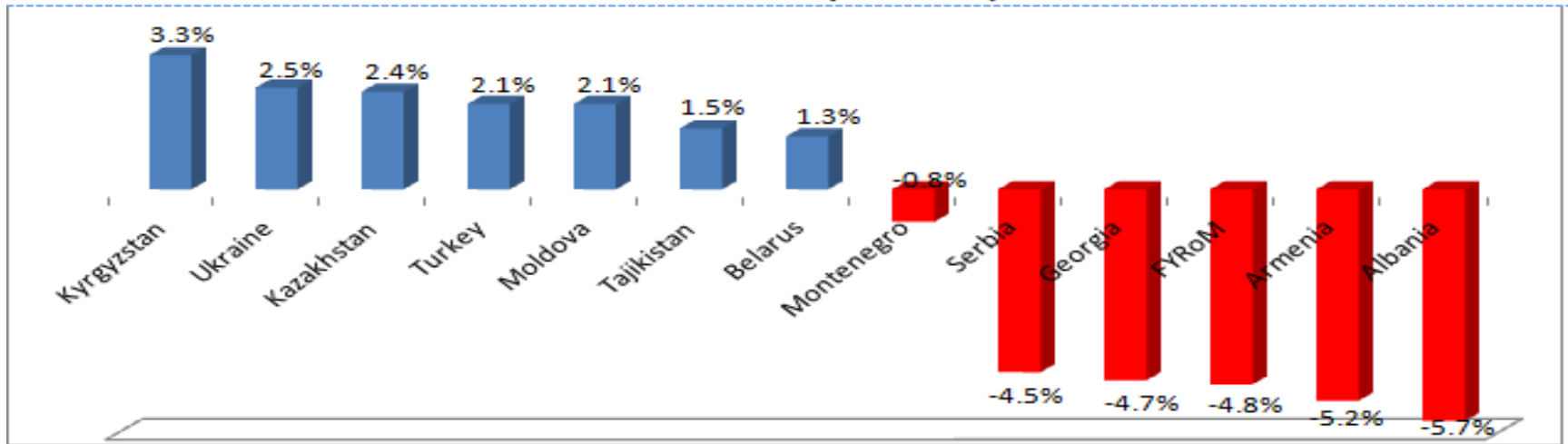
^ Taken from the OPHI website.



# Pro-poor and inclusive growth

- **pro-poor growth**, in which economic growth is accompanied by falling poverty rates; versus
- **inclusive growth**, in which economic growth is accompanied by falling levels of income inequality.

†“Bottom 40” annual average income growth, relative to annual average growth in per-capita gross national income (2005-2010)

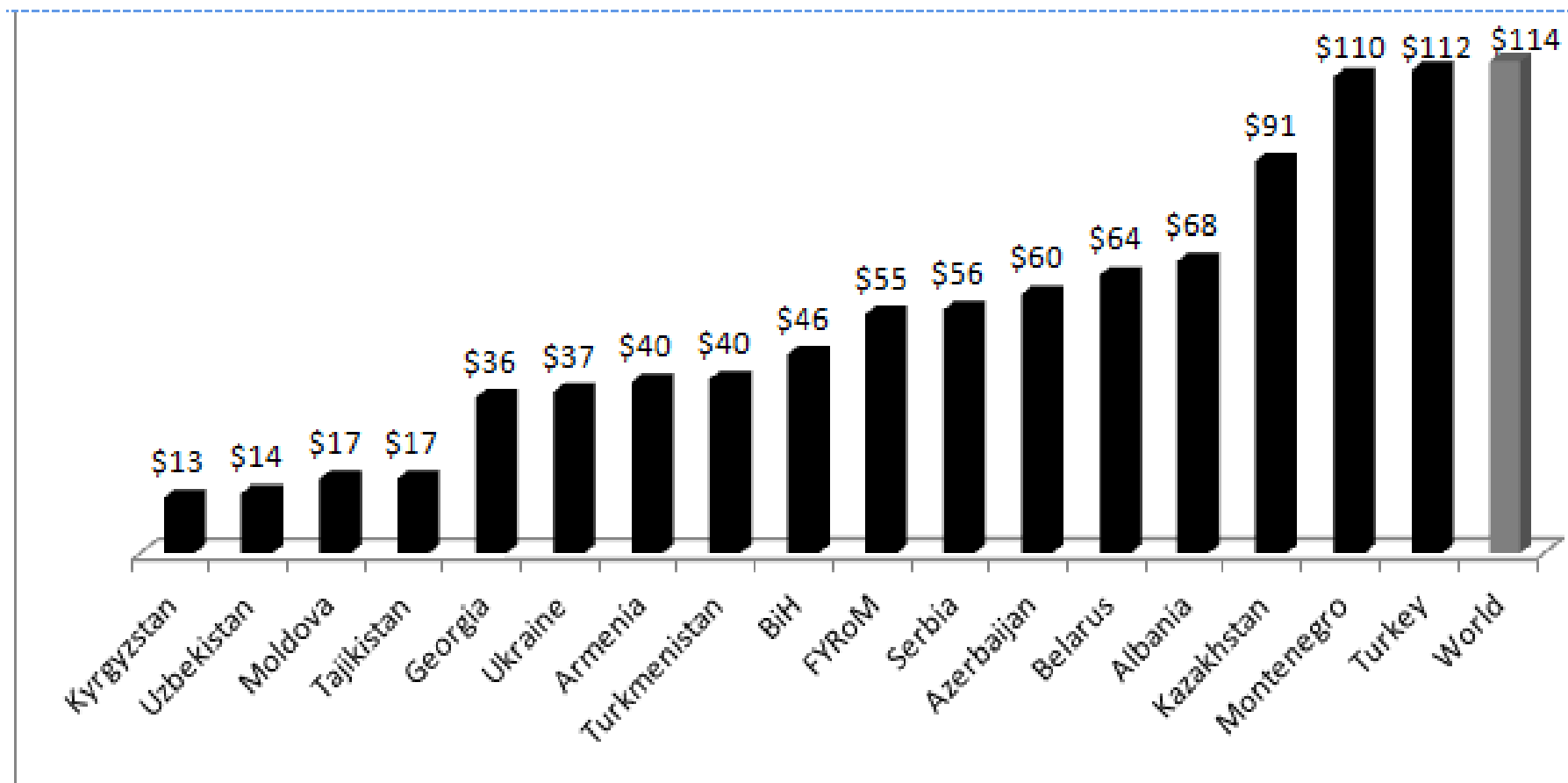


UNDP calculations, based on data presented in <<Shared Prosperity>> (page 12), and from the World Bank's World Development Indicators database.

# Sustainable development

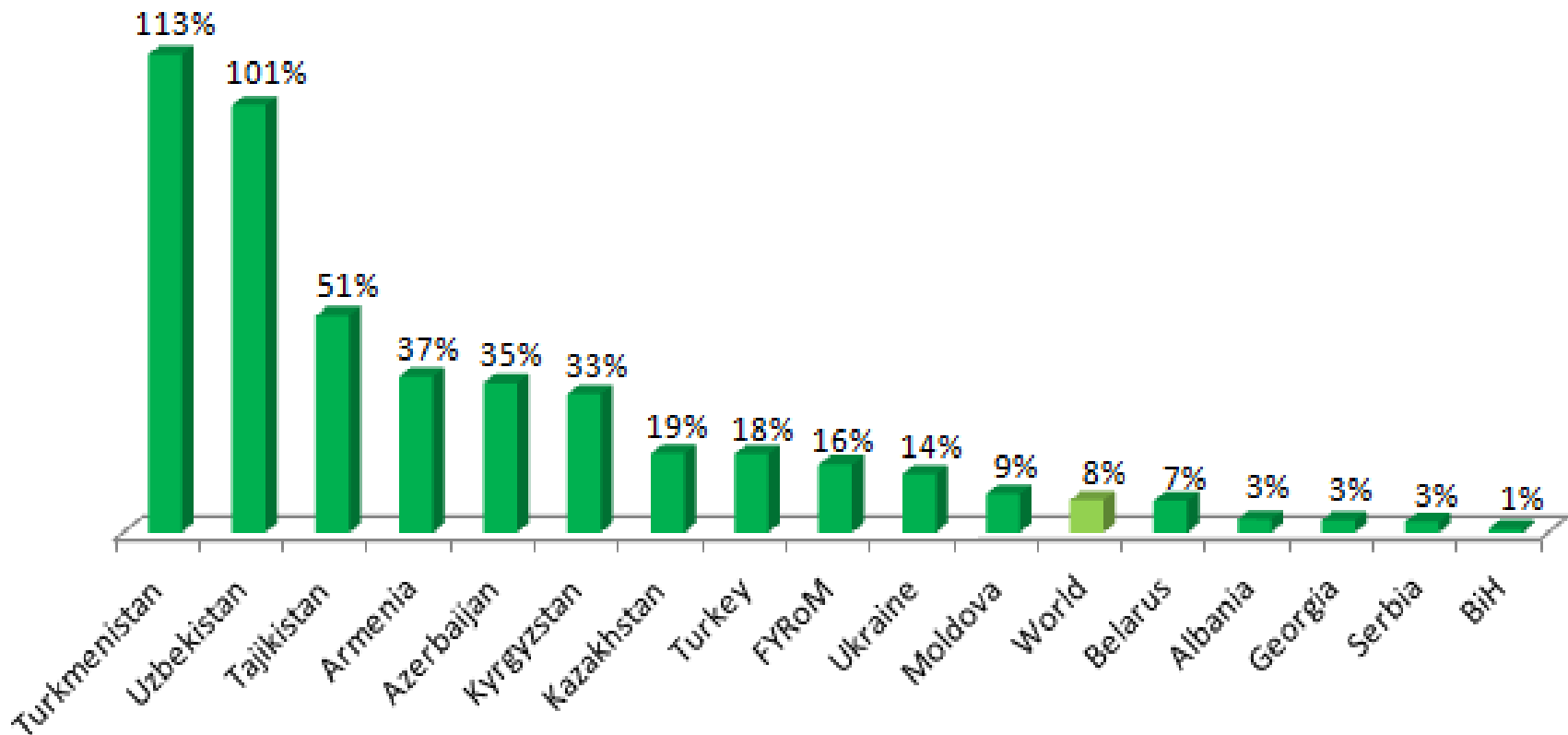
- Development accomplishments that are not robustly sustainable may be particularly vulnerable to reversal.
- Unfortunately, efforts to operationalize sustainable development programming and policies in the region continue to be constrained by the absence of well accepted, monitorable indicators that can integrate the environmental, social, and economic dimensions of sustainability.
- Addressing this shortcoming is particularly important in the run-up to the post-2015 introduction of the sustainable development goals.

# GDP produced per ton of greenhouse gas emissions (2010)



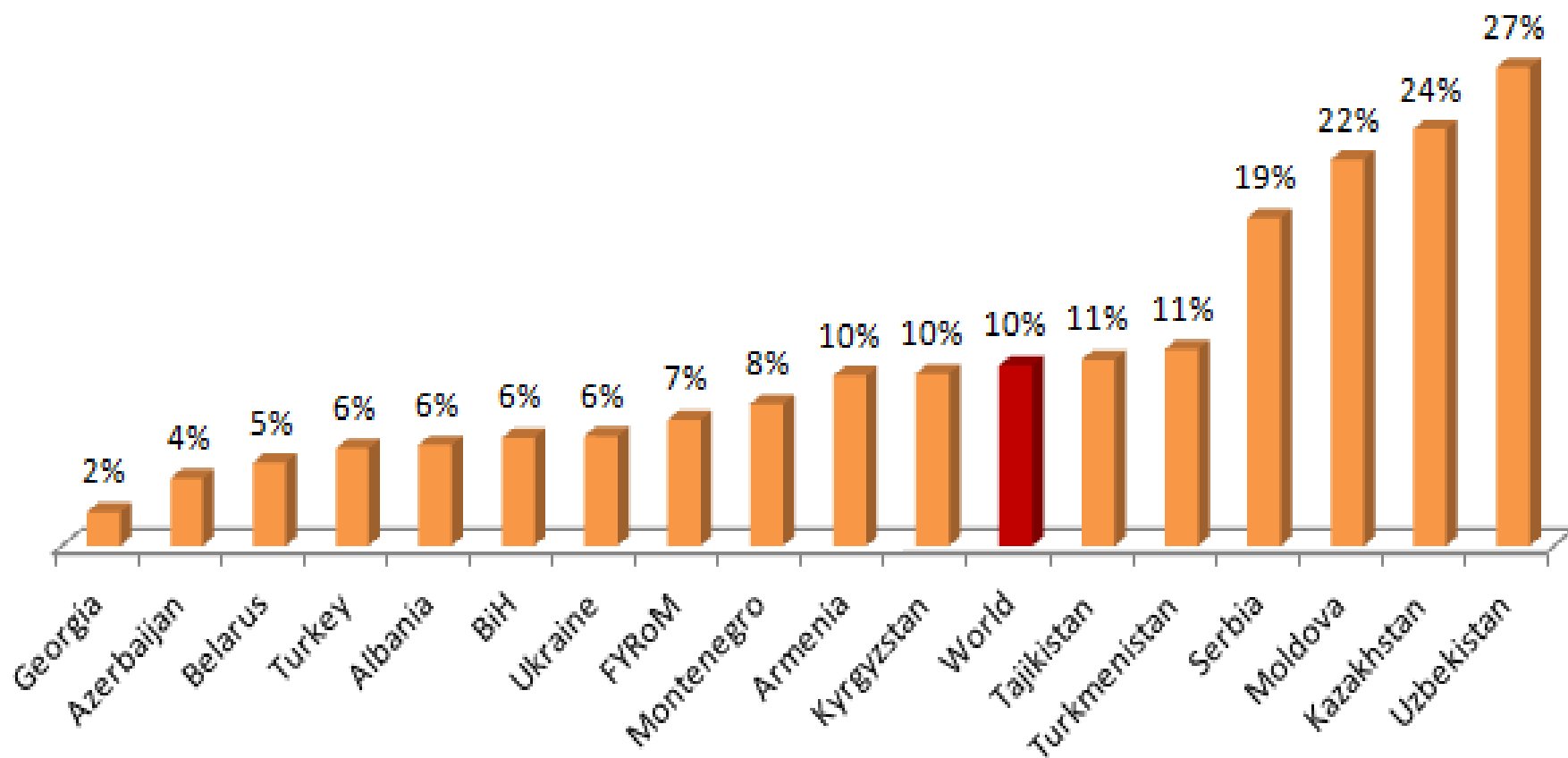
UNDP calculations, based on IMF-WEO and HDRO data.

# Fresh water withdrawals as a share of total renewable water resources (2007-2011)

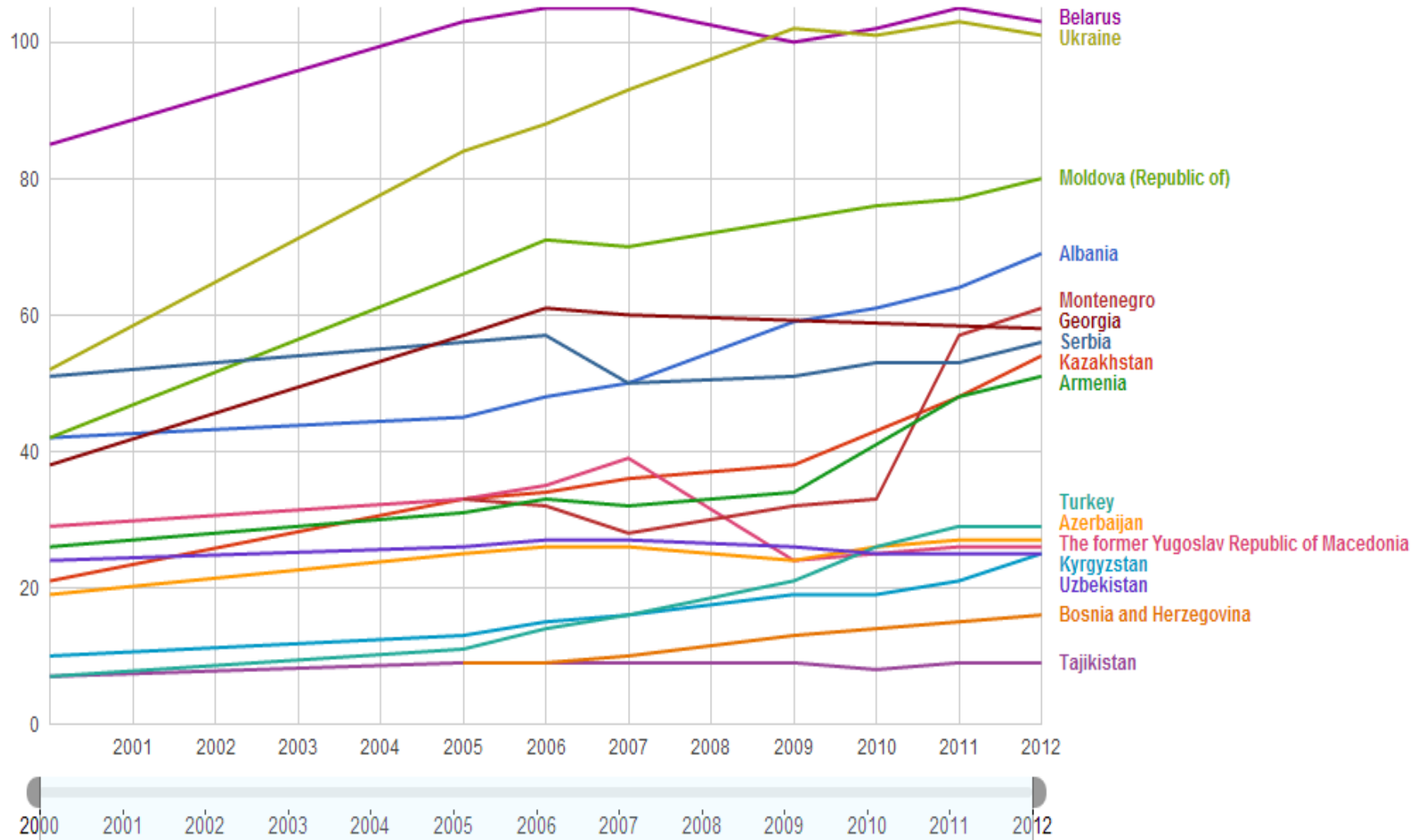


HDRO data, most recent available year.

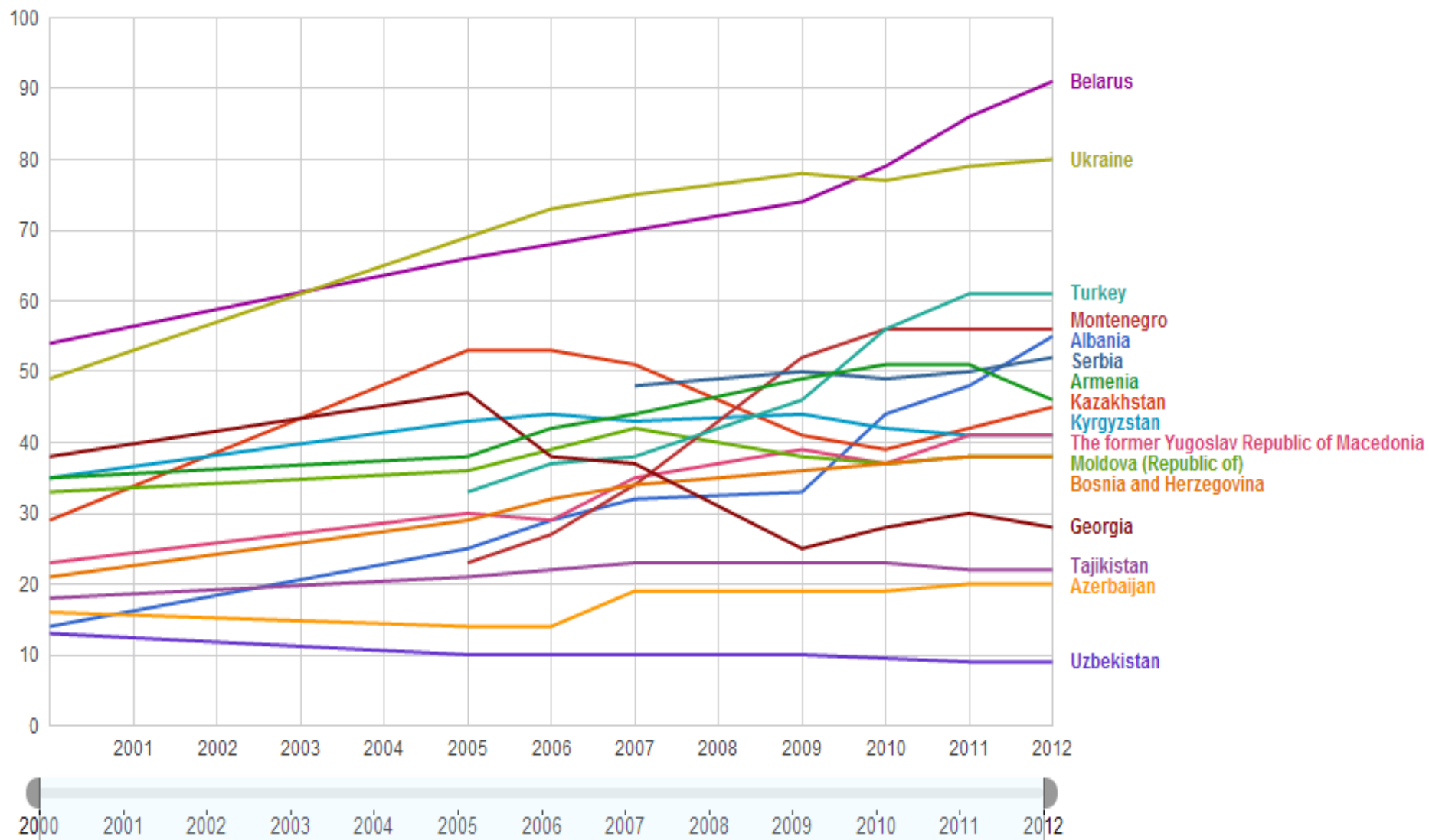
# Shares of population living on degraded land (2010)



# Pre-school enrolment rates, 2000-2012



# Gross enrolment in tertiary education, 2001-2012



# Implications for the post-2015 agenda: Data revolution!!!

- Without internationally **comparable household budget survey data**, complete regional (and global) assessments of trends in income inequalities (and related issues of exclusion and vulnerability) are impossible;
- The **absence of indicators that can integrate the economic, social, and environmental dimensions of sustainability**—and of the vulnerability of development progress;
- **The MDGs have been criticized** for deviating from the spirit of the 2000 Millennium Declaration from which they were drawn. The MDGs' focus on national averages have also been criticized for drawing attention away from sub-national disparities and those left behind;
- The importance of the **statistical/data dimensions of the debates around the sustainable development goals (SDGs) and the post-2015 development agenda is underscored**;



# Complex and Controversial issues

The USSR and Yugoslavia had fallen into deep systemic crisis by 1990, they had largely succeeded in eradicating poverty and significant income inequalities, but...

- Why are **absolute poverty rates today thought to be higher** in virtually all these countries than was the case before 1990?
- Are higher rates of **poverty and inequality really unavoidable** consequences of marketization and the dissolution of socialist federations?
- Or have higher poverty rates resulted from otherwise avoidable **mistakes made in the macroeconomics, political economy, or social aspects of transition?**
- What about the **role of military conflicts** that have afflicted roughly half of these countries?
- Or perhaps significant **problems of poverty and inequality were present during the pre-transition period as well—but were hidden** by ideology and by the **absence of the data**, institutions, and policy frameworks needed for effective poverty measurement and monitoring?