



## **Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience**

***Explanatory note on the 2014 Human Development Report composite indices***

### **Ukraine**

#### **HDI values and rank changes in the 2014 Human Development Report**

##### **Introduction**

The *2014 Human Development Report (HDR)* presents the 2014 Human Development Index (HDI) (values and ranks) for 187 countries and UN-recognized territories, along with the Inequality-adjusted HDI for 145 countries, the Gender Development Index for 148 countries, the Gender Inequality Index for 149 countries, and the Multidimensional Poverty Index for 91 countries. Country rankings and values of the annual Human Development Index (HDI) are kept under strict embargo until the global launch and worldwide electronic release of the Human Development Report.

It is misleading to compare values and rankings with those of previously published reports, because of revisions and updates of the underlying data and adjustments to goalposts. Readers are advised to assess progress in HDI values by referring to table 2 ('Human Development Index Trends') in the Statistical Annex of the report. Table 2 is based on consistent indicators, methodology and time-series data and thus shows real changes in values and ranks over time, reflecting the actual progress countries have made. Small changes in values should be interpreted with caution as they may not be statistically significant due to sampling variation. Generally speaking, changes at the level of the third decimal place in any of the composite indices are considered insignificant.

Unless otherwise specified in the source, tables use data available to the HDRO as of 15 November 2013. All indices and indicators, along with technical notes on the calculation of composite indices, and additional source information are available online at <http://hdr.undp.org/en/data>

For further details on how each index is calculated please refer to Technical Notes 1-5 and the associated background papers available on the Human Development Report website: <http://hdr.undp.org/en/data>

##### **Human Development Index (HDI)**

The HDI is a summary measure for assessing long-term progress in three basic dimensions of human development: a long and healthy life, access to knowledge and a decent standard of living. Just as in the 2013 HDR, a long and healthy life is measured by life expectancy. Access to knowledge is measured by: i) mean years of education among the adult population, which is the average number of years of education received in a life-time by people aged 25 years and older; and ii) expected years of schooling for children of school-entry age, which is the total number of years of schooling a child of school-entry age can expect to receive if prevailing patterns of age-specific enrolment rates stay the same throughout the child's life. Standard of living is measured by Gross National Income (GNI) per capita expressed in constant 2011 international dollars converted using purchasing power parity (PPP) rates.

To ensure as much cross-country comparability as possible, the HDI is based primarily on international data from the United Nations Population Division, the United Nations Educational, Scientific and Cultural

Organization Institute for Statistics and the World Bank. As stated in the introduction, the HDI values and ranks in this year's report are not comparable to those in past reports (including the 2013 HDR) because of a number of revisions to the component indicators. To allow for assessment of progress in HDIs, the 2014 report includes recalculated HDIs from 1980 to 2013.

## Ukraine's HDI value and rank

Ukraine's HDI value for 2013 is 0.734— which is in the high human development category—positioning the country at 83 out of 187 countries and territories. Between 1990 and 2013, Ukraine's HDI value increased from 0.705 to 0.734, an increase of 4.1 percent or an average annual increase of about 0.18 percent.

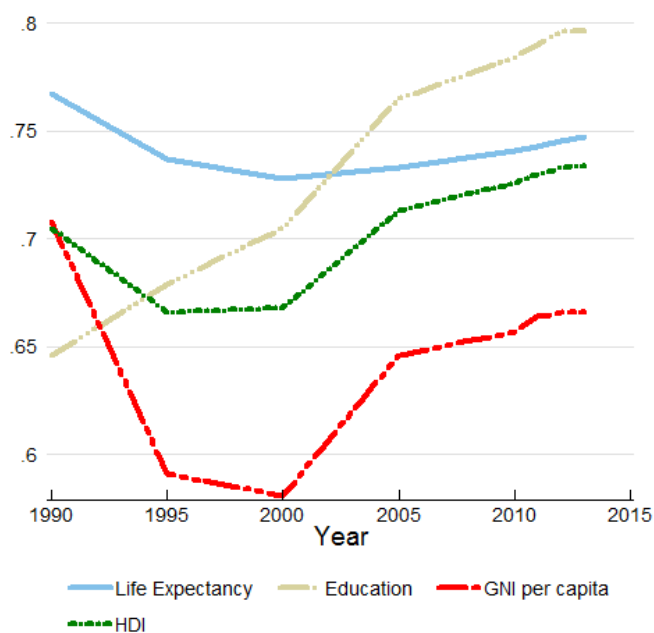
Table A reviews Ukraine's progress in each of the HDI indicators. Between 1980 and 2013, Ukraine's life expectancy at birth decreased by 0.8 years, mean years of schooling increased by 3.9 years and expected years of schooling increased by 3.1 years. Ukraine's GNI per capita decreased by about 24.2 percent between 1990 and 2013.

**Table A: Ukraine's HDI trends based on consistent time series data and new goalposts**

	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (2011 PPP\$)	HDI value
1980	69.3	12.0	7.4		
1985	70.0	12.2	8.2		
1990	69.9	12.3	9.1	10,835	0.705
1995	67.9	12.0	10.4	5,008	0.666
2000	67.3	12.6	10.7	4,672	0.668
2005	67.7	14.2	11.1	7,210	0.713
2010	68.2	14.7	11.3	7,752	0.726
2011	68.3	14.9	11.3	8,102	0.730
2012	68.4	15.1	11.3	8,196	0.733
2013	68.5	15.1	11.3	8,215	0.734

Figure 1 below shows the contribution of each component index to Ukraine's HDI since 1990.

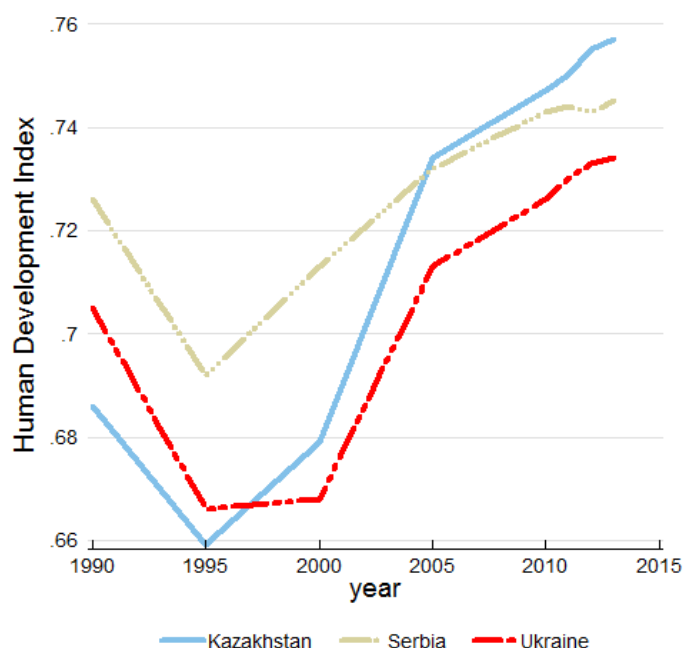
**Figure 1: Trends in Ukraine's HDI component indices 1990-2013**



## Assessing progress relative to other countries

Long-term progress can be usefully compared to other countries. For instance, during the period between 1990 and 2013 Ukraine, Kazakhstan and Serbia experienced different degrees of progress toward increasing their HDIs (see figure 2).

**Figure 2: Trends in Ukraine, Kazakhstan and Serbia's HDI 1990-2013**



Ukraine's 2013 HDI of 0.734 is below the average of 0.735 for countries in the high human development group and below the average of 0.738 for countries in Europe and Central Asia. From Europe and Central Asia, countries which are close to Ukraine in 2013 HDI rank and to some extent in population size are Kazakhstan and the Russian Federation, which have HDIs ranked 70 and 57 respectively (see table B).

**Table B: Ukraine's HDI indicators for 2013 relative to selected countries and groups**

	HDI value	HDI rank	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP US\$)
<b>Ukraine</b>	0.734	83	68.5	15.1	11.3	8,215
<b>Kazakhstan</b>	0.757	70	66.5	15.0	10.4	19,441
<b>Russian Federation</b>	0.778	57	68.0	14.0	11.7	22,617
<b>Europe and Central Asia</b>	0.738	—	71.3	13.6	9.6	12,415
<b>High HDI</b>	0.735	—	74.5	13.4	8.1	13,231

## Inequality-adjusted HDI (IHDI)

The HDI is an average measure of basic human development achievements in a country. Like all averages, the HDI masks inequality in the distribution of human development across the population at the country level. The 2010 HDR introduced the Inequality-Adjusted HDI (IHDI), which takes into account inequality in all three dimensions of the HDI by 'discounting' each dimension's average value according to its level of inequality. The IHDI is basically the HDI discounted for inequalities. The 'loss' in human development due to inequality is given by the difference between the HDI and the IHDI, and can be expressed as a percentage. As the inequality in a country increases, the loss in human development also

increases. We also present the coefficient of human inequality as a direct measure of inequality which is an unweighted average of inequalities in three dimensions. For more details see technical note 2.

Ukraine's HDI for 2013 is 0.734. However, when the value is discounted for inequality, the HDI falls to 0.667, a loss of 9.2 percent due to inequality in the distribution of the dimension indices. Kazakhstan and the Russian Federation show losses due to inequality of 11.9 percent and 12.0 percent respectively. The average loss due to inequality for high HDI countries is 19.7 percent and for Europe and Central Asia it is 13.3 percent. The Human inequality coefficient for Ukraine is equal to 9.1 percent.

**Table C: Ukraine's IHDl for 2013 relative to selected countries and groups**

	IHDl value	Overall loss (%)	Human inequality coefficient (%)	Inequality in life expectancy at birth (%)	Inequality in education (%)	Inequality in income (%)
<b>Ukraine</b>	0.667	9.2	9.1	10.4	6.1	10.9
<b>Kazakhstan</b>	0.667	11.9	11.8	16.7	5.9	12.7
<b>Russian Federation</b>	0.685	12.0	11.6	9.8	2.1	22.9
<b>Europe and Central Asia</b>	0.639	13.3	13.2	14.2	8.6	16.9
<b>High HDI</b>	0.590	19.7	19.3	10.7	17.4	29.9

### **Gender Inequality Index (GII)**

The Gender Inequality Index (GII) reflects gender-based inequalities in three dimensions – reproductive health, empowerment, and economic activity. Reproductive health is measured by maternal mortality and adolescent birth rates; empowerment is measured by the share of parliamentary seats held by women and attainment in secondary and higher education by each gender; and economic activity is measured by the labour market participation rate for women and men. The GII can be interpreted as the loss in human development due to inequality between female and male achievements in the three GII dimensions. (For more details on GII please see Technical Note 3.)

Ukraine has a GII value of 0.326, ranking it 61 out of 149 countries in the 2013 index. In Ukraine, 9.4 percent of parliamentary seats are held by women, and 91.5 percent of adult women have reached at least a secondary level of education compared to 96.1 percent of their male counterparts. For every 100,000 live births, 32.0 women die from pregnancy related causes; and the adolescent birth rate is 25.7 births per 1000 live births. Female participation in the labour market is 53.0 percent compared to 66.6 for men.

In comparison, Kazakhstan and the Russian Federation are ranked at 59 and 52 respectively on this index.

**Table D: Ukraine's GII for 2013 relative to selected countries and groups**

	GII value	GII Rank	Maternal mortality ratio	Adolescent birth rate	Female seats in parliament (%)	Population with at least some secondary education (%)		Labour force participation rate (%)	
						Female	Male	Female	Male
<b>Ukraine</b>	0.326	61	32.0	25.7	9.4	91.5	96.1	53.0	66.6
<b>Kazakhstan</b>	0.323	59	51.0	29.9	18.2	99.3	99.4	67.5	77.5
<b>Russian Federation</b>	0.314	52	34.0	25.7	12.1	89.6	92.5	57.0	71.4
<b>Europe and Central Asia</b>	0.317	—	31.0	30.8	18.2	70.4	80.6	45.5	70.3
<b>High HDI</b>	0.315	—	42.0	26.4	18.8	60.2	69.1	57.0	77.1

## **Gender Development Index (GDI)**

In the 2014 HDR, we introduce a new measure, the Gender Development Index (GDI) based on the sex-disaggregated Human Development Index, defined as a ratio of the female to the male HDI. The GDI measures gender inequalities in achievement in three basic dimensions of human development—health (measured by female and male life expectancy at birth), education (measured by female and male expected years of schooling for children and mean years for adults aged 25 years and older); and command over economic resources (measured by female and male estimated GNI per capita). For details on how the index is constructed refer to Technical Note 4. Country rankings are based on absolute deviation from gender parity in HDI. What this means is that ranking takes into consideration inequality in favour of men or women equally.

The GDI is calculated for 148 countries. The 2013 female HDI value for Ukraine is 0.738 in contrast with 0.729 for males, resulting in a GDI value of 1.012. In comparison, GDI values for Kazakhstan and the Russian Federation are 1.015 and 1.038 respectively (see Table E).

**Table E: Ukraine's GDI value and its components relative to selected countries and groups**

	Life expectancy at birth		Expected years of schooling		Mean years of schooling		GNI per capita		HDI values		F-M ratio
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	GDI value
<b>Ukraine</b>	74.4	62.8	15.3	14.9	11.2	11.4	6,450	10,279	0.738	0.729	1.012
<b>Kazakhstan</b>	72.3	61.0	15.4	14.7	10.2	10.5	14,369	24,902	0.762	0.751	1.015
<b>Russian Federation</b>	74.4	61.8	14.5	13.5	11.7	11.8	18,228	27,741	0.792	0.763	1.038
<b>Europe and Central Asia</b>	75.4	67.3	13.4	13.8	8.8	9.8	7,287	17,867	0.705	0.752	0.938
<b>High HDI</b>	76.8	72.3	13.4	13.1	7.5	8.5	9,426	16,966	0.710	0.750	0.946

## **Multidimensional Poverty Index (MPI)**

The 2010 HDR introduced the Multidimensional Poverty Index (MPI), which identifies multiple deprivations in the same households in education, health and living standards. The education and health dimensions are each based on two indicators, while the standard of living dimension is based on six indicators. All of the indicators needed to construct the MPI for a household are taken from the same household survey. The indicators are weighted to create a deprivation score, and the deprivation scores are computed for each household in the survey. A deprivation score of 33.3 percent (one-third of the weighted indicators), is used to distinguish between the poor and nonpoor. If the household deprivation score is 33.3 percent or greater, the household (and everyone in it) is classed as multidimensionally poor. Households with a deprivation score greater than or equal to 20 percent but less than 33.3 percent are *near multidimensional poverty*. Definitions of deprivations in each dimension, as well as methodology of the MPI are given in Technical note 5 and in Calderon and Kovacevic 2014.

The most recent survey data that were publically available for Ukraine MPI estimation refer to 2007. In Ukraine 0.6 percent of the population are multidimensionally poor while an additional 0.2 percent are near multidimensional poverty. The breadth of deprivation (intensity) in Ukraine, which is the average of deprivation scores experienced by people in multidimensional poverty, is 34.3 percent. The MPI, which is the share of the population that is multi-dimensionally poor, adjusted by the intensity of the deprivations, is 0.002. Kazakhstan has an MPI of 0.004.

Table F compares income poverty, measured by the percentage of the population living below PPP US\$1.25 per day, and multidimensional poverty. It shows that income poverty only tells part of the story. The multidimensional poverty headcount is 0.6 percentage points higher than income poverty. This implies that individuals living above the income poverty line may still suffer deprivations in education, health and other living conditions. Table F also shows the percentage of Ukraine's population that is near poverty (with a deprivation score between 20 and 30 percent) and that live in severe poverty (with a

deprivation score of 50 percent or more). The contributions of deprivations in each dimension to overall poverty complete a comprehensive picture of people living in poverty in Ukraine. Figures for Kazakhstan are also shown in the table for comparison.

**Table F: The most recent MPI for Ukraine relative to selected countries**

	Survey year	MPI value	Head-count (%)	Intensity of deprivations (%)	Population share (%)			Contribution to overall poverty of deprivations in (%)		
					Near poverty	In severe poverty	Below income poverty line	Health	Education	Living Standards
<b>Ukraine</b>	2007	0.002	0.6	34.3	0.2	0.0	0.0	95.1	1.0	3.8
<b>Kazakhstan</b>	2010/2011	0.004	1.1	36.4	2.3	0.0	0.1	83.9	4.3	11.8