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CHILD WELL-BEING IN EASTERN EUROPE AND CENTRAL ASIA: A MULTIDIMENSIONAL APPROACH

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Acronyms and abbreviations

CEE	Central and Eastern Europe
CIS	Commonwealth of Independent States
CRC	Convention on the Rights of the Child
DHS	Demographic and Health Survey
DPT	Diphtheria, Pertussis and Tetanus vaccine
EU	European Union
EU-SILC	European Union Statistics on Income and Living Conditions
GDP	Gross Domestic Product
IDPs	Internally Displaced Persons
IMF	International Monetary Fund
ISCED	International Standard Classification of Education
MICS	Multiple Indicator Cluster Survey
OECD	Organisation for Economic Co-operation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
PPP	Purchasing Power Parity
TIMSS	Trends in International Mathematics and Science Study
U5MR	Under-five Mortality Rate
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

Child Well-Being in Eastern Europe and Central Asia
A multidimensional approach

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Summary: After two decades of transition the countries of Central and Eastern Europe and the Commonwealth of Independent States face an increasingly diverse mix of old and new policy challenges to improving child well-being and realizing children's rights. While attempts have been made to reflect these challenges and diversities by constructing indices of child wellbeing, which measure and rank overall performance by individual countries, this paper proposes a simplified approach which examines five different dimensions of child wellbeing separately, using several indicators for each dimension which allow cross-country comparison. The dimensions included in the analysis are income, health, education, housing and deprivation of parental up-bringing. The results highlight a divergence of child well-being priorities in the selected dimensions for the different countries and for different age groups of children. The analysis shows that in the 2000-2008 period the situation of children improved in absolute terms in almost all dimensions in all countries, but that government interventions still face difficulties in reaching all children, and that across the region there are increasing differences in the character of problems facing the more vulnerable sections of the child population. The discussion shows that it is difficult to rank countries according to an overall level of child well-being, since performance varies significantly according to the choice of dimension or indicator considered. An overall index cannot therefore capture the open challenges, and indeed may distract policy attention away from them. The approach used in this paper shows that each country faces challenges which can be tackled only if they are monitored and fully understood with clear and meaningful indicators, analyzed individually and in their interaction.

Keywords: child well-being, poverty, transition countries, education, health, housing, child protection

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1. INTRODUCTION

From the late 1990s onwards, the entire Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) region[1] experienced around ten years of steady, and in some cases impressive, economic growth, as well as an increasingly stable political environment. These trends were accompanied by a decline in income poverty and improvements in most social indicators, leading to suggestions that transition had entered a new stage. Economic and political events in late 2008 have challenged some of this optimism, and given rise to concerns about the resilience of economic growth to the shocks created by the international financial crisis, as well as the stability of political regimes in countries where geo-political interests are being contested.

After two decades of transition, child well-being in CEE/CIS is now at a crossroads. This paper argues that at this stage of transition a mix of old and new policy challenges exist to improving the well-being of children and young people; and that the priorities for governments in working towards the realization of child rights – in particular each child's right to an adequate standard of living, free and equitable access to different levels of school education, to survival and best possible health care, and to support regarding housing and nutrition - are diverging across the region and even within individual countries. Moreover, the economic crisis which began to unfold in the late 2008 is putting at risk key factors which have underpinned the progress in most child wellbeing indicators since the late 1990s, i.e. household incomes and the capacity of the state to finance social policies. The crisis is of necessity leading to an increased policy focus on macroeconomic indicators, and there is a risk that this focus detracts attention from social indicators, as was the case in the initial transition crisis of the early 1990s. This paper, in reviewing, analysing and discussing a range of child-relevant indicators, aims to highlight the nature and depth of the outstanding challenges for improving the living conditions of children in the region, and draws attention to the vulnerability of recent achievements to the aftershocks of the global economic crisis.

[1] For the purposes of this paper, 'Eastern Europe and Central Asia' and 'Central and Eastern Europe and the Commonwealth of Independent States' are used to indicate the same geographical entity, which includes 28 countries, grouped in the following six sub-regions. Central Europe: Czech Republic, Hungary, Poland, Slovakia and Slovenia; Baltic States: Estonia, Latvia and Lithuania; South-Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Montenegro, Romania, Serbia and the former Yugoslav Republic of Macedonia; Western CIS: Belarus, Republic of Moldova, Russian Federation and Ukraine; Caucasus: Armenia, Azerbaijan and Georgia; and Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan. The countries of Central Europe and the Baltic States joined the European Union in 2004; Bulgaria and Romania in 2007. The data and analysis presented in this paper for Serbia do not include Kosovo; those for the Republic of Moldova do not include Transnistria, while those for Georgia do not include Abkhazia and Tskhinvali region. See also the tables in the appendix for basic information on levels of GDP and child population in the CEE/CIS.

2. ASSESSING THE SITUATION OF CHILDREN IN CEE/CIS

The concept of child well-being covers physical, cognitive and social-emotional aspects of the child's current situation (being) and development (becoming).[2] Frameworks and indices to assess the well-being of children have been developed for various countries and regions, including the CEE/CIS.[3] These can provide a snapshot of the situation in any one country (within countries and/or over time), and also allow inter-country comparisons. They have proven useful in broadening the policy discussion on poverty among children: moving it away from a predominantly income-focused or mono-dimensional perspective, towards a better understanding of the multiple factors influencing and constituting the living conditions of children – as well as their interconnectedness.

The present analysis does not attempt to construct an index, but rather develops a simpler framework to assess the situation of children, by taking a selection of (mainly traditional) indicators and organizing them into five dimensions, namely income poverty, health and nutrition, education, housing and access to public utilities, and deprivation of family upbringing. The choice of both indicators and dimensions is not meant to be exhaustive or comprehensive. It is guided by their relevance to child well-being in the specific context of the CEE/CIS region, as well as by the availability of data which allows cross-country comparison. These dimensions and indicators are used to look at the situation of children within the region and at disparities within countries, but also to look at changes since the early 2000s. Efforts have been made to keep the set of indicators both as revealing and as manageable as possible.[4] The five dimensions are examined separately, although they are all interrelated. For example, income poverty can lead to reduced access to health care, or to poor maternal and child nutrition due to inadequate material resources to purchase products which permit an adequate diet. A young child's health status is also influenced by housing conditions, access to safe water, as well as access to and the quality of primary health care services, and also parents' (in particular mothers') education. At the same time the education outcomes of a child are influenced by the stimulations she/he receives in the family, the household socio-economic situation, housing conditions and her/his health status.

The first dimension considered is child income poverty. Data on household levels of income (or consumption) provide an important indication of the material means at the disposal of households, which, as previous studies have shown, are often positively correlated with other child well-being indicators. The second dimension, health, is central to children's overall well-being and is interconnected not only with income levels, but with household socio-economic

[2] See for example Ben-Arieh et al. (2001)

[3] See, for example, Gordon et al. (2003), Bradshaw et al. (2006) and Richardson et al. (2008). These exercises vary in the choice and number of dimensions incorporated in the child well-being framework, and in the approach to defining the dimensions (e.g. there are obviously differences in the choice of dimensions and indicators according to the area/country/region being examined, but there are other differences in approaches, for example, some have incorporated an explicitly rights-based approach, taking key articles of the Convention on the Rights of the Child (CRC) as the basis for defining components; while others have emphasized the need to consult children in the process of defining key elements influencing their well-being).

[4] See the recommendations for the definitions of measures of material deprivation reported in UNICEF (2005) p.9.

background (including parents' education), community and environmental indicators, as well as coverage and quality of social services. Equal access to, and quality of, different levels of education (the third dimension) is crucial to child development and also influences the future opportunities for children in the labor market and in exercising citizenship, while being a vital part of policies aimed at inclusion of the marginalized. The fourth dimension, housing and access to basic utilities, has a strong influence on the child's chances of healthy development, education achievement and socialization. Quality family relations are vital for a child's development, but many children in the region experience disruptions in family life due to high divorce rates or migration, and extreme deprivation in this dimension is experienced by those children deprived of parental care and placed in institutions: a practice which is still widespread in some countries. The fifth dimension to be examined is therefore children's upbringing in a family context.

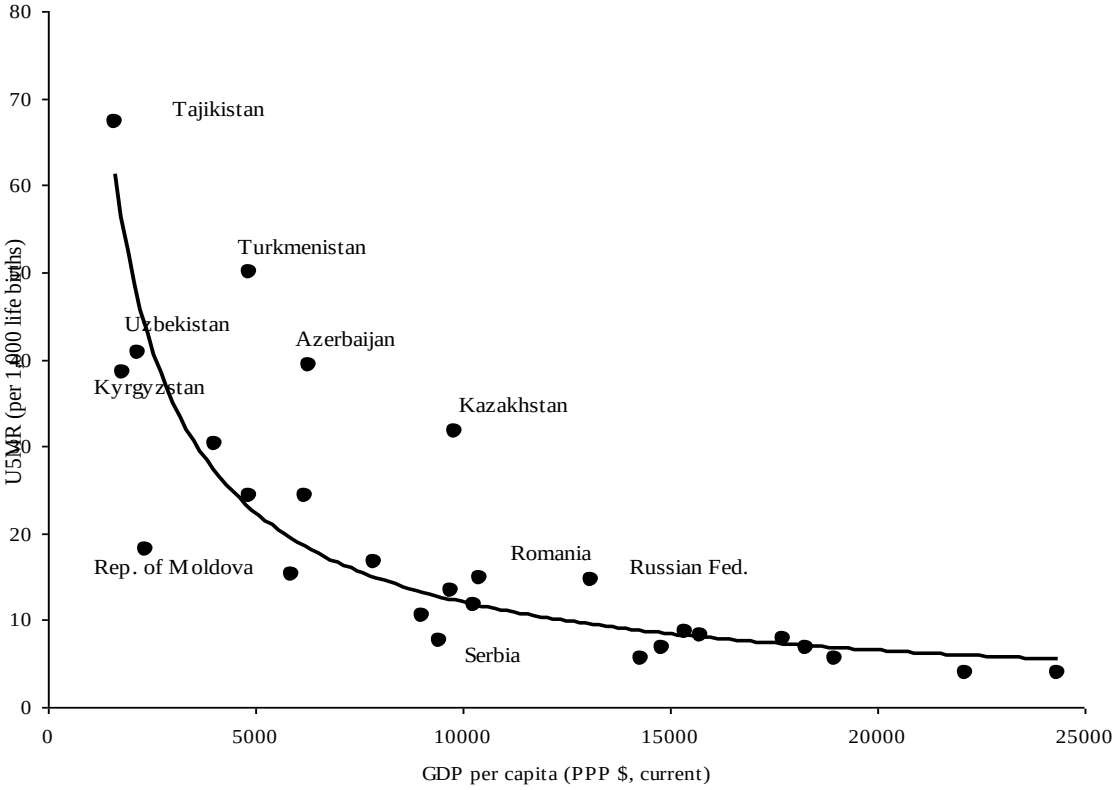
The dimensions and indicators discussed in this paper include many for which improvements depend not only on increases in household incomes, but also on increases in public expenditure, as well as changes in the way in which this is allocated and distributed. The indicators also include some which can be considered proxy measures for the more subtle problems of socialization and social cohesion which have emerged for children and young people in this period of change, when the withdrawal of the state from the organization of many aspects of education and leisure activities, has led to an increase in opportunities for some, but has left a vacuum for others. Families and young people have not always been equipped to compensate for the collapse of previous channels of socialization and integration, and either do not have access to alternative structures, or do not have the financial means to access them.

The results for the different sub-regions are summarized at the end of the paper in the form of a table, which highlights the open challenges in the selected dimensions in the various CEE/CIS sub-regions, and for different groups of children. Three main points emerge from the summary, namely that the policy challenges for improving child well-being vary considerably across the region; that economic growth (and reduction in income poverty) in itself has not led to consistent improvements in well-being across all its dimensions, for all children, in all countries; and that national averages, while necessary for international comparison, often mask considerable intra-country disparities and do not capture the position of marginalized groups of children and young people.

Overall, the analysis suggests that, between 2000 and 2008, the situation of children improved in average absolute terms throughout the region in almost all the indicators examined. However, it also points to increasing differences in the character of problems facing the more vulnerable sections of the child population in different parts of the region, and show that improvements in key aspects of child well-being are not always positively correlated to the levels of per capita GDP. This is especially true of indicators which provide proxy measurements for social cohesion and inclusion, such as mortality rates due to external causes (including suicide, and intentional and unintentional injuries) among young people, but also the rates of children living in institutional care.

These last points are illustrated graphically in Figures 1 and 2 which show on the one hand that levels of under-5 child mortality (U5MR) on the whole reflect levels of economic development, in that they are negatively correlated to GDP per capita, (i.e. those countries with higher levels of GDP per capita have lower rates of U5MR).[5] On the other hand, the example of mortality rates for 15-19 years shows that mortality due to natural causes decreases with increasing GDP per capita levels (as with U5MR, but with a weaker correlation); but that mortality due to external causes does not follow a similar pattern: the middle-income countries in the CIS and, to a lesser extent the Baltic states, have higher rates – in some cases strikingly high - than low-income countries of the region.

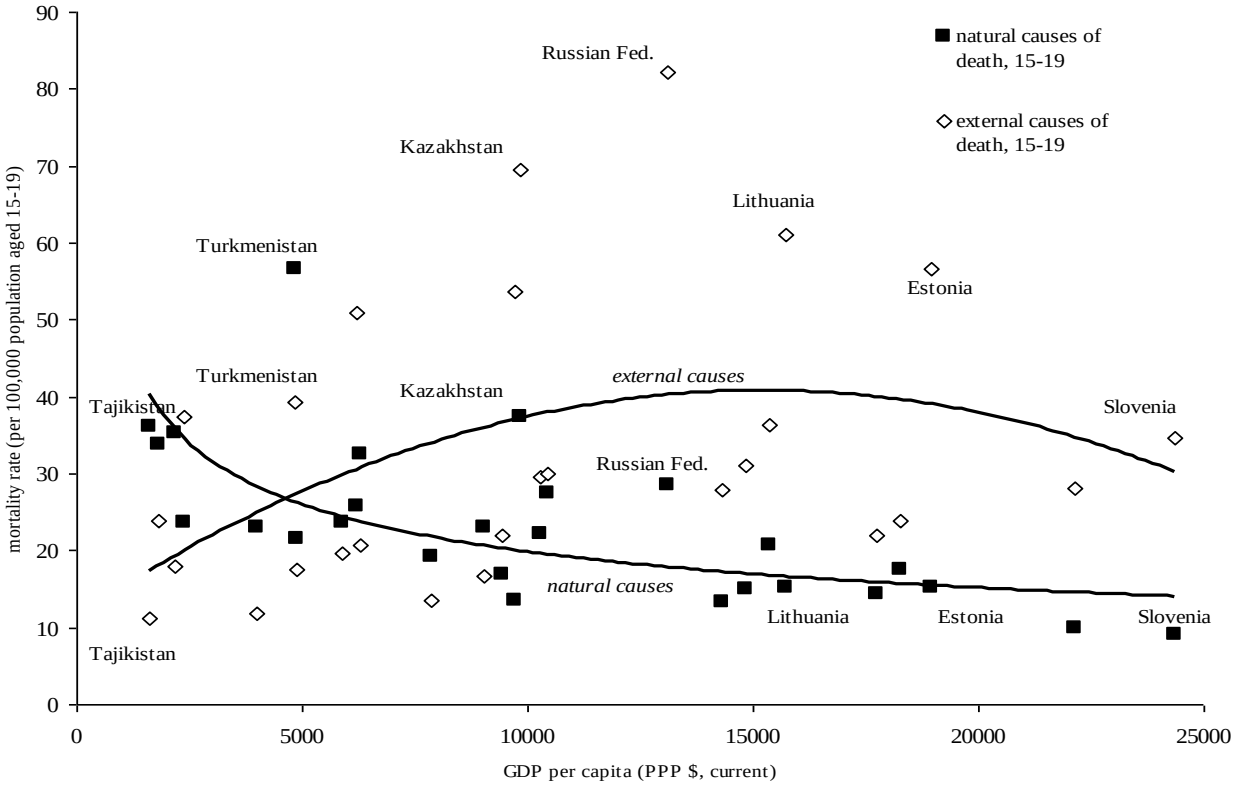
Figure 1: Under-5 mortality rates in the countries of the CEE/CIS by level of GDP per



Source: data from www.childinfo.org and from World Development Indicators 2008 (accessed in December 2008).

[5] There are few exceptions, including the Republic of Moldova, which performs well in terms of child mortality rates relative to its per capita GDP level; and Kazakhstan and Azerbaijan which show higher rates of child mortality, relative to those in other countries with similar levels of GDP per capita.

Figure 2: Mortality rates (natural and external causes) for 15-19 year olds by level of GDP per capita, 2006-2007



Source: data from TransMONEE database 2008 and from World Development Indicators 2008 (accessed in December 2008).

The results discussed in this paper show that in the low-income countries of the region child survival, widespread income poverty and low-quality education and underemployment, remain priority problems requiring firm policy responses. Transition has led to a worsening of these indicators, and despite some improvements in average levels, the overall level of child deprivation remains high, and is often worse for certain regions or groups of the population. In other countries where GDP levels are higher, deterioration in indicators of child socialization and protection, as well as youth unemployment and marginalization suggest that, despite impressive rates of economic growth and poverty reduction, many countries in the region still have a long way to go in order to build, or replace the previous mechanisms and institutions required to support families with children, guarantee access to services of decent quality, help young people make the transition to adulthood, and promote the inclusion of some minority ethnic groups.

3. CHILD INCOME POVERTY

Material deprivation is commonly measured using monetary indicators (income or expenditure) to identify those individuals and households living below a certain minimum threshold: i.e. income or expenditure levels are used as indicators of household means and resources, and those households and individuals which have levels under a minimum threshold, or poverty line, are considered to be poor.

Monetary indicators have certain known limitations, and are by no means perfect tools for assessing child well-being. Firstly, both income and expenditure indicators are measured at the household level and, by themselves, do not provide any indication of the extent to which the individual child within the household derives benefits from the given levels (relative to other household members). Secondly, poverty estimates based on income and expenditure can vary considerably depending on a series of choices and assumptions made by individual analysts, which – while various rational justifications may be provided - are ultimately made on the basis of subjective judgments[6]. Despite these limitations, poverty estimates based on either household income or expenditure play a key role in understanding the socio-economic situation of children, especially since they have been found to be strongly correlated with deprivations in other dimensions of child well-being.[7]

This section looks at levels of child poverty in CEE and CIS countries, using data on the share of children living in households with per capita consumption expenditure lower than Purchasing Power Parity (PPP) $ 2.50 a day, which can be considered a threshold for measuring extreme poverty in the region. Estimates of the share of children living in households with per capita consumption of less than PPP $ 5.00 a day are also provided. This is a less extreme poverty threshold, and the share of children living in households with a per capita consumption expenditure of between PPP $ 2.50 and PPP $ 5.00 can be considered as vulnerable to extreme poverty.

The poverty estimates provided in figures 3-5 are from the World Bank's Eastern Europe and Central Asia Regional Databank, and are calculated using a common methodology for all countries. They are based on consumption expenditure (cash and in-kind) data from household surveys, and the value of household consumption expenditure is divided by the number of household members to derive a per capita consumption level (i.e. the equivalence scale is equal to one). International comparison is made possible by converting the household consumption expenditure in US $ at the 2005 Purchasing Parity Power (PPP) rates, and by adopting two poverty thresholds used by the World Bank (2005 and 2008) for international comparison in the CEE/CIS region, namely PPP $ 2.50 per person per day and PPP $ 5.00 per person per day.[8]

[6] For example, assumptions regarding economies of scale and differences in the needs of different household members (e.g. children may be assumed to need less than adults, or on the other hand may be assumed to require more expenditure) are reflected in the choice of equivalence scale used, which can have a considerable influence on the final poverty estimates. Poverty estimates will also vary according to whether income or expenditure is chosen as the indicator to measure household resources, and according to decisions on what components to include in the total household income or expenditure aggregate. And finally, the choice of poverty line chosen to distinguish poor from non-poor households will have an obvious impact on the numbers which are categorised as living in poverty.

[7] See for example UNICEF (2006) and Menchini and Redmond (2009)

[8] For a basic description of poverty measurement techniques, see UNICEF (2006), Box 2.1. For a more detailed description of the methodology used by the World Bank, see Chen and Ravallion (2008). For a debate on the methods used to calculate global poverty rates, see for example Reddy (2008) for a criticism, and Ravallion (2008) for arguments in support of the methodology.

The PPP $ 2.50 a day and the PPP $ 5.00 a day international poverty lines are so-called "absolute" poverty lines, i.e. they represent fixed amounts. They are useful for cross-country comparison, but not always useful for informing policy makers in the individual countries: in particular the extreme poverty line (at PPP $ 2.50 a day) is too restrictive to provide meaningful estimates of poverty in the richer countries of the region. In fact, some CEE and CIS countries establish their own national poverty thresholds: for example, the Russian Federation calculates an official subsistence minimum, which is considerably higher than the PPP $ 2.50 one, and is used both as the national absolute poverty line, and as a reference point for various social policy interventions, including eligibility of households for family allowances. On the other hand, the PPP $2.50 a day line is close to the national poverty lines computed in some of the poorer countries of the region, such as Kyrgyzstan. Here, however, the opposite is true, in that use of this poverty line produces extremely high levels of poverty (over 80 percent, see figure 4), which may be useful for international comparison, but not for domestic policy making, since they cannot guide the concentration of policy efforts and resources on the most vulnerable.

Other countries, in particular those CEE countries which joined the European Union in 2004 and in 2007, use "relative" poverty lines, with income as the indicator to measure household resources. In line with EU practice, the relative poverty line is set at 60 percent of the median national per adult equivalent income. The former Yugoslav Republic of Macedonia also uses a relative poverty line to obtain its official poverty estimates, but sets the threshold at 70 percent of the median national per adult equivalent expenditure. Unlike absolute poverty lines, a relative line is not a fixed amount, but one which changes in line with the level of median income of the country. Use of this relative threshold can provide some indication of the extent of inequality in the distribution of income (more exactly in the poorest half of the distribution) in any given country, and relative poverty rates are sometimes interpreted as an indicator of social exclusion, i.e. those living in relative poverty can be considered at risk of being socially excluded, since they appear not to have the minimum resources required to participate in the consumption patterns and activities which are the norm in the country where they live.

Extreme poverty and vulnerability to extreme poverty among children in CEE and CIS, 2000-2005

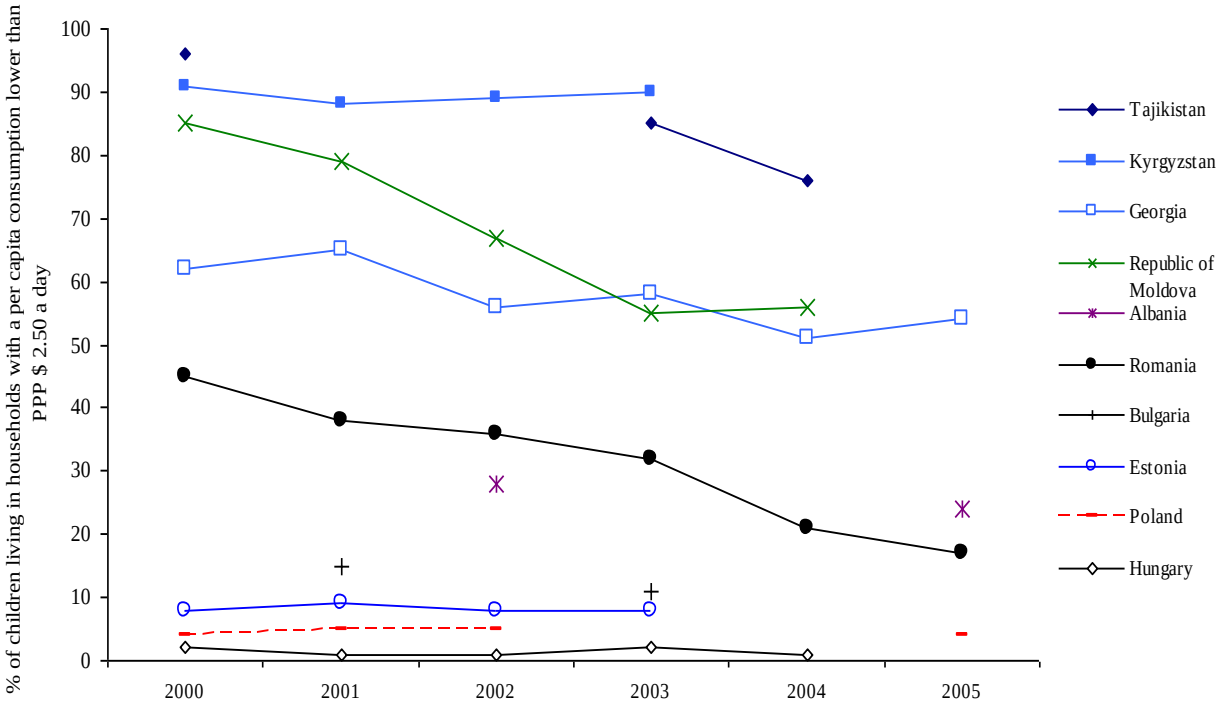
Economic growth from the late 1990s to mid-2008 has led to a reduction in extreme poverty and vulnerability to extreme poverty for the total population, measured both in absolute numbers and as rates.[9] The absolute numbers of children living in poverty registered important reductions, partly because of improvements in household income and expenditure levels, but also due to a demographic effect, i.e. the considerable reduction in the total number of children in CEE and CIS countries.[10] Child poverty rates also declined, but at a slower pace than those observed for other age groups,[11] which meant that while there was an overall improvement in living standards,

[9] World Bank (2005) and World Bank (2008) pp. 87-90
[10] See Menchini and Marnie (2007)
[11] See UNICEF (2006) p. 31

children (or to be precise, households with children, and particularly large households with children) benefited less from the impact of economic growth.

Figure 3 illustrates trends in the share of children aged 0-15 living in extreme poverty in selected countries from different CEE/CIS subregions. The data point clearly to the large disparities in living standards within the region, with the countries of Central Asia, Caucasus and the Republic of Moldova (where the majority of the population lives in rural areas) having very high or high rates of child extreme poverty (over 50 percent), while the rest of the region has intermediate to low levels. The data also show that the general pattern of decline during the period of economic recovery was neither uniform in all countries, nor continuous over time, despite the fact that economic growth has been continuous.

Figure 3: Extreme poverty among children: percentage of children (0-15) living in households with per capita consumption lower than PPP $ 2.50 a day, 2000-2005, selected CEE and CIS countries

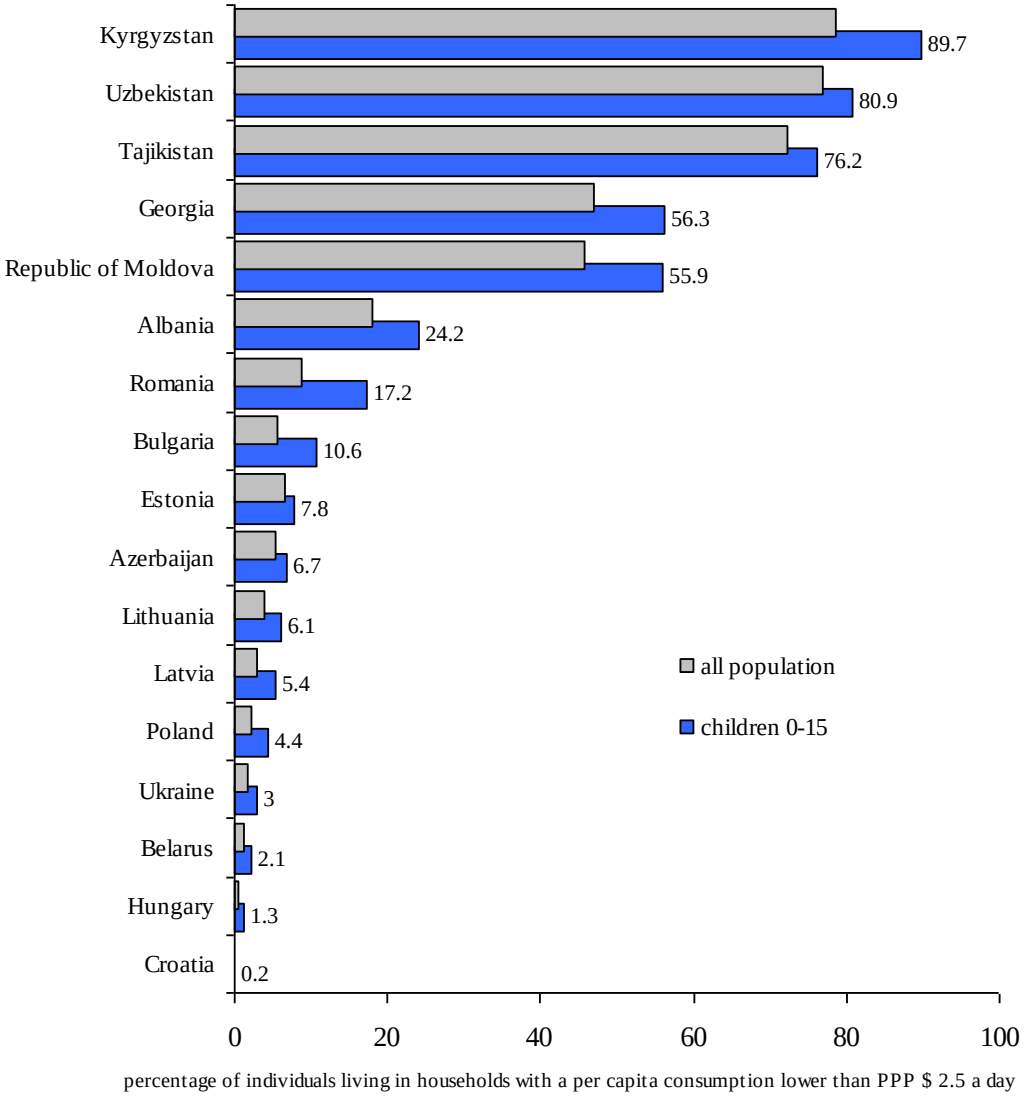


Source: World Bank's Eastern Europe and Central Asia Regional Databank (estimates received in December 2008)
Note: the 2000 data point for Tajikistan refers to 1999. The figure includes a selection of countries with data which allows an examination of trends over time. Estimates are derived from consumption data from household surveys, using a per capita equivalence scale (i.e in the calculation of per capita consumption, a value of 1 is assigned to each member of the household irrespective of her or his age).

The subregional patterns emerge clearly in Figure 4, which compares extreme poverty rates for children with those for the total population (i.e. children, adults and elderly together). The three countries of Central Asia for which data are available are those with by far the highest child poverty rates: about 90 percent of children under-16 in Kyrgyzstan were living in extreme

poverty in 2003, followed by Uzbekistan (2003) and Tajikistan (2004) at around 80 percent. In these countries children aged 0-15 represent more than one third of the total population, most households contain children, households with 3 or more children are common, and the risk of extreme poverty is considerably higher for the latter.

Figure 4: Extreme consumption poverty in CEE/CIS countries: percentage of the total population and percentage of children (0-15) living in households with per capita consumption lower than PPP $ 2.50 a day, around 2005



Source: World Bank's Eastern Europe and Central Asia Regional Databank (estimates received in December 2008)
Note: data for Estonia, Bulgaria, Kyrgyzstan and Uzbekistan refer to 2003, data for Hungary, Lithuania, Latvia, Croatia, Republic of Moldova and Tajikistan refer to 2004, data for Poland, Romania, Albania and Azerbaijan refer to 2005, data for Ukraine and Georgia refer to 2006. Data for the Russian Federation and for other ten countries are not available. Estimates obtained using consumption data from household surveys, and a per capita equivalence scale.

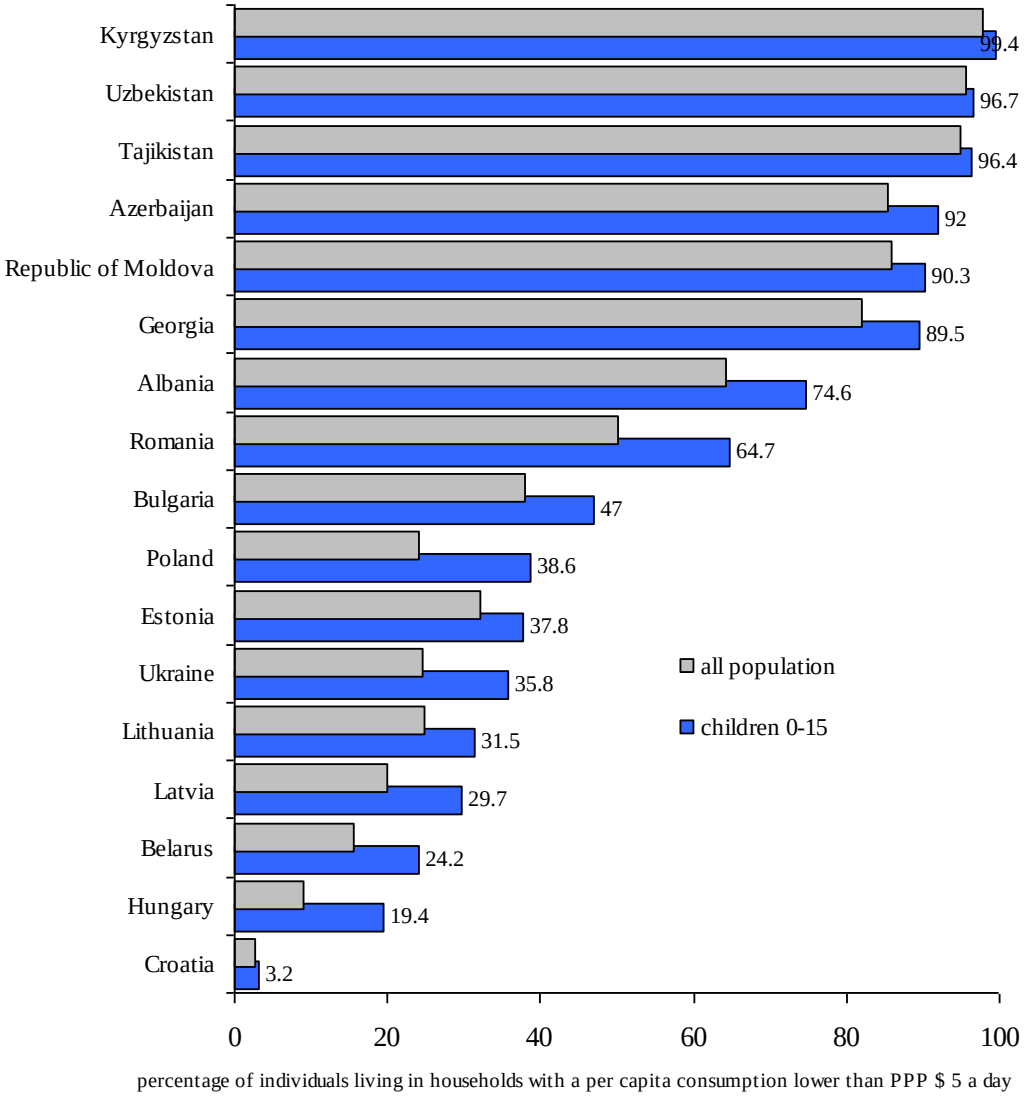
In Georgia and the Republic of Moldova, children under 16 represent less than one fifth of the population, and more than half of them are living in extremely poor households, meaning that children are clearly over-represented in the poor population of both countries. Extreme poverty is more widespread in rural areas, followed by secondary cities.

In Albania, in 2005, extreme child poverty was estimated at 24 percent, compared with 18 percent for the whole population. Romania (2005) and Bulgaria (2003) have both seen reductions in the rates of children living in extreme poverty during the period of economic recovery, but still have rates of over 10 percent, which mainly reflect the difficulties experienced by children in the Roma population in exiting from extreme poverty. In these countries, the extreme child poverty rate is double that for adults: children under 16 represent around 15 percent of the whole population, but more than 30 percent of the population living in extreme income poverty.

In the other countries for which data are available, the share of children living in extreme poverty is lower than 10 per cent, with the lowest rates registered in Central European countries and Belarus. In fact, for the richest countries of the region, the PPP $ 2.50 line is too restrictive to be useful as a tool to identify the poor in the individual countries.

Poverty estimates using the international poverty line of PPP $ 5.00 a day show that a substantial share of children, even in the richest sub-regions of CEE/CIS, live in households which are vulnerable to extreme poverty, and that children face a considerably higher vulnerability (Figure 5). In the countries of Central Asia and the Caucasus for which data are available, as well as the Republic of Moldova, 90 percent or more of children live in households with per capita consumption lower than PPP $ 5.00 a day, and the difference in rates between children and adults is very narrow. In the countries of South-Eastern Europe, the poverty rates for children range between slightly less than 50 percent (in Bulgaria) and 75 percent (in Albania), and the gap between adult and child poverty rates is large. In the countries of Central Europe and the Baltic states the percent of children under PPP $ 5.00 a day ranges from 19 percent in Hungary (2004) to 39 percent in Poland (2005). In the two countries, where children under 16 represent one sixth of the overall population, there is a large gap between the poverty rate for children and that for the total population, confirming that poverty is clearly concentrated in families with children, in particular in large families.

Figure 5: Shares of all population and of children (0-15) living in households with per capita consumption lower than PPP $ 5.00 a day, around 2005



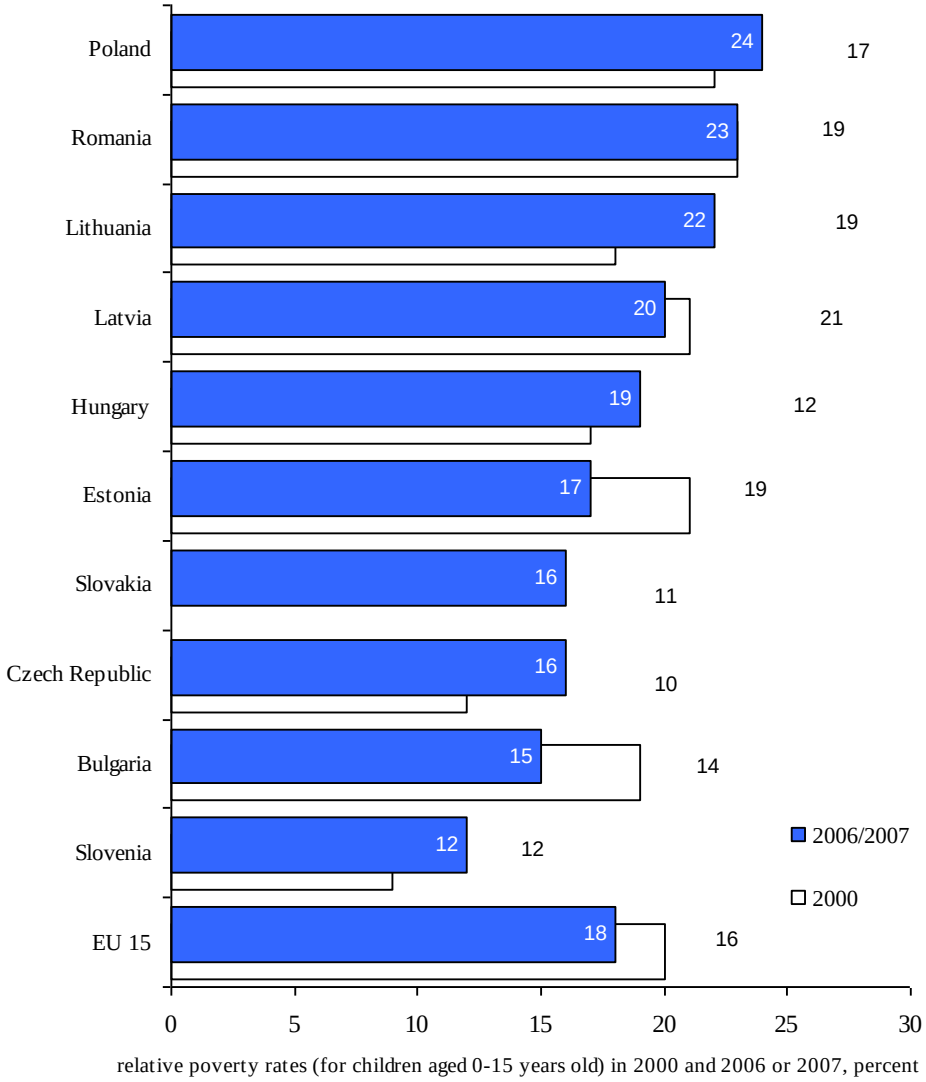
Source: World Bank's Eastern Europe and Central Asia Regional Databank (estimates received in December 2008)
Note: data for Estonia, Bulgaria, Kyrgyzstan and Uzbekistan refer to 2003, data for Hungary, Lithuania, Latvia, Croatia, Republic of Moldova and Tajikistan refer to 2004, data for Poland, Romania, Albania and Azerbaijan refer to 2005, data for Ukraine and Georgia refer to 2006. Estimates obtained using consumption data from household surveys, and a per capita equivalence scale.

Relative poverty in the CEE countries which are part of the EU

Figure 6 provides data on relative poverty rates for children 0-15 in those CEE countries which are part of the EU. These data are not comparable with the absolute poverty estimates reported in Figures 4 and 5, not only because of the different approach to setting the poverty line, but also because they are based on income (rather than consumption expenditure) indicators, and a

different equivalence scale is used. The relative poverty line is set at 60 percent of the national median income (derived from survey data), and thus reflects the different living standards across countries: for example, in 2005 the value of the relative poverty line in the Czech Republic was 3.5 times higher than that of the relative poverty line for Romania.[12]

Figure 6: Child relative poverty, percentage of children (0-15) living in households with per capita income lower than 60 percent of the national median, 2000 and 2006 or 2007



Source: Eurostat online database (accessed in December 2008)
Note: 2000 data point for Czech Republic refers to 2001. Most recent data for Bulgaria, Romania and EU 15 average are for 2006, for the other countries 2007. The numbers outside the bars are the relative poverty rates for the total population in 2006/07. Poverty is calculated using income data (after social transfers) derived from household surveys, including EU-SILC for 2007. The modified OECD equivalence scale is adopted (it assigns a value of 1 to the household head, of 0.5 to each additional household member aged 15 or older, and of 0.3 to each child aged under age 15).

[12] European Commission (2008) p. 15

The relative poverty rates for children are over 15 percent in most countries included in Figure 6: Poland had a rate of 24 percent in 2007, which was the highest rate in the European Union. In Romania, Lithuania and Latvia, the relative poverty rate for children aged 0-15 is more than 20 percent, and in several countries relative child poverty actually increased or stagnated between 2000 and 2006/07. In most countries, including the Czech Republic, Poland and Hungary, children have a significantly higher risk of relative poverty than the overall population. In sum, the use of the relative poverty line and income indicators confirm that large households with children face a higher poverty risk, as do children living in single parent households.[13]

The results for relative child poverty suggest also that while economic growth has led to improvements in overall living standards in the countries of Central Europe and the Baltics, the economic conditions of a significant share of the households with children improved at a slower rate, and that households with more than 2 children experienced difficulties in keeping up with the rest of the country. These discrepancies in the rates of improvement of income poverty indicators are reflected in other child-relevant indicators, such as those on health status and education achievements discussed in the following sections.

4. CHILD HEALTH INDICATORS: DIVERGING POLICY CHALLENGES

This section looks at changes in the health dimension of child well-being through the lens of child survival, nutritional status, access to key public health care programmes, and mortality rates for young people. Some of these can be considered measures not only of health outcomes, but also more generally of child well-being (e.g. child mortality rates) since they are influenced by many factors outside the health sector, including, for example, household income and wealth, mother's education and access to safe water and sanitation. Others, for example access to health care programmes, are measures of inputs or process, and are indicators of the extent to which certain policy interventions aimed at improving the health status of children have been successfully implemented.

The ways in which each indicator influences and interacts with other dimensions of well-being will vary according to the age of the child. Most of the indicators examined below concern children under 5 years of age. This is partly due to the availability of comparable data, but also due to the greater health vulnerability of this younger age group to health risks, and the important spillover effect which a young child's health status has on his/ her subsequent growth and development. However, mortality rates for older children are also examined, as an important indicator of their health and safety, and also as a proxy indicator of social cohesion and integration, and one which can signal problems in making the transition to adulthood.

[13] See also European Commission (2008) pp. 13-15

Early childhood survival

The under-5 mortality rate (U5MR) is a central indicator for assessing the situation of young children. It measures the probability of survival of a newborn to her/his fifth birthday, but also reflects more broadly the socio-economic conditions in which the child grows up, and the access of households to basic social services and infrastructure.

Infant mortality (i.e. mortality before the first birthday) represents the largest share of under-5 mortality. Child survival and infant deaths are strongly influenced by an interplay of different factors such as the health and nutritional status of mothers, their knowledge of basic healthcare and hygiene, levels of immunization coverage, the availability of maternal and child health care services (including pre-natal and neo-natal care), household income levels, the availability and nutritional value of food, safe drinking water and basic sanitation, and the overall safety of the environment in which the child grows up.

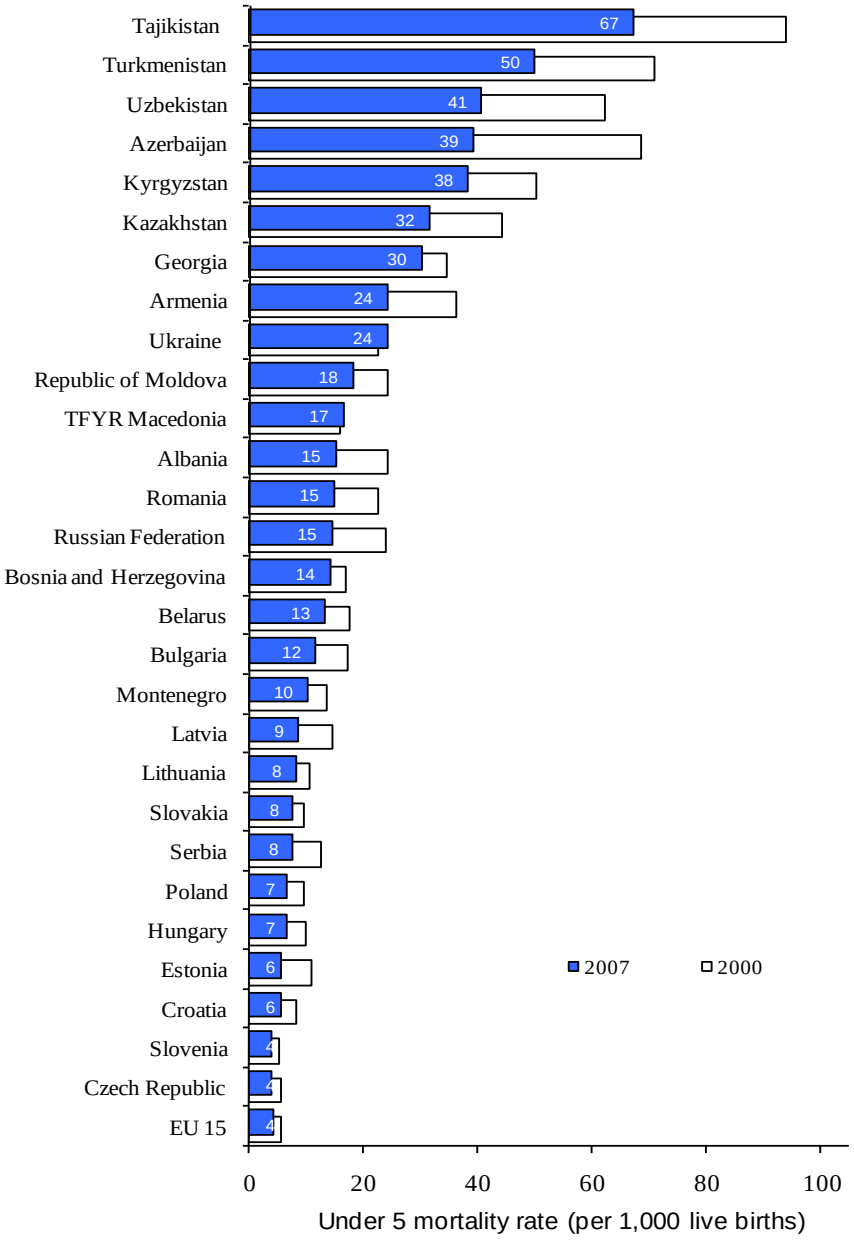
Under-5 mortality rates for most countries in the region went through a phase of accelerated reduction in the 2000s. The estimates reported in Figure 7 show that for some countries the reductions were substantial. However, the estimates for 2007 also highlight that the significant inter-country differences in levels which existed at the beginning of the transition have persisted and even increased over time.

There are striking disparities between, and even within, sub-regions: the countries of Central Asia and the Caucasus have levels of under-5 mortality in the range of 25 and 70 per thousand live births; an intermediate group of countries - mainly in South-Eastern Europe and the Western CIS - have levels of between 10 to 25 per thousand live births; and finally the other countries - mainly in Central Europe and the Baltics - have levels lower than 10 per thousand.

The Czech Republic and Slovenia now rank among those countries with the lowest levels of under-5 mortality in the world. They have managed to reduce their rates since the late 1990s by improving the survival chances for very pre-term children, as well as low and very low birth-weight children, and also reducing sub-national disparities. The other countries in Central Europe and the Baltics have succeeded in reducing the average under-5 mortality rate to below 10 per thousand, but further progress in reducing mortality for pre-term newborn infants, and risks in the pre-natal period, will be needed in order to achieve lower rates.[14]

[14] Tragakes et al. (2008, p. 25) highlight that in Latvia, the difference in infant mortality levels with best performing countries is mostly due to the higher rates of perinatal deaths.

Figure 7: Under-5 mortality rates in CEE and CIS countries, 2000 and 2007 (deaths per thousand live births)



Source: www.childinfo.org, accessed December 2008.
Note: the figures for EU 15 are unweighted averages. The under-5 mortality estimates are derived using the model developed by the Inter-Agency Group for Child Mortality Estimation. This model combines data from vital registration, and direct and indirect estimations obtained from surveys and census; see UNICEF, WHO, World Bank and United Nations Population Division (2007). The Demographic and Health Survey (DHS) carried out in Ukraine in 2007 found an average under-5 mortality rate of 17 per thousand for the period 2003-2007. This new estimate is not included in the figure reported here for Ukraine.

Bulgaria and Romania are the only European Union member countries with under-5 mortality rates of over 10 deaths per thousand live births in 2007, more than three times higher the levels attained by Czech Republic and Slovenia. The higher levels of the two South-Eastern European

countries which joined the EU in 2007 are in part a reflection of marked sub-national disparities, which in turn largely reflect the geographical concentrations of the Roma population: for example, in Bulgaria, the Sliven and Montana regions had infant mortality rates which were double that of the national average in 2005[15]. From the early 1990s these two countries have also reported levels of low-weight births[16] which - at 9.6 percent in Bulgaria and 8 percent in Romania in 2006 - are among the highest in the CEE/CIS, pointing to problems with maternal and pre-natal care.

Significant sub-national disparities in under-5 mortality rates are also found in other South-Eastern European countries, as well as some Western CIS countries. In the former Yugoslav Republic of Macedonia, survey results for the early 2000s point to continuing large differences between levels in urban (10 per thousand live births) and rural areas (26 per thousand live births).[17] On the other hand, official data for the Republic of Moldova seem to suggest that the improvements recorded since the late 1990s are due *inter alia* to successes in reducing the differences in child mortality rates between urban and rural areas.[18]

The highest levels of under-5 mortality are found in the Caucasus and Central Asia, although these two sub-regions are far less homogeneous than the other sub-regions. Armenia, for example, has an estimated under-5 mortality rate of 24 deaths per thousand live births for 2007, the lowest level of child mortality for this group. Improvements in primary health care interventions have contributed to the reduction in child mortality by about one third since 2000. All the other countries have levels which are above 30 per thousand live births, with Tajikistan (at 67 per thousand) registering the highest under-5 mortality rate, with persistent intra-country disparities in rates, both by socio-economic status and place of residence.

In many of the high and very high under-5 mortality countries, better data collection and more timely analysis in patterns of underlying trends are needed to strengthen policy responses. Official data on infant mortality, based on vital registration, are generally considered unreliable, and there are large discrepancies between survey results and the mortality statistics obtained from the vital registration system. This is partly linked to the continuing use of the former Soviet definition of live birth in parts of these countries, which leads not only to underestimates of neonatal deaths, but also to a lack of policy attention on the need to improve the quality of pre and neo-natal care.[19]

[15] Georgieva et al. (2007)
[16] Share of newborns weighing less than 2,500 grams.
[17] State Statistical Office of the Republic of Macedonia (2007)
[18] National Bureau of Statistics of the Republic of Moldova (2008). The Republic of Moldova has a national average level of under-5 mortality which is similar to that of countries in South Eastern Europe and Western CIS with much higher levels of GDP.
[19] Menchini and Marnie (2007). Most countries are now gradually transferring to actually implementing the WHO definition live birth (e.g. Armenia, Kyrgyzstan and Uzbekistan).

Child nutrition and growth

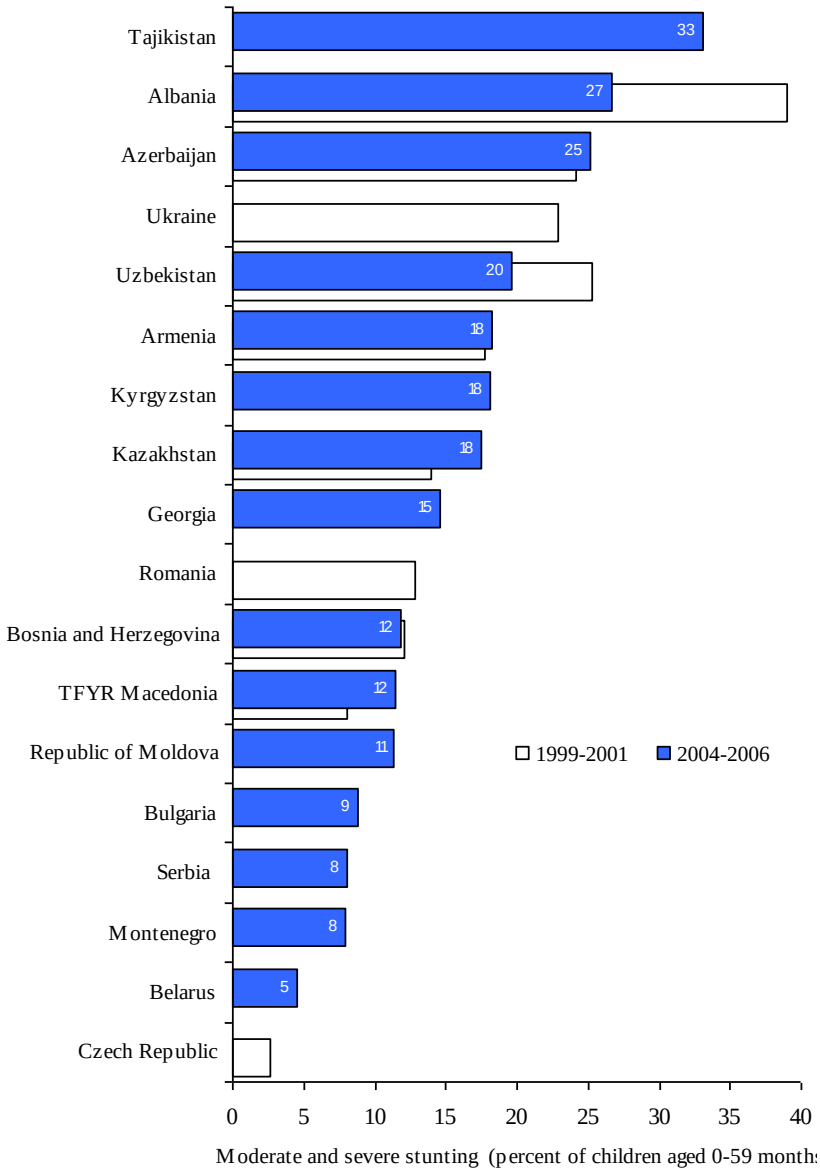
Nutrition is a major component of child health, growth and development. Child malnutrition can manifest itself in different ways, namely chronic or current under-nutrition (low quantity of nutritional/food intake); or inadequate intake of micronutrients (resulting in poor quality nutrition). Another form, not discussed here due to the lack of comparable statistics, is excessive and/or bad quality nutrition, which manifests itself in obesity.

Data on child nutrition tend to be more available in the poorer countries of the region due to the greater identification of problems in this domain. Statistics on stunting (low height for age)[20] for the mid-2000s are available for a few countries in the region. One of these is Tajikistan which, with rates of stunting of more than 30 per cent for children under 5 years, stands at the threshold where, according the WHO guidelines, stunting should be considered a primary national health concern.[21] Albania has the second highest level of stunting prevalence at 27 percent in 2005 (35 per cent for children in the poorest wealth quintile and 18 percent for children in the richest one), but prevalence has declined from 39 percent in 2000.[22]

Two other countries are in the medium prevalence range (indicating a moderate incidence), namely Azerbaijan and Uzbekistan. The first had a national average of 25 per cent in 2006, but with notable sub-national variations: i.e. lower than average levels in the capital city Baku, and particularly high levels in the Guba and Khachmaz districts where around half of the children under 5 years had low height for age.[23] In Uzbekistan, about 20 percent of children under 5 were stunted in 2005, which represents considerable progress since 1996 when the level was 39 percent. All the other countries in Central Asia and South-Eastern Europe reported in Figure 8 registered levels below 20 percent, but with evidence of disparities by both household socio-economic status, and place of residence, with some sub-national regions exceeding the level when this form of child malnutrition should be considered a public health priority.[24]

[20] Stunting is considered a measure of chronic malnutrition. Prevalence of stunting is the percentage of children under five whose height for age is less than minus two standard deviations from the median for the international reference population adopted by the WHO.
[21] WHO (1995) p. 208
[22] Authors' calculations based on MICS microdata.
[23] State Statistical Committee of Azerbaijan and Macro International Inc. (2008), p. 170
[24] For example, in Kazakhstan children under-5 in the poorest wealth quintile were twice as likely to be stunted than children in the richest quintile. In this country the highest prevalence was registered in the regions of Kyzylorda and Aktobe (at around 30 percent) both bordering the Aral Sea, while the lowest levels (less than 10 percent) were found in the Akmola oblast and in Almaty city. In Georgia, according to the MICS 3 results, the rate of moderate and severe stunting was 22 percent for children in the poorest quintile, compared to 8 percent for children in the richest quintile. Authors' calculations.

Figure 8: Moderate to severe stunting, children age 0-59 months (percent)



Source: Authors' calculations from Multiple Indicator Cluster Survey (MICS) for Albania, Belarus, Bosnia and Herzegovina, Georgia, the former Yugoslav Republic of Macedonia, Montenegro, Kazakhstan, Kyrgyzstan, Serbia, Tajikistan and Uzbekistan for the years 2004-2006. Data for Azerbaijan are from State Statistical Committee of Azerbaijan and Macro International Inc. (2008). All the other figures are from WHO Global Database on Child Growth and Malnutrition (accessed in December 2008).
Note: all these estimates are based on the WHO Child Growth Standards (see de Onis et al. 2006). Data labeled 1999-2001 for Uzbekistan refer to 2002.

Another key indicator used for assessing the prevalence of undernutrition among children is the wasting rate, i.e. the percentage of children with low weight for height, which is considered to reflect recent food deprivation or illness. The evidence on national averages suggests that none of the countries for which data are available registered high national levels of wasting (i.e. more than 10 percent according to the WHO guidelines) for children under 5 years in the mid-2000s.

Some reported medium levels of prevalence (between 5 and 9 percent): in Tajikistan, for example, 9 percent of children under 5 years were classified as wasted using WHO standards (slightly more than 10 percent in Khatlon oblast), 7 percent in Albania and Azerbaijan, and 6 percent in Republic of Moldova and Armenia. In all the other countries with data, the prevalence of wasting is lower than 5 percent and subnational disparities are limited.[25] In general, current undernutrition does not reach levels of high public health concern in the region, even if some countries show signs of vulnerability, and in particular in some regions within countries, it needs to be carefully monitored.

While the prevalence of stunting and wasting shows some correlation with the country's levels of GDP, the prevalence of micronutrient malnutrition does not follow clear patterns. For the few countries where data on micronutrient deficiencies are available there are signs of improvement since the late 1990s, although in some cases levels of deficiency remain a cause for concern. This is the case, for example, of iron deficiency which was a matter of public health concern among children below the age of 5 in Georgia, Republic of Moldova and Kyrgyzstan in the early 2000s, and of "moderate" concern in Armenia, Ukraine and Uzbekistan.[26]

Iodine deficiency can impair a child's mental and psycho-motor development. Data reported by the WHO[27] show that average iodine intake among school-age children was insufficient in Tajikistan, Kyrgyzstan, Georgia, Latvia, and Albania in 2000-2005, with the latter having particularly high levels of inadequacy. On the other hand, two countries – the former Yugoslav Republic of Macedonia and Armenia – were found to have excessive average urinary iodine prevalence among children, which can also have adverse effects on child health. Although the region as a whole has made significant progress in improving the availability and use of iodized salt, just above 50 percent of the households across the region used it, which is the lowest level in the non-industrialized world.[28] This regional average is pulled down largely by the low rates of coverage in the Russian Federation, where only 35 percent of all households consumed iodized salt in 2002/03.

The picture emerging from the data discussed here is a mixed one: applying WHO guidelines, it would seem that the different forms of child under-nutrition are matters of primary public health concern in only a few countries, while others show signs of "vulnerability". Disaggregated data shows that the major challenges are concentrated at subnational levels and among specific groups of the population, suggesting the need for targeted policy responses, and monitoring efforts to evaluate their impact.

[25] For data sources on wasting, see the note to table 1.8
[26] WHO (2008)
[27] WHO database on iodine deficiencies disorders (accessed on December 2008) and WHO and UNICEF (2007)
[28] UNICEF (2008b)

Births attended by skilled personnel, immunization rates, and breastfeeding

Many factors influence child survival and health. Among these, three play a widely recognized role in ensuring a healthy start in life, as reflected in the following indicators: the share of births attended by skilled personnel, breastfeeding and immunization rates. Ensuring that births are attended by skilled health personnel is important for reducing both infant as well as maternal mortality, while breastfeeding, in particular exclusive breastfeeding in the first 4-6 months of life, is generally recognized as having a positive effect on the health and nutrition of infants. Immunization is a cost-effective intervention which can make a significant contribution to reducing child morbidity and mortality. Although the countries of the region on the whole perform well in all of these indicators, there is evidence of problems concerning the quality of assistance provided by personnel in some countries; and in others, problems with the delivery of the immunization programmes, or lack of awareness of the value of breastfeeding.

Regarding the first indicator, official data[29] suggest that in 2007, in almost all the countries of the region, the rate of deliveries assisted by skilled attendants was almost 100 percent. The main exceptions were Tajikistan where coverage was around 85 percent; and Azerbaijan at 93 percent (compared with 99.6 percent registered in 2006), but also Romania where in 2005-2007 between 1 and 2 percent of all births were not attended by skilled personnel.

As for breastfeeding, survey results show that around 2005, the South-Eastern European and CIS countries for which data are available reported relatively low levels of exclusive breastfeeding for children less than 6 months. The highest level was found in the Republic of Moldova at 45 percent, while most of the other countries had levels under 30 percent. Continued breastfeeding (with complementary nutrition), at 12-15 months, is more common in the region, with rates of around 70 percent in Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan; all countries where fewer women work in the formal sector away from the home. At the other extreme, less than a quarter of children aged 12-15 months were still being breastfed in Belarus, Montenegro, Serbia and Ukraine in 2005.[30]

Almost universal rates of immunization are found in most of the region. For diphtheria, pertussis and tetanus (DPT), for example, only three countries, Bosnia and Herzegovina, Georgia and Armenia, had vaccination rates of less than 90 percent for children under 2 years in 2006. These countries also experienced a drop in coverage compared to 2000, especially in certain sub-regions: for example in Armenia in 2006, 10 percent of districts had coverage rates of between 50 and 79 percent for DPT, and two percent of districts had a coverage rate of below 50 percent. Similar sub-national disparities were found in Georgia.

Other countries have inconsistencies in the rate of immunization coverage for different years since 2000, pointing again to problems with the delivery of the programmes. For example, in

[29] TransMONEE data. Data from MICS for 13 countries broadly confirm the official estimates, see UNICEF (2008a)

[30] See UNICEF (2008a) pp. 37 and 77, reporting estimates derived from MICS.

Turkmenistan, the national DPT immunization rate dropped by 16 percent points for one year (in 2003), and in Kazakhstan it dropped from 99 percent in 2003 to 82 percent in 2004, before reaching 98 percent in 2005. Moreover, even when coverage rates are high, there is some evidence of interruptions in vaccine supply and delivery of immunization programmes in several countries: in 2006 interruptions in vaccine supply were experienced by all the countries of Caucasus and Central Asia, but also by richer countries such as Poland and Ukraine.[31]

Health indicators for children over 5

Data to assess well-being in the health dimension for children aged over 5 years are more scattered and incomplete than for the younger age groups, making inter-country comparisons more problematic. However administrative data on mortality rates - although they refer to extreme events - are widely available.

Mortality rates for both the 5-14 and 15-19-year-old-age-groups show very large disparities across the region, but with patterns which differ strikingly from those observed for infant and under-5 mortality. Overall, there is almost no correlation between higher mortality rates for older children and per capita levels of GDP: this case is very different if compared with mortality rates for younger children.[32] As a result, the country ranking by levels of mortality for 15-19 year olds (see Figure 9) is different to that for infant and under-5 mortality rates (Figure 7 above).

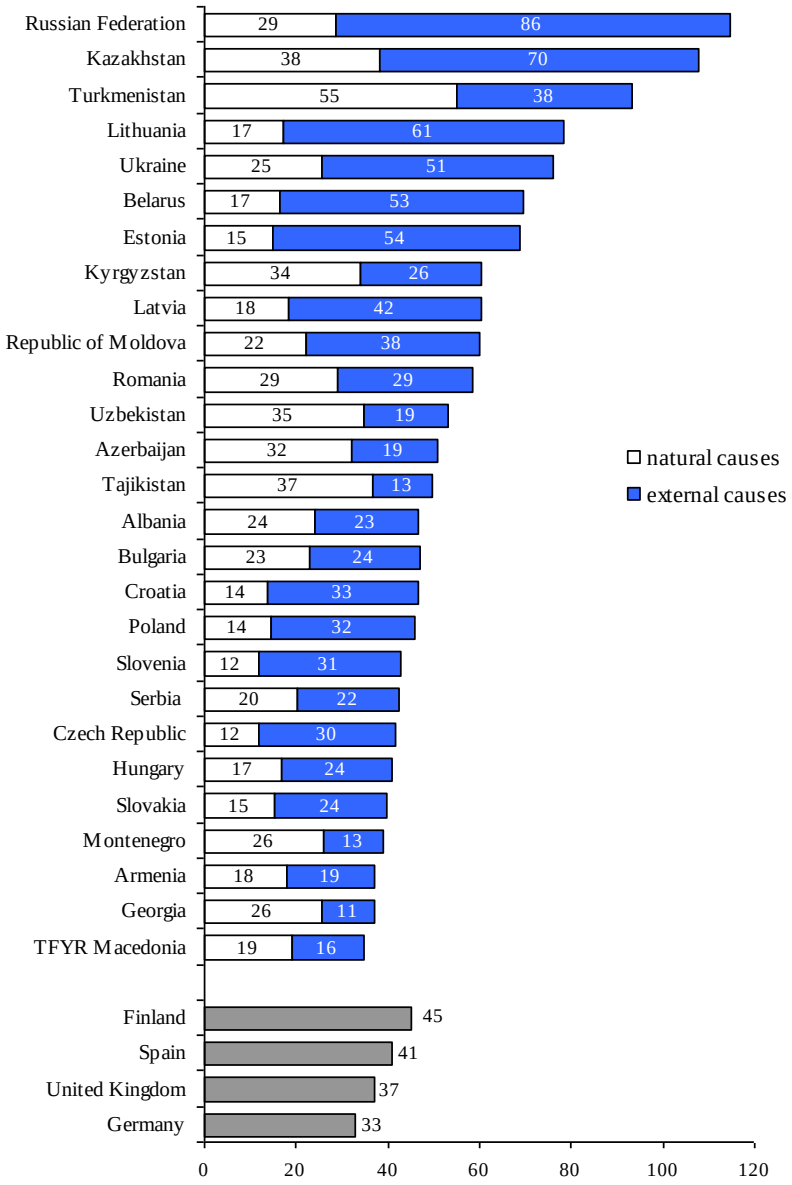
The levels of mortality for older children and adolescents in part of the CIS and in the Baltic States are more than double those found in most the EU 15 countries. "External causes" (which include intentional and non intentional injuries) explain a large part of the differences in ranking for mortality rates among older children and young people. Mortality due to natural causes (for example, infectious and respiratory diseases) remains generally low across the region for this age group, and – as with under-5 mortality - are negatively correlated with levels of GDP per capita. On the other hand, the correlation between mortality rates due to external causes and per capita GDP is weak, but positive.[33]

[31] UNICEF and WHO (2008)

[32] In 2006 the correlation between the indicators of the under- 5 mortality rate and the average country level of economic well-being, proxied by the level of GDP per capita PPP, was negative and strong (the value of the simple linear correlation index is -0.74). The negative correlation declines to -0.56 for mortality of children aged 5-14 and to a low – 0.07 for individuals aged 15-19

[33] In CIS countries high mortality rates are also found in the adult age groups. The average adult mortality rate for the CIS is higher than the world average and is lower only than that of Sub-Saharan Africa. Despite some decrease since the early 2000s adult mortality rates in Western CIS remain high and are often attributed to lifestyle factors, including high rates of alcohol consumption. See USAID (2007) pp. 11-16

Figure 9: Mortality rate for children and young people aged 15-19, 2004-2006



Source: TransMONEE database 2008. Figures are averages for the three year period 2004-2006. Figures for Finland, Germany, Spain and United Kingdom are based on data from the WHO Mortality Database and are not disaggregated by natural/external causes.

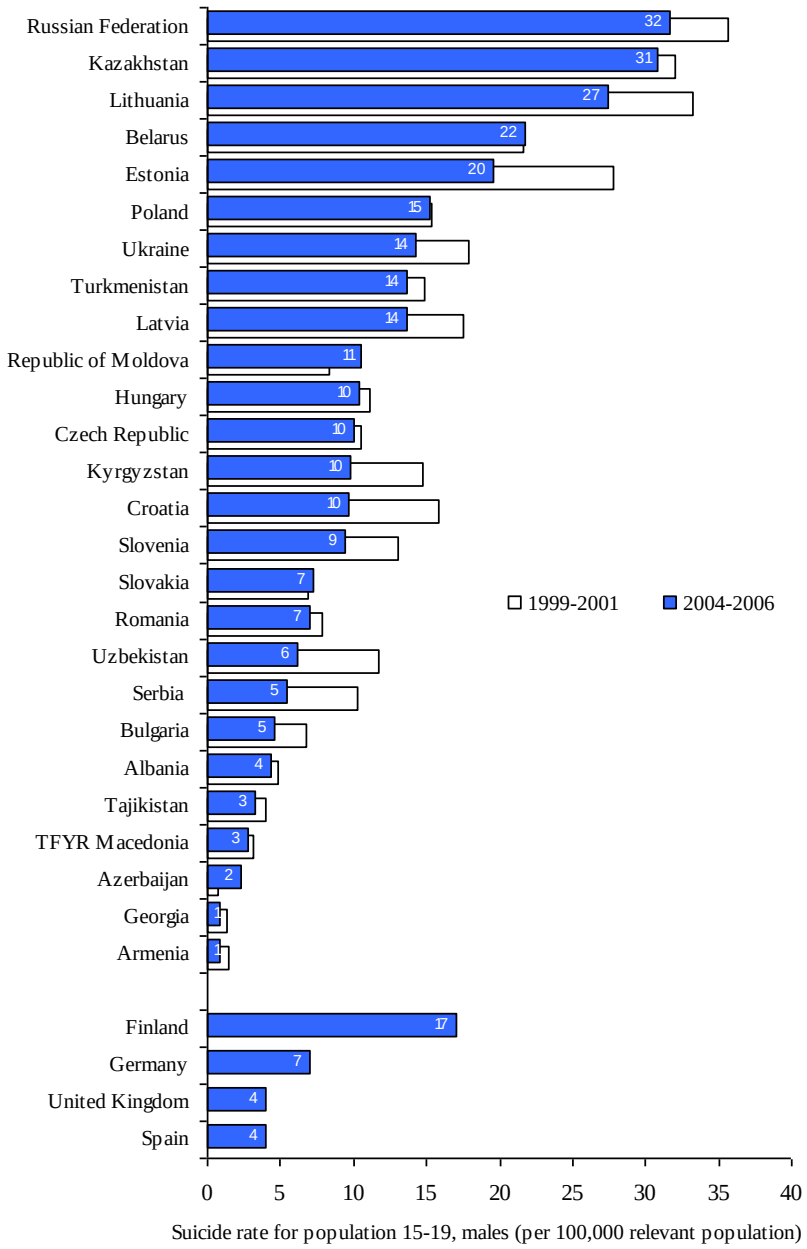
Note: The figure for Spain is the simple average for the three year period 2003-2005. External causes of death include unintentional injuries (transport injuries, poisoning, injuries due to fall, fires and drowning and other) as well as intentional injuries (self-inflicted injuries, injuries due to violence and war and other). They include also suicides. The total mortality rate for males 15-19 in the Russian Federation for 2004-2006 was 161 per 100,000 population, compared with 66 per 100,000 for females. In Finland, in 2004-2006, the total mortality rate for males 15-19 was 62 per 100,000 compared with 27 per 100,000 for females.

Overall, the highest mortality rates for the age group 15-19 are found in the countries of the former Soviet Union. The Russian Federation and Kazakhstan have the highest levels at circa 110 deaths per 100,000 population aged 15-19 years (for around 2005). Although the correlation with levels of GDP per capita is weak, some sub-regional patterns can be detected, with the countries of the former Soviet Union having mid to high mortality rates, and Central and Southern European countries having mid to low rates. The exceptions to these broad sub-regional patterns are Armenia and Georgia (which are among the low mortality countries), and Romania (which ranks among the mid to high mortality countries). While mortality rates due to natural causes in Kazakhstan and Uzbekistan are very similar (around 40 per 100,000), Kazakhstan has dramatically higher (double) rates for deaths associated with external causes than Uzbekistan. The Baltic States also have exceptionally high mortality rates due to external reasons (accounting for about 80 percent of total deaths).

In the large majority of the CEE/CIS countries, male mortality rates for the age group 15-19 are double or more than double those for females, although there are some exceptions, mainly in the poorest countries of Central Asia. Around 2005, the mortality rate for males in this age group was circa 160 per 100,000 in the Russian Federation, compared to circa 60 per 100,000 for females. Again the difference is explained by the greater share of deaths due to external causes among young men. The high rates for (male) mortality due to external causes are partly driven by the high rates of suicides, which account for about one third of such deaths in the high mortality countries. According to civil registration data, the Russian Federation, Kazakhstan and Lithuania had some of the highest rates of suicide in the world for 15-19 year olds in 2005, at around 30 per 100,000.

In the 2000-2005 period there was a reduction in mortality rates among young people aged 15-19 years old in the entire region, with the exception of Turkmenistan, where there was an increase in deaths due to external causes. Data for the first five years of 2000s suggest that, in most countries, the reduction in mortality rates was due as much to improvements in the figures due to external causes as to those associated with natural reasons. But there were exceptions: in Latvia and Tajikistan, for example, the reduction in deaths for external reasons made a disproportionately high contribution to reducing total mortality rates, while the reduction in natural deaths played a greater role in Belarus and the Republic of Moldova.

Figure 10: Suicide rate, males aged 15-19 (rate per 100,000 relevant population)



Source: TransMONEE database 2008. Figures for Finland, Germany, Spain and United Kingdom are based on data from the WHO Mortality Database

Note: figures are averages for the three year periods 1999-2001 and 2004-2006. The figure for Spain is the average for the three year period 2003-2005.

5. EDUCATION: QUALITATIVE AS WELL AS QUANTITATIVE CHALLENGES

Centrally planned economies achieved important results in the field of education, including universal enrolment for basic school (classes 1-9), free access (at least formally) to school and tertiary level institutions, and a strong emphasis on equity in access. The transitional crisis in the early 1990s put many of these achievements under threat, but nevertheless most of the countries in the region managed to maintain high enrolment rates for compulsory education even during the most difficult period of economic crisis. While there was some decline in enrolment for primary and lower secondary education levels in the first part of the 1990s, it was relatively small, more prevalent in the Caucasus and Central Asia, and tended to be concentrated in lower secondary education rather than in the primary levels. The high levels of formal enrolment did, however, mask slight decreases in attendance rates as the economic situation deteriorated, especially among children from poor households, which were less able to meet the increasing formal and informal costs of sending children to school.[34] The effects of the economic and social turmoil of the 1990s had a more visible impact on enrolment rates for the non-compulsory levels (pre-school and upper secondary), where there were not only declines in enrolment rates, but clear and growing inequality in access and also in quality.

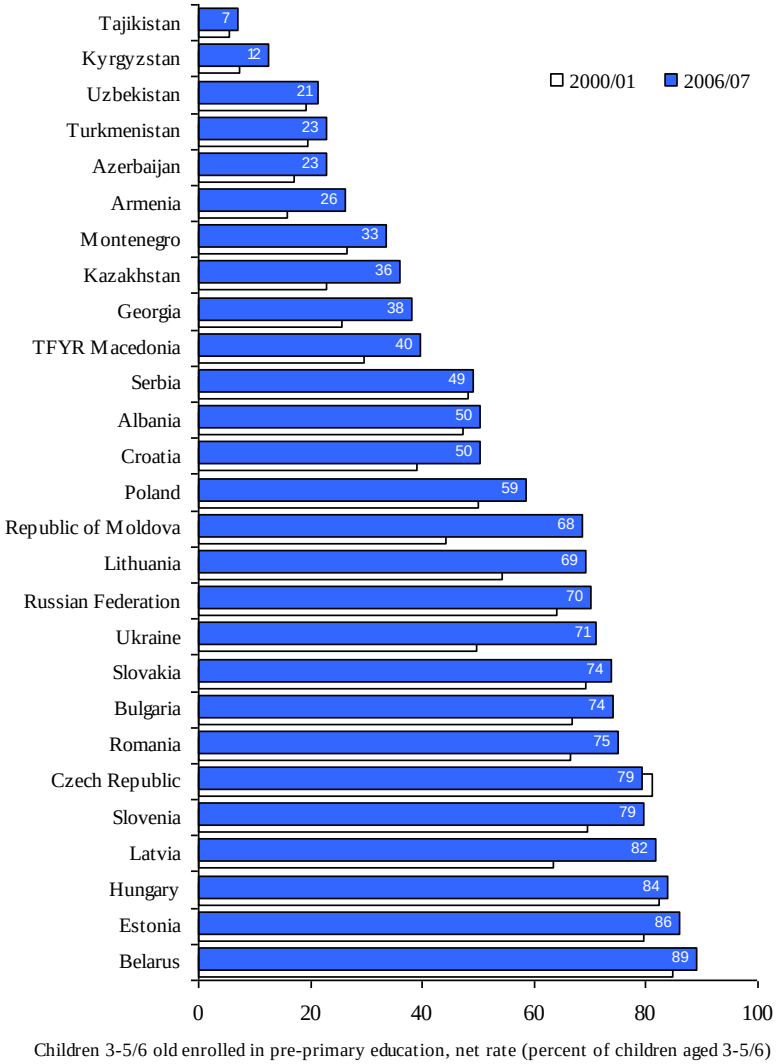
The period of economic recovery has presented the countries of the region with an opportunity to invest in education, expand enrolment in the non-compulsory levels, and increase quality and equity. Since the beginning of transition the CEE and CIS countries have engaged in a long process of reform aimed at adapting the school systems to the new context, with a strong focus on establishing education standards and on introducing more diversified curricula.[35] In practice, coverage, quality and matching the curricula with the requirements of the labour market, remain challenges for all countries, although some have progressed further in reform implementation.
Despite some signs of increases, coverage of early childhood education services is still low in Central Asia and the Caucasus, where pre-school was not common even in the Soviet period, and where there is often a lack of suitable infrastructure. On the other hand, it has recovered and even surpassed pre-transition levels in most of the other countries.[36] There are also growing differences in enrolment in higher education, which has become the norm (i.e. with very high enrolment rates) in most of the countries of Central Europe and Baltics, but has been decreasing in other sub-regions. However, even in those countries with high levels of upper secondary and higher education, there are signs that the transition to the labour market is difficult for many graduates, signaling in some cases a mismatch between curricula and labour demand,[37] which is also confirmed by the high rates of long term unemployment among young people. Overall all countries have experienced problems in guaranteeing equity in the quality of education offered at all levels, and in guaranteeing equity in access for the non-compulsory levels.

[34] Marnie and Menchini (2007) p. 2
[35] UNICEF (2007a)
[36] Here it should be noted that increased coverage of pre-primary education is only positive if the quality of education and care provided is adequate, otherwise it can damage rather than promote childhood development.
[37] In other cases, there is quite simply a lack of demand for labour, due to capital-intensive forms of growth, and this also influences young people's choice to remain in education.

Early childhood education and care

Early childhood education and care facilities were widely available under central planning, but contrary to what is often believed, the network did not extend to all parts of the region, and there were considerable intra-regional disparities in the availability and use of nurseries and kindergartens. They were common in the European part of the USSR, as well as in Central Europe, Bulgaria and Romania, but were less prevalent in the former Yugoslavia and in rural Central Asia and Azerbaijan where there is also a strong cultural tradition of keeping children in the family until compulsory school age. This sub-regional pattern in coverage has become more accentuated in the late transition period, as is shown in Figure 11.

Figure 11: Enrolment in pre-primary education of children aged 3-5 or 3-6



Source: TransMONEE database 2008
Note: age 3-5 or 3-6 depending on the functioning of country's education system. Data for Albania, Russian Federation and Turkmenistan are gross enrolment ratios.

Considerable differences in enrolment rates exist between Western CIS, Baltic States, Central Europe, Bulgaria and Romania on the one hand, and the countries of the Caucasus and Central Asia on the other. The remaining countries of South-Eastern Europe, have seen an improvement in enrolment rates since the early 2000s and occupy an intermediate position. However, high average levels of enrolment rates do not necessarily mean equity in coverage: for example in the Republic of Moldova, where two thirds of children aged 3-6 years live in rural areas, enrolment rates in 2006 for rural areas were 59 percent compared to 86 percent in urban areas. The difference between rural and urban areas is even greater in Lithuania, where enrolment rates in rural areas are low at 27 percent, compared to almost universal coverage in cities (at 97 percent).

The MICS survey results for countries with average levels of pre-school enrolment confirm the intra-country disparities in access. In Georgia, for example, the 2005 data suggest that children belonging to the poorest wealth quintile have an enrolment rate of 17 percent compared to 70 percent of children in the richest quintile; in Tbilisi enrolment was 73 percent, while in rural areas only one preschool-age child out of four was attending pre-primary education. Similar disparities are found in Serbia, where the enrolment rate for 3-5 year olds in Belgrade was circa 57 percent compared with 14 percent in rural areas. Despite the fact that pre-school can play an important role in social inclusion policies, the estimated enrolment rate for Roma children was around 3 percent, less than one tenth of the national average. Overall for these countries with relatively high national levels of enrolment, it is common for high levels of enrolment in some areas to co-exist with lower coverage in remote and rural areas, and for there to be considerably lower coverage for children from the more disadvantaged population groups.

Finally, in Central Asia and to a slightly lesser extent in Azerbaijan and Armenia, early childhood education and care services cover only a minority of the child population (in 2006/07 the share of pre-school age children covered ranged from 7 percent in Tajikistan to 26 percent in Armenia). In this group of countries preschool enrolment rates are low for every sub-national entity and group, but even within these very low national coverage rates, there are signs of disparities in access, with coverage in rural areas being extremely low or almost non-existent.

Basic Education and Upper Secondary Levels

Almost all the countries of the region were able to protect formal enrolment levels of basic education (ISCED 1 and 2, legal ages 6/7 to 14/16 years) throughout the period of economic crisis, and have engaged in reforms which aim to increase choice and flexibility in the school system, even for the compulsory levels. In the CEE/CIS countries (in the second half of 2000s), compulsory education starts at 6 or 7 years of age and lasts from 8 or9 years (e.g. in Albania, Czech Republic or the Republic of Moldova) to 11 or 12 years.[38] The longest compulsory

[38] Azerbaijan has recently passed a law on the reduction of the duration of compulsory education from 11 to 9 years, in part responding to the virtual absence of vocational schools to accommodate those not going on to complete general education.

schooling is found in the CIS where, since circa 2005, Ukraine and Uzbekistan have implemented reforms which extend compulsory school education to 12 years.

The vast majority of the countries in the CEE/CIS has attained universal, or close to universal, enrolment for primary education. Only Turkmenistan has a basic gross enrolment ratio below 90 percent for the school year 2006/07. Data on attendance derived from MICS for primary age children suggest that attendance is almost universal, even in the poorest countries of the region.[39] Moreover, almost all children who completed primary school in the region make the transition to lower secondary education.[40],[41]

At the upper secondary level (ISCED 3) there are clearer sub-regional patterns in enrolment rates, but different from those shown above for pre-primary education. Central Europe and the Baltic States have almost universal enrolment rates for young people aged 15-18 years, albeit with differences in school systems, i.e. in some general secondary education programmes are more common, and in other vocational school programmes prevail. Western CIS, as well as the South-Eastern European countries, have gross enrolment rates of circa 80 percent, while official data for the lower income CIS suggest that the average gross enrolment rate for 15-18 year olds in the mid-2000s was around 65-70 percent.[42] However, the high enrolments rates in upper secondary for Central Europe and Baltic States may also reflect lack of job opportunities for young people; while lower rates in Central Asia reflect higher poverty rates, and pressure on young people to work and contribute to household income.

Finally, official data for each level of education do not show any signs of gender imbalances in enrolments, the only exception in 2006/2007 being Tajikistan, where females represented around one third of the overall students enrolled in upper secondary education[43]. There is moreover some evidence from Central and South Eastern European
countries that children from Roma households tend to be segregated at the obligatory school levels, and in worse cases sent to schools for children with "special needs", or developmental disabilities. There has also been slow progress in including children with disabilities in mainstream schooling.[44]

[39] On the other hand, a study based on TIMSS data, reports statistics for 2003 on school headmaster's evaluation of attendance problems (including absenteeism, arriving late at school, skipping class) for 8th grade students. Problems of attendance were considered to be high in Baltic states and Bulgaria (Mullis et al. 2004)

[40] UNESCO (2008)

[41] It is worth mentioning here the international debate over the participation of children in agricultural work (in particular cotton field) in Uzbekistan, which is not only a major child protection concern, but means that children miss up to two months of school during the autumn harvest period. See Kandivoti, ed. (2008).

[42] UNICEF (2007b) p. 19

[43] Partial data for Turkmenistan, referring only to professional and vocational schools, suggest the existence of strong gender imbalance also for this country.

[44] Research sponsored by UNICEF Azerbaijan in cooperation with the State Committee for Family, Women and Child Issues, found tha only 15.8 of children with disabilities were in inclusive class in mainstream schools, 24.1 per cent in general schools, 7.7 percent in boarding school and 3.5 percent in special school. For almost half of children with disability (48.5 percent) education took place at home (see UNICEF Azerbaijan and Center for Innovation in Education, 2008)

Quality of education

Enrolment and attendance rates give only a partial picture of the education challenges in CEE/CIS, since they provide no measure of the quality of education provided. Quality is however notoriously difficult to measure. Surveys of learning achievements can be used to look at learning outcomes, while indicators measuring the inputs and resources invested in the education system can sometimes be used as proxy measurements of quality. However, data for the latter are scarce and not usually available for all countries (at least not using the same definitions), and therefore not suitable for cross-country comparison. One exception is pupils per teacher ratios. The results for this indicator points to some differences between the richest and the poorest countries of the region, with greater differences at the primary rather than the secondary level. In the poorer Central Asian countries the average pupils per teacher ratio for primary education is 4-5 pupils per teacher more than in Central European countries, with the highest ratio observed in Kyrgyzstan (averaging 24 pupils per teacher). Faced with the need to maintain close to universal school enrolment rates and growing cohorts of school children, as well as shortages of classrooms and staff, some countries have increased the number of schools operating on more than one shift. This is the case in Uzbekistan, where between 2000/01 and 2005/06 the share of schoolchildren attending schools offering two shifts increased from 26 percent to 29 percent, although it decreased in 2006/07. Regional figures show large differences within the country: in 2006/07, the same figure for Surkhandarya was 34 percent, while in Bukhara it was 13 percent and in Tashkent city 22 percent.[45] On the other hand, in the Republic of Moldova the rate of students attending schools operating shift systems decreased over the period 1997/8-2006/07, from 10 percent to 3 percent.[46]

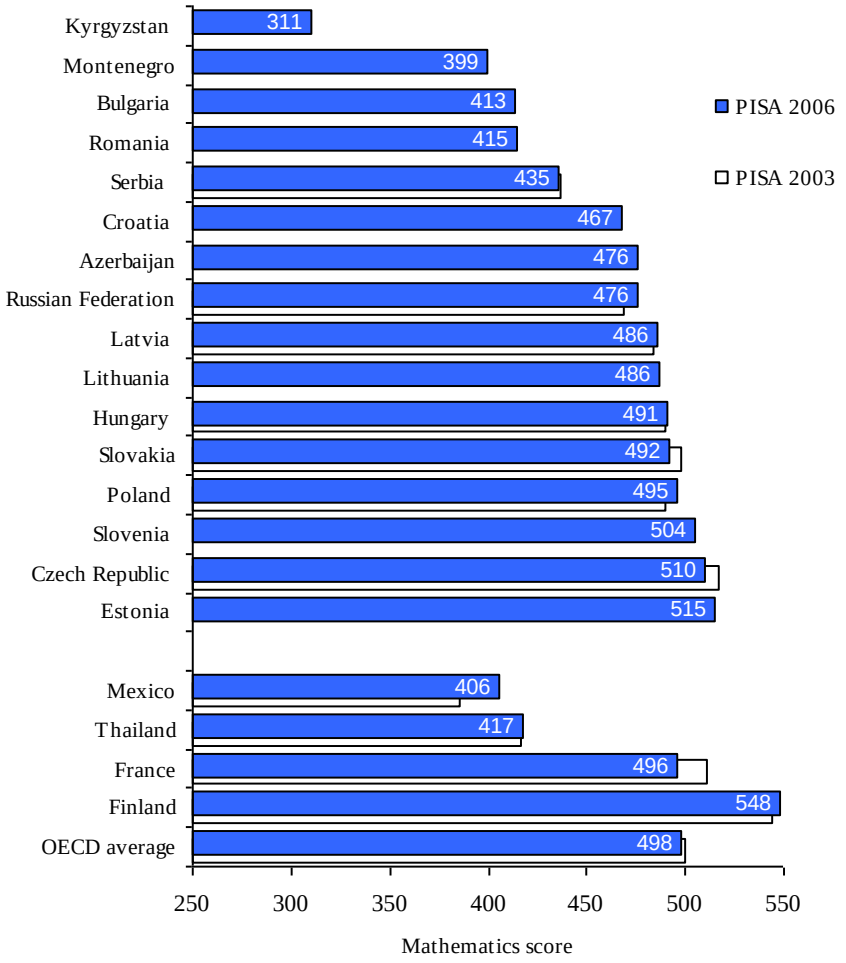
Some countries in the region have participated in international comparative studies of learning achievement, although the poorer countries of the region are under-represented in these comparisons. The main studies are TIMSS (mathematics and sciences), PIRLS (literacy and reading) and PISA (reading, mathematics and sciences). The first two are designed to measure learning achievements or outcomes for particular aspects of the school curricula, while PISA is designed to assess children's ability to interpret words, numbers and aspects of science which they come across in daily life (including at school), and to provide a broader measure of the acquisition of "life skills".

The mathematics scores recorded in the PISA surveys for 2003 and 2006[47] suggest that the CEE/CIS countries included in the study saw no statistically significant change in their performance over this period (Figure 12). The highest average scores in 2006 were for Estonia and the Central European countries, which had levels similar to the OECD average. The Russian

[45] State Committee of the Republic of Uzbekistan on Statistics (2007) p. 64-68
[46] National Bureau of Statistics of the Republic of Moldova (2008) p. 77
[47] The population sampled in the PISA surveys includes people between 15 years and 3 months and 16 years and 2 months. The average age of people surveyed is 15 years and 7 months. People which are enrolled at the 6th grade or lower are excluded.

Federation and Azerbaijan[48] occupy middle positions for the CEE/CIS (with the latter showing very low levels of inequality in achievements), while Bulgaria and Romania perform less well than the other EU countries of Eastern Europe and Baltics, and are also out-performed by Serbia and Croatia. Bulgaria also shows high levels of inequality in performance and, with Hungary and Slovakia, shows the highest correlation between the education level of the parents and school achievement,[49] suggesting that existing socio-economic inequalities are strongly reflected in school achievements.

Figure 12: Student achievements in mathematics, PISA 2006 (CEE and CIS and selected other countries participating to PISA in 2006)



Source: Programme for International Student Assessment (PISA) database 2007
Note: PISA covers students who are aged between 15 years 3 months and 16 years 2 months at the time of the assessment and who have completed at least 6 years of formal schooling (regardless of the type of institution in which they are enrolled and of whether they are in full-time or part-time education, of whether they attend academic or vocational programmes, and of whether they attend public or private schools or foreign schools within the country). The average age of the students participating to the survey was 15 years and 9 months.

[48] OECD has acknowledged the existence of problems with the PISA mathematics data for Azerbaijan. See UNICEF (2009a) p. 24
[49] OECD (2008)

Only one Central Asia country was included in the PISA study in 2006, namely Kyrgyzstan, and it has far lower scores than the rest of the region (in fact the lowest of all countries participating in the study), with high levels of disparities in results between the best performing and the worst performing pupils.

Comparison of the PISA reading and sciences results confirm the general picture emerging from the mathematics study, but with some re-ranking, notably for Azerbaijan which is in the middle of the regional ranking for mathematics, but ranks low among the CEE/CIS countries for science and reading. The strikingly different performance of this country in the different subject areas deserves further study.[50]

PIRLS data on reading performance in 2006 (curricula based performance evaluation) for children at the 4th grade of education show significant and robust improvements since 2001 for the Russian Federation and also good scores for the countries of Central Europe and Baltics, while TIMSS data for 2007 also put the Russian Federation among the top performing countries for both mathematics and sciences tests, for students in the 4th and in 8th grade.[51]

6. CHILDREN AND EXTREME FORMS OF HOUSING DEPRIVATION

The environment in which a child grows up influences her or his chances of having a healthy development, good education achievement and smooth socialization. Housing conditions represent an important and immediate aspect of the child's environment, and housing deprivation can manifest itself in different ways, including homelessness, dwelling in precarious, unsafe, or unhygienic conditions, overcrowding (lack of space/room), lack of or unreliable access to basic utilities (water, electric power, fuels for heating and cooking). These deprivations can be both a cause and a manifestation of material poverty.

Although there were housing shortages, quality problems, and overcrowding under central planning, the right to housing was one of the social guarantees provided by the state, and housing costs were minimal. As with most other commodities, the problem was access and availability, not cost; and priority was given to urban dwellers. With transition, the price of housing and housing maintenance services have shot up, making both access and cost a problem for low-income households, and representing one of the motivations for young people to delay family formation.

Data from household surveys are used below to look at evidence of households being affected by overcrowding, lack of connection to the piped water system, access to improved sanitation

[50] It is important to note that OECD acknowledged the existence of problems with the PISA mathematics data for Azerbaijan. See UNICEF (2009) p. 24
[51] See Mullis, Martin and Foy (2008)

facilities, and the use of dirty fuels for cooking and heating[52]. Although these are measures of household rather than child deprivation, households with children, especially large households, tend to be over-represented among those suffering from various forms of housing deprivation. They are however proxy indicators for housing deprivation, and do not capture the full extent or all aspects of this dimension of child deprivation.

For example, the indicators derived from household surveys only rarely provide information on the most extreme forms of housing deprivation, i.e. the population living in informal settlements, the homeless or internally displaced persons (IDPs), and informal migrants living in abandoned or unused buildings. These categories are usually not covered by household survey samples, although some special ad hoc surveys have been carried out in selected cities or regions.[53] In fact the conditions faced by slum dwellers living in the outskirts of many important cities of the region, cannot be meaningfully measured using the traditional indicators used to describe housing conditions (for example, building materials used for the walls, floor, roof, sanitation availability, water connection etc.). In Central and Eastern Europe, Roma people, with their large child populations, constitute by far the largest group living in such informal settlements. Apart from the sub-standard housing conditions, this group also suffers from precariousness in their housing solutions, and the constant threat of evictions.

In some cities, for example Belgrade and Baku, the pressure on housing increased during the 1990s due to the arrival of IDPs from war zones, who settled in various types of make-shift accommodation. In 2008, Azerbaijan had one of the largest IDP populations (circa 570,000), followed by Serbia (250,000), Bosnia (125,000), Armenia (8,400), Croatia (5-7,000), while the Russian Federation also has an IDP population from the war in Chechnya (for which estimates vary).[54] The former Yugoslav Republic of Macedonia also had refugees and IDPs following the armed conflicts in the area, but has one of the best records in helping IDPs to re-settle. The Azerbaijan government has in recent years increased efforts to re-house IDP households, but a section of the IDP population continues to live in improvised shelters of poor structural.

The above represent extreme forms of housing deprivation, however, housing shortages, and poor quality of housing, are problems facing large numbers of households in the region. The construction market stagnated in most of the region during the 1990s, in large part due to the fall in government investment in public housing, and the existing housing stock has suffered from lack of repair and maintenance work, as have the delivery systems for utilities. In general public policy on housing and social housing has been absent or been given low priority.[55] Economic

[52] "Dirty fuels" include firewood, charcoal, crop waste, coal, whereas "clean fuels" include liquid gas, natural gas or electricity. Dirty fuels tend to be associated with a greater incidence of respiratory infections among infants and children.

[53] Krasheninnokov (2003)

[54] All the estimates of and the information on IDPs are from the International Displacement Monitoring Center (www.internal-displacement.org, accessed in December 2008).

[55] See UNECE (2007). In Georgia, for example, privatization of the housing stock progressed during the 1990s and early 2000s but without a clear direction and coherent institutional framework and there has been virtually no government housing policy since independence. The construction sector recovered only slightly after 2004.

recovery has been accompanied by a revival of activities in the construction sector, in particular in capital cities, and mainly driven by the private sector. As prices increased, it is not clear how the poorest have benefited from the construction boom in the 2000s. On the other hand, the concentration of economic activities in capital cities and urban conglomerates has led in some cases to the growth of slums around the outskirts, or in certain parts, of big cities, as a result of unregistered internal migration patterns. Lack of maintenance or reform of utility services mean that interruptions in heating, electricity and water supply are frequent in the multi-storey apartment blocks built in the central-planning era, and cases of flooding, leaks, and cracked ceilings are frequently reported.

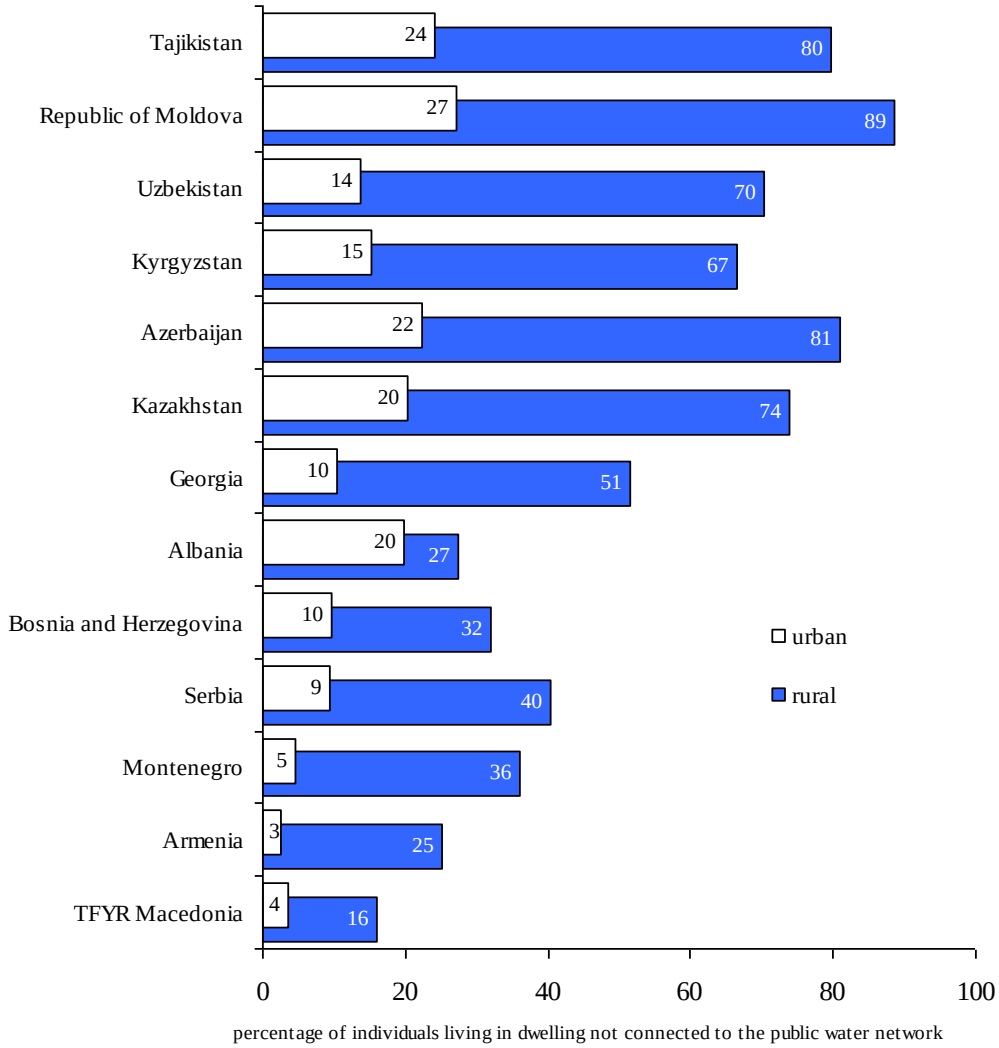
Using survey data to evaluate different aspects of housing deprivation, the World Bank (2005) suggests that extreme overcrowding[56] was common in some CIS countries and in a few South-Eastern European countries in the early 2000s[57], and was in general higher in capital cities and in other urban areas than in rural areas. Other forms of housing deprivation (lack of access to public water network, lack of sanitation and use of unclean fuels) were more linked to low coverage of public utilities infrastructure and tended to be more common in rural areas. Both overcrowding and lack of access to the utilities network were, not surprisingly, more prevalent among low-income households. Lack of connection to the utilities' network was particularly frequent in the rural areas of the poorer countries of the region, but also in the informal settlements which have sprung up in urban areas.

However both UNICEF (2006) and World Bank (2005) point out that low levels of coverage are not only a problem in rural areas in the countries with the lowest levels of GDP per capita, but are also found in some middle-income countries. For example, data for Romania in 2003, show that 15 percent of the population of Bucharest and around 80 percent or the rural population did not have a connection to running water. In Lithuania in 2003 slightly less than 10 percent of urban dwellers (apart from those living in the capital city), and around 40 percent of the rural dwellers had no running water in their home. It should also be pointed out that in some low and middle-income countries connection to centralized water supply does not represent a guarantee of uninterrupted supply of water. The same is true of centralized electricity and gas supply. Neither is the quality of water supplied through the public network always satisfactory, especially in the poorer countries, meaning that connection is not necessarily a guarantee of safe drinking water. In some rural areas, households with access to wells may have better quality water than those connected to the public network. Again, the full extent of this aspect of housing deprivation is difficult to capture with the available survey data.

[56] Defined here as the percentage of individuals living in dwellings with space less than 6 square meters per person, or with more than 3 persons per room.

[57] The highest levels of overcrowding, around 2003, are found in Tajikistan (with 37 percent of individuals living in dwelling with more than 3 persons per room), Kyrgyzstan and Albania (both at 17 percent).

Figure 13: Population living in dwelling not connected to the public water network in urban and rural areas, 2005-06 (per cent)



Source: MICS data; for Armenia, Azerbaijan and the Republic of Moldova data are from DHS carried out in 2005 or 2006.
Note: the household connection takes into account only piped water that is distributed in the house or just outside (yard) and that can be considered as used privately. Countries are ordered by decreasing levels of the national average of household water connection. Data from MICS refer to individuals; data from DHS refer to households.

Figure 13 presents data derived from MICS and DHS surveys carried out in 2005 and 2006 and confirms that lack of water connection in the home is primarily a rural problem. The highest shares of households without a connection are found in Central Asian countries and the Republic of Moldova, where a significant share of the urban population also has no piped water connection. Armenia and the countries of the former Yugoslavia report lower average national levels of non-connection, but the share of households in rural areas without a connection always tends to be higher. The highest share of households affected is found in Tajikistan, where about two thirds of the total population lives in homes which are not connected to the public water network. However, here again large sub-national differences exist: the non-connection rate is 80

percent in rural areas, 24 percent in urban areas, and less than 10 percent in the capital city, Dushanbe.

Although the share of households connected to the water supply system tends to be correlated with the country's level of GDP per capita, there are two exceptions in the region: Kazakhstan has the highest GDP per capita level (among the countries for which data for 2005-06 are available), but it has among the largest shares of households without water connection. Armenia on the other hand, ranks better in terms of its share of households with a water connection, than in terms of GDP per capita.

Lack of piped water holds additional implications for children, since they are often involved in water fetching activities: in fact according to MICS results, children under 15 years in Kyrgyzstan and Tajikistan living in households without access to water in the dwelling or in the yard represent around 20 and 10 percent respectively of the household members with the main responsibility for fetching water. This has implications for the amount of time available to children for study and play.

As with access to the public water infrastructure coverage, households living in rural areas in the poorest countries of the region are most likely not to have access to improved sanitation. DHS data for the Republic of Moldova, Azerbaijan and Armenia suggest that around one fifth of rural households had no access to improved sanitation facilities,[58] although coverage is also not complete in urban areas. In the Republic of Moldova in 2005, around 6 percent of households shared a toilet with other households, with a slightly higher prevalence of sharing in urban areas. In South-Eastern Europe, lack of access to improved sanitation is clearly more common in the rural areas of the former Yugoslav Republic of Macedonia and Bosnia and Herzegovina where, 13 percent and 10 percent respectively of individuals did not have improved sanitation facilities in their dwellings.

Finally, unlike the other housing indicators discussed above, use of unclean fuels is not only found in the lower-income countries. Use of solid fuels for cooking and heating is one of the main sources of indoor air pollution, and is associated with the risk of respiratory diseases among young children. The use of solid fuels for cooking is widespread in rural areas, but in many countries is also common in urban areas. The highest rates of use of solid fuels for cooking in rural areas are found in Georgia (90 percent), Albania (79 percent) and Bosnia and Herzegovina (67 percent), while in most rural areas in Central Asia the rate is lower than 50 percent. Urban rates are much higher in the European countries surveyed in MICS or DHS: in Albania and the former Yugoslav Republic of Macedonia around one fourth of the urban dwellers live in households which use solid fuels as a main source of fuel for cooking. On the contrary, the urban rates are very low in Central Asia: for example, this form of housing deprivation is found among only 8 percent of urban households in Tajikistan, 7 percent in Kazakhstan and 1 percent in Uzbekistan.

[58] DHS reports define improved sanitation as means of excreta disposal which include flush toilet, ventilated improved pit latrine and latrine with a slab.

7. THE FAMILY ENVIRONMENT: CHILDREN GROWING UP WITH ONLY ONE PARENT OR WITHOUT PARENTAL UPBRINGING

The family is the primary environment in which children grow and develop, in which they are cared and where they learn how to socialize and behave. The role of adults, in particular of parents, and the quality and stability of their interaction with children are important for children's physical, intellectual and emotional security and development. While there has been a long-term trend in most industrialized countries towards a smaller role for traditional families and a reduction in family stability, the strength and importance of the family unit varies between and within countries. The changes brought about by transition, including the initial economic crisis, have had a striking impact on family structure, and are reflected in the tendency to delay family formation and childbearing, increasing signs of family instability (divorce rates), and the growth in the number of children living with single parents or in state care.

Although there has been an overall decrease in the child population, several countries in the region – in particular those in Western CIS, Central Europe and Baltic States – have seen a growth in the share of children living with a single parent, and to a lesser extent without parents. There are several reasons for the growth in the number of single parents, including the increased share of children born out of wedlock, the increase in divorce rates and also, in particular in the Russian Federation, the growth in adult male mortality rates. In some countries there has also been an increase in the number of children left behind (for shorter or longer periods) by one or both parents migrating abroad.

With the transition some countries of the region – those in Western CIS, Baltic States and those in Central Europe – experienced a marked rise in the number of children living in single parent families.[59] For example, in the Russian Federation, in 2003, around 28 percent of children were not living with both parents, and the main cause for a parent's absence was divorce, followed by the death of the father.[60] Census data for Central Europe and the Baltic States for 2000/01 showed that circa 20 percent of children in Slovakia and Slovenia, 31 percent in Estonia and 37 percent in Latvia were living without one or both parents. For comparison, in the United Kingdom, the EU 15 country with the highest rate, 24 percent of children were living with only one parent in the early 2000s.[61]

In countries with large levels of out-migration, the number of children left behind by migrating parents has grown. Data for Albania and the Republic of Moldova show that the share of children left behind - even if in some cases this is for short periods - is significant. For example, survey data for the Republic of Moldova in 2007 suggest that 37 percent of children aged 0-14 years were not living in families with both parents, and in slightly more than half of the cases this was due to the migration of one or both parents.

[59] At the beginning of the 1970s several republics of the former Soviet Union (for example the Russian Soviet Socialist Federative Republic and the Estonian Soviet Socialist Republic) ranked among the countries in the world with the highest shares of children living in single parent households, but during the following two decades they experienced only very slight changes, while countries like Sweden, the United Kingdom and the United States rapidly outpaced them. See Klugman and Motivans (2001, p. 10)

[60] UNICEF (2006) p.34

[61] European Commission (2008)

Children living in formal care

Children living in institutions experience a more extreme form of deprivation of parental care. The increase in numbers living in public care institutions is partly due to the economic difficulties experienced by families in transition, but also due to the traditional ways in which the state has intervened to provide child protection in most countries of the region. Under central planning, placement of children in formal care – usually in large institutional structures - was the main way for the states to provide protection to children deprived of parental care. Such reliance on these structures was based on the underlying ideological belief that the state could substitute the family's role in child upbringing. In the transition period, this belief has lingered on, and has meant that in many countries formal care in institutions is still seen as a viable form of child protection, despite the fact that a large body of international literature points to the harmful effects of institutional care on the psychological and emotional development of children.

Children living in institutions include orphans, children of parents legally deprived of their parental rights, children of parents who consider themselves unable to fulfill their parental duties, and children with disabilities. But the total numbers also include children living boarding schools, mainly from rural or remote areas. For example, in Kyrgyzstan and Azerbaijan, almost three quarters of children living in institutional care are those enrolled in boarding schools (see Table 1 below).

The vast majority of children in institutions still have their biological parents, and only a small percent are orphans. The social and economic instability of the early transition period put family structures under particular stress, and in the absence of preventative measures and support mechanisms, led to an increase in the number and rates of children left without the parental care (mainly those with parents who considered themselves unable to fulfill their parental duties), and an increase in the rates of children being placed in formal care, usually in institutions.

There are large differences within the region regarding the rates of children in formal care, with the countries in the Western CIS, Kazakhstan and Lithuania having the highest rates, and those which were part of the former Yugoslavia and the Central Asian countries having the lowest prevalence. The increasing trends in children being placed in formal care have continued even in the period of economic recovery in most countries of the region: high numbers of children continued to enter formal care each year throughout the first half of 2000s, and even in cases where the absolute numbers declined, the rates of children entering formal care often increased due to the shrinking size of the child population.

As noted above, in some countries the increasing rates are due to the large shares of children attending boarding schools to obtain general education. In some cases, this might be done in the best interests of the child, for example, when the child lives in remote and rural areas of Central Asia. If the care provided in boarding schools is of good quality, and the schools are managed well, children can indeed benefit from increased access to schooling, especially girls who might otherwise be under family pressure to drop out of school at an early age. Children in boarding schools can also benefit

from regular and nutritious meals, and those with socialization problems, especially those from poor households or from ethnic minorities, can benefit from integration with children from other backgrounds. However, boarding schools, if they are not properly staffed, equipped and managed, have the potential to do the same harm and have the same long term negative effects on the child's development as other forms of institutional care. There is some evidence that Central Asian countries, including Kyrgyzstan and Tajikistan are increasingly relying on boarding schools to help children from poor families benefit from obligatory schooling.[62] Here it will be important to ensure that that the quality of care and staff training is adequate, and that policy makers are aware of the potential harm from the child protection perspective of pursuing this type of solution to guaranteeing access to obligatory education, and also of keeping close contact with the family environment.

In specific cases, institutional care for some severely disabled children may also be the best option, due to the need to guarantee support from professional carers at all times. In these extreme situations, it is necessary to ensure that the quality of care is appropriate in the best interest of the individual child, both from the medical and child protection point of view[63]. From the point of view of monitoring, it is important that numbers and rates of children in institutions are disaggregated in order to identify the different types of institutions (large residential, boarding school, family-type), and the reasons for placement.

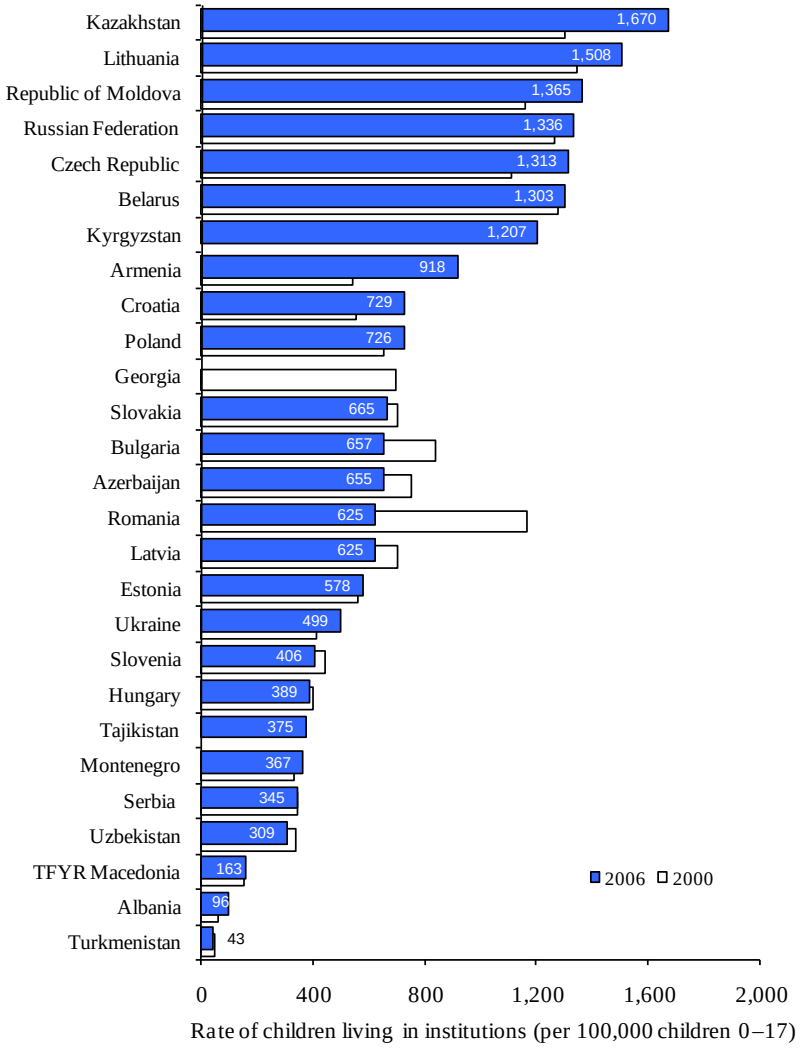
Two indicators relating to the type of formal care are discussed below, namely the rate of children living in institutions and the rate of children living in guardian or foster care. As noted above, there is little tradition in the region of looking for alternative solutions to institutional care for children. However, as awareness of the damaging effects of institutional care has increased, foster care has gradually emerged as a viable alternative, but in some countries more than in others. But despite the increase in family-based care, there are no clear or consistent signs of a reduction in the rates of children being placed in institutions. In some cases, there has even been an increase in the latter, suggesting that the flow of children into formal care has not yet abated, especially in those countries which have traditionally relied most on residential care. Thus alternative family-based forms of child care may be expanding, but are not necessarily replacing the previous reliance on residential/ institutional care. And the continuing high shares of children being separated from their biological families suggest that mechanisms to provide support to families in need are still underdeveloped.

Figure 14 ranks countries according to the rate of children living in institutions at the end of 2006 and compares it with data for 2000. In six countries, Kazakhstan, Lithuania, the Republic of Moldova, Russian Federation, Czech Republic, Belarus and Kyrgyzstan, more than one percent of the child population lives in some form of institutional care (including boarding schools). In most of the countries with the highest rates, the proportion of children living in institutional care actually grew between 2000 and 2006 (although in the most recent years some signs of decline in the rates were registered). On the other hand, the most positive trend can be seen for Romania, where the share of children living in institutions almost halved between 2000 and 2006, largely as a result of public and international support for the development of foster care, or smaller family-type care

[62] UNICEF (2008c)
[63] UNICEF (2008c)

solutions. However, it should be noted that the rates of institutionalization for Romania also include children over the age of 18, and there is evidence that, with the reduction in the number of new entrants to the institutions, those are more and more populated by adult individuals (who grew up in institutional care) for whom it is difficult to find an alternative – family based - accommodation. Unlike the rest of the Western CIS countries, Ukraine performs relatively well. However if the data on children living in institutions are disaggregated by regions it is clear that some regions in the south-east of the country have the highest rates and also experienced the largest increases between 2000 and 2004[64].

Figure 14: Children living in institutions (per 100,000 population aged 0-17)



Source: TransMONEE database 2008
Note: definitions may differ among countries. Data for Western CIS, Central Asia and Caucasus countries, as well as Czech Republic and Lithuania include children living in boarding schools. In some countries data includes also individuals aged 18 and more residing in child care institutions, for example in the former Yugoslav Republic of Macedonia, Romania, Slovenia and the Baltic States.

[64] Mykytyn (2005)

Table 1 provides information on the absolute numbers of children living in institutions, for selected countries, and of these, the numbers living in boarding schools. The data refer to the end of 2006, and illustrate clearly how the populous countries like Ukraine and Uzbekistan with relatively lower rates of institutionalization, are among the countries with the highest absolute numbers of children in institutions (occupying respectively fourth and fifth place in the region, after the Russian Federation, Kazakhstan and Poland). Table 1 also shows the impact of placement in boarding schools on raising the numbers on children living in institutional care: in fact, in the countries of Central Asia and Caucasus, children in boarding schools represent the majority of those living in institutions.

Table 1: Children living in institutions in selected CEE and CIS countries, absolute numbers and rates (end of 2006)

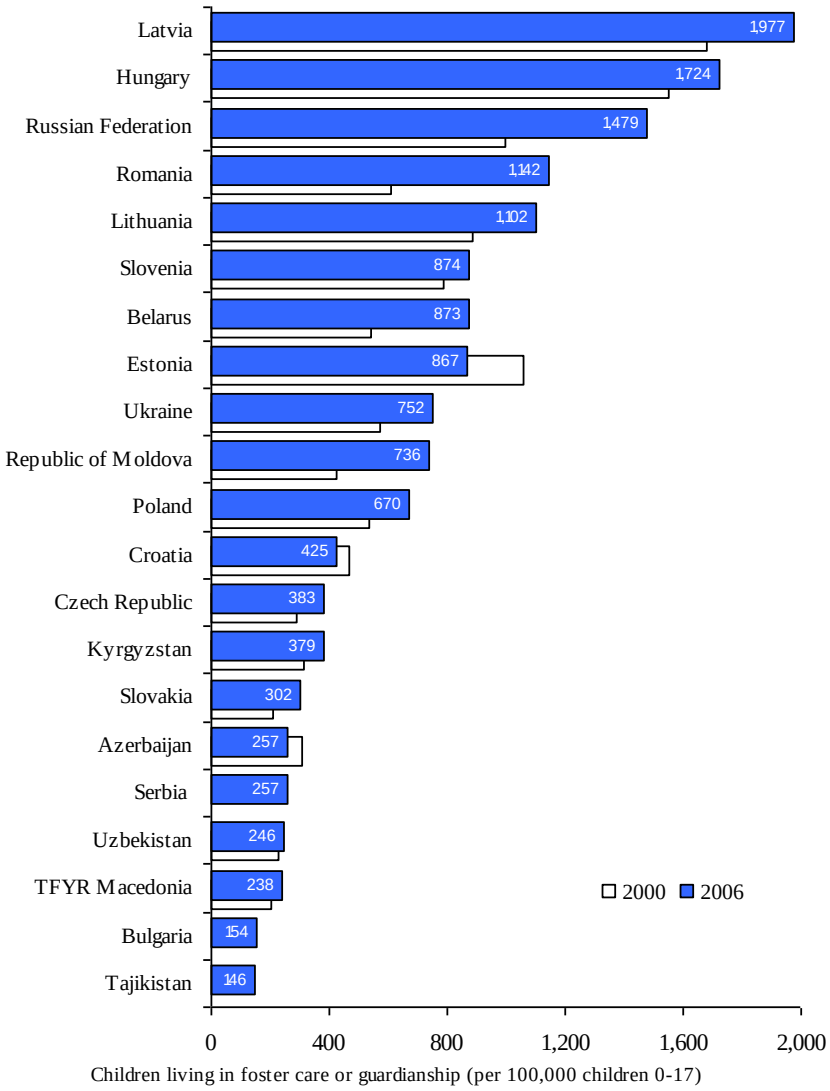
	Total number of children living in residential care	- of which in general type boarding schools	Children living in residential care, including boarding schools (per 100,000 children 0-17)	Children in general type boarding schools (per 100,000 children aged 0-17)
Czech Republic	24,517	2,957	1,313.3	158.4
Lithuania	10,491	4,278	1,508.4	615.1
Belarus	24,349	8,968	1,303.1	479.9
Republic of Moldova	11,551	6,039	1,365.1	713.7
Russian Federation	360,942	112,746	1,336.1	417.4
Ukraine	42,634	10,553	499.5	123.6
Armenia	7,597	1,973	917.9	238.4
Azerbaijan	16,992	13,075	655.4	504.3
Georgia	8,155	4,696	761.6	438.6
Kazakhstan	76,859	48,418	1,670.3	1,052.2
Kyrgyzstan	23,390	17,974	1,206.6	927.2
Tajikistan	11,646	8,462	375.4	272.8
Uzbekistan	32,008	5,076	308.8	49.0

Source: TransMONEE database 2008
Note: data for Georgia refer to end 2003.

Finally, rates of children living with guardians or in foster care (Figure 15) grew in most of the region during the 2000s, reflecting both the increase in rates of children left without parental care, but also in several countries the promotion of alternatives to institutionalization. In 2006, slightly less than 2 percent of children in Latvia and Hungary were living in foster care or with a guardian. In the Russian Federation the share of children in institutional care grew between 2000 and 2006, but there was also an increase in the share of children being placed with guardians. In Romania, the increase in the rate of children in foster care almost entirely compensated for the decline in institutional care. Here, there have clearly been policy efforts to prioritise more child-friendly solutions, but there is no evidence of effective preventative measures to reduce family

breakdown, meaning that the actual numbers of children deprived of parental care are not decreasing[65].

Figure 15: Children living in foster care or guardianship (per 100,000 population aged 0-17)



Source: TransMONEE database 2008
Note: definitions and regulations differ country by country. The 2006 figure for Estonia refers to 2005.

[65] Panduru, Pisică, Molnar and Poenaru (2006)

8. CONCLUSIONS

The previous sections have provided an overview of child wellbeing across five dimensions for countries in different parts of the region. Table 2 summarises the conclusions emerging from the analysis, setting out priority child well-being concerns for the different sub-regions of CEE/CIS. The analysis shows that the period of economic recovery from the late 1990s to 2008 brought with it clear improvements in most average indicators of child well being throughout the region. There was a decline in child income poverty and child mortality (although there remain large disparities across the region), average improvements in education indicators, no obvious deterioration in housing indicators, and rates of child institutionalization also showed a modest improvement in the 2005-2007 period. However the analysis has also shown that significant challenges remain to achieving long term and sustainable improvements in the different dimensions, across all sections of the child population.

As the region entered, from mid-2008, a new period of economic uncertainty, the wellbeing of children is at a crossroads. Further progress towards realizing child rights will depend on a continuation of investments in children, in terms of public expenditure and also on the implementation of the long term and complex reforms needed to improve the efficiency of expenditure and its impact on child outcomes. However, there is a risk that the economic crisis will divert the policy focus away from necessary investments in, for example, improving primary health care services for mothers and children, expanding pre-school access and improving the quality of school education, and developing new systems of child protection as alternatives to the excessive reliance on institutional care. Unless these investments are protected and continued, there is a danger that the crisis will lead to a reversal not only in child income poverty trends, but also in some of the positive trends achieved in the other dimensions of child wellbeing since the beginning of the decade.

The results of the review have underscored the fact that economic growth has not and cannot on its own lead to improved indicators for all children across all dimensions but must be accompanied by long term policy efforts to improve access and quality of basic public services, and strengthen social protection for vulnerable families. This is further confirmed by the fact that the countries with high levels of GDP do not perform well in all child well-being indicators, and the fact that national averages for each indicator frequently mask significant intra-country disparities, even within the richer countries. While there have often been improvements in national averages in the period of economic growth, persistent intra-country differentials point to continuing difficulties faced by vulnerable families in certain regions or population groups.

The worrying outcomes for some proxy indicators for youth socialization (especially mortality due to external causes in middle-income countries) point to mixed results for young people in the middle income and richer countries during the period of economic growth, where not all have been included in the benefits of growth, and where there has been insufficient policy attention given to the need to replace previous channels of socialization in the vacuum created by transition. Exclusion among youth is often not perceived as a problem by policy makers, and there has been little investment in preventing delinquent behaviour, which is often perceived as a problem of individual irresponsibility rather than a collective problem. The lack of a tradition of

professional social workers at the local level to help families is particularly a problem in those countries where communities and families show signs of instability and lack of cohesiveness.

Some countries with strong economic growth rates did not experience substantial progress in reducing the rates of children living formal care. The increase in rates in the initial transition period was usually attributed to the rise in income poverty. However the continuing high levels even in the period of economic recovery, despite an increase in awareness of the potentially damaging effects for the individual child of institutional care, point again to lack of effective forms of social protection for children in vulnerable families. Incomplete reforms aimed at providing alternative solutions for families which feel unable to provide adequate care for their children, mean that there are still no other options which would allow the best interests of the child to be respected.

While it is difficult to generalize for the sub-regions, since they are also heterogeneous across different indicators, an attempt is made below, and in the attached table, to identify and summarize the remaining open challenges:

1 - For the five Central European countries, levels of extreme poverty are low, and the positive results in indicators relating to child health, education as well as housing point to successful policies regarding provision and quality of basic public services and infrastructure. However, the data for these countries also suggest problems of exclusion for some sections of the child population, as manifested in quite high levels of relative child poverty, and evidence of school segregation as well as a greater probability of living in public care institutions for children from the Roma population. The policy priorities in these countries should be aimed at ensuring an adequate standard of living and access to an equal quality of basic services for all children.

2 - The three Baltic countries also have low rates of extreme child poverty and relatively good results for education and health, suggesting that overall access to basic services are not a priority concern. Here again, however, there are signs of inequalities and differentials in quality. Two of the countries (Estonia and Lithuania) have high levels of mortality for 15-19 year olds, pointing to problems of youth marginalization and moral disorientation in the face of the collapse of those institutions previously entrusted with the socialization of adults, lack of employment opportunities, and families under stress. Latvia and Lithuania have high rates of institutionalization, again suggesting continuing pressures and lack of support for vulnerable families.

3 - The eight countries of SEE have relatively high rates of extreme child poverty, and problems of exclusion, with Roma in some countries being strongly over-represented among the extremely poor. Indicators of child health and education point to high levels of differentiation in the quality of basic services. Romania and Bulgaria are the only EU countries with U5MR of over 10 per thousand live births, and Albania has one of the highest rates of child malnutrition of the whole CEE/CIS region. Pre-school enrolment rates are under 50 percent in some of the Western Balkan countries. The quality of housing and utilities infrastructure also shows large differences, with the latter being less available in rural areas.

Table 2: Child well-being challenges in the CEE and CIS sub-regions

	income poverty	health	education	housing	child protection / deprivation of parental upbringing
Central Europe (Czech Republic, Hungary, Poland, Slovakia and Slovenia)	Very low levels of child extreme poverty. More substantial percentage of children living on less than PPP $.5 a day. Relative poverty matters, as well as regional inequalities. Risk of social exclusion.	Low and very low levels of infant and child mortality. Low levels of mortality for older children. In some countries, some evidence of higher rates of overweight and obesity among older children.	High rates of enrolment in preschool, in particular for the year prior to the beginning of primary education (for 5 or 6 years old). High levels of enrolment in upper-secondary education. Average quality of education is good, good performance in international comparison studies. Exclusion of Roma children, segregation in school.	Low levels of extreme housing deprivation.	High rates of children living in institutional care in Czech Republic and intermediate rates in the other. Hungary has a high rate of children living in foster or guardian care. Over-representation of Roma children in public care institutions or in special schools for children with disabilities.
Baltic States (Estonia, Latvia and Lithuania)	Very low levels of child extreme poverty. More substantial percentage of children living on less than PPP $ 5.00 a day. Relative poverty matters, as well as regional inequalities. Risk of social exclusion.	Low levels of infant and child mortality. No major nutritional challenge is evident. High levels of mortality for 15-19 years old in Lithuania and Estonia due to 'external cause' (voluntary or involuntary injuries and suicide)	High rates of enrolment in preschool, in particular for the year prior to the beginning of primary education. High levels of participation also to upper-secondary education. Average quality of education is good, quite good performance in international comparison studies	Low levels of extreme housing deprivation. Rural areas are disadvantaged in terms of access to basic utilities.	Latvia has a high level of children 0-3 living in infant home and a high rate of children in foster or guardian care. Lithuania has both high levels of institutionalization and foster care.
South-Eastern Europe (Bulgaria, Romania, Albania, Bosnia and Herzegovina, Croatia, Montenegro, Serbia and TFYR Macedonia)	Child extreme poverty is substantial in some countries and in some regions within countries. Roma children are over-represented in the population living in extreme poverty	Intermediate levels of infant and child mortality. Persistence of substantial subnational inequalities. Evidence of quite high levels of prevalence of undernutrition for children under-5 in Albania.	Quite high levels of participation in preschool in Bulgaria and Romania. Intermediate in the other countries. In Bosnia and Herzegovina levels of preschool participation are very low. Intermediate rate of participation in upper secondary education. Subnational inequalities in enrolment to non compulsory levels. Inequality in learning achievements.	Problems of overcrowding in some countries, in particular in urban areas and for the poorest sections of the population. Problems of quality of housing stock. Levels of non-connection to basic utilities (water and sanitation) vary across this sub-region. Rural areas are less covered by basic infrastructure, also in the richest countries of South Eastern Europe.	Intermediate rates of children living in institutional care in Bulgaria and Romania (this one, has high rate of children in foster care). Low rates of children in formal care in the other countries of the region.

Western CIS (Belarus, Republic of Moldova, Russian Federation and Ukraine)	High levels of extreme child poverty in the Republic of Moldova. In the other countries extreme, extreme poverty risk is higher in large households with children. Substantial sub-national inequalities. Substantial shares of children living on less than PPP $ 5.00 a day.	Intermediate to high levels of infant and child mortality. Persistence of subnational inequalities. High and very high levels of mortality for 15-19 years old, especially due to external causes	High levels of participation to preschool education - in particular for the year prior to primary education - and intermediate levels for upper secondary. Subnational inequalities.	Problems of overcrowding in some countries, in particular in urban areas and for the poorest sections of the population. Problems of quality of housing stock. Levels of non-connection to basic utilities are very high in the poorest rural areas. Rural areas are less covered by basic infrastructure. In the Republic of Moldova quite high rates of non connection to the public water network are found also in urban areas.	High rates of children living in institution and in foster care in most of the countries of Western CIS. High rates of children left behind by migrant parents in the Republic of Moldova.
Caucasus (Armenia, Azerbaijan and Georgia)	Medium levels of extreme child poverty, but very high percentage of children vulnerable to extreme poverty. Regional inequalities.	High levels of infant and child mortality. Substantial inequalities. Monitoring challenges. Some evidence of nutritional problems for children under-5 at the subnational levels. Azerbaijan is one of the countries with the highest levels of mortality for 5-14 year olds. All the Caucasus countries rank among the countries with low levels of mortality for 15-19 year olds	Low levels of participation to preprimary education and intermediate to low levels in upper secondary school. Substantial subnational inequalities.	Problems of overcrowding in some countries, in particular in urban areas and for the poorest sections of the population. Problems of quality of housing stock. Levels of non-connection to basic utilities are very high in the poorest rural areas. Rural areas are less covered by basic infrastructure.	Intermediate rates of children living in institutional care, low levels of children in foster or guardian care.
Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan)	Very high levels of extreme poverty. Substantial subnational inequalities.	Very high levels of infant and child mortality. Subnational disparities. Monitoring challenges. High levels of undernutrition found in some countries and in some subregions within countries. High levels of mortality for 15-19 year olds in some countries, especially Kazakhstan	Very low levels of participation in preprimary education and in upper secondary school. Substantial subnational inequalities. In Tajikistan evidence of female disadvantage in access to upper secondary. Data on learning achievements from international comparative studies for Kyrgyzstan point to low quality of education.	Problems of overcrowding in some countries, in particular in urban areas and for the poorest sections of the population. Problems of quality of housing stock. Levels of non-connection to basic utilities are very high in the poorest rural areas. Rural areas are less covered by basic infrastructure.	High rates of children living in formal care in Kazakhstan and Kyrgyzstan (mainly in boarding schools). Quite low levels in the rest of Central Asia. Low rates of children living in foster care.

4 - The four countries of the Western CIS show a relatively high risk of extreme poverty (very high in the Republic of Moldova) for households with children, and large sub-national inequalities, pointing to lack of social protection and cash transfers for vulnerable families. The fact that large sections of the child population are vulnerable to poverty, in that they are living on less than PPP $ 5.00 per day, points again to the importance of child benefits and other forms of support. Inadequate support for families under strain is also suggested by the high rates for children living in institutions in these countries, and in the Republic of Moldova, by the high rates of children being left behind by migrants. The large sub-national inequalities in income levels are mirrored in the large differentials in the results for infant and child mortality, pointing to differentials in employment and income opportunities, but also differentials in the quality of primary health care. The worryingly high levels of mortality due to external causes for young people aged 15-19 years confirm the lack of mechanisms, institutions to support family in the upbringing of children (many forms of deviance which are manifested in the adolescent phase have their roots in the experiences of the child in earlier phases of his/her development), and lack of policy attention to helping marginalized youth. Here pre-school coverage is relatively high, but there is possibly a need to work on improving the quality, and in providing other forms of parenting support.

5 - The three countries of the Caucasus have low rates of youth mortality rates and of children living in institutional care, pointing to the greater strength of traditional family structures and communities to help with socialization processes. However, a very high percentage of children are vulnerable to extreme poverty, and there is also quite a large share of children already living in extreme poverty, with evidence of significant sub-national inequalities. Lack of access to quality primary health care, and inequalities in access and quality, are reflected in the relatively high levels of infant and child mortality and child malnutrition in some sub-national regions.

6 - The five countries of Central Asia have high levels of extreme child poverty, and very high levels of infant and child mortality. Levels of child malnutrition are also high in some sub-regions. Again, the strength of traditional family and community structures seems to be reflected in the lower rates of children living in institutions. While the countries have managed to retain high rates of enrolment for basic obligatory schooling, there are low levels of pre-school and upper-secondary enrolments. The priority in these countries should be on broad based social protection measures for families with children (not targeted since the majority of child population lives in poverty), and efforts to improve the quality of primary health care.

The discussion in this paper reflects the difficulties to rank countries according to an overall level of child well-being and the limited interpretation that can be drawn from an overall ranking/index. The review of selected indicators which has been presented, has shown the degree to which the assessment changes according to the choice of dimensions and indicators, and that relatively good results in one dimension may be inconsistent with poor results or priority policy issues in another. For this reason, it is considered useful to examine each indicator and dimension separately and in their interaction in order to capture the open challenges, and to disaggregate data as much as possible in order to identify the most vulnerable groups within the child population.

The policy priorities and challenges for improving child well-being clearly differ between and within sub-regions and also within countries. Each country has its own mix of old and new child well-being issues to monitor and tackle: this underscores the need for all governments in the region to ensure that their monitoring systems are adequate to identify those sections of the child population at risk, to determine the nature and extent of exclusion and deprivation, and identify their main causes as a basis for efforts to effectively reduce persisting disparities, while giving priority to those in greater need.

Appendix

Table A1: GDP levels and growth, estimates and projections

	GPD per capita PPP $ (constant 2005)		GDP per capita annual % growth rate	GDP annual % growth rate		
	2000	**2007**	**2000-2007**	**2000-2007**	**2008**	**2009 projection**
Czech Republic	16886	22953	4.5	4.6	2.7	-4.3
Hungary	13597	17894	4.0	3.8	0.6	-6.7
Poland	11743	15634	4.2	4.0	4.9	1.0
Slovak Republic	12722	19342	6.2	6.2	6.4	-4.7
Slovenia	19718	26294	4.2	4.4	3.5	-4.7
Estonia	11053	19327	8.3	8.0	-3.6	-14.0
Latvia	8533	16317	9.7	9.1	-4.6	-18.0
Lithuania	9417	16659	8.5	7.9	3.0	-18.5
Bulgaria	6854	10529	6.3	5.6	6.0	-6.5
Romania	6838	10750	6.7	6.1	7.1	-8.5
Albania	4787	6707	4.9	5.4	6.8	0.7
Bosnia and Herzegovina	5010	7088	5.1	5.4	5.5	-3.0
Croatia	10570	14729	4.9	4.9	2.4	-5.2
Montenegro	6707	10363	6.4	4.7	7.5	-4.0
Serbia	6785	10128	5.9	5.6	5.4	-4.0
TFYR Macedonia	7231	8350	2.1	2.3	4.9	-2.5
Belarus	5810	10238	8.4	8.0	10.0	-1.2
Republic of Moldova	1455	2409	7.5	6.2	7.2	-9.0
Russian Federation	8615	13873	7.0	6.6	5.6	-7.5
Ukraine	3696	6529	8.5	7.6	2.1	-14.0
Armenia	2290	5377	13.0	12.6	6.8	-15.6
Azerbaijan	2490	7414	16.9	17.9	11.6	7.5
Georgia	2342	4403	9.4	8.3	2.1	-4.0
Kazakhstan	5406	10259	9.6	10.2	3.2	-2.0
Kyrgyz Republic	1501	1894	3.4	4.3	7.6	1.5
Tajikistan	1003	1657	7.4	8.8	7.9	2.0
Turkmenistan	..	..	..	..	10.5	4.0
Uzbekistan	1632	2290	5.0	6.3	9.0	7.0

Source: Authors' elaboration of data from World Development Indicators 2008. Estimates of GDP growth for 2008 and projections for 2009 are from IMF (2009), accessed on October,1st 2009.

Table A2: The child population in CEE/CIS countries

	Total child population (0-17), (thousand)			Proportion of children aged 0-17 in the total population (%)			total fertility rate (children per woman 15-45)
	1990	**2000**	**2007**	**1990**	**2000**	**2007**	**2006**
Czech Republic	2,780	2,115	1,867	26.8	20.6	18.1	1.33
Hungary	2,611	2,119	1,904	25.2	20.7	18.9	1.35
Poland	11,350	9,614	7,661	29.8	24.9	20.1	1.27
Slovak Republic	1,613	1,336	1,106	30.5	24.7	20.5	1.24
Slovenia	506	402	349	25.4	20.2	17.4	1.31
Estonia	416	314	280	26.5	22.9	20.9	1.55
Latvia	682	539	420	25.6	22.6	18.4	1.35
Lithuania	997	871	696	27	24.8	20.5	1.31
Bulgaria	2,188	1,634	1,317	25	19.9	17.2	1.38
Romania	6,635	5,108	4,207	28.6	22.7	19.5	1.31
Albania	1,261	1,284	966	38.4	37.7	30.7	1.4
Bosnia and Herzegovina	1,311	942	887	29.4	23.6	19.6	1.18
Croatia	1,149	1,067	852	24.1	23.9	19.2	1.38
Montenegro	-	173	153	-	26.6	24.4	1.64
Serbia	-	1,541	1,412	-	20.5	19.1	-
TFYR Macedonia	595	556	482	31.4	27.5	23.6	1.46
Belarus	2,793	2,397	1,869	27.4	23.9	19.2	1.29
Rep. of Moldova	-	1,079	846	-	29.6	23.6	1.2
Russian Federation	40,178	34,583	27,014	27.2	23.5	19	1.3
Ukraine	13,325	11,143	8,536	25.8	22.5	18.4	1.3
Armenia	1,243	1,145	828	35.4	30.1	25.7	1.35
Azerbaijan	2,743	2,961	2,593	38.5	36.9	30.4	2.33
Georgia	-	1,165	1,007	-	26.3	22.9	1.4
Kazakhstan	6,066	5,053	4,617	37.2	33.9	30.2	2.36
Kyrgyz Republic	1,894	2,025	1,939	43.5	41.6	37.4	2.7
Tajikistan	2,588	3,034	3,102	49.4	49.5	43.9	3.27
Turkmenistan	1,721	2,182	2,158	46.9	45	39.9	2.6
Uzbekistan	9,522	11,011	10,366	47.1	45	38.9	2.39

Source: TransMONEE 2008 database

Note: data on population refer to the beginning of the referred year. Figures for the Republic of Moldova do not include Transnistria, Figures for Georgia do not include Abkhazia and Tskhinvali region. Data for Serbia do not include Kosovo.

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