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CHILD CONSUMPTION POVERTY IN SOUTH-EASTERN EUROPE AND THE COMMONWEALTH OF INDEPENDENT STATES

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This paper presents a further analysis of poverty among children in a selection of countries in SEE and CIS in support of a study on child poverty carried out in the context of the UNICEF Innocenti Social Monitor 2006 on 'Understanding child poverty in the South-Eastern Europe and the Commonwealth of Independent States (2006). The research reported here was funded by Irish Aid with additional support from Country Offices and the Regional Office for CEE/CIS.

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Child Consumption Poverty in South-Eastern Europe and the Commonwealth of Independent States

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Summary: This paper examines poverty in recent years among children in the countries of South Eastern Europe and the Commonwealth of Independent States. The indicator used to measure poverty – current household consumption tested against an absolute poverty threshold of US $2.15 converted at Purchasing Power Parity exchange rates – is found to be robust to sensitivity testing, and to correlate well with non-income indicators of well-being among children. The absolute poverty rate among children is highest where national income is lowest, and where the density of children in the population is highest.

The paper analyses two dimensions of child poverty – according to household composition, and according to its urban, rural and regional dimensions. The most important findings from a policy point of view are the strong rural character of child poverty, and the relationship between child population density (at the level of the country, the sub-national region, and the household) and child poverty: where child population shares are higher, child poverty rates are also higher. This relationship, moreover, may have strengthened over time. Child population density needs to be seen more as a trigger to redistribution. In addition, the analysis finds that in some countries, poverty among children of single parents is reduced by their particular patterns of migration and remittance's flows. However, parental migration to economically support children raises important questions about material well-being in relation to other aspects of child well-being. These warrant further analysis.

Keywords: children, child poverty, poverty measurement, transition countries

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Contents

1. INTRODUCTION

This paper considers recent evidence on child poverty in the countries of South-Eastern Europe and the Commonwealth of Independent States.[1] The analysis focuses on material poverty, defined as per capita household consumption. Children in this very heterogeneous region have experienced considerable changes in their fortunes since the early 1990s, and a whole generation has arguably suffered greatly from the economic and social effects of the transition. In recent years, economies in the region appear to have turned the corner, and average national incomes are now generally increasing. Nonetheless, this paper shows that severe problems remain.

The analysis has two main aims. First, it sets out to summarize levels and trends in child poverty, measured according to a household consumption indicator. Second, it examines two hypotheses: (a) poverty in the region is closely related to demographic factors: high concentrations of children in individual households, at the sub-national level and at the level of countries themselves are associated with high child poverty rates; and (b) the relationship between household composition and child poverty is strongly influenced in some countries by migration and remittances: this may partly explain lower poverty rates among children in single parent families than among children in couple families in countries with high levels of out-migration.

These issues point to the need for greater public investment in children across the region – both in those countries where the child population continues to grow, to ensure that poverty is not reproduced with each new generation, and also in those countries where the child population is shrinking, to ensure that there is sufficient public support for families with children. These issues also raise important questions about how public policy relates to the distribution of child populations within countries, and how some households' responses to poverty, although they may raise children's living standards, also have important non-material side effects that need to be taken into consideration. For example, the migration of parents and their subsequent remittances may increase the material well-being of the children they leave behind. But these children may suffer in other ways as a consequence of the absence of parents.

In carrying out this analysis, we use aggregate data and calculations from a range of sources, particularly a recent study by the World Bank (2005) to paint a broad picture of child poverty in nearly all countries across the region. We also use original analysis of household survey microdata for five countries to describe poverty in greater depth, and to test the main hypotheses. While all countries in the region have unique characteristics that set them apart from other countries, the five for which we have microdata – Albania, Bulgaria, Moldova,

[1] The SEE/CIS region comprised until recently 19 countries which can be usefully divided into five groups: (1) EU acceding countries in SEE (Bulgaria, and Romania); other SEE countries (Albania, Bosnia Herzegovina, Croatia, FYR Macedonia, and Serbia and Montenegro; with Croatia and FYR Macedonia also candidates to join the EU), Western CIS (Belarus, Moldova, Russia and Ukraine), Caucasus (Armenia, Azerbaijan and Georgia) and Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan). In Spring 2006 a referendum in Montenegro resulted in that country separating from Serbia. However, since the analysis in this paper refers to a period preceding this date, Montenegro and Serbia are not examined as separate entities.

Russia and Tajikistan - represent a broad range, in terms of geography, in terms of the region's population covered and in terms of level of economic development and demographic structure.

We begin our analysis with an examination of the region. Section 1 provides a brief overview of the context of child poverty – the changes that accompanied economic and social transition, and the recent period of economic growth. Section 2 examines the data and major analytical assumptions used in this analysis. Section 3 compares child poverty across most countries in the region using the PPP $2.15 threshold proposed by the World Bank (2000 2005), while section 4 examines the sensitivity of child poverty statistics to changes in assumptions, and examines relative poverty in a selection of countries. Section 5 looks at household structure and child poverty, focusing in particular on large families, and the situation of children in single parent families. Section 6 examines urban and rural differences in child poverty, and the relationship between child poverty and child population in regions within countries. Section 7 concludes.

2. THE HERITAGE OF COMMUNISM AND A DECADE OF TRANSITION

Poverty and inequality did not suddenly appear in SEE and CIS countries at the end of communism. Already by the mid 1980s, economic inequalities were growing among the Republics of the Soviet Union. In particular, the divergence in living standards was driven by the fact that average earnings grew more rapidly in Russia than in the already poorer Central Asian republics. Atkinson and Micklewright (1992) argue that within republics of the Soviet Union, the dispersion of earnings increased during the 1980s, in many cases to above the level found in the United Kingdom in the same period. Flaherty (1988) demonstrates a similarly widening gap between the different republics of the Federal Republic of Yugoslavia from the 1970s onwards.

The fall of communism resulted in the fairly rapid creation of 15 countries out of the Soviet Union, and five countries out of FR Yugoslavia.[2] *Of the countries included in this analysis, only three pre-date the end of communism*. The huge political changes which occurred during the 1990s were seldom peaceful. The transition from planned to market economy heralded not only a time of economic crisis and declining living standards, but in many cases also of nation-building and armed conflict. Often, infrastructure was destroyed and economic recovery delayed. In Tajikistan, for example, public expenditure effectively collapsed during the civil war years of 1992-95. The uncertain legitimacy of post-communist regimes, moreover, coupled with the liberalization of markets and widespread corruption contributed to public disillusion with the institutions of the state, rendering regulation and tax collection less effective, with flow on effects for all areas of state activity, not least policies to protect people against poverty, and the provision of public and social services.

Table 1 shows that in all countries of the region, the real level of GDP per capita in 1998 was substantially lower than the 1990 level. Bulgaria and Romania, which will join the European

[2] In May 2006, a sixth country was added to the former Yugoslavian states, with the people of Montenegro voting in favour of separation from Serbia.

Union in 2007, succeeded in recovering early losses in average living standards by 2004, as did Croatia, Albania, Belarus, Armenia and Kazakhstan. Other countries performed less well. In particular, the countries of Central Asia started off from a low base in 1990, and mostly experienced large declines in GDP through the 1990s. As GDP declined, so did public expenditure, including spending on social services. In ten countries, the decline in overall public expenditure as a percentage of GDP was greater than one tenth, suggesting huge falls in real terms, once falls GDP itself are factored in. In Armenia and Georgia, declines in real government expenditure on health care and education were precipitous. Romania and Belarus stand out as exceptions where public effort in heath care and education appears to have increased notably over the 1990s.

Table 1: National income and public expenditure in the 1990s

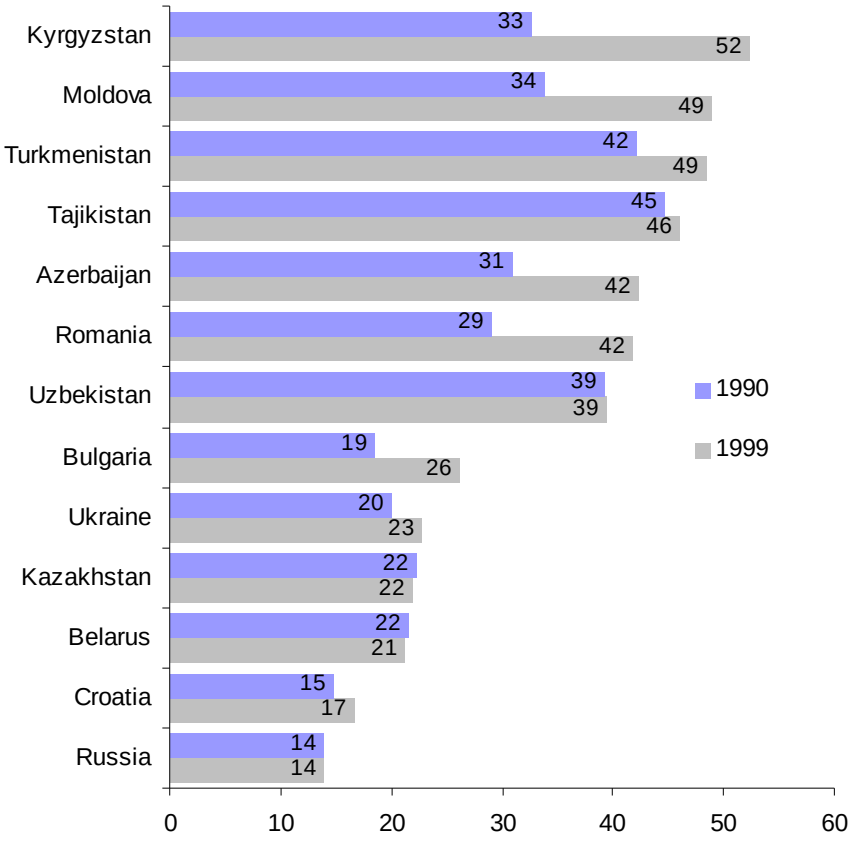
	Index of Real GDP per capita , 1998 (1989=100)	Index of Real GDP per capita , 2004 (1989=100)	GDP per capita in current PPP $, 2004	Change in real public expenditure on health care 1990-98 (1990=100)	Change in real public expenditure on education 1990-98 (1990=100)
South-Eastern Europe – EU acceding countries (2007)					
Bulgaria	73	101	8,078	45	66
Romania	81	106	8,480	139	115
South-Eastern Europe – other					
Albania	89	141	4,978		70
Croatia	82	101	12,191	-	-
FYR Macedonia	68	74	6,610	50	98
Bosnia and Herzegovina	-	-	7,032	-	-
Serbia and Montenegro	-	-	-	63	-
Western CIS					
Belarus	79	115	6,970	185	112
Moldova	41	53	1,729	46	48
Russia	55	83	9,902	84	74
Ukraine	40	63	6,394	48	-
Caucasus					
Armenia	53	106	4,101	47	16
Azerbaijan	39	62	4,153	46	26
Georgia	36	56	2,844	10	15
Central Asia					
Kazakhstan	66	111	7,440	40	-
Kyrgyzstan	55	68	1,935	68	51
Tajikistan	37	53	1,202	-	-
Turkmenistan	43	78	4,315	-	-
Uzbekistan	76	89	1,869	51	-

Source: MONEE Project database.
Note: GDP data for Serbia and Montenegro represents change in real GDP in national currency. Earlier year GDP for Uzbekistan is for 1991, and for Azerbaijan is for 1992

Associated with declines in national income and public expenditure were growth in unemployment, informal employment, a return to the land, and increased migration. While

formal employment declined, employment in agriculture often rose, as Figure 1 shows. Some of the biggest increases were in Moldova and Kyrgyzstan, where in 1999 about half of all employment was in agriculture. The retreat to agriculture, very often subsistence in nature, was spurred in part by land redistribution policies implemented by several governments in the region (World Bank 2005). While it served as a coping strategy for households to protect their food sources during the economic crisis of the 1990s, it may also have had longer term detrimental impacts on rural workers' skills and earning capacities, not least because capital investment and productivity among small farms was often low, and the capacity to take advantage of economic opportunities was often limited. When recovery came, it bypassed rural areas in many countries. In parts of the region, migration emerged as one of the major responses to the problems associated with the transition. Albania, Bosnia-Herzegovina, Kazakhstan and Moldova all saw large outflows of people, while Russia experienced a considerable inflow. Also intra-country migration increased during this period, particularly from rural to large urban areas. As this analysis later shows, remittances from migrants have become an important influence on children's living standards in some countries.

Figure 1: Employment in agriculture 1990 and 1999 (per cent total employment)



Source: Cazes and Nesporova (2003), Table 3.1., the 1999 figure for Turkmenistan is referred to 1998 and is taken from the World Development Indicators 2005.

Declines in average incomes, in overall public expenditure, and in expenditure on social services were accompanied by increases in income inequality and poverty. In several countries, notably Russia, Moldova, Armenia, Georgia and Tajikistan, not only had inequality levels surpassed OECD averages by the late 1990s, but resembled those found in several Latin American countries (see Szekely and Hilgert 1999). UNICEF (2001) estimates that by the late 1990s, in most of the countries of Caucasus and Central Asia and in Moldova the majority of children were living in households with per capita incomes of less than PPP $ 2.15 a day, what the World Bank (2000) describes as a very minimum consumption level for the region. In these countries too, problems of severe under-nutrition of children, and of very high rates of infant mortality, are apparent during the 1990s. In Tajikistan in 1996, four in ten of all children under five were stunted (low height per age, indicating chronic under-nutrition), as were a third of children in Albania and Uzbekistan. These figures compare with 10 per cent in Brazil and Turkey in the 1990s, and 2 per cent in the US (UNICEF 2001). Survey data also suggest that infant mortality rates during the 1990s were at levels seen in many developing countries. About 60 out of every 1,000 children died within a year of their birth in Kazakhstan, as did 80 per 1,000 in Azerbaijan and Tajikistan (Aleshina and Redmond 2005).

There is a consistent pattern to trends during the Transition in terms of deprivations experienced by children in the region. Across the board – economic decline and return to the land, income poverty, levels of malnutrition and mortality among children, and migration – the countries of the Caucasus and Central Asia (and in many cases Moldova) tended to experience the strongest negative effects. Within this group, four out of five countries of Central Asia are also where the child population grew fastest, as Table 2 shows. Diverging trends in the child population across the region are striking. In the Western CIS and South Eastern Europe fertility declined to considerably below replacement levels during the 1990s. Countries such as Belarus and Ukraine now have some of the lowest fertility rates in the world, and the number of children in Bulgaria is now a third less than in 1990. In most countries of Central Asia on the other hand, fertility has remained above replacement levels, and the child population has continued to rise. In Tajikistan and Turkmenistan the child population increased by a fifth or more between 1990 and 2003. In consequence, the share of children in the overall population varies considerably across country groups. In the higher income countries of South Eastern Europe and the Western CIS (with the exception of Moldova), about two in ten of the total population are now aged under 18. In the poor countries of Central Asia, children make up about four in ten or more of their countries' populations (here, Kazakhstan is an exception). Uzbekistan, one of the poorest countries in the region, has about 13 per cent of all the region's children, only slightly less than share of children living in all seven countries in South Eastern Europe combined. In spite of rapidly falling fertility rates, however, Russia remains the country with the largest child population, and is home to over a third of all children in the region.

Table 2: Child population, 1990-2003

	Number of children aged under 18 years 1990 (thousands)	Number of children aged under 18 years 2003 (thousands)	Share of the region's children 2003 (per cent)	Child population as a percentage of total population 2003
South-Eastern Europe – EU acceding countries (2007)				
Bulgaria	2,188	1,459	1.7	18.6
Romania	6,635	4,754	5.7	21.8
South-Eastern Europe – other				
Albania	1,261	1,078	1.3	35.0
Croatia	1,149	925	1.1	20.8
Bosnia and Herzegovina	1,311	962	1.2	24.4
FYR Macedonia	595	538	0.6	26.4
Serbia and Montenegro	2,916	2,548	3.0	23.9
Western CIS				
Belarus	2,793	2,171	2.6	21.9
Moldova	1,439	971	1.2	26.8
Russia	40,174	30,548	36.6	21.3
Ukraine	13,325	9,843	11.8	20.6
Caucasus				
Armenia	1,243	964	1.2	30.0
Azerbaijan	2,743	2,798	3.3	34.1
Georgia	1,582	1,110	1.3	25.6
Central Asia				
Kazakhstan	6,066	4,771	5.7	32.1
Kyrgyzstan	1,894	1,984	2.4	39.8
Tajikistan	2,588	3,094	3.7	47.6
Turkmenistan	1,721	2,197	2.6	43.2
Uzbekistan	9,522	10,850	13.0	42.7

Source: MONEE Project database.

Another constant across the region has been the significant role of the state in social service provision for children. Despite the often large declines in public expenditure experienced during the 1990s, the importance of the state as a source of welfare, both in the form of service provision, and terms of cash transfers, should not be underestimated. In nearly all countries, the vast majority of children are born with the assistance of trained medical personnel. Enrolment in basic education is generally complete. And even in the poorest countries, high percentages of children live in households that receive public cash transfers (UNICEF 2006). Moreover, a number of countries have adopted ambitious plans to reduce poverty using frameworks proposed by international organisations, such as Poverty Reduction Strategies, Millennium Development Goals, and recommendations of the European Union for aspirant members. Many states are now taking an active interest in poverty reduction. An important subtext to this analysis is that the state matters, and that policy can make a real difference to children's lives in the region.

3. DATA

Our analysis in the remainder of this paper focuses on children living in households with low levels of economic resources (in our case, consumption expenditure). This is the most common approach to poverty measurement used in the countries of Eastern Europe and Central Asia (see for example, World Bank 2000, 2005). Arguably, household resources (although widely used) are not an ideal indicator of child well-being since children do not usually control the family budget, and since children tend to rely more heavily on public services for key inputs. In section 4, therefore, we test not only the robustness of our poverty statistics, but we also briefly summarise the relationship between household consumption and other 'outcome' oriented indicators of child deprivation (these are explored in greater detail in UNICEF 2006). Section 5 reports on the relation between child poverty and household composition. Urban/rural and regional disparities in child poverty are examined in Section 6. Our main source of data is household surveys: for most of the countries we draw on statistics from World Bank (2005) which reports survey estimates of adult and child poverty in 23 countries of Central and Eastern Europe plus Turkey, including17 of the 19 countries in the SEE and CIS.[3] For five countries we directly analyse recent survey microdata.

As the large literature on the subject shows, the measurement of poverty using data on household income and consumption is laden with difficulty. For example, there is no single answer as regards how resources should be counted, where a poverty line should be drawn, whether absolute or relative poverty measures or other inequality based approaches are more appropriate, or how to compare households of different size and composition (Corak 2005). The approach taken in this analysis is to some extent pragmatic, governed by the properties of the data (and in particular the survey microdata) available to us. Our welfare aggregate is 'current household consumption expenditure'. This indicator is preferred to household income for several reasons, some of them specific for this region. First, income can be highly volatile, while consumption can be more readily smoothed over time by individuals and for this reason can represent more accurately the level of well-being at any given time. This aspect is particularly relevant in economies were people are sometimes paid irregularly (several months of wage arrears are common in some countries), and where household incomes vary greatly according to the season (this is often the case with farming households). Second, data on household consumption are generally considered more reliable than data on incomes, as under-reporting of income is believed to be more common.

In this study, we purposely define household consumption in the same manner as World Bank (2005). This includes current expenditure on food, energy and other utilities, clothing, education, alcohol and tobacco, transport, services, and leisure activities. The consumption aggregate includes the imputed value (using median local prices) of consumption of food produced by the household itself or received as gifts. However, it excludes direct costs of housing such as rent, expenditure on durables, and expenditure on health care.[4] The World

[3] In our analysis, we use information from the World Bank study on 14 of these 17 countries. We do not use World Bank calculated data on child poverty for Azerbaijan, Belarus and Ukraine, because they appear to understate true levels of poverty in these countries.

[4] Analysis by the authors for a limited number of countries shows that the exclusion of these items does not greatly impact on poverty estimates. However, the treatment of housing costs does perhaps need further

Bank justifies the exclusion of housing costs mainly because of data limitations, in particular to the absence of reliable information that would allow accurate imputation of rent for owner occupiers, which would be necessary in order to compare consumption across people in owner-occupier and renting households. Furthermore, in the available surveys, information on ownership and expenditure on durables by households is similarly not adequate to impute the consumption flow associated with the possession of consumption durables. Finally, the World Bank (2005) excludes expenditure on health care for the following reason, citing Deaton and Zaidi (2002):

> "…when consumption is used as a measure of well-being, higher consumption should indicate a higher level of well-being. For most consumption items, this correspondence is reasonable; however, for some categories such as health expenditures, this correspondence is questionable." (World Bank, 2005, p.224)

Again following the method of the World Bank, different price levels within countries are accounted for with regional deflators (Paasche price indexes) which are constructed using information on prices contained in the household survey microdata used to analyse poverty. Where survey data have been collected over a long period of time (for example throughout a year, as happens with the Moldovan Household Budget Survey), monthly price indexes are applied to adjust reported expenditures to a common point in time. The value of household consumption is then divided by the number of people in the household to derive a per person consumption level (in technical terms, the equivalence scale is set equal to one). The analysis thus assumes that all household members (including children) consume the same amount, regardless of age or other characteristics. The definition of household consumption used in this analysis, with its focus on current consumption, supports such an assumption. Many children for example consume similar levels of food as adults, and often consume more clothing (because they are growing) and services such as education.

We believe that the above assumptions are reasonable, and in adopting them we can extend our analysis greatly by drawing on the work of the World Bank (2005) for those countries where we do not have direct access to survey microdata. For the same reason, we also take the World Bank's lead in choosing the threshold of US$2.15, converted from local currency to US dollars using Purchasing Power Parity exchange rates which are based on OECD estimates for the year 2000 (see OECD 2003). The World Bank argues that this threshold is a suitable basic subsistence measure for the Europe and Central Asia region:

> "While in many parts of the world the one-dollar-a-day line is used to measure absolute deprivation, the two-dollar-a-day line is more appropriate for the Europe and Central Asia region because its very cold climate necessitates additional expenditures on heat, winter clothing and food. " (World Bank, 2000, p.34)

The World Bank (2005) states moreover that this line is roughly equal to the lowest national absolute poverty lines that are used in some of the poorer countries in the region and that its value corresponds to the cost of a meagre basket of food (composed predominantly of wheat, beans, milk and oil) needed to meet basic nutritional requirements; plus a minimal allowance

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consideration – in particular the valuation of imputed consumption of owner occupied housing, and its treatment in terms of poverty.

to cover lighting, heating, clothing and transport. As with the dollar a day measure, used to track poverty in developing countries for the Millennium Development Goals, the two dollar measure (as the World Bank commonly calls it) is simple and telegraphic, and tells us something important about the relative well-being of people (and children) across countries. For these reasons, Deaton (2003) and Ravallion (2002) defend it. On the other hand, Reddy and Pogge (2002), and Kakwani and Son (2006) argue that the PPP $ 2.15 poverty line (as well as the one dollar poverty line) is arbitrary and does not reflect the cost of meeting essential human requirements in any actual country, and that the purchasing power parities used to construct formally equivalent poverty lines are flawed, in particular because they are not designed for making international poverty comparisons and also because weights in the PPP baskets of good and services do not adequately represent the consumption basket of the poor.

In sections 4, 5 and 6 we use the data for the five countries where we have access to original survey microdata to test assumptions used by the World Bank on poverty lines, PPPs and equivalence scales, and to expand and deepen the analysis of child poverty. These are Albania, Bulgaria, Moldova, Russia and Tajikistan. Together, they represent about half of the total SEE/CIS population, and about 45 per cent of the total child population. In 2004, two of these countries (Russia and Bulgaria) had a GDP per capita higher than PPP $ 8000. Albania had an intermediate GDP per capita of slightly less than PPP $ 5000, while Moldova and Tajikistan registered GPD per capita lower than PPP $ 2000 (see Table 1).

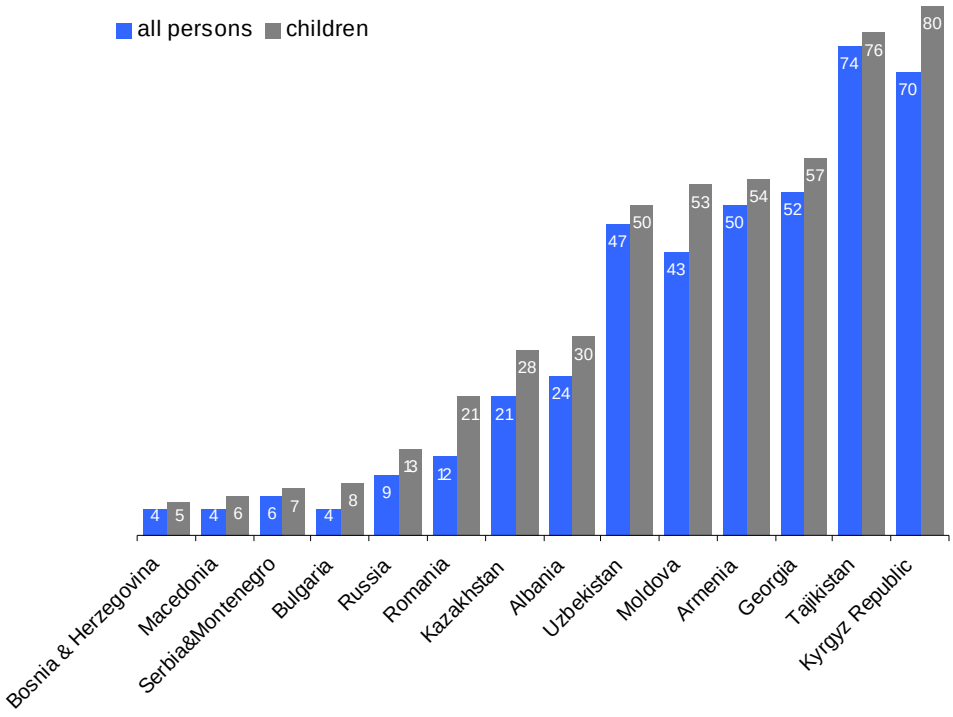
All the five surveys analysed in this study are multi-topic or 'integrated surveys'. That is, they not only collect information on household income and expenditure, but also on household characteristics, housing, members' working activities, education and health. The surveys for Albania (2002), Bulgaria (2001) and Tajikistan (2003) are part of the World Bank's Living Standard Measurement Study program and they have similar structures and questionnaires. The data for Moldova are from the Household Budget Survey (2003) carried out by Moldovan National Statistical Office and are collected over one year period. The Russian survey is the 'National Survey of Prosperity and Participation of the Population in Social Programs' (or NOBUS survey, according with the Russian acronym) carried out in 2003; a survey specially designed to measure the efficiency of the national social assistance programs by means of estimating the impact of social benefits and privileges on household welfare. Sample sizes vary from 2500 households in the Bulgarian survey to 44524 households in the Russian survey. All the surveys aim to be representative at the national level, and for distinguishing between urban and rural areas and major sub-national levels. Information on household, person and child sample sizes in these surveys is summarized in Annex 3, table A3.1.

4. LEVELS AND TRENDS IN CHILD POVERTY

Figure 2 presents data on overall and child consumption poverty rates according to the PPP $2.15 measure in 14 countries in the region around 2002-03. Here children are defined as under 16 years of age. From the figure, three distinct country groups emerge. The first group, with the lowest child poverty rates in the region, ranging from 5 to 15 per cent, includes countries of the former Yugoslavia (Bosnia-Herzegovina, FYR Macedonia, and Serbia and Montenegro), plus Bulgaria and Russia. These countries are among the richest in the region.

They also have low fertility rates and the share of children in their populations is generally low (less than a quarter of the total). The next group comprises Romania, Kazakhstan and Albania, with child poverty in the range 21 to 30 per cent. In Albania and Kazakhstan, children comprise a third of the total population, but in Romania, they comprise little more than a fifth. Given its low child population, relatively high average income and status as an EU accession country, the child poverty rate in Romania seems especially high. This is due in part to the very high levels of rural poverty, and well as the high poverty rates experienced by Roma children. Zamfir et al (2005) show that while Roma children represent one in twenty of all children, they account for one in four children in severe poverty (defined according to national criteria). Among the remaining countries - Uzbekistan, Moldova, Georgia, Tajikistan and Kyrgyzstan - more than half of all children are poor. These are among the countries with the lowest national incomes per head in the entire region. In Tajikistan and Kyrgyzstan, where upwards of 4 in 10 of the population are aged under 18, close to four in five children live in households with less than PPP $2.15 consumption per person per day.

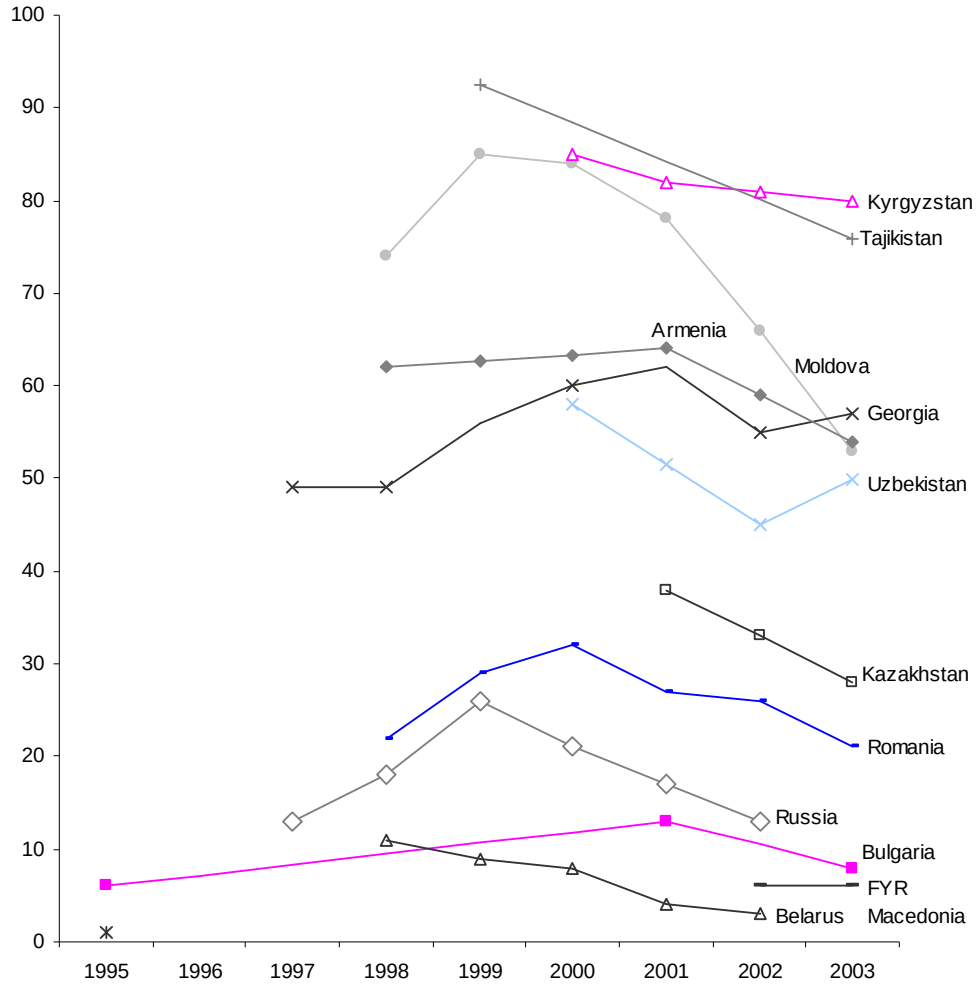
Figure 2: All persons and children aged 0-15 under the PPP $2.15 poverty line, 2002-03 (per cent)



Source: *World Bank (2005)*, Annex tables 2 and 4.

Five countries covered by this analysis – Azerbaijan Belarus, Croatia, Turkmenistan and Ukraine – are not included in Figure 2. Child poverty statistics for these countries are either not available in comparable form, or appear to the authors to be unreliable. In particular, there are almost no useful statistics on poverty available for Turkmenistan, and the country is not well covered in this analysis.

Figure 3: Children aged 0-15 living under the PPP $2.15 poverty line, 1990s-2003 (per cent)



Source: World Bank (2005) Annex Table 4.

Table 3 shows relative risks that people in different age groups in the population will fall below the PPP $2.15 poverty line, where a risk of 1 indicates that an age group is no more or less likely than the average to fall into poverty. In every country, poverty risks are greatest for young children, gradually decreasing with age. In a few cases (Georgia, Moldova, Russia) the poverty risk increases again for the elderly, while in other countries, it continues to decline. The gradient of increase in poverty risk with decreasing age is steepest in Russia and Bulgaria where relatively few people fall below the PPP $2.15 threshold, but flatter in the case of Tajikistan and Kyrgyzstan, where most people are poor. The relatively higher poverty risk for younger children in part reflects life cycle issues – young children are likely to have younger parents who have not yet reached their earnings peaks. But they also reflect the poor level of financial and other support given by states to young children in the region (see Stewart and Huerta 2006). This lack of support is evident in both countries where the child population is increasing, and in countries where it is declining.

Table 3: Poverty risks by age, relative to the country average, 2002-03 (1=average risk)

	Russia 2003	Bulgaria 2003	Albania 2002	Georgia 2002	Armenia 2003	Kyrgyzstan 2002	Moldova 2003	Tajikistan 2003
0-6 years old	1.66	2.18	1.36	1.20	1.15	1.13	1.24	1.07
7-14years old	1.47	1.64	1.28	1.09	1.06	1.13	1.17	1.02
15-17 years old	1.24	1.33	1.20	1.00	1.03	1.11	1.09	0.97
18-65 years old	0.91	0.88	0.86	0.96	0.97	0.94	0.93	0.97
66 years and older	0.74	0.61	0.72	1.02	0.93	0.73	0.98	0.98

Source: Calculated from Household Budget Surveys and Living Standards Measurement Surveys. Data for Bulgaria, Georgia, Armenia and Kyrgyzstan were calculated by the World Bank. Calculations for Albania, Moldova, Russia and Tajikistan were made by the authors from: Albanian Living Standards Measurement Survey, 2002, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003, and Tajikistan Living Standards Survey 2003.
Note: Poverty estimates refer to individuals, and are based on current household consumption (excluding consumption of health care, durables and rental payments). Equivalence scale equals 1. Poverty line is US $2.15 at Purchasing Power Parity exchange rates. Relative risks represent the probability that a person in a given age group will be poor, divided by the average probability for the country's entire population (i.e. the poverty rate referred to a given age group divided by the poverty rate referred to the entire population).

5. ALTERNATIVE POVERTY MEASURES

How robust are the poverty estimates presented in Section 3 above? As emphasized in Section 2, any estimate of poverty is the result of a series of value-based technical decisions and assumptions. Annex I shows some analyses of sensitivity for the poverty statistics for the five countries (Albania, Bulgaria, Moldova, Russia and Tajikistan) for which we have microdata from nationally representative household surveys. Findings are briefly summarized in this section.

PPP exchange rates

As noted in Section 2 above, the computation of household resources and poverty estimates is made comparable across countries by the application of PPP exchange rates calculated by OECD (2003) for around the year 2000. Figure A1.1 in Appendix 1 shows how estimates of overall poverty rates differ when alternative estimates of PPPs, calculated for the years 1993 and 1996, are used. Among richer countries where poverty rates are low, discrepancies are also relatively low. Among some poorer countries with high poverty rates however, differences in estimates based on PPPs are large. This is perhaps not surprising, given that in the latter countries, reliable estimates of household consumption are more difficult to obtain, and some price estimates (for example the value of home production) may vary considerably within and between surveys. While the most recent PPP estimates used in this analysis are certainly subject to error, they are probably the best available, for the very reason that they are the most recent and they are supposed to reflect contemporary prices as they evolved during the transition, instead of the administered prices of the past.

Varying the poverty line and examining the poverty gap

Varying the PPP $2.15 poverty line by plus or minus ten per cent does not greatly alter the proportions of children in poverty, or the relative rankings between countries, suggesting that there is little 'bunching' of children around this poverty line. Choosing another absolute

poverty line of PPP $4.30 per capita does not alter the ranking of countries in terms of poverty rates. The World Bank uses the PPP $4.30 line as a proximate vulnerability threshold.

> "to identify households that are not suffering absolute material deprivation, but are vulnerable to poverty. Although it seems somewhat arbitrary, it does bear some relation to empirically observed vulnerability to poverty. Analysis of panel data from the Region suggests that households with per capita consumption at least twice the poverty line face less than a 50 per cent chance of becoming poor in the foreseeable future." (World Bank 2005, p.229)

The World Bank's interpretation would suggest that while child absolute poverty rates (as measured against the PPP $2.15 threshold) are currently low in Bulgaria and Russia, a future economic downturn could expose more than a third of Bulgarian children, and more than half of Russian children to poverty.

In all five countries examined, the average gap between the consumption of households with children and the PPP $2.15 threshold is high, ranging from about a fifth of the PPP $2.15 poverty threshold in Albania, to two fifths (or over PPP $0.80) in Tajikistan. This confirms that children are not bunched near the poverty line, and suggests that most children who are poor would need quite a boost to their consumption in order to cross the PPP $2.15 threshold. This is in line with Stewart and Huerta's (2006) finding that social security payments across the region, whether targeted at those with the lowest incomes or not, tend to have little impact in terms of lifting children out of poverty.

Choice of equivalence scale

As noted in Section 2, the definition of household resources used in this analysis is current consumption, excluding rent and consumption of durables. In most countries, the majority of consumption according to this definition is of items for which there are few economies of scale, for example food and clothing. For this reason, we have chosen for our analysis a per capita equivalence scale where equivalent consumption equals total consumption divided by the number of people (of any age) in the household. This is often called $\theta=1$ in the economics literature, to signify a scale of h1, where h equals household size and 1 is the exponent. One method of examining the extent to which the equivalence scale impacts on results is to calculate poverty statistics based on equivalence scales calculated from different values of θ.

Table A1.2 in Appendix 1 shows poverty rates among children and elderly people, and among children in households with different numbers of children, where the exponent $\theta=1.0$, 0.75, 0.5 and 0.25, and with a scale proposed by Bradbury and Jäntti (1999), explained in the note to the table. The scales with $\theta=0.75$ and $\theta=0.5$ are frequently used in poverty analysis, while scale with $\theta=0.25$ is rarely used, but is nonetheless useful as a sensitivity check. A lesser the value of θ suggests greater economies of scale as the example scales at the bottom of Table A1.2 show. With the assumption of $\theta=1$ a household with two adults and two children would need four times the absolute consumption of a household with just one person in order to maintain an equivalent standard of living. Where $\theta=0.75$ the larger household would need 2.83 times the consumption of a single person household to maintain equal living standards, and with $\theta=0.5$, this ratio would be 2.0 In four out of the five countries, an equivalence scale calculated with $\theta=0.75$ does not change the relative positions of children and the elderly (Moldova is the exception), but with $\theta=0.5$ poverty rates among the elderly are greater than

rates among children in four out of five countries (here Albania is the exception). With the equivalence scale proposed by Bradbury and Jäntti (1999), poverty among children is greater than poverty among children than among elderly in three out of five countries.

The relationship between poverty and household size can also be influenced by the choice of equivalence scale. Table A1.2 shows that across all five countries where $\theta=1$ and $\theta=0.75$, and with the Bradbury and Jäntti scale, children with more siblings in the household tend to experience more poverty. With $\theta=0.5$ this is no longer true in the case of Moldova and Tajikistan: poverty probabilities become the same for households with one, two or three children. These findings to some extent support those of Lanjouw et al. (2004) who argue that poverty relativities among children and the elderly in Eastern European countries are highly sensitive to the choice of equivalence scale. However, given our definition of household consumption as comprising mostly food and other elements of personal consumption, we believe an equivalence scale with θ tending towards 1 is most appropriate for this analysis, and a substantial move away from $\theta=1$ to $\theta=0.75$ does not affect results significantly.

Income poverty and non-income indicators of child deprivation

For most available indicators, there is a reasonably strong relationship at the level of the individual child between poverty among children and deprivation in terms of outcomes, such as overcrowded housing, access to water and sanitation, and enrolment at school (see Annex 1 Tables A1.3 and A1.4). There is also a strong positive relationship at the regional level in several countries between child poverty rates and infant mortality rates (see the example for Russia on Annex 1 Figure A1.2). The strong correlation between household consumption and more direct outcome measures tends to underline the usefulness of the former as an indicator of children's well-being. However, household consumption by no means captures all aspects of children's well-being. Baschieri and Falkingham (2006) show that in the case of Albania, the relationship between under-nutrition and poverty among young children is weak, and also that different indicators can be widely dispersed across populations of children (and even populations of poor children), so that those who miss out on school are not always the same as those who live in poor housing conditions, or who lack easy access to clean drinking water. Household consumption can reveal a lot about children's well-being. But it does not reveal the whole story.

Relative poverty

Relative poverty among children was also estimated for the five countries for which we have access to microdata, and the results are worth considering at greater length, because they tell a different story to that told by the absolute poverty statistics. While it is possible to argue that relative poverty where the threshold is usually calculated as a percentage of the median can lose much of its meaning in cases where even the median is below a very low absolute threshold such as the PPP $2.15 poverty line (this is the case in some countries in the region, for example Tajikistan), there are two reasons why we believe it is nonetheless important to monitor relative child poverty, even in the poorest countries. First, while economic growth, as shown above, may be associated with strong declines in absolute poverty rates, it may also be accompanied by an increase in relative poverty, if inequality in the bottom half of the income distribution rises. Relative poverty measures can be used as a check on the fairness of the distribution of economic growth, particularly where such growth has been rapid, as has

happened in the region since 1998. We do not have data to examine trends in relative child poverty in the region. However, Zamfir et al. (2005) suggest that in the case of Romania, relative poverty among children did not decline at all between 2000 and 2004, in spite of a substantial fall in absolute poverty over this period.

The second reason for monitoring relative child poverty even in poorer countries is because research shows that children themselves are often aware of how their living standards may differ from those of their peers, and can sometimes experience exclusion from the activities that their peers engage in because of their relative poverty (Micklewright 2002, Van der Hoek 2005). Arguably, children (and their parents) are more likely to compare themselves, not with 'the average individual', but with children in their age group.[5]

Table 4 shows relative poverty statistics among all children and children aged 0-6. In each case, the poverty threshold is 60 per cent of median household consumption with a per capita equivalence scale. However, the population from which the median is calculated changes: from all persons (the first and third rows of poverty statistics in the table), to all children (the second and fourth rows), and just children aged 0-6 (the fifth row). In Albania, Moldova and Tajikistan, all the relative poverty lines are below the PPP $2.15 threshold, while in Bulgaria and Russia they are all above. When measured against the 'all persons' poverty line, relative poverty among all children and among young children is equally high in Bulgaria, Moldova and Russia. When measured against the 'all children' and the 'children aged 0-6' thresholds, however, children's poverty is clearly highest in Bulgaria, suggesting perhaps a greater degree of social exclusion among children in this country.

Table 4: Relative child poverty rates (per cent)

Poverty line is 60 per cent of median consumption of	Albania 2002	Bulgaria 2001	Moldova 2003	Russia 2003	Tajikistan 2003
	Poverty among all children				
All persons	19.0	25.6	24.5	25.9	18.2
All children	13.5	23.6	17.1	20.6	16.8
	Poverty among children aged 0-6				
All persons	20.9	32.9	31.4	28.1	20.7
All children	15.1	29.8	22.8	22.4	19.1
Children aged 0-6	13.7	27.0	17.0	21.0	16.1

Source: Authors' calculations based on Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey 2001, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003, and Tajikistan Living Standards Survey 2003.
Note: Poverty lines are calculated on the basis of household consumption, with an equivalence scale of 1, and each person, or child, or child aged 0-6, counted once.

It is also worth comparing the different poverty statistics within each country for the 0-6 age group. As the population from which the poverty line is calculated changes from 'all persons', to 'all children' to 'children aged 0-6', the poverty rate falls notably in Albania (from 21 to 14

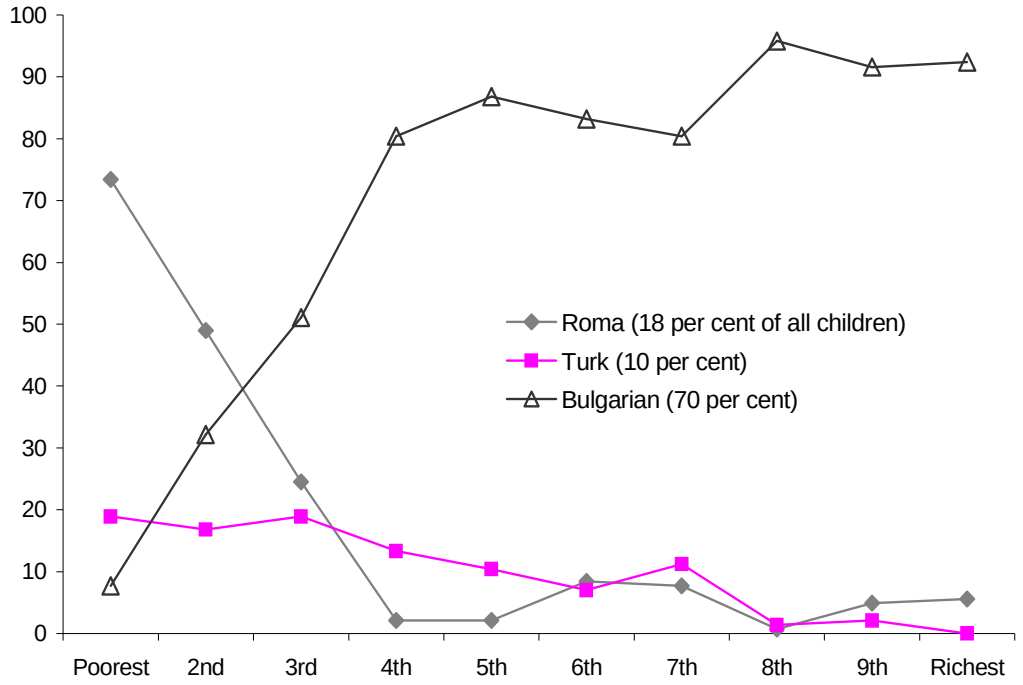
[5] Children may also compare themselves just with children in their immediate community, for example, the school that they attend. However, they (or their parents) may also be aware of their community's standing in relation to other communities. Among smaller countries such as Bulgaria and Moldova, it is plausible that children and their parents develop a national perspective in assessing their relative well-being. However, in large countries such as Russia, a national perspective may be lacking, and it is not clear whether children in Irkutsk would compare themselves with children in St Petersburg, or just with other children in Siberia.

per cent) and Moldova (from 31 to 17 per cent), suggesting that in these countries there is more homogeneity among young children in terms of living standards than among children overall. If opportunities for children's intellectual and physical development are closely related to their current living standards, then such opportunities are likely to be more equal in these countries than the overall relative poverty statistics suggest.[6]

In Bulgaria, on the other hand, the poverty rate among children aged 0-6 shifts relatively little (from 33 to 27 per cent) as the population from which the poverty threshold is calculated changes. This suggests that the degree of heterogeneity in living standards among young children in Bulgaria is almost as high as among all children. This may be due to the structure of extreme poverty in Bulgaria, which is particularly concentrated in two ethnic minority groups – Roma and Turks. Figure 4 shows that although these two groups make up respectively 18 and 10 per cent of all children in the country, with ethnic Bulgarians comprising nearly all of the remaining 72 per cent, they are heavily concentrated in the lowest two or three deciles of the distribution of household consumption. There may be less of a 'life cycle' element to poverty in Bulgaria. Rather, the differences between ethnic Bulgarian children on the one hand, and Roma and Turk children on the other, are likely to be reflected not only in higher levels of social exclusion now for the latter, but also in correspondingly unequal opportunities for growth and development in the future.

[6] However, this is not the only possible interpretation. If it is held that child development and material well-being are linked, it is also possible to argue that opportunities for children's development are related not only to current living standards, but also to the trajectory of household income over a period. In such a scenario, overall child poverty rates may also reveal some useful truths about opportunities for very young children.

Figure 4: Ethnic composition of each child consumption decile by ethnic group, Bulgaria 2001 (per cent)



Source: Authors' calculations, from Bulgarian Integrated Household Survey 2001.
Notes: Consumption deciles are calculated for the entire child population, using an equivalence scale of 1. The percentages in parentheses after the ethnic group names in the legend refer to the proportion of all children who belong to the different ethnic groups. These do not add up to 100 per cent because very small proportions of children may belong to other ethnic groups.

6. POVERTY AND HOUSEHOLD COMPOSITION

There is considerable evidence to suggest that in rich countries, child poverty is strongly associated with household structure. In particular, it is heavily concentrated among children living in large households, and in single parent households (UNICEF 2000). The analysis in this section shows that poverty among children in large households is also severe in SEE and CIS countries, although the picture of poverty among children in single parent households is somewhat more varied.

Table 5 presents detailed information on household composition and poverty for two countries - Russia and Tajikistan. The two countries differ greatly, not only in terms of child share in the total population (see Table 2), but also in terms of the distribution of children across households. Most notable are the large number of adults who live in households without any children in Russia (almost half of the population, or two thirds of households), compared with the much smaller proportion in Tajikistan (less than one in twenty of the population). Also notable is the small proportion of persons who live in households with three or more children in Russia (4 per cent of the total population, and just over a tenth of children), compared with the very large proportions in Tajikistan (nearly 60 per cent of the

total population, and over 70 per cent of all children), as well as the greater percentage of children who live in households with just one adult in Russia compared to Tajikistan (12 versus 2 per cent).

Table 5: Household composition and income poverty in Russia and Tajikistan, 2003 (per cent)

	Russia			Tajikistan		
	Proportion of the total population in each household type	**Proportion of all children in each household type**	**Poverty rate (PPP $2.15) All population**	**Proportion of the total population in each household type**	**Proportion of all children in each household type**	**Poverty rate (PPP $2.15) All population**
3 + adults, no children	18.3	-	8.1	2.7	-	52.0
2 adults, no children	20.6	-	6.9	1.1	-	28.9
1 adult, no children	8.8	-	3.8	0.6	-	28.4
3 + adults, 1 child	13.9	16.2	12.3	6.3	2.6	52.9
2 adults, 1 child	14.9	24.9	9.2	1.7	1.2	41.8
1 adult, 1 child	2.9	7.4	9.8	0.3	0.4	27.7
3 + adults, 2 children	4.6	8.7	20.9	11.2	7.5	65.9
2 adults, 2 children	10.9	27.3	16.4	4.0	4.3	48.6
1 adult, 2 children	1.2	4.1	18.8	0.6	0.8	50.0
3 + adults, 3 + children	1.1	2.7	43.3	49.3	50.9	75.7
2 adults, 3 + children	2.6	7.9	34.1	21.2	30.7	69.6
1 adult, 3 + children	0.2	0.9	40.7	1.0	1.6	65.5

Source: Authors' calculations, based on Russia NOBUS Survey 2003 and Tajikistan Living Standards Survey 2003.

Poverty rates for households of different types, however, share some features across the two countries. Common to both is the rough equality in poverty rates among children living in households with just one adult or with two adults. This does not fit with the rich country experience of child poverty. The reasons are likely to vary quite a bit from country to country within the region, and the issue is explored in greater detail below. Common to both countries too are the higher rates of poverty among households with three or more adults. This is to some extent counter-intuitive, since a greater number of adults in a household should imply more economic activity, or perhaps more pension income, and therefore less poverty.

However, most households with three or more adults are also more likely to live in rural areas, where economic opportunities tend to be fewer, and poverty rates tend to be higher.

Also common to the two countries are extremely high rates of poverty among households with three or more children. In Russia, the increase in poverty rates as the number of children in the household rises is particularly steep, rising to over 40 per cent among households with three plus adults and three or more children. World Bank (2005) shows that across the region, poverty among children in large households is notably higher than poverty among children in smaller households (see Annex 2, Figure A2.1). This has two important implications. First, the child poverty rate is closely related not only to the size of the child population, but also to the concentration of children in large households. Second, in every country, even those with low rates of child poverty, children in large families are especially disadvantaged.

The analysis of Table 5 above considers household composition in very crude terms – the number of adults and children only. In the remainder of the section we look more specifically at the living arrangements of children and their parents, and the poverty rates that children in different arrangements experience. Table 6 organizes children in Bulgaria, Albania, Moldova, Russia and Tajikistan into different household and family composition groups – nuclear family households (that is, just parents and their dependent children aged under 18) and non-nuclear family households, with both parents present, or just one, or no parents present. In all countries, a majority of children live in two parent nuclear family households. The proportion of children living in households comprising only a single parent and her (for the most part) children varies from 2 per cent in Albania to 16 per cent in Moldova. Between about 3 and 4 in ten children live in households that contain not only their immediate family, but also other adults, often grandparents or other relatives. In Bulgaria, more children of single parents live in non-nuclear than in nuclear family households.

Table 6 shows that Albania is the only one of the five countries where children living with a single parent are clearly more likely to be in poverty (as measured by the PPP $2.15 threshold) than children living with both parents. In Moldova and Tajikistan, children living in households containing only a single parent family have relatively low probabilities of falling into poverty compared with the average for their countries.[7] More surprising, children in Moldova and Tajikistan living in households without either parent also have relatively low probabilities of falling into poverty. In Russia, poverty rates change little according to the number of parents present in the household.

[7] These findings for Moldova and Tajikistan are statistically significant. The analysis for Bulgaria shows similar patterns with a lower risk of poverty among children living in single parent households. However because of small sample sizes results are not statistically significant

Table 6: Distribution of children and child poverty by household type (per cent)

	Albania 2002	Bulgaria 2001	Moldova 2003	Russia 2003	Tajikistan 2003
	Distribution of children by household type (per cent)				
Nuclear family households					
- 0 or 1 parent	2.2	5.2	16.3	14.5	4.3
- 2 parents	62.8	52.1	53.7	60.3	51.4
Non nuclear family households					
- 0 parents	0.8	2.4	7.3	3.2	1.0
- 1 parent	1.5	7.2	8.5	9.8	4.6
- 2 parents	32.7	33.1	14.2	12.3	38.8
	Children in poverty, PPP $ 2.15 (per cent)				
Nuclear family households					
- 0 or 1 parent	35.4 [27.4-43.4]	(5.3) [0.1-10.5]	47.0 [43.0-50.9]	16.8 [15.6-18.0]	60.5 [56.3-64.7]
- 2 parents	24.8 [23.4-26.2]	10.7 [8.5-12.9]	53.3 [51.2-55.4]	15.6[15.0-16.1]	67.9 [66.7-69.0]
Non nuclear family households					
- 0 parents	-	-	52.4 [46.5-58.2]	17.7 [15.1-20.3]	55.6 [46.9-64.3]]
- 1 parent	(36.5) [26.0-47.0]	19.4 [11.6-27.2]	62.8 [57.6-68.0]	20.1 [18.5-21.7]	76.1[72.6-79.6]
- 2 parents	29.7 [27.6-31.8]	15.2 [11.9-18.4]	71.6 [67.8-75.4]	19.1 [17.7-20.4]	75.1 [73.8-76.3]
Overall child poverty	26.8 [25.6-28.0]	12.8 [8.5-18.7]	55.6 [54.0-57.2]	16.7 [16.2-17.1]	70.6 [69.8-71.4]

Source: Authors' calculations based on Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey 2001, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003, and Tajikistan Living Standards Survey 2003.
Note: Poverty threshold is PPP $2.15. No percentages are provided where the sample size on the cell is less than 60. Percentages in parentheses denote sample sizes of between 60 and 100. A nuclear family household consists only of parents and their dependent children aged 0-17. All other households are classified as non-nuclear family. 95 per cent confidence intervals are presented in the square brackets.

The data on Table 6 suggest that children in single parent families (and even in families where neither parent is present), whether they live in extended family arrangements or not, do not generally experience higher poverty rates compared with the average, which is not the case in most rich countries. Table 7 decomposes poverty among children in single parent families by cause of single parenthood in Moldova and Russia. This shows a more nuanced picture. In Russia, the most common cause of single parenthood is separation or divorce: 14 per cent of all children live with a one divorced/separated parent. These children experience poverty rates that are not very different to the average. Nine per cent of Russian children live in households with a widowed or never married single parent. Among this group, poverty rates are considerably higher, particularly where the children live in non-nuclear families. In the case of Moldova, children living with a widowed, separated or divorced single parent experience poverty rates not far from the averages for children in two parent nuclear and non-nuclear families. However, where at least one parent is a migrant or both parents are absent (we presume them also to be migrants), poverty rates drop to considerably less than the two parent averages.[8]

[8] Differences are statistically significant.

Table 7: Child population and child poverty by reason of single parenthood in Moldova and Russia, 2003

	Distribution of child population		Poverty rates	
	Households containing one nuclear family	**Households containing more than one nuclear family**	**Households containing one nuclear family**	**Households containing more than one nuclear family**
Russia:				
Children in two parent families	60.3	12.2	15.6 [15.0-16.1]	19.1 [17.7-20.4]
Children in one or no parent family				
- parent is single	1.3	2.2	21.7 [17.4-26.1]	28.8 [25.1-32.5]
- parent is widow(-er)	4.1	1.1	17.8 [15.5-20.2]	26.8 [22.0-31.6]
- parent is separated or divorced	8.3	5.3	16.5 [14.5-18.1]	15.3 [13.3-17.3]
- one parent is absent for other reason	0.7	1.2	..	19.3 [15.9-20.4]
- both parents are absent (reasons not specified)	0.1	3.2	..	17.7 [14.6-19.7]
Moldova:				
Children in two parent families	53.7	14.2	53.3 [51.2-55.4]	71.6 [67.8-75.4]
Children in one or no parent family				
- parent is single	0.7	1.1	..	..
- parent is widow(-er)	3.3	0.8	57.0 [48.4-65.6]	..
- parent is separated or divorced	4.6	3.8	54.2 [47.8-62.6]	65.6 [58.6-72.6]
- at least on parent is migrant*	7.4	4.4	38.2 [32.5-43.9]	54.2 [46.8-61.7]
- one parent is absent for other reason	0.1	0.1	..	..
- both parents are absent (reasons not specified)	0.1	5.6	..	51.2 [44.1-57.5]

Source: Authors' calculations from Russia NOBUS Survey 2003 and Moldova Household Budget Survey 2003.
Note: Poverty is defined as a child living in a household with a per capita income of less than PPP $2.15. 95% confidence intervals are presented in the squared brackets. A household containing one nuclear family consists of one or both parents, plus dependent children aged 0-17 years only. Children in any other arrangement are classified as living in a household with more than one nuclear family. The Moldova Household Budget Survey 2003 does not report explicitly migration as a cause of long or medium term absence of household members. Following advice from the Moldovan National Bureau of Statistics, migration has been imputed as the reason of absence crossing different information collected in the survey.

The picture that emerges from the data for Russia on Table 7 complements Kanji's (2004) findings that while single mothers as a group are at high risk of falling into poverty, they are also heterogeneous, with widows tending to have the lowest poverty rates (although not as low as couple families) and never married mothers having the highest rates. This table further shows that among children living in nuclear families those who live with just one parent (male or female, but in practice mostly female) have a higher poverty risk than those living with both parents, and that children living with never married parents have higher poverty rates than those living with widowed or separated/divorced parents, although differences between these latter groups are not significant. But the biggest disparities are between children in nuclear families and non-nuclear family households. Nonetheless, among children living with both parents or with a never married or widowed parent, poverty rates are significantly higher where they live in non-nuclear family households. Among children living with separated or divorced parents there is little difference between those living in nuclear and non-nuclear family households. While the data suggest that living in a non-nuclear family

household increases poverty risks for children, one can only assume, as Kanji (2004) suggests, that many children live with (mostly) their extended families so their parents can pool incomes and spread the responsibilities of childcare more widely in order to escape poverty.

In the case of Moldova poverty rates among children in non-nuclear family households are also higher than among children in nuclear family households. The biggest disparities, however, are in poverty rates among children with and without migrant parents: this is true among children in both nuclear and non-nuclear families. Moldova has experienced very high rates of migration since the mid 1990s. The International Monetary Fund (2005a) cites reports which estimate that 571,000 Moldovan citizens could be classified as part of a migration contingent in 2005 – 400,000 who are already abroad, and a further 171,000 recent returnees to Moldova who intend to migrate again. These two groups make up almost four in ten of the working age population in Moldova. Most are between the ages of 20 and 40, and 62 per cent of them married. In common with what is found in other countries with large numbers of out-migrants, married migrants tend to stay abroad for shorter periods than unmarried or divorced migrants. Russia and Ukraine are the most common destinations, followed by Western European countries. On average, migrants send back to Moldova over 50 per cent of their earnings, amounting to US$367 per transfer. Small scale research indicates that the impact of such remittances on family living standards in Moldova is considerable.[9] Notably, the IMF also reports that a large proportion of remittances is spent on education (although for whom, it is not made clear). The IMF (2005b) also reports large remittance flows (90 per cent of them from Russia) also to Tajikistan, which may be worth up to half of GDP for that country. However, while the data for Tajikistan on Table 6 are not inconsistent with the proposition that remittances are a major factor in reducing poverty among children living with one parent, there is little corroborating information on the characteristics of migrants from Tajikistan, or their family circumstances.

The suggestion that remittance flows lift children (especially children in single parent families) out of poverty in Moldova (and perhaps in Tajikistan) is a plausible one. However, it prompts important questions about the relationship between children's material well-being and their emotional and intellectual development, what Bradbury (2003) refers to as parental care and home production. Substantial numbers of parents in the region may be making definitive trade-offs between provision of economic support and non-economic support in seeking to provide for their children. In a study of children of international migrants in South East Asia, Bryant (2005) argues that the migration of parents improves the material well-being of children left behind, which may flow to health and schooling. However, he argues that the social costs of migration in South East Asia (principally the absence of parents) are mitigated to a large extent by the active support of extended families. Although the data on Table 7 suggest that in many cases extended families in Moldova support the children of migrant parents, sources of social support for children of migrants from countries such as Moldova and Tajikistan are not well documented. Nor is it clear how many children are left without one or both parents for extended periods, or who looks after them during these

[9] Cornia (2004) reports that information in the Household Budget Survey (used in this analysis) on remittances received by households in Moldova is poor, and appears to greatly understate the real impact of remittances on household living standards.

absences. Considering the size of the migrant populations from these countries, further research on these issues is urgently needed.

7. URBAN, RURAL AND REGIONAL DIFFERENCES IN CHILD POVERTY

In most countries and particularly in developing countries, poverty rates tend to be higher in rural than in urban areas. This pattern is reflected in varying degrees across the region for children, as Table 8 shows for five countries. In Russia and Bulgaria, the proportions of children living in households with less than PPP $2.15 per capita are very low in the main cities (Sofia, Moscow and St Petersburg), and much lower in other urban areas than in rural areas. In Albania, child poverty in the capital city (Tirana) is slightly lower than in other urban centres, and about a third lower than in rural areas. In Moldova and Tajikistan, on the other hand, while child poverty in the capital cities is relatively lower, there is little difference between rates of child poverty in other urban areas and in rural areas. Cornia (2004) argues that in the case of Moldova, extreme poverty tends to be most acute in small towns, in part because many of their inhabitants (unlike people in rural areas) cannot rely on subsistence farming to provide food, and in part because the towns themselves do not have the industry or economic base to take advantage of national economic growth. Many were developed as one-company towns in the communist era, and have languished in decline since the start of the Transition. Economic expansion has tended to pass them by. In Russia, however, where many small and medium sized towns face similar structural problems of industrial decline, child poverty rates across all regions tend to gradually increase as the size of the city or town diminishes, and the poverty rate is still notably higher in villages and rural areas compared with even the smallest towns (see Annex II Table A2.1).

Table 8: Income poverty among children by place of residence (urban/rural), 2003 (per cent)

	Child poverty rates			Poverty rates among children in households with 3+ children		
	Capital city	Other urban areas	Rural areas	Capital city	Other urban areas	Rural areas
Albania (2002)	18.3	21.9	30.3	40.2	41.7	40.1
Bulgaria (2001)	1.0	9.2	24.0	-	31.3	45.9
Moldova (2003)	29.3	56.9	61.3	34.3	66.7	73.7
Russia (2003)	4.0	12.7	26.6	-	29.0	44.2
Tajikistan (2003)	59.6	71.6	71.7	65.6	77.2	73.9

Source: Authors' calculations based on Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey, 2001, Moldova Household Budget Survey 2003, Russia NOBUS Survey 2003, Tajikistan Living Standards Survey, 2003.
Note: Poverty threshold is PPP $2.15 per person per day.

Notwithstanding the generally higher child poverty rates in rural areas, Table 8 also shows that differences between children living in large households (with three or more children) in urban and rural areas are often small. In Albania, poverty rates among children living in large households are the same in urban and rural areas. In Bulgaria and Russia, overall poverty rates for children living in rural areas are more than double those for children living in urban areas. Among children in large households, the difference between urban and rural poverty rates is considerably smaller.

Table 8 also shows that absolute poverty rates experienced by children living in large households in rural areas of Russia and Bulgaria are not significantly different to poverty rates experienced by children in large households in Albania. This finding is surprising given the considerable difference in national income between the two former countries and Albania: in 2002, GDP for Russia and Bulgaria (PPP $7,993 and PPP $7,130 respectively) was about two thirds greater than that for Albania (PPP $4,830). Many large households in Bulgaria and Russia do not appear to share in the apparent advantage in average national income. Part of the explanation lies in the greater level of regional inequality in Bulgaria and Russia than in Albania, exacerbated in the Russian case by the size of the country, and in the Bulgarian case by very large differences in economic well-being between ethnic Bulgarians and minority ethnic groups, particularly Roma (see Section 4 above), most of whom are concentrated in rural areas. While disparities between urban and rural areas in Albania are not insignificant, they may be minimised by the relative wealth of rural areas in the south of the country (next to Greece), which may have the effect of reducing average rural poverty rates and bringing them closer to urban averages (see World Bank 2003).

It was noted in Section 1 that the collapse of many formerly state owned industrial enterprises, economic hardship and the enactment of land redistribution policies during the 1990s prompted many households to take up subsistence agriculture as a means of coping with adverse circumstances. Ablezova et al (2004) show that one factor behind the vulnerability of children in large households to poverty in rural Kyrgyzstan is that land

distribution policies enacted by the government in that country often implicitly discriminated against large households, through corruption (which resulted in poorer households losing out), and in some cases through policies which distributed the same amount of land to each household, regardless of size. Their research suggests that households with five or more children have on average less than half the land of households with no children. This finding adds to a picture of extreme vulnerability to poverty among children living in large rural households in both the richest and the poorest countries in the region.

The World Bank (2005) argues that rural poverty has remained high and has declined less than urban poverty since the late 1990s, because across the region most rural poor people's livelihoods continue to be based on subsistence agriculture. It is a resource in the face of uncertainty and food insecurity that rural households may still be reluctant to give up. However, it also means that many rural people often benefit less from economic growth, since they do not have the wherewithal to improve the productivity of their farms, and cannot take advantage of the economic opportunities that growth presents to the same extent that their urban counterparts can (Von Braun and Lohlein 2003).

Moreover, much of the consumption that contributes to rural households' living standards is not based on cash expenditure but on eating what they produce. In Bulgaria, more than a quarter of the value of all consumption among rural households with children is 'in kind', compared than less than a tenth of consumption among urban households with children. While the value of cash income, for example wages of employees, often increases with economic growth, the value of subsistence food production may not. Indeed, the availability of economic opportunities to earn cash may prompt rural children to leave school early and take up paid work. Research points to this occurring in Kyrgyzstan in recent years (Ablezova et al. 2004). And in Moldova, Murrugarra and Signoret (2003) suggest that during the economic crisis of 1999, older children aged 16-18, particularly those with younger siblings, were sometimes taken from school in order to raise the household's income, either directly or through freeing up other persons. They suggest that some households in Moldova may be protecting the enrolment in education and well-being of younger children by calling on the labour supply of their older siblings. In Albania too, evidence suggests that migration of parents and adult siblings may leave the farm more dependent on children's labour, as the following quote attests:

> Child labour in farming can be explained in part by the fact that adult family members have gone abroad or to towns to try to earn more money. If, for example, the father, the elder brother or the uncle is away from the fields, they are replaced by one or more children from the same family, especially during harvesting. (Grumiau 2004).

Children in rural areas also experience worse access to services than those in cities and towns. Stewart and Huerta (2006) show that in several countries, access to pre-schools is severely restricted among children in rural areas. Access to water and sanitation, and clean sources of heating is also poor in rural areas. UNICEF (2006) shows that in Turkmenistan and Uzbekistan, respectively, only 29 and 33 per cent of rural households have access to improved sources of drinking water. This compares with 81 and 85 per cent respectively in the urban areas of these countries. Differences such as those discussed here imply that the raw

poverty data shown on Table 8 are likely to understate the actual gap in living standards experienced by children in urban and rural children in the region.

Differences in living standards experienced by children in urban and rural areas capture some significant aspects of the geographical disparities that children experience in SEE and CIS countries, but not all of them. Differences between regions within countries are also important. Every country is subdivided into several layers of administrative regions. First order subdivisions (the largest) are usually given the name of oblasts in the countries of the former Soviet Union, and districts, prefectures or provinces in other countries. Russia is divided into 89 oblast-level units. Some of these are ethnic homelands, while others are strictly administrative units. The latter include the federal cities of Moscow and St. Petersburg, both of which have larger populations than many of the countries in the SEE and CIS. Albania is divided into 12 prefectures, while Kyrgyzstan is divided into seven oblasts plus the two cities of Bishkek and Osh. Across the region, first order administrative units have important functions in terms of social policy design and delivery of public social services, and in some cases tax collection. The distribution of state resources among these administrative units can have an important influence on the availability and quality of services for children. Yemtsov (2003) writes with respect to Russian regions:

> "In addition to similar geographic, historic and social conditions, regions are the agents of fiscal, structural and social policy. They have the right to levy local taxes, invest in local infrastructure, provide subsidies to enterprises, legislate on local social transfers, supplement federally mandated transfers, and provide housing and utility subsidies to the households. At the same time authorities in some regions employ several quasi-legal methods of impeding free movement of capital, goods, services and labour."

There are currently little data on children's well-being across the oblasts and districts of the countries of the SEE and CIS. More general analyses suggest often high and growing levels of inequality among regions within countries. World Bank (2003) highlights the gap in poverty rates between the mountainous north of Albania, and the more prosperous coastal region. Kolenikov and Shorrocks (2005) and Gerasimova (2006) both argue that Moscow is an outlier in the Russian context, as the richest, but also one of the most unequal cities or oblasts.

The analysis in this paper focuses in particular on the relationship between children's share in regional populations within countries and indicators of child poverty. In general, those administrative units with the greatest concentration of children in their populations also have the greatest concentration of poverty among children. Table 9 presents summary information on the sub-national distribution of child shares in the population, and on the distribution of child poverty, for eight countries. The standard deviations are measures of dispersion in the two indicators, and the correlation coefficients are measures of the extent to which the two indicators are associated. There are notable differences in the dispersion of both child population shares and poverty rates across the seven countries. In Ukraine, child population shares vary between 15 and 23 per cent of the total population in the capital city of Kiev and in the largely rural region of Transcarpathia. In Albania, they vary between 35 per cent in Korçe in the South East, near the Greek border, and 48 per cent in Kukes, in the mountainous North East, next to Kosovo. These differences are significant for child oriented policy

formulation. Heavier concentrations of children in particular oblasts or districts should trigger appropriate investments to ensure that they are not disadvantaged.

Table 9: Dispersion and correlation measures for in child population shares and child poverty rates, 2001-2003

	Regional child population shares		Regional child poverty rates		
	Average	Standard deviation (mean=0)	Average	Standard deviation (mean=0)	Correlation coefficient - child population shares and child poverty (R^2)
Albania (12)	39.6	3.6	29.4	7.7	0.73
Bulgaria (9)	19.6	2.0	12.2	8.4	0.24
Moldova (10)	26.4	3.7	59.8	13.5	0.13
Russia (47)	21.7	4.5	17.4	8.6	0.53
Ukraine (26)	18.9	2.1	33.0	7.5	0.25
Kyrgyzstan (8)	38.9	6.9	64.9	15.3	0.62
Tajikistan (5)	45.0	4.2	71.0	15.5	0.06

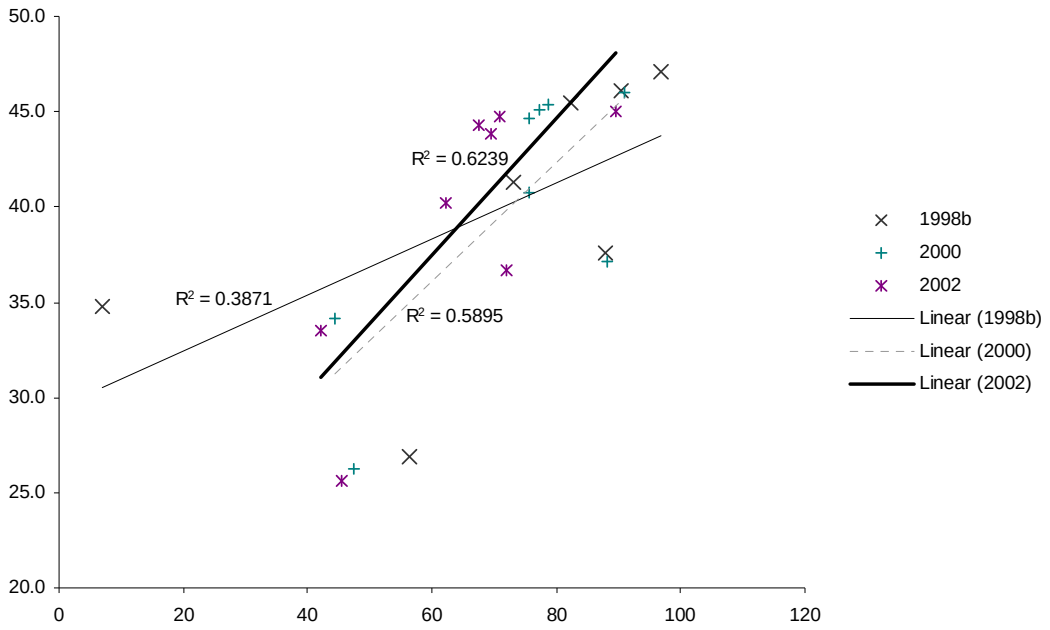
Sources: Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey, 2001, Moldova Household Budget Survey 2003, Russia NOBUS Survey 2003, Tajikistan Living Standards Survey, 2003. World Bank (2003), MONEE Project Country Analytical Report for Ukraine, 2004, MONEE Project Database.

Notes: The numbers in parentheses after the country names denote the number of sub-national regions from which statistics are calculated. The Standard deviation is a measure of dispersion – the larger the statistic, the larger the dispersion. In the standard deviations presented in the table, means are standardized to 0 to allow easier comparison of the statistic across countries. The correlation coefficient is a measure of the strength of a relationship between two distributions. A strong positive relationship between the two distributions (where a high score in one distribution is associated with a high score in the other) will give a Correlation Coefficient approaching 1.0. A strong negative correlation between the two distributions (where a high score in one is associated with a low score in the other) will give a Correlation coefficient approaching -1.0. Where there is no relationship between the two distributions, the score will be close to 0. Data for Albania and Ukraine show the relationship between child population and overall poverty rates. For these two countries, poverty rates are calculated according to national poverty standards. For the other five countries, poverty rates are based on the PPP $2.15 threshold.

Across the seven countries on Table 9, child poverty rates also vary considerably, and are invariably lowest in the largest cities. In Russia, child poverty rates range from less than two per cent in St Petersburg to over 50 per cent in the Republic of Tuva in the far east of the country. Such large differences, evident also in several other countries, suggest an enormous gap among sub-national oblasts and districts, not only in living standards, but also in children's life chances. Moreover, the correlation coefficients show that in five of the seven countries for which data are available, there is a strong positive relationship between child population shares and child poverty (the notable exception here is Tajikistan, where the region with lowest share of children (GBAO) in total population is also that with highest child poverty level). In general, where the child population share is high, the child poverty rate is also high. What is true internationally, that countries such as Tajikistan and Uzbekistan with high child population shares tend to have high child poverty rates, is also true within countries.

How have different administrative units within countries fared in terms of child poverty reduction since the late 1990s? Figure 5 shows that in Kyrgyzstan, the relationship between child population and child poverty strengthened between 1998 and 2002. That is, while the overall rate of child poverty declined in Kyrgyzstan, it declined least in those regions with the highest share of children in their populations. In the oblast of Naryn in the centre of the country, for example, where more than 80 per cent of people are classed as living in rural areas and where the child share in the population is greater than in any other region, the child poverty rate was already the highest in the country in 1998, and it declined less than in any other oblast. On the other hand, the rate of child poverty fell more than the national average in Bishkek, the capital and largest city (and also the region with the lowest poverty rate), between 1998 and 2002. In addition, the child share in the population of Bishkek fell by more than the average.[10] This suggests that in Kyrgyzstan at least, reductions in child poverty were accompanied by greater geographical polarization between poor children and those above the poverty line. The poverty reduction that occurred during the period of economic recovery has not been equally enjoyed by all children.

Figure 5: Changes in the relationship between children's share in the population and child poverty in the oblasts of Kyrgyzstan, 1998-2002



Source: Falkingham and Ibramigova 2004, and MONEE Project database.
Notes: The Y axis shows children's share in the population of different oblasts in Kyrgyzstan, while the X Axis shows the child poverty rate in the oblasts, based on the national subsistence minimum. Child population data for 1998 and 2000 are interpolated.

[10] However, Falkingham and Ibramigova (2004) comment: "Interestingly, it seems that children living in urban areas have been hardest hit by the recent slowdown in economic growth, with urban child poverty rates worsening between 2001 and 2002 whilst those in rural areas continued to improve." This is also consistent with the World Bank thesis that poverty rates in urban areas are considerably more elastic than those in rural areas.

8. CONCLUSIONS

This paper uses household consumption as indicator for considering child poverty and well-being in the SEE and CIS region. Results for absolute child poverty using the PPP $2.15 per person per day poverty line are quite robust to alternative assumptions, and correlate well with many other non-income indicators of deprivation. This measure of poverty facilitates international comparison, is simple to understand and the results obtained are relatively robust.

The analysis shows that, along with absolute poverty, relative poverty is important to monitor among children in the region, since it can reveal whether the fruits of economic growth are being evenly shared, and whether particular groups of children are excluded from what is considered the average standard for the population or the population sub-group. The analysis reveals that in some countries (for example Moldova), relative poverty rates are low among very young children, even though relative poverty among all children is high, whereas in other countries (for example Bulgaria), relative poverty is much the same among all children, and among young children.

This paper also highlights the strong relationship between child population share and child poverty. In countries with a greater share of children in their populations, the child poverty rate tends to be higher. This is also true of regions within countries, and indeed of households. Across the region, households with greater numbers of children are more likely to experience poverty. This suggests that policy should pay attention to demographic characteristics. This is equally important for those countries where fertility rates remain high and the child population continues to grow, and those countries where fertility is low and the child population is falling. In all countries, greater public investment in children is essential if the reductions in child poverty witnessed across the region since 1998 are to be consolidated.
Finally, the paper reports that while migration may have a positive impact on poverty rates among children living with just one, or even no parents, this must come at a price. As yet, this price has not been calculated. There is important research to be done on the trade-offs that parents make between home production and care, and economic support for their children, particularly where that economic support involves migration and separation of parents from children. Where one of the factors influencing parents' choices is the absolute poverty that they and their children experience, understanding better the consequences of their choices for child well-being in the wider sense becomes urgent indeed.

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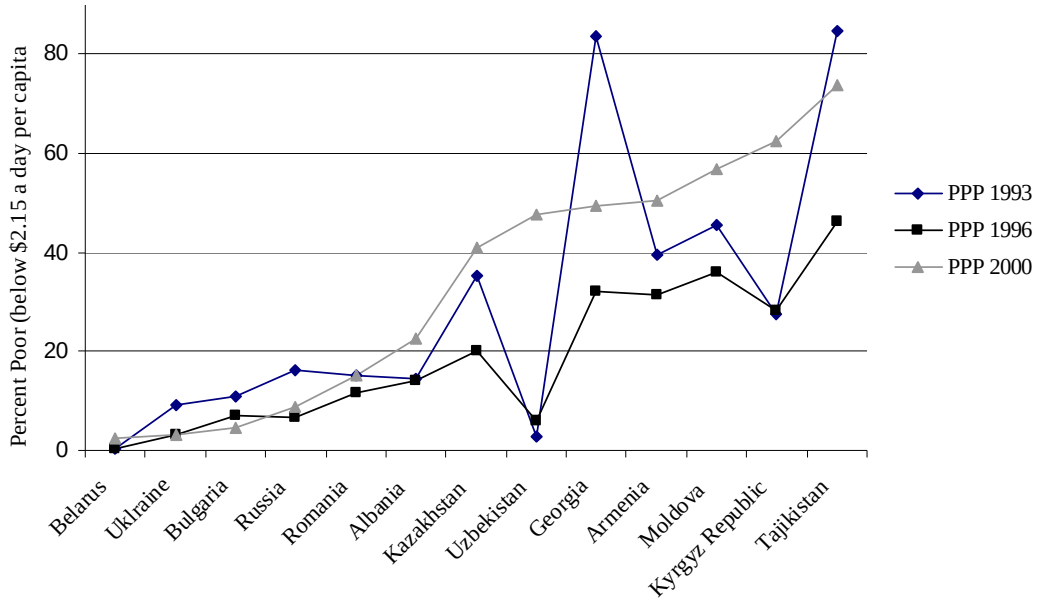
ANNEX I: SENSITIVITY TESTING THE PPP $2.15 CONSUMPTION POVERTY LINE

Figure A1.1: Poverty rates with different Purchasing Power Parity estimates, years 2002/2003



Source: World Bank (2005*)*
Note: PPPs have been estimated on household consumption data for countries in the region for the years 1993, 1996 and 2000. World Bank (2000) uses PPPs estimated for 1996. Poverty rates in the figure refer to the overall population living in households with a per capita consumption lower than $ 2.15 a day. Countries are sorted by increasing poverty rates based on 2000 PPPs.

Table A1.1 Impact of varying the poverty line (per cent in poverty)

	Poverty threshold (in PPP $)				
	1.94 (2.15–10%)	2.15	2.37 (2.15+10%)	4.30	Average poverty gap (per cent PPP $2.15 threshold)
Bulgaria 2001					
All	5.8	7.2	9.1	28.6	28
Children	11.0	12.8	15.9	34.7	31
Albania 2002					
All	14.8	20.8	26.4	71.6	21
Children	20.0	26.8	33.0	78.7	22
Moldova 2003					
All	38.5	45.4	52.7	85.2	31
Children	48.2	55.6	62.4	89.4	33
Russia 2003					
All	8.9	11.4	14.4	47.5	29
Children	13.6	16.8	20.5	56.4	29
Tajikistan 2003					
All	61.7	68.3	74.4	94.6	38
Children	64.1	70.6	76.6	95.6	39

Source: Authors' calculations based on Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey 2001, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003, and Tajikistan Living Standards Survey 2003.

Note: poverty gap is calculated as the average distance of each poor child from the poverty threshold, expressed as a percentage of the threshold.

Table A1.2 Impact of varying the equivalence scale (per cent in poverty)

	Per capita scales				Bradbury
	θ=1	θ=0.75	θ=0.5	θ=0.25	and Jäntti
Albania 2002 (overall poverty rate is 20.8 per cent)					
Children	26.8	26.1	24.7	22.5	24.3
Elderly	14.9	15.3	18.5	23.0	17.1
Children in 1 child households	8.3	11.3	14.9	19.8	12.2
Children in 2 child households	16.6	18.1	19.3	19.0	16.8
Children in 3+ child households	40.7	37.1	32.0	26.1	34.1
Bulgaria 2001 (overall poverty rate is 9.4 per cent)					
All Children	12.8	11.8	8.7	6.1	11.3
Elderly	3.8	6.1	11.1	16.8	6.4
Children in 1 child households	3.8	3.4	3.6	3.2	3.8
Children in 2 child households	8.3	7.4	7.4	5.4	6.5
Children in 3+ child households	41.3	38.6	21.6	13.3	37.5
Moldova 2003 (overall poverty rate is 55.6 per cent)					
Children	55.6	50.2	43.7	37.9	47.8
Elderly	42.9	53.2	63.2	70.4	54.2
Children in 1 child households	43.8	42.5	41.7	41.8	41.4
Children in 2 child households	57.0	50.2	44.1	36.5	47.2
Children in 3+ child households	68.9	60.6	45.7	35.7	57.7
Russia 2003 (overall poverty rate is 11.4 per cent)					
Children	16.8	14.8	12.1	9.1	13.6
Elderly	8.4	12.0	17.4	23.4	12.2
Children in 1 child households	10.1	9.9	9.1	8.0	9.6
Children in 2 child households	17.7	15.1	11.8	8.4	13.6
Children in 3+ child households	37.1	28.9	18.9	12.5	27.2
Tajikistan 2003 (overall poverty rate is 68.3 per cent)					
Children	70.6	70.1	69.6	69.1	69.0
Elderly	67.0	68.3	70.9	70.4	70.5
Children in 1 child households	46.4	56.0	67.5	76.0	57.3
Children in 2 child households	58.7	63.5	68.9	74.1	62.3
Children in 3+ child households	73.6	71.8	69.9	68.0	70.6
Example equivalence scales					
1 adult	1.0	1.0	1.0	1.0	1.0
2 adults	2.0	1.68	1.41	1.19	1.8
1 adult, 2 children	3.0	2.28	1.73	1.32	2.10
2 adults, 2 children	4.0	2.83	2.0	1.41	2.83

Sources: Authors' calculations based on Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey 2001, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003, and Tajikistan Living Standards Survey 2003.

Note: Θ refers to the exponential by which household size is multiplied in order to arrive at equivalised household income. ɵ =1 (the equivalence scale used throughout this analysis) weights all individuals equally. The equivalence scale proposed by Bradbury and Jäntti (1999) has the form (adults + children x c)a, where c=0.7, and a=0.85. Overall poverty rates are held constant at the rate where the poverty threshold is PPP $2.15, and the equivalence scale is ɵ=1. The example equivalence scales show the multipliers by which total consumption for different example households would need to be increased in comparison with a single adult household in order to achieve the same living standard as the single person household under the different equivalence assumptions.

Table A1.3 Household access to water by quintiles of children's consumption

	Poorest quintile	2nd	3rd	4th	Richest quintile	All children
ALBANIA (2002)						
River, lake, pond or similar	4	3	2	0	0	2
Spring or well	25	30	24	25	19	25
Public tap	18	13	12	10	5	11
Running water outside the dwelling	24	22	17	14	9	17
Running water inside the dwelling	29	33	45	50	67	45
BULGARIA (2001)						
Piped public – inside dwelling	44	80	92	92	93	80
Piped public – inside building	6	8	2	5	4	5
Piped public - outside building	40	11	5	2	2	12
Other	11	1	1	0	1	3
MOLDOVA (2003)						
Aqueduct	16	19	18	33	52	28
Water reservoir	3	2	4	2	0	2
Well	76	70	72	62	47	65
Other	5	8	7	2	0	4
RUSSIA (2003)						
River, spring etc	3	1	1	1	0	1
Water truck or other	0	0	0	0	0	0
Well in collective use	6	4	2	2	2	3
Water pump in collective use	16	11	7	6	3	9
Well, water pump in courtyard	18	11	9	8	5	10
Running water in apartment/house	57	73	80	83	89	77
TAJIKISTAN (2003)						
Piped water inside the dwelling	21	18	22	24	27	22
Piped water outside the dwelling	14	15	16	20	22	18
Water truck	3	2	3	4	3	3
Public tap	9	10	14	11	10	11
Spring or well	11	11	11	13	13	12
River, lake, pond etc.	40	41	33	28	22	33
Other	2	2	1	1	2	1

Source: Authors' calculations based on Albanian Living Standards Measurement Survey, 2002, Bulgarian Integrated Household Survey 2001, Moldovan Household Budget Survey 2003, Russian NOBUS Survey 2003, and Tajikistan Living Standards Survey 2003.

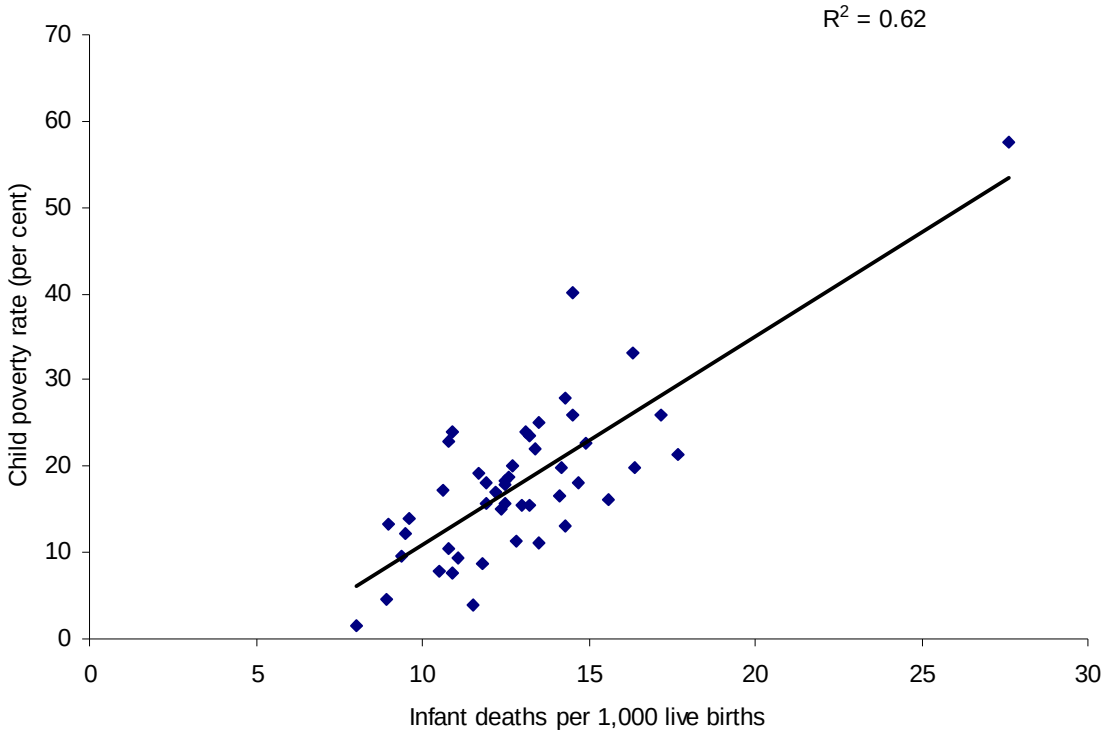
Note: The World Bank (2005) notes that access to water is often restricted to a few hours a day in some countries. In some countries, moreover, piped water is sometimes unfit for drinking.

Table A1.4 School enrolment among boys and girls by poverty status

	Moldova 2002	Bulgaria 2003	Russia 2002	Georgia 2002	Kyrgyzstan 2002	Tajikistan 2003
Age 7-14 enrollment						
male non poor	99	98	97	98	96	92
male poor	96	70	96	96	97	92
female non poor	98	98	98	97	95	90
female poor	95	84	97	97	97	88
Age 15-17 enrollment						
male non poor	85	92	91	95	88	81
male poor	72	43	81	91	89	73
female non poor	78	85	93	97	92	61
female poor	80	30	87	94	90	56

Source: data from the World Bank.
Notes: Poverty is defined as living in a household with current consumption of less than PPP $2.15 per person per day for all countries except Bulgaria, where the threshold is PPP $4.30 per person per day.

Figure A1.2 Infant mortality and child poverty in Russia's oblasts, 2003



Source: Russia NOBUS Survey 2003 (authors' calculations), and MONEE Project Database.

Note: Data are for 47 out of 89 oblasts in Russia (covering about two thirds of the population of Russia) where the NOBUS survey is representative at the oblast level. Child poverty rate refers to the per cent of children living in households with incomes below the PPP $2.15 threshold.

ANNEX II OTHER DETAILED TABLES ON CHILD POVERTY

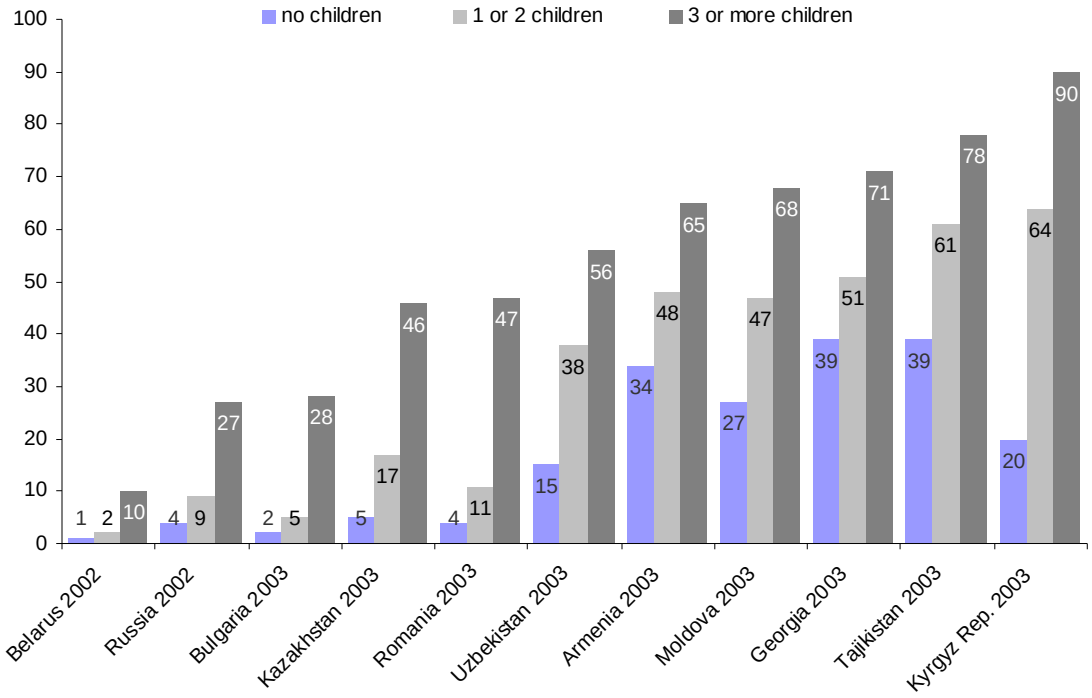
Table A2.1 Child poverty rate and share of children in total population by Federal Districts and Type of City, Russia, 2003 (per cent)

Size of city	Federal Districts							
	Central	North-west	Southern	Volga	Urals	Siberian	Far East	Total
1,000,000+								
poverty	9.5	1.6	0.0	11.8	9.9	10.8	0.0	9.2
share	13.3	11.2	0.0	18.1	20.8	18.3	0.0	15.3
500,000-1,000,000								
poverty	11.1	0.0	9.0	9.7	0.0	5.3	7.8	8.7
share	18.8	0.0	20.5	17.6	0.0	18.7	19.4	18.8
250-500,000								
poverty	8.1	2.0	8.6	14.2	8.9	5.6	22.6	8.4
share	17.3	20.3	18.7	18.8	21.1	21.7	18.8	19.2
100-250,000								
poverty	9.9	6.6	17.6	8.9	9.5	18.0	9.3	11.8
share	17.2	19.7	19.2	20.3	21.7	22.7	21.6	19.9
50-100,000								
poverty	11.2	11.9	21.6	11.9	11.6	19.7	18.1	14.6
share	15.5	21.6	17.9	22.8	19.3	20.9	22.3	19.6
20-50,000								
poverty	14.3	8.6	14.8	15.3	15.7	8.5	25.0	13.8
share	18.0	20.4	19.9	20.8	20.6	23.6	23.2	20.4
≤20,000								
poverty	12.4	11.9	18.2	15.3	24.6	17.7	23.2	16.5
share	16.1	20.6	21.2	21.8	24.5	23.0	22.6	20.4
villages								
poverty	18.5	12.1	25.6	30.0	28.0	28.5	36.8	26.0
share	17.5	23.6	23.5	24.4	25.6	27.5	27.0	23.4
Total								
poverty	12.4	7.7	19.4	18.2	16.5	17.9	22.3	16.3
share	16.3	18.0	21.2	21.1	22.1	22.9	22.7	20.0

Source: Russia NOBUS Survey, Authors' calculations.

Note: Child poverty rate refers to the per cent of children living in households with incomes below the PPP $2.15 threshold.

Figure A2.1 Poverty by number of children in the household (per cent)



Source: World Bank, 2005, Appendix Table.
Notes: Poverty threshold is PPP $2.15 adopting a 'per capita' equivalence scale.

ANNEX 3: DATA SOURCES DESCRIPTION

Table A3.1 Summary description of the surveys analysed in this study.

Country	survey name	data collection period	Sample size no. of households	Sample size no. of individuals	Sample size no. of children
Albania (2002)	Living Standard Measurement Survey	April - July 2002	3,599	15,559	5,633
Bulgaria (2001)	Integrated Household Survey	April - May 2001	2,500	7,326	1,432
Moldova (2003)	Household Budget Survey	Jan.-Dec. 2003	6,125	15,557	3,933
Russia (2003)	NOBUS (National Survey on Household Welfare and Social Program Participation)	May - June 2003	44,524	117,196	25,443
Tajikistan (2003)	Living Standard Survey	June - July 2003	4,156	26,132	11,913

Note: Further descriptions and the full datasets for the surveys of Albania, Bulgaria and Tajikistan can be obtained at www.worldbank.org/lsms/guide/select.html Further information and the full dataset for the Russian NOBUS survey can be downloaded at http://nobus.worldbank.org.ru A restricted dataset of the Moldovan HBS (2003) can be downloaded at www.statistica.md/statistics/dat/332/en/bug_eng.htm Detailed information on these surveys can also be found at: http://www.internationalsurveynetwork.org/surveys