

Nature and Evolution of Poverty, 1998–2003

Poverty has declined significantly in Eastern Europe and the Former Soviet Union (the Region) since the financial crisis in Russia (1998–99). Then, one in five people (or 20 percent of the population) were living in poverty. Five years on, this figure is close to one in eight people (or 12 percent).¹ This report documents the substantial reduction in poverty that has been achieved since 1998 and discusses why poverty has been more responsive to growth in some countries than in others. It explores the main channel—the labor market—through which resurgent growth has contributed to poverty reduction. It examines whether, and to what extent, nonincome dimensions of welfare have improved alongside improvements in household income. Finally, it discusses prospects for the reduction of both poverty and overall economic vulnerability and what role public policy can play. This chapter discusses the nature and evolution of poverty in the period since 1998.

Introduction

How many people are living in absolute deprivation in Eastern Europe and the Former Soviet Union? To answer this question, one needs to measure material well-being and establish a poverty line.

Data on well-being for this report are derived directly from representative household surveys to ensure comparability across countries and over time (see overview box 3 and the appendix, A. Data and Methodology). Survey data are available for 23 countries from the Region, although the data do not span the entire period 1998–2003 in all countries.² To deal with the diversity of the Region, these countries are grouped into four subregional clusters:

- EU-8, the group of countries that recently acceded the European Union (EU) (and have the lowest poverty)
- Southeastern Europe (SEE), the group of countries in Europe that are either formal candidates or have some prospect of acceding to the EU—Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Romania, and Serbia and Montenegro (moderate poverty)
- Middle income CIS countries, consisting of Belarus, Kazakhstan, Russia, and Ukraine (moderate poverty)
- Low income CIS countries, comprising Armenia, Azerbaijan, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, Turkmenistan, and Uzbekistan (high poverty)³

Turkey, included in the Europe and Central Asia (ECA) Region in the World Bank classification, but which does not have the same historical legacy as the other countries, is treated as a benchmark or comparator country to reveal differences between poverty in a transition economy context in the Region and poverty in a developing country. Two other benchmarks from outside the Region are also used: Colombia (survey covers 2003) and Vietnam (latest available survey is 1998).

One dollar a day is not enough in the Region. In many parts of the world, the \$1-a-day line is used to measure absolute deprivation. However, because of the cold climate and other features of countries in the Region, this line is too low (see box 1.1). As a result, this report uses the \$2-a-day line (or, more accurately, \$2.15 per person per day) to measure the extent of the absolute material poverty. A higher poverty line, the \$4-a-day line (or, \$4.30 per person per day) is used to measure “economic vulnerability,” by which is meant those who are not absolutely poor, but are nonetheless vulnerable to poverty (see box 1.1 and box 1.2).

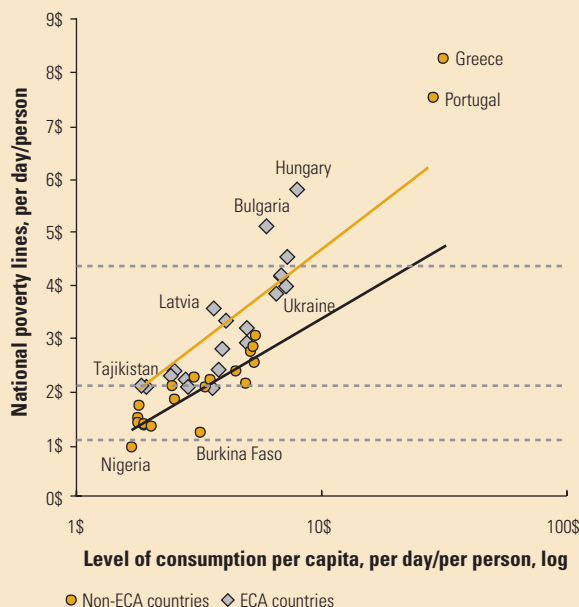
These lines are converted into local currencies, using 2000 purchasing power parity (PPPs) (see overview box 1 and the appendix for comparison of PPPs used in this report to other PPP revisions of 1993 and 1996) and country-specific consumer price indexes (CPIs).⁴

BOX 1.1

What Is an Appropriate Poverty Line for the Region?

This report uses an *absolute* concept of poverty, which is consistent with a large body of literature in which poverty is seen as the inability to meet basic material needs (Ravallion 1994). Although the notion of basic needs differs across countries, it can be reasonably well defined as the current cost of the subsistence consumption basket (see box 1.2). In practically all countries in the Region, one finds groups of the population unable to meet such basic needs. This group and the group who is “nearby” in income terms are the focus of this report. The alternative measure of deprivation—*relative* poverty—has also been used in the literature (Atkinson, Marlier, and Nolan 2004). However, the difficulties that it creates for monitoring differences across countries and changes over time within countries make the authors favor the absolute poverty approach.

What would be an appropriate absolute poverty line for countries in the Region? The World Bank often uses \$1 a day for cross-country comparisons, which has since 1990 come to be regarded as providing the absolute minimum standard of living. The \$1-a-day poverty line (in 1985 PPPs) was chosen because it was the most typical poverty line among the low-income countries (later updated, using 1993 PPPs, to \$1.075 a day). None of the countries in the Region was considered when coming up with this estimate.

National Poverty Lines and Consumption in 2000 PPPs

Sources: ECA: World Bank staff estimates; non-ECA: Kakwani and Sajaia (2004) and OECD (2003) for 2000 PPP; EU: Eurostat (2003) recalculated from per equivalent to per capita, using formula by Deaton and Zaidi (1999); and Dennis and Guio (2004).

Note: Dashed gridlines correspond to \$1.075, \$2.15, and \$4.30 a day per capita.

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BOX 1.1 (continued)

Comparing national poverty lines for groups of countries (see figure) reveals that, as elsewhere in the world, there is a close correlation in the Region between the average standard of living and the national minimum needs definition. However, no country in the Region has a poverty line close to \$1 a day. On the contrary, the lowest poverty lines cluster around the \$2 mark, which fortuitously is twice the \$1-a-day line. The vertical distance between fitted lines for countries in the Region and those outside the Region, which translates into a higher national poverty line for the same level of consumption, is suggestive of higher costs of basic needs in the Region. This is not surprising in a part of the world where climatic conditions mean that warm clothing and heating, both of which can be expensive, are essential for survival. Two dollars a day (or, more accurately, \$2.15, which is exactly double \$1.075) is therefore used as an absolute poverty line. A higher poverty line (\$4.30 a day) is also used as a proximate vulnerability threshold to identify households who 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 suggests that households with per capita consumption at least twice the poverty line face considerably reduced risk of becoming poor (World Bank 2002c).

Sources: World Bank staff estimates; Ravallion 1994, Atkinson, Marlier, and Nolan 2004; Kakwani and Sajaia 2004; OECD 2003; and World Bank 2002c.

Material and nonmaterial poverty are closely linked. Poor people in the Region have much in common with people in other parts of the world; namely, an inability to buy basic material needs. However, the socialist legacy of high access to social services (for example, health care) and infrastructure (for example, heating), which have since been eroded, means that people feel an acute sense of deprivation relative to the past. For this reason, both income and nonincome dimensions of well-being are considered when trying to understand the evolution of living standards in the period since 1998. Material poverty remains in the center, because many of its nonmaterial aspects—such as the psychological pain of being poor, low achievements in education and health, vulnerability to shocks, and a sense of powerlessness—are in fact closely linked to material poverty. At the same time, nonmaterial poverty does not entirely overlap with material poverty and deserves distinct consideration.

The rest of this chapter is organized as follows: the first section presents the profile of material poverty and its changes over time, the second section discusses the nonincome dimensions of well-being, and the third section presents conclusions.

Consumption Poverty

More than 40 million people moved out of poverty in the Region between 1998 and 2003. The resurgence of growth in the Region during 1998–2003—particularly in Russia and other CIS countries—has substantially reduced the number of people in poverty. Poverty incidence fell from around 20 percent at the start of the period to around 12 percent by the end (figure 1.1). In addition to 60 million poor in 2003, more than 150 million remained “vulnerable” to poverty (between \$2.15 and \$4.30 per day).⁵ Thus, close to half of the population is either poor or under threat of poverty. Although some countries in the Region are among the poorest in the world—Tajikistan has a poverty headcount comparable to Cameroon, Côte d’Ivoire, the Republic of Yemen, and Honduras (see World Bank 2005i)—two-thirds of the poor in the Region live in middle-income countries, with Kazakhstan, Poland, Romania, Russia, and Ukraine jointly accounting for more than half of all poor.⁶

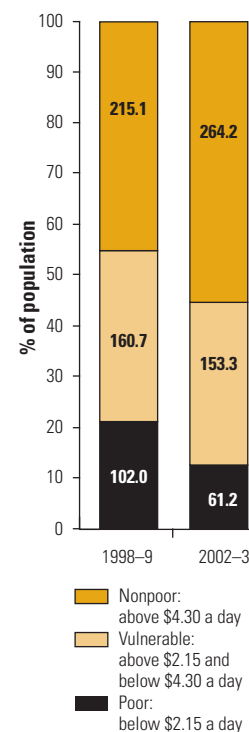
Country-Level Trends in Incidence and Depth of Poverty

Poverty reduction varied across countries: some countries did not experience any poverty reduction, while poverty fell significantly in others. Although most countries in the Region have seen a reduction in poverty from 1998–99 to 2002–3, the degree to which countries have succeeded in reducing poverty has varied a great deal (see overview figure 2 and appendix table 2 for country-level data on poverty over time). The largest reduction in poverty was achieved in Moldova, where 22 percent of the population moved out of absolute poverty.⁷ Poverty reduction in Tajikistan was equally impressive, with more than 15 percent of the population moving out of absolute poverty. In contrast, neither Georgia nor Poland experienced any poverty reduction—in fact, poverty increased in both countries—while poverty incidence in Lithuania was unchanged. The trends in poverty derived from the comparable consumption measure produced for this study correspond closely to poverty changes monitored with national definitions of poverty (see box 1.3).

In relation to country groupings, the most rapid poverty reduction occurred in the middle income CIS group, followed by the low income CIS group and SEE. There was no change in poverty in the EU-8. It is important to note here, however, that EU-8 countries had already grown out of poverty in its absolute sense by 1998, and further progress in poverty reduction for this group is more appropriately assessed using the concept of economic vulnerability.

FIGURE 1.1
More Than 40 Million People Moved out of Poverty during 1998–2003

Distribution of Population by Poverty Status



Source: World Bank staff estimates using ECA Household Surveys Archive.

Note: In million persons and in percent to population. Poverty lines converted to local currencies using 2000 PPP. Data refer to ECA Region as defined by the World Bank, and Turkey is included in the aggregate figures.

BOX 1.2**What Would Someone in the Region Living on Two Dollars a Day Consume?**

Based on prevailing market prices, the average food expenditure needed to meet basic caloric requirements with the cheapest products available on the market is around \$1.18 a day at 2000 PPP (selected countries in CIS, population-weighted). Interestingly, it is found to be in a relatively narrow range from the cheapest basket of \$1.15 a day in Tajikistan to around \$1.22 in Kazakhstan. National data show that such allowances cover only very meager baskets (composed predominantly of wheat, beans, milk, and oil). Based on this evidence, taking an international line of \$1.075 a day would simply violate the presumption of measuring basic needs, even in the poorest countries of the Region.

A person living at the poverty line of \$2.15 a day would have been able to spend about \$1 a day toward other needs. Such needs in the Region primarily consist of heating and lighting. The approximate monthly electricity needed to light an apartment with 3 bulbs and run basic appliances (for example, a refrigerator) is 150 kilowatt-hours. At prevailing prices of around 2–5 cents per kilowatt-hour, when converted into PPP (PPP exchange rates are typically 3–4 times market levels), and adjusting for family size (3–4 people per household), this amounts to \$0.07–\$0.17 per day. Heating would require significantly more. For example, Euroelectric's (2003) "typical consumer" on average requires an additional 350 kilowatt-hours per month around the year, or an additional \$0.17–\$0.42 per day in PPP. Wood and gas are cheaper sources of heating, but estimates from poor countries in the Region suggest wood for heating and cooking would cost at a minimum \$80–\$100 per year at the current exchange rate, which amounts to around \$0.30 per day. Thus, essential energy can eat up a quarter to a half of the dollar that remains after the purchase of the minimum food basket.

After purchasing food and energy, the person would have little to put toward miscellaneous essential nonfood items, such as clothing and transport. These needs are not negligible and do not represent a luxury. Warm clothing is essential in cold climates and, in groups such as children, requires replacement on an annual basis as children grow. In the Balkans, households are known to enter into complex reciprocal exchange arrangements to economize on children's clothing. Expenditure on warm clothing could easily amount to a minimum of \$50 per child per year. Transport costs are also important because maintaining access to the labor market and basic social capital requires some minimum mobility.

A sizable share of the population in the Region cannot afford even this frugal bundle.

Sources: World Bank staff; Kakwani and Sajaia 2003; Wu, Lampiatti, and Meyer 2004; and Euroelectric (2003).

Countries varied even more with regard to changes in economic vulnerability or the number of near poor. Often the reduction in the number of people below the absolute poverty line was accompanied by mixed outcomes in economic vulnerability (between \$2.15 and

BOX 1.3**National Poverty Assessments Confirm Poverty Trends Based on International Poverty Lines**

The World Bank carried out a number of Poverty Assessments in the countries of the Region over the recent years. These reports focused on the evolution of poverty using national (official) definitions of poverty and living standards suited to the circumstances of each country. Although *levels* of poverty as defined in this study according to international poverty lines may well differ from national assessments of poverty, *trends* in poverty universally point in the same direction.

In Moldova, the report entitled *Recession, Recovery, and Poverty in Moldova* (World Bank 2004i) shows that growth and income poverty are closely tied—poverty rose sharply and became deeper and more severe during the recession that followed the Russian crisis, but the rate, depth, and severity of poverty began to recede with the subsequent recovery. By 1999, 71 percent of the Moldovan population was poor according to national definition of poverty, but by 2002, the poverty rate had receded to 48 percent.

In Russia, the *Reducing Poverty through Growth and Social Policy Reform* (World Bank 2005g) documents that by 1999, because of the collapse in incomes and jump in inequality, poverty levels reached an all-time high for the transition period. Luckily, economic rebound after the crisis was both impressive and broad based—albeit uneven—across both sectors and regions. All this led to a dramatic reduction in poverty. Russia succeeded in cutting poverty in half between 1999 and 2002, from about 42 percent in 1999 to 20 percent in 2002, using a consistent national poverty standard.

In Belarus, the *Poverty Assessment* (World Bank 2004b) reports that according to national measures of poverty, the headcount ratio has fallen from 39 percent of population in 1996 to 27 percent in 2002, and further to 18 percent in 2004, implying that about 2 million people moved out of poverty. This can be fully accounted for by broad-based economic growth beneficial to labor. Strong growth in labor-intensive sectors (such as services, food processing, and machinery), backed by government wage and income policies, helped to ensure that the growth benefits were broadly shared by the population. The poverty reduction of Belarus is impressive but vulnerable because Belarus's significant comparative advantages at its main export markets, the main source of its impressive growth, are eroding quickly.

In the Kyrgyz Republic, as argued in *Enhancing Pro-Poor Growth* (World Bank 2003i), major strides in the past few years toward macroeconomic stability and economic growth started paying off in poverty reduction. With increased productivity and a shift toward higher-valued products, the agricultural sector has led economic growth since 1996, although gold and trade have also contributed to the recovery. Based on the full nationally representative survey (only comparable since 2000), the number of poor people was reduced by an estimated 300,000 individuals between 2000 and 2001 (poverty declined from 63 percent to 56 percent, using the national definition of poverty). Analysis of a panel subset of the survey shows that out of every 100 poor people in 1998, 23 people are estimated to have escaped poverty by 2001.

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BOX 1.3 (continued)

In Poland, the trends point in the opposite direction. The report *Growth, Employment and Living Standards in Pre-Accession Poland* (World Bank 2004h) shows that the growth slowdown during 1998–2002 led to a reversal of the previous trend toward poverty reduction. Low growth rates and growing inequalities combined to increase poverty after 1998—from around 13 percent in 1998 to 15 percent in 2001, according to national definition. Moreover, poverty has become increasingly a “permanent” phenomenon associated with lack of skills, long-term unemployment, and residence in small towns or in particular regions.

In Georgia, the *Poverty Update* (World Bank 2002c) and subsequent analysis focused on a key puzzle: why, despite positive growth, was there no poverty reduction in the country? The extreme poverty incidence edged up during 1998–2003 from around 14 percent to 17 percent of the population. Poverty (officially defined) stood at around 50 percent. The report argued that growing poverty between 1997 and 2000 was due to increased inequality in the distribution. Rural poverty worsened considerably. Growth was too weak and too concentrated in a narrow set of sectors, and there were no effective mechanisms to redistribute its benefits.

Sources: World Bank 2002c; World Bank 2003i; World Bank 2004b; World Bank 2004h; World Bank 2004i; and World Bank 2005g.

\$4.30 per day). In some cases, the number of vulnerable increased (for example, Armenia, Kazakhstan, the Kyrgyz Republic, and Moldova). In others, such as Russia, there was little change. By contrast, Hungary and Romania reduced economic vulnerability significantly.

In underlying poverty incidence by country, countries form three distinct clusters: low, moderate, and high poverty (figure 1.2). At one end of the spectrum, Armenia, Georgia, the Kyrgyz Republic, Moldova, Tajikistan, and Uzbekistan are characterized by high incidence of poverty. At the other end, countries such as Belarus, Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, and Ukraine have negligible poverty at \$2.15 a day. A much higher poverty (or vulnerability) line of \$4.30 a day still yields relatively limited poverty in these countries. Countries in the middle—Kazakhstan, Romania, and Russia—have moderate poverty (in the range of 10–20 percent) at \$2.15 a day, but very sizable poverty at \$4.30 a day. High prevalence of poverty at \$4.30 in these countries is a reflection of high vulnerability to economic downturns, which, as the financial crisis in Russia has shown, could easily lead to doubling of absolute poverty counts in a space of a year. Comparing poverty in the Region to benchmarks shows that each of these comparator countries fits in a particular cluster mentioned above: Colombia in the low-poverty

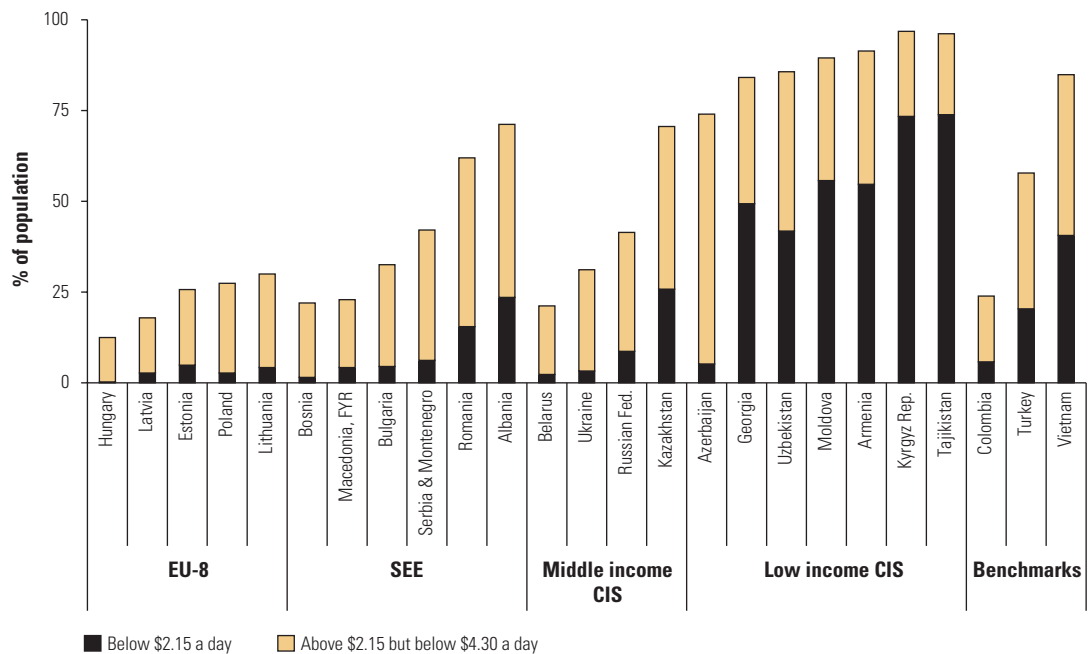
cluster, Turkey in the moderate-poverty cluster, and Vietnam in the high-poverty cluster.

In some countries in the Region, poverty remains shallow, while in others, it is deep, and deepening. For countries for which data are available over time, poverty has become deeper in some countries with initially low depth, such as Poland and Romania. On the contrary, poverty depth fell in some poorest countries and approached more moderate levels, for example, in Armenia, Moldova, and Tajikistan. In other countries, it remained stable or increased. Despite some convergence, differences between countries in poverty depth remain very large (figure 1.3) and warrant different approaches to poverty reduction.

Profile of the Poor

Looking beneath national aggregates, which groups face a higher-than-average risk of poverty, and which groups constitute most of the poor? The two are not the same. Certain subgroups can have an

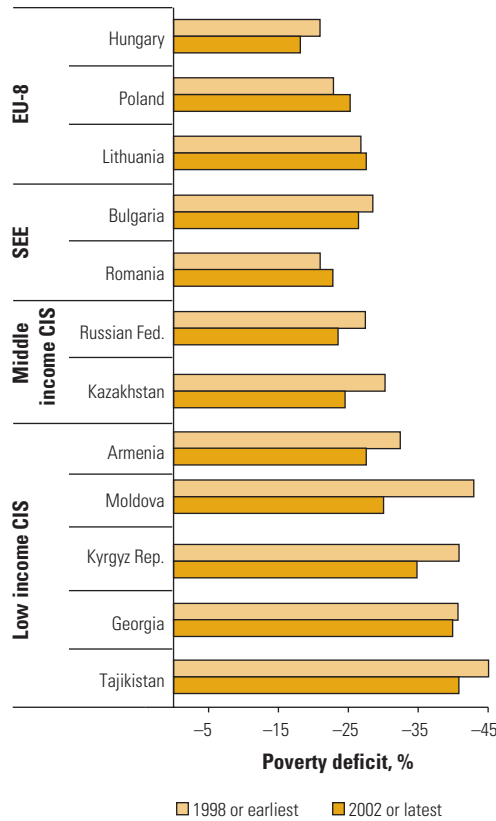
FIGURE 1.2
Poverty Incidence Varies across Countries in the Region, around 2003



Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 2 for latest year.

Note: In 2000 PPPs.

FIGURE 1.3
Poverty Depth in the Region, 1998–2003



Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 2 for data and years used by country.

Note: Poverty depth is the distance between consumption per capita of an average poor and poverty line, expressed as percent of poverty line. For the EU-8 poverty depth is assessed using \$ 4.30 a day, for other countries, \$ 2.15 a day.

extremely high incidence of poverty, but may not form most of the poor because of their small share in the population. The discussion focuses first on groups with high risk of poverty and then on groups that constitute a large share of the poor.

Although the poverty profile is changing, the same groups are found to be at high risk of poverty as in 1998. Five years ago, the World Bank identified four subgroups of the population as having a higher incidence of poverty than others: in particular, the unemployed, the less well educated, the rural population, and children (or large families). However, because these groups made up a relatively small share of the total population, they rarely constituted the largest group among the poor, except in a few countries. In most of the

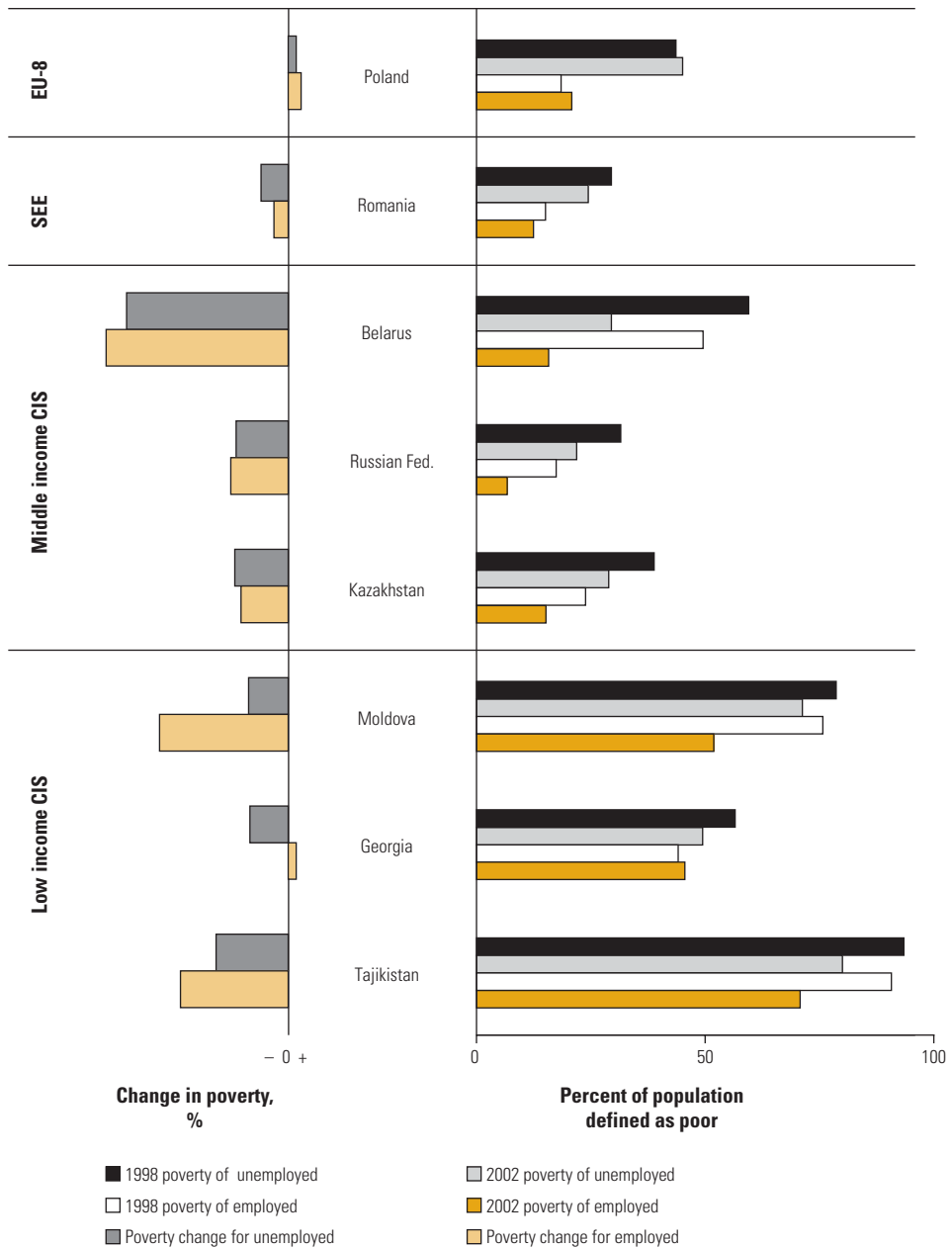
Region's countries, the largest group of the poor was found to be employed, with a secondary education, often living in urban areas, and of working age. Children formed the second largest group. Taken together, working adults and their dependent children (or, working families) accounted for an overwhelmingly large proportion of the poor. Five years later, this picture remains largely true.

The unemployed face high and increasing poverty risk. As might be expected, the unemployed face a higher-than-average incidence of poverty (right panel in figure 1.4). Moreover, there has been an ongoing deterioration in their position relative to the employed (left panel in figure 1.4). Indeed, in the middle- and low-income countries in the CIS, such as Belarus, Moldova, Russia, and Tajikistan, there has been a sharp increase in relative poverty risk of the unemployed (that is, poverty risk relative to the employed), basically reflecting the substantial improvement in the living standards of those in employment. By contrast, five years ago, the difference between the poverty risks of the two groups (that is, employed and unemployed) was relatively small. In the poorer CIS group, Georgia represents the case of the differences that remain as subdued as they were five years ago.

Low education is strongly associated with poverty. As reported previously, in the Region, poverty incidence falls with level of schooling. Figure 1.5 shows absolute poverty risk by levels of education for four representative countries and its evolution during 1998–2003. It shows that in countries with significant poverty reduction (mostly in the CIS), all educational categories shared equally. A different outcome emerges in countries with slow poverty reduction (mostly in EU-8 and SEE). In these countries, those with the lowest and the highest educational attainment experienced no change, while poverty incidence for the middle groups changed in parallel. Clearly, the low-growth environment has done little to reduce poverty among the least educated.

Capital cities gained the most from growth and rural areas the least. Rural areas face the highest poverty risk, followed by secondary cities. Rural poverty is typically higher than urban poverty (except for Armenia and Belarus), but the gap has increased in the past five years. This is because economic growth has resulted in more rapid poverty reduction in urban than in rural areas and, in a few instances (Armenia, Georgia, and Poland), rural poverty has actually increased (left panel in figure 1.6). Capital cities, and the poor residing in capital cities, gained most, to the point that in some countries, poverty in capital cities has been practically eliminated. Barring some exceptions driven by peculiar historic circumstances (for example, FYR Macedonia), capitals have much lower poverty than other cities, sometimes strikingly so (Kazakhstan, Russia, and Uzbekistan).

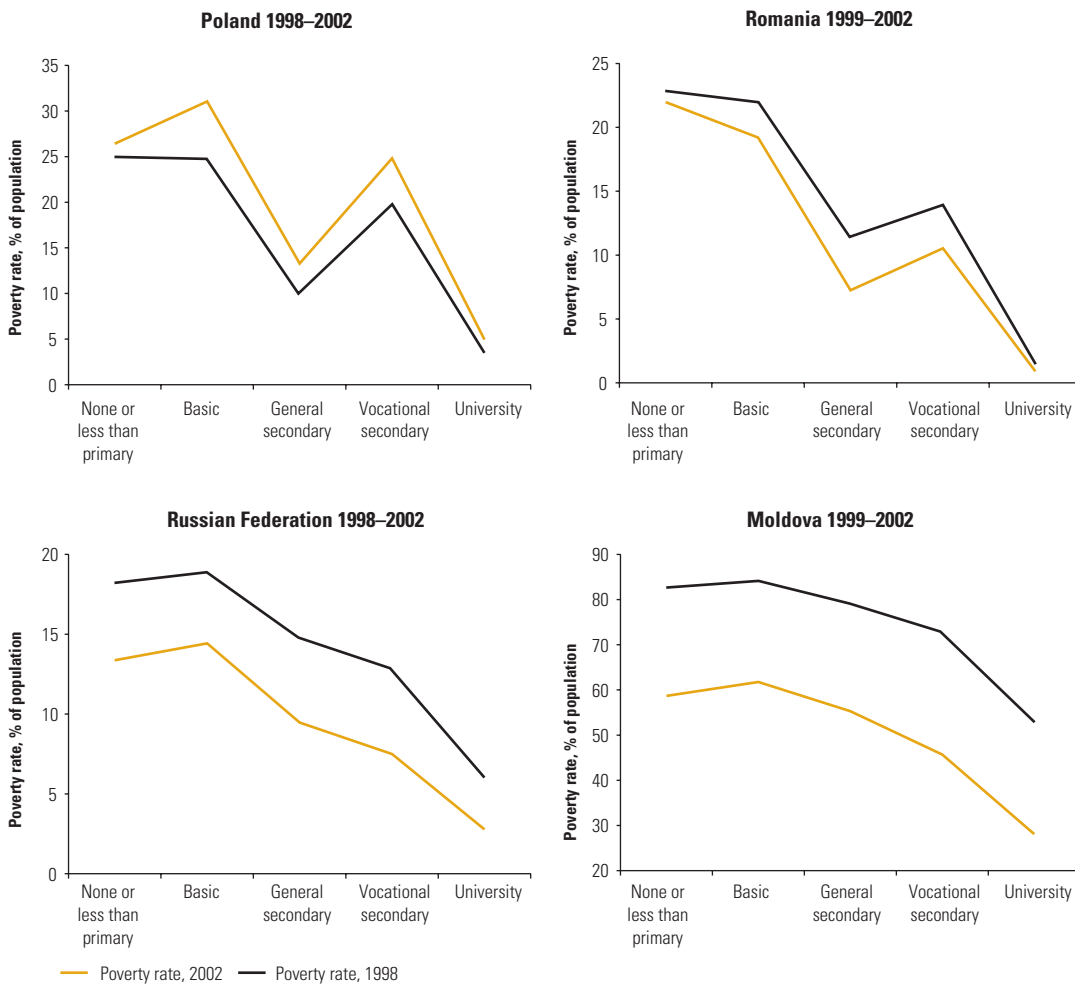
FIGURE 1.4
Levels and Changes in Poverty by Employment Status, 1998 to 2003



Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 6 for country-level data and years used.

Note: 1998 or earliest available year is used as starting point and 2002 or latest available as end point; for Poland and Belarus, poverty line is \$ 4.30 a day, for other countries, \$ 2.15; in 2000 PPPs.

FIGURE 1.5
Change in Poverty by Education for Representative Countries



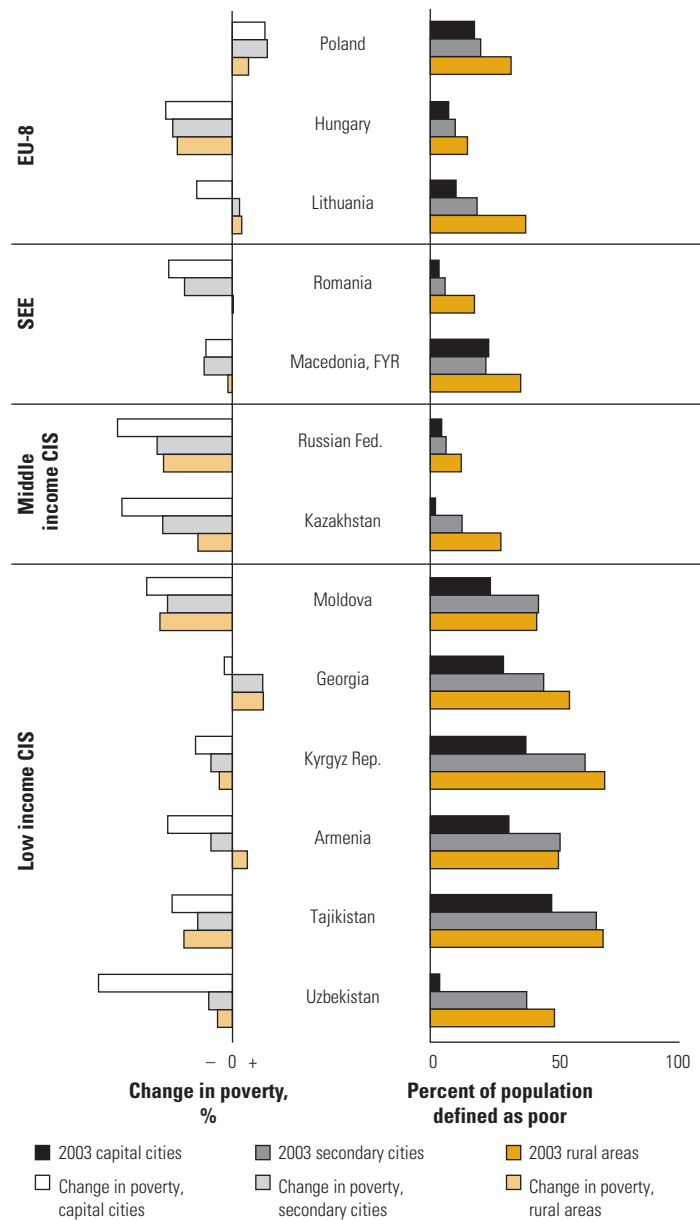
Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 5 for country data and years used.

Note: For Poland, poverty line is \$ 4.30 a day, for other countries, \$ 2.15, in 2000 PPPs.

Changes over time show that because of concentration of economic opportunities, capital cities have reduced poverty faster than any other areas have, and often secondary cities did no better on average than rural areas. As a result, a large gap is now observed in rural and urban poverty rates in middle income CIS countries, the EU-8, and SEE (right panel in figure 1.6). In countries where rural populations are large or the rural-urban gap is particularly high, the rural poor are in a majority. Thus, rural poor represent only between 25 and 40 percent of all poor in Bulgaria, Estonia, and Russia, but close to 70 percent of all poor in Kazakhstan, the Kyrgyz Republic, Moldova, Romania, and Tajik-

istan. Because of the rising relative incidence of rural poverty, the Region as a whole has seen an increase in the share of poor living in rural areas. At the end of the past decade, 45 percent of all poor in the Region lived in rural areas. This share has since risen to 50 percent.

FIGURE 1.6
Capital Cities Gained More than Other Cities and Rural Areas, 1998–2003

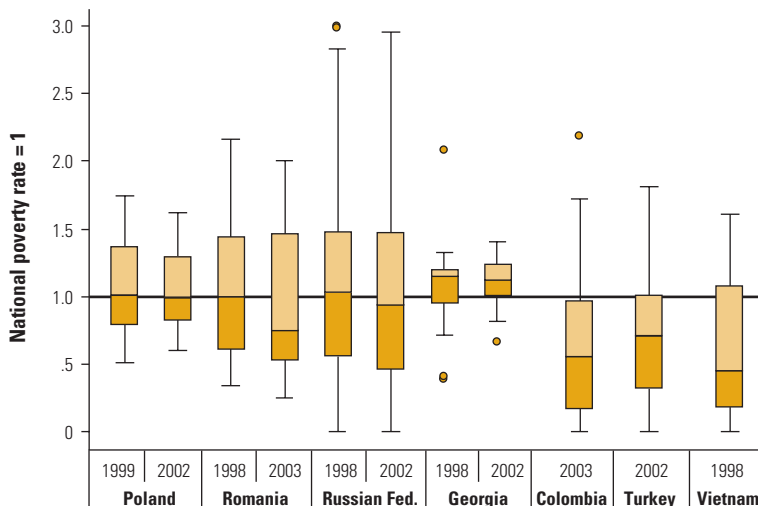


Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 3 for country data and years used.

Note: For the EU-8 and FYR Macedonia poverty line is \$ 4.30 a day, for other countries, \$ 2.15; in 2000PPPs.

Poor regions are noticeably lagging behind, and there is increasing differentiation between regions with regard to poverty. With further disaggregation of poverty rates by subregions within countries, a similar picture of increasing concentration of poverty in relatively disadvantaged areas emerges. Figure 1.7 shows that the gap between poorer and richer regions has increased in the past five years. In part, this is due to rising relative poverty in rural areas. It is also because poverty reduction in secondary cities has lagged behind the progress in capital cities and large population centers, where most of the new economic opportunities are concentrated. The trend toward rising regional disparities in poverty rate for the Czech Republic, Hungary, and Poland is also documented by Förster, Jesuit, and Smeeding (2005), using different data sources and different definitions of poverty. The comparison with benchmark countries presented in figure 1.7 offers interesting insights into the specifics of poverty in the Region. The extent of variation in poverty risks within countries of the Region spans the whole range from relatively moderate to extreme. But the location of box diagrams in figure 1.7 suggests that concentration of poverty within countries of the Region remains quite distinct from that of other world

FIGURE 1.7
Variation of Poverty Risks by Regions, 1998/9–2002/3



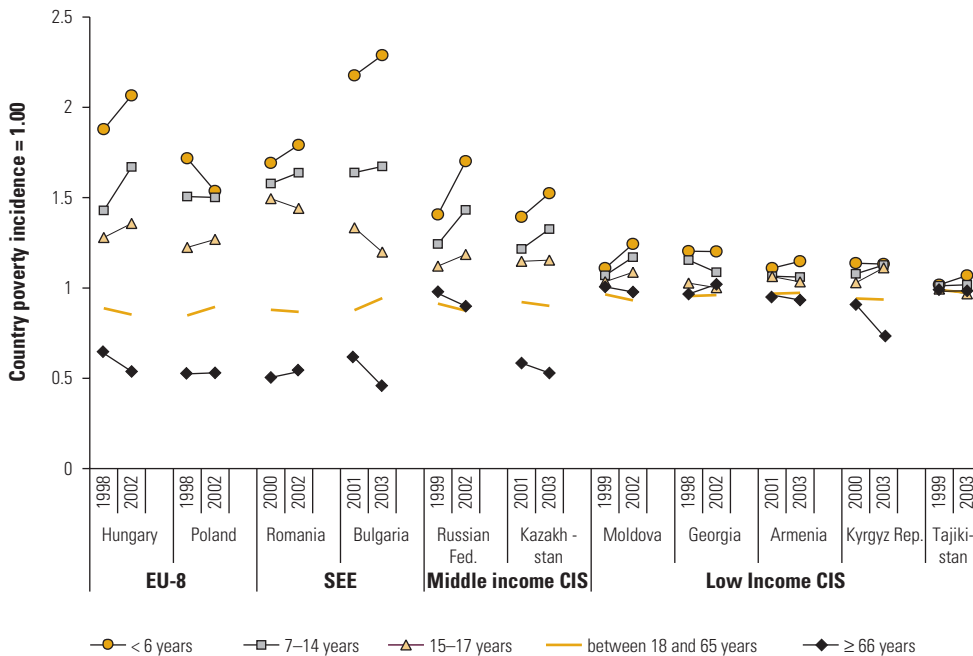
Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 3 for data used.

Note: The boxes represent range for variation of the poverty rates. The line in the middle of the box represents the ratio of the median to the national poverty rate. The box extends from the 25th percentile to the 75th percentile of the distribution of regional poverty rates, the so-called interquartile range (IQR). Whiskers extend the box by 50 percent. Regional-level poverty rates are for the level at which surveys are representative, and rural and urban areas for each region were treated separately—samples were designed to provide urban-rural breakdown within each region; the number of regions varies between 176 in Russia and 16 in Georgia. Dots refer to outlying regions with poverty rates (relative to the median) more than 1.5 times the interquartile range.

regions. The poor in the Region are still spread evenly throughout the countries, while in benchmark countries representing the developing world, they are concentrated in a few poor regions.

Children face much higher poverty risk than the elderly, which is increasing over time relative to the average. Figure 1.8 shows poverty risks by age and its evolution over time (relative risks to fall below the \$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). High poverty risk, by which is meant higher-than-average incidence of poverty, among families with children remains a major concern in all countries of the Region. This figure provides evidence that small children (under 6 years) face elevated poverty risks. The same applies to older children (under 17 years). The elderly, in contrast, are characterized by somewhat lower poverty risk (except for Georgia), especially in the EU-8 and Kazakhstan. Indeed, in contrast to the situation five years ago, no country has the elderly as the group facing the highest risk—a possible reflection of the regularization of pension payments and reduction of pension arrears.

FIGURE 1.8
Changes in Poverty by Age, Relative to National Average



Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix table 4 for data used.

Note: For the EU-8 and Bulgaria poverty line is \$ 4.30 a day, for other countries, \$ 2.15.

The diagnosis of a worsening situation for families with children does not hinge on using a per capita scale to assess welfare. A key question when considering relative risks of different demographic groups is whether findings are sensitive to assumptions about economies of scale. The per capita standard used to construct the poverty profile in this study assumes no economies of scale. Children tend to live in large families—where there may well be scale economies—while the elderly tend to live in small families. With sufficiently large economies of scale, it is possible for relative risk rankings for children and elderly to be reversed. However, in countries where one would expect economies of scale to be significant (for example, middle-income countries), the disadvantage of families with children is so pronounced that the ranking does not change with changing values of the economies-of-scale parameter. So, for example, children are consistently poorer than the elderly in Bulgaria, Hungary, Poland, and Romania. In low-income countries, this is not always the case (especially in Moldova, as documented in Mencini and Redmond [2005]), but given the dominance of food consumption in the household consumption basket (see appendix, part A, chart 2), it is not clear that other than per capita scales are particularly relevant. On balance, children tended to be the poorest group in the Region during 1998–2003.

The changes in the poverty profile by age have been most pronounced in countries with moderate poverty. In most countries, in addition to facing higher-than-average risk of poverty, children, especially small children, have seen noticeable increase in their poverty risk relative to other groups. This is particularly evident in middle-income countries such as Hungary, Kazakhstan, and Russia. In Poland, the poverty risk of small children has improved somewhat, but it is undone by the increasing poverty of youth. The poorest countries, in contrast, again with the notable exception of Moldova, have not seen major shifts in poverty risks faced by children. The elderly as a group has, in general, held a steady position vis-à-vis the rest of the population or has improved its well-being. One important exception is Georgia, where poverty risk increased somewhat for the elderly.

Vulnerable groups. Certain social groups (internally displaced persons [IDPs], Roma, and other socially excluded groups) suffer extremely high poverty, even controlling for their individual demographic and labor market characteristics (see box 1.4); however, these groups often account for only a minority among the poor.

Which groups constitute most of the poor? Looking at the composition of the poor by labor market status (figure 1.9), children and working adults together constitute most of the poor. Because most

BOX 1.4**Vulnerable Groups and Poverty: Roma, IDPs, and Institutionalized Populations**

A number of studies carried out in the past five years in countries of the Region document extremely high poverty risks for some social groups: ethnic minorities, refugees, institutionalized persons, and disabled. These risks persist even when one controls for household and individual characteristics. The combination of income poverty and low social capital for these groups often reflects a “totality of exclusion” (Szalai 2002).

Roma minority. Poverty rates among Roma are a multiple of poverty rates of the general population and other vulnerable groups. For example, a staggering 60.5 percent of the Roma are poor in Serbia, compared with 6 percent among the general population (World Bank 2005e). As a minority that has experienced centuries of discrimination, the Roma have high intragroup interactions, but their networks do not extend beyond their ethnic group. A cross-country comparison found that the bulk of poor Roma households were headed by someone with primary or less than primary education, a factor that in turn limited employment opportunities and increased dependence on social assistance (Revinga, Ringold, and Tracy 2002; World Bank 2004d). Roma frequently live in settlements where unclear property ownership and inadequate documentation prevent them from claiming social assistance or enrolling their children in school. Their high prevalence in informal sector employment further limits their access to health care and unemployment benefits. Social and cultural factors also affect access and interactions with service providers. Exclusion has been furthered by overrepresentation of Roma children in “special schools” for disabled children, and language barriers create difficulties in communicating with teachers, doctors, and local welfare officials (Ringold, Orenstein, and Wilkens 2003).

poor children are in families with at least one working adult, working families form the largest group of the poor. The next largest group, which could be the elderly, the unemployed, or the inactive, depends on the country in question. The poverty profile in the countries of the Region is strikingly different from the composition of the poor in benchmark countries.

Working poor are the majority among the poor in the Region. It is worth pointing out that in the EU-15, exclusion from employment is a typical correlate of poverty; and the share of the working families, or working poor, is typically small, while the share of jobless among the poor is large. In contrast, in the Region, except for Hungary, there are more *working* adults among the poor than there are *nonworking* adults. Thus nonemployment—while closely associated with

Internally displaced persons (IDPs). In all countries where data are available, IDPs consistently are found among the poorest group (see, for example, World Bank 2003l). Migrants lose social capital through displacement, where the activities and structures that supported social relationships in their previous environment are missing. This is particularly true for people displaced by war. A study of displacement in the Region shows that poverty from loss of assets and unemployment of IDPs leads to the “hollowing out” of communities of displaced persons because potential entrepreneurs and leaders migrate to more fertile environments (Holtzman and Nezam 2004).

Formerly institutionalized populations (such as young people leaving residential facilities) start life with a combination of poor skills and very low social capital that puts them at risk of poverty and exploitation. Many lack functioning family ties, and their remaining social networks consist of people as isolated and disadvantaged as themselves. Throughout the Region, many children are still excluded from mainstream schools because of restricted mobility, sensory impairment, learning difficulties, or minority ethnicity. They spend their school years in institutions that isolate them and drastically reduce opportunities for mainstream social engagement (Grammenos 2003; Clert and Gomart 2004).

The disabled, especially the severely disabled, is a group that often faces discrimination and severe constraints in engaging with society. The sheltered workshops that once provided incomes, a place in society, and regular social contact outside the home no longer function. Often, disability pensions effectively exclude disabled people from the labor market. Current Kyrgyz legislation, for example, prohibits some disabled people from earning a living. At the same time, disability benefits are insufficient (Toraliyeva and Maslova 2004).

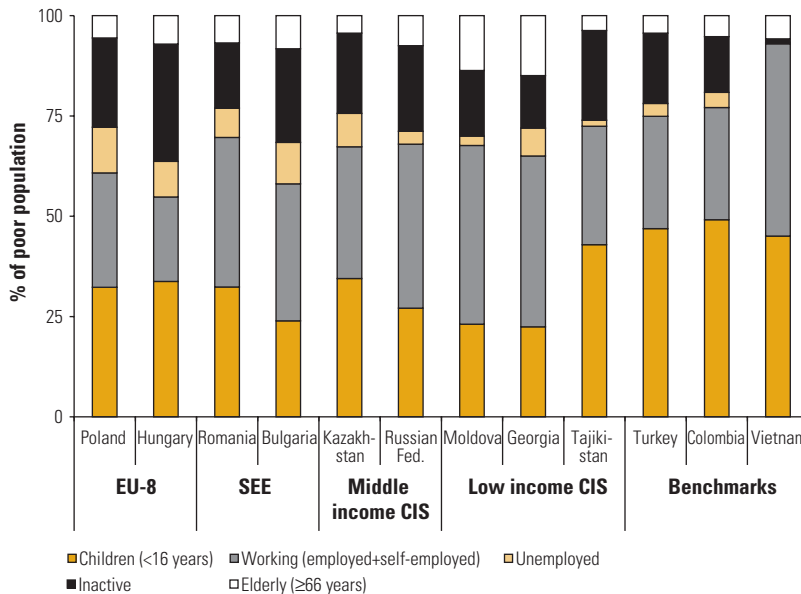
Sources: Grammenos 2003; Clert and Gomart 2004; Holtzman and Nezam 2004; Szalai 2002; Toraliyeva and Maslova 2004; Ringold, Orenstein, and Wilkens 2003; Revenga, Ringold, and Tracy 2002; and World Bank 2003l, World Bank 2004d, and 2005e.

poverty—does not represent in itself a major poverty dimension. Some countries in the EU-8 such as Hungary seem to have moved closer to the EU-15 typical pattern, but still harbor significant numbers of working poor. This point is brought home by figure 1.10, which shows for four representative countries the distribution of poor between households where someone is employed (working families) and households where no one is employed (jobless families). Hungary has the largest share of poor without any connection to employment (approximately 37 percent of the poor live in households where no one has a job), but such households account for less than one quarter of all poor elsewhere. The predominance of working poor in the Region remains in stark contrast with the rest of Europe, where poverty is concentrated among the jobless.

FIGURE 1.9

The Poor in the Region around 2003

Composition of the Poor by Age and Employment in Selected Countries in the Region and Benchmarks



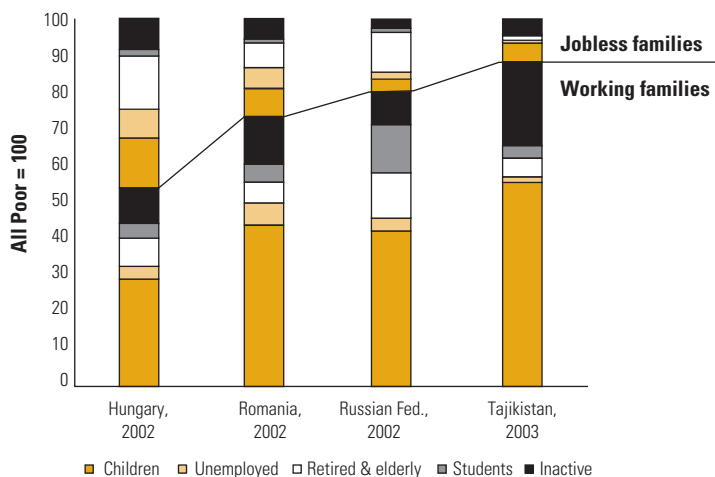
Source: World Bank staff estimates using ECA Household Surveys Archive; see appendix tables 4 and 6 for data and years used.

Note: For the EU-8 and Bulgaria \$ 4.30 a day used as a poverty line; other countries, \$2.15.

FIGURE 1.10

Most Nonworking Poor Live in Households Where Someone Works

Share of All Poor Accounted for by Nonworking Individuals Differentiated between Those Living with Someone Who Works (Working Families) and Jobless Families



Source: World Bank staff estimates using ECA Household Surveys Archive.

Note: Hungary \$4.30, other countries \$2.15, at 2000 PPP used as poverty line; jobless families are defined as household where no one is working for wage or is self-employed.

Poverty in Nonincome Dimensions

Although poverty may no longer be a growing problem in most countries in the Region, deprivation in nonincome dimensions remains a source of concern. Across nonincome dimensions, *health* status in most countries of the Region is a major factor of deprivation and, in many respects, is deteriorating. Progress in other nonincome dimensions is also mixed: better financing of public services has helped to maintain access, but erosion of quality, combined with deterioration of affordability, has excluded many poor households. The relative worsening of service quality—both in access (poor versus nonpoor, urban versus rural) and with regard to historical parameters (where subsidized services were universally available)—affect subjective perceptions of poverty.

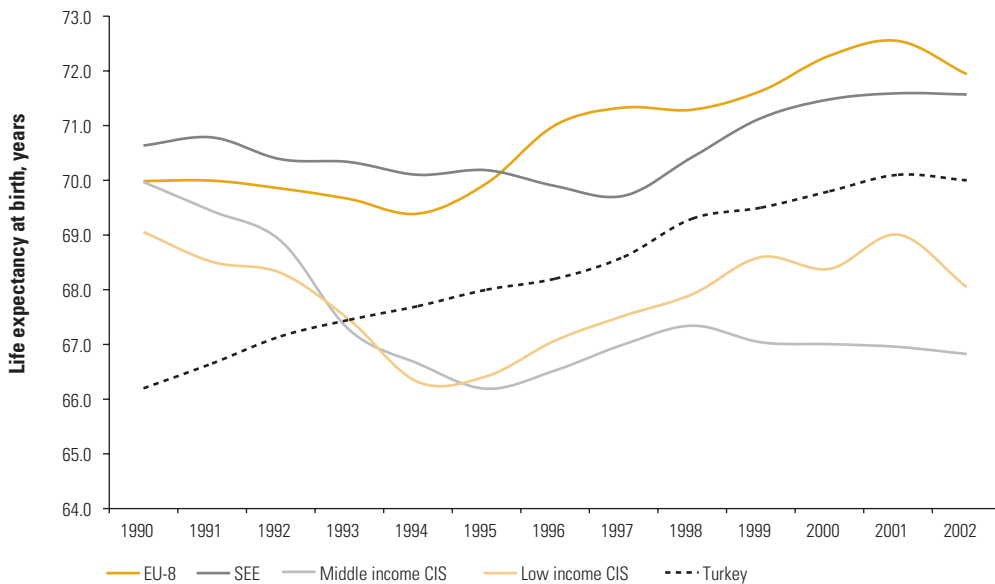
Health

Life expectancy losses have been difficult to reverse. All countries in the Region suffered declines in life expectancy during the 1990s. For some countries, this decline was brief, for others fairly protracted. In the latter group—although the declines have bottomed out or have begun to be reversed—many countries have not recovered to pre-transition levels (figure 1.11). For example, in Russia and Ukraine, life expectancy is five years below pretransition levels. Most of the decline in life expectancy is accounted for by premature (or avoidable) deaths in the most productive age groups, and it affected males particularly strongly. In Russia alone, the total number of male premature deaths was 2 million during 1992–2000, which, when compared with all deaths, suggests that one out of five deaths during the period was preventable (Nolte, McKee, and Gilmore 2004). Interpreting premature death as an extreme manifestation of health poverty, the risk for Russian males to suffer for this form of deprivation was about 3 percent. Although it is recovering, life expectancy in the Baltics, Belarus, Kazakhstan, Russia, and Ukraine is significantly lower than in much poorer Armenia and Georgia.⁸

In transition, premature mortality affects both the poor and nonpoor. Evidence on linkages between premature mortality and poverty is more limited. Available evidence from panel surveys suggests that premature mortality is not concentrated among the poor, but affects all groups of the population to the same extent (Brainerd and Cutler 2005). At a more aggregate level, Ivashenko (2005) finds that variation in regional poverty rates accounts for less than one-half of regional excess male mortality.

Maternal and child mortality remain high in some countries. Mortality among children and women is also an issue, although more so in some countries than in others. Infant and under-five mortality rates are declining in most countries of the Region; however, in some parts of the Region, particularly in the low income CIS countries, progress in reducing child mortality is too slow.⁹ In addition to the need for better pre- and postnatal care, lagging countries need to develop better case management techniques for the treatment of infant and early childhood diseases, both at home and in the community. Maternal mortality (and maternal health) is also an issue in a number of countries in the Region. A number of low income CIS countries and some middle income CIS countries, as well as benchmark Turkey, may well not achieve the Millennium Development Goal (MDG) targets related to maternal health.¹⁰ Key to reducing maternal mortality is access to emergency obstetric care and a referral system that enables women to reach life-saving treatment in time. Despite the high proportion of births that are attended to by medical professionals, health systems in many parts of the Region are not able to deliver the timely services that are essential to averting maternal death. Related to maternal health more broadly is the issue of exces-

FIGURE 1.11
Life Expectancy at Birth, 1990–2003



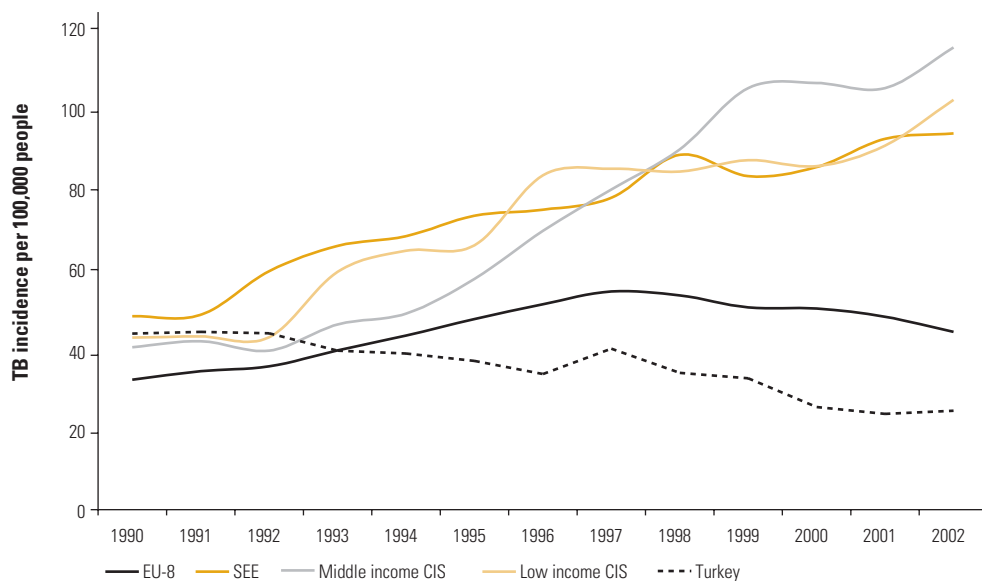
Source: WHO.

Note: EU-8: Hungary, Poland, Estonia, and Latvia; SEE: Romania and Bulgaria; middle income CIS: Belarus, Kazakhstan, Russia, and Ukraine; low income CIS: Armenia, Georgia, the Kyrgyz Republic, Moldova, and Uzbekistan.

sive reliance on abortion for birth control in large parts of the Former Soviet Union. This is thus partly a legacy issue but also a reflection of the fact that contraceptives remain in short supply and are relatively expensive. Despite declines in recent years, abortion rates remain among the highest in the world, with negative consequences for maternal health.

Public health indicators show worrying trends outside the EU-8. Of course, preventable mortality is the most extreme form of health deprivation. Other forms of health deprivation include increased risk of disease and reduced access to medical help when in need. An increase in the incidence of noncommunicable diseases is to some extent to be expected because most countries have completed the epidemiological transition (from communicable diseases as a major source of morbidity to other health risks). However, countries (especially in the CIS) are facing growing epidemics of communicable diseases such as TB and HIV/AIDS (figure 1.12). The increase in injecting drugs and commercial sex work throughout the Region, a concurrent increase in the incidence of sexually transmitted infections (STIs), high migration rates, limited capacity of governments and civil society to implement effective preventive

FIGURE 1.12
Incidence of Tuberculosis, 1990–2003



Source: WHO.

Note: EU-8: Hungary, Poland, Estonia, and Latvia; SEE: Romania and Bulgaria; Middle income CIS: Belarus, Kazakhstan, Russia, and Ukraine; low income CIS: Armenia, Georgia, the Kyrgyz Republic, Moldova, and Uzbekistan.

responses, and low levels of awareness of HIV and STIs have all contributed to the growing epidemic. At current rates of infection and treatment, the HIV/AIDS MDG is unlikely to be attained by the Region.

Perceptions of health status show mixed trends. Although suffering from a number of drawbacks, subjective perceptions of health status reflect many of these objective trends. Between 20 and 25 percent of the population in the Region report their health status being “bad” or “very bad”—significantly more than in any country in the EU. As is the typical pattern with these data, the poor report less bad health than the rich (controlling for age), pointing to the influence of income and possibly education in such self-assessments. This difference is reflected at the national level in reported acute morbidity rates that vary from fairly low levels in poor countries (for example, 3 percent of the population per month in Armenia, Tajikistan, and Uzbekistan) to fairly high levels in richer countries (more than 20 percent in Belarus and Russia). Over the past five years, morbidity rates have declined, perhaps reflecting rising incomes.

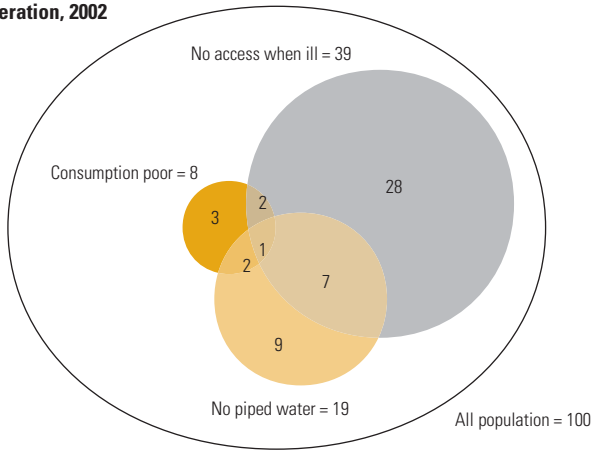
Chronic health conditions that limit daily activities provide perhaps a better assessment of underlying health conditions. Reported incidence of chronic conditions has been increasing. In the CIS, between 25 and 55 percent of the population report such conditions (with the highest proportion observed in Moldova, the lowest in Georgia and Kazakhstan, and Russia falling in between). The proportion of the population reporting chronic conditions falls to around 10–20 percent in SEE and the EU-8 (with the lowest in Romania and the highest in Hungary), but remains higher than in most EU countries.¹¹

Utilization of health services in low-income countries has declined to very low levels. Utilization of health services, defined as the fraction of sick individuals who use health services, represents another dimension of deprivation, namely deprivation of health care. Here the picture is mixed. Utilization has gone up in most countries, but in a number of poor countries remains at very low levels, reflecting both supply-side (poor quality) and demand-side issues (high cost) in accessing health care. There is clear evidence that the poor experience greater financial barriers to accessing health care than the rich. Figure 1.13 examines the degree of overlap between different notions of poverty as they relate to income and health. There is clearly a degree of overlap, but it is less than complete. This reinforces the need to think of health and other indicators (such as access to education or good-quality housing) as dimensions of well-being *distinct* from income (or poverty).

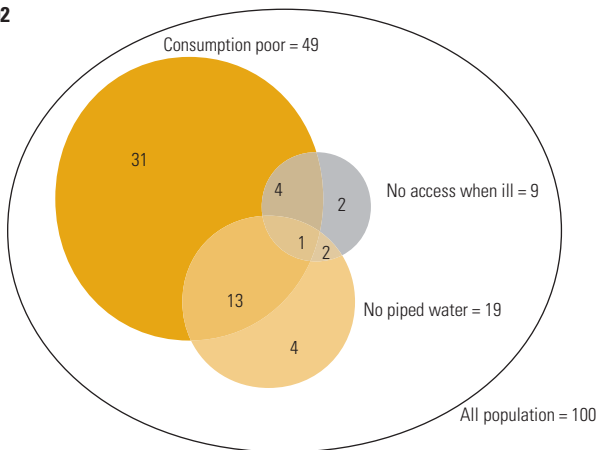
FIGURE 1.13

Poverty in the Dimensions of Consumption, Access to Water, and Health

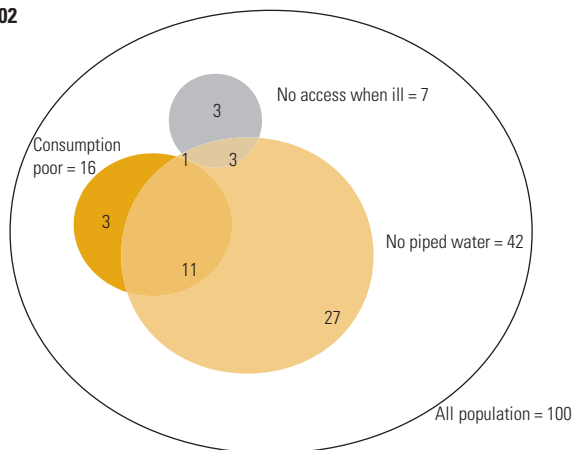
Russian Federation, 2002



Georgia, 2002



Romania, 2002



Source: Staff estimates from survey data.

Note: Percentages to population. Size and overlap exaggerated in some cases for clarity of exposition.

Education

Inherited literacy rates are high in the Region. The most acute form of education deprivation is illiteracy. Average literacy among the transition economies of the Region is high (more than 98 percent), and in the transition country with the lowest levels of literacy (Tajikistan), 96 percent of adults are literate. Thus, this extreme form of education deprivation does not appear to be a major issue in the Region. Few studies in the Region focus on actual ability to read and understand text (as opposed to self-declared literacy), but the ones that do show that functional illiteracy is not uncommon. However, data deficiencies preclude an examination of whether this is more of an issue than in other parts of the world, or any examination of trends.

The lack of education and poverty are closely correlated, but a majority among the poor in the Region have completed secondary education. Although there is no information on functional literacy and poverty, data on number of years of completed education show that there is a concentration of adults with incomplete primary education among the poor. However, in contrast to most developing countries, including benchmarks, a clear majority among the poor in the Region are those who completed secondary education.¹²

But the quality of education is not improving and is ill suited to the needs of the labor market. Although more extreme forms of education poverty are not an issue, concerns remain about the overall quality of education imparted by inherited systems. With few exceptions, there has been an increase in the proportion of students who underperform at the secondary school level, according to international assessments of educational quality.¹³ If this trend is not stemmed, the fraction of children and youth with poor education will continue to grow. The value of the skills imparted by education systems in a large number of countries is also questionable and bears little relation to what may be required by the market (see, for example, Yemtsov, Mete, and Cnobloch 2005).

Infrastructure and Housing

The steady erosion of infrastructure networks due to neglected maintenance (especially in the CIS countries) has taken a toll on access to, and quality of, infrastructure services. Even though the ability to pay has increased since the resumption of growth in all parts of the Region, the lagged effect of postponed maintenance has resulted in falling access and increased deprivation, particularly in the CIS. However, as with education, the inherited networks still offer access far

greater than in countries at comparable income levels, and deprivation generally does not take extreme forms.

Water. Lack of access to safe water is the most acute form of deprivation in this area and is an important proximate cause of poor health from waterborne diseases. Interpreting access to safe water in the very narrow sense of connection to a working tap (or faucet), one does not find significant water access “poverty” in the Region, except for some specific groups (for example, some rural areas) and some poor countries. Connection rates are impressive and, in some instances, have expanded over the past five years (Tajikistan). Connection rates in rural areas are obviously lower than in urban areas and, in some instances, have actually deteriorated in the past five years (for example, the Kyrgyz Republic and Uzbekistan).¹⁴ Connection rates, however, overestimate access to water. Water is often not available for more than few hours a day, particularly in the low income CIS group (see chapter 4 for more evidence). There is growing evidence that tap water is not meeting basic quality requirements in many instances. It is also possibly the case that water supply disruptions take a heavier toll on urban dwellers in apartment buildings with limited alternatives (widespread in the Region) than for rural residents. Although there are concerns about quality both in uninterrupted supply and bacteriological content, there is limited evidence of significant health impacts of limited access to safe water. There have been few significant outbreaks of waterborne diseases in the Region.

Heating. The ability to maintain ambient temperature at home through the winter is a basic need in the colder parts of the Region. In contrast to water (where even cost recovery tariffs will not undermine the budgets of the poor), “energy” poverty is a source of widespread concern. Although few studies suggest extreme deprivation—such as death from exposure to cold—there is abundant evidence of less extreme forms of deprivation, such as the increase in the use of so called “dirty” fuels for heating indoors and reduced activity levels due to inadequate heating (see, for example, Wu, Lampietti, and Meyer 2004). Because of high connection rates to electricity (virtually 100 percent in both rural and urban areas) and availability of other fuels on the market, energy “poverty” is more often than not related to the inability of the poor to afford clean sources of fuel and is thus one of the consequences of poverty.

Sanitation services and housing. Most countries in the Region are highly urbanized, and provision of safe sewerage and solid waste disposal are

important aspects of household well-being. Among countries of the Region, Uzbekistan has the lowest connection rates to sewerage (50 percent of urban households). In other CIS countries, connection rates vary between 70 and 90 percent for urban areas, while those in the EU-8 and SEE are generally above 90 percent. Connection rates are significantly lower among the poor, again with Uzbekistan having the most acute problem (80 percent of urban poor are not connected to sewerage). In other countries, nonconnection rates among the poor are also high, ranging between 50 percent in the low income CIS countries to 25 percent in the middle income CIS group and SEE. There is little information on other forms of sanitation.

Substandard urban housing in many parts of the Region is concentrated in informal settlements, often parts of large cities where temporary housing is built without permits. Dwellers of slums often belong to poor marginalized groups, such as Roma and IDPs. However, the overall prevalence of slums is low compared with other regions (UN Millennium Project 2005). There is growing anecdotal evidence of the rise in the number of slum dwellers in the Region, but accurate estimates are elusive. Overcrowded housing is a significant problem in the poorest countries of the Region, affecting primarily capital cities.

Subjective Poverty

The effect of the transition shock on people's morale is not over: the Region remains the one with the most pessimistic perceptions and lowest self-rated satisfaction with life (see box 1.5). Subjective perceptions of well-being provide a measure of a population's own assessment of poverty. Although material deprivation is the most important correlate of subjective poverty, nonincome deprivation also plays a role. Despite recent improvements in the self-assessed welfare mirroring income gains, the formerly socialist countries are characterized by lower satisfaction with life for their level of income than any other region of the world.

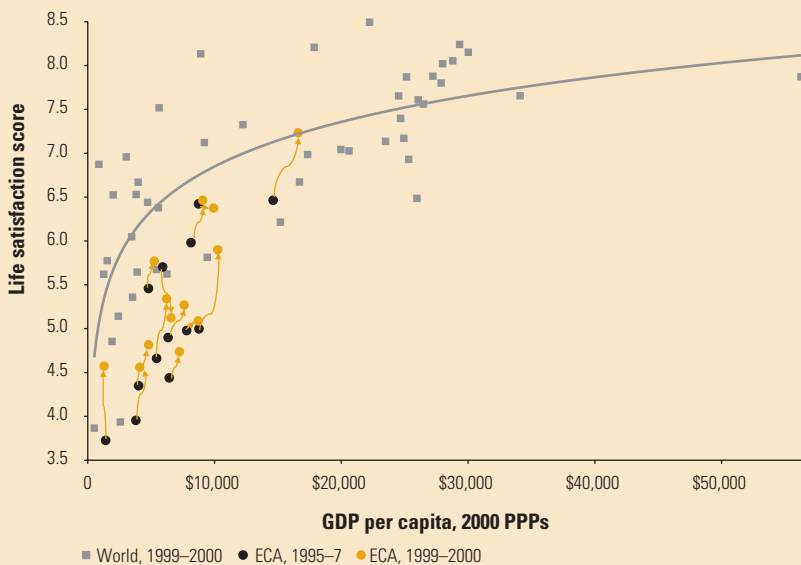
Some authors suggest that inequality aversion is an important factor behind the lower subjective perceptions of well-being in the Region (see Sanfey and Teksoz 2005;¹⁵ also Ravallion and Lokshin 1999). Others, however, find limited evidence of inequality aversion in the CIS relative to other countries (see Murthi and Tiongson forthcoming). Decline in access and quality of public services may also have a role to play in explaining perceptions of well-being, particularly given the legacy of fairly uniform access.

BOX 1.5

Life Satisfaction in the Region Remains Low

Subjective data from the World Values Survey, spanning 1990–2000, suggest that after declining from the early to the late 1990s, subjective valuations of welfare in the transition economies of the Region improved in the most recent period. In other words, subjective evaluations appear to follow the broad trend in material deprivation. At the same time, these data reveal that, compared with other countries, the formerly socialist countries are characterized by lower satisfaction with life for their level of income (see figure below). Five countries in the Region—Armenia, Belarus, Moldova, Russia, and Ukraine—are in the bottom decile in the world distribution of satisfaction scores and fare much worse than the benchmark countries represented on the graph. Two of the Baltic States—Latvia and Lithuania—are in the next-to-bottom category, along with Albania, FYR Macedonia, and Romania. In general, the new EU members score much better, with Slovenia’s score of 7.23 (above France’s, 7.01, and not far off from Great Britain’s and Germany’s, 7.40 and 7.42, respectively) in life satisfaction.

Life Satisfaction in the Region, While Improved, Is Low Vis-à-Vis Other Countries, around 2000



Source: World Values Survey.

Sources: Sanfey and Teksoz 2005; Murthi and Tiongson forthcoming; and World Values Survey (see www.worldvaluessurvey.org).

Conclusions

Poverty has declined significantly in the Region since 1998 because of the resumption of growth. At the same time, progress in the non-income dimensions of well-being are mixed with improvements recorded in some instances and stagnation or declines in others. All in all, this has resulted in a change in the nature of poverty in the Region. Although the share of population below the poverty threshold has shrunk, the proportion who are “poor” in dimensions such as health, good-quality schooling, or housing has not declined in tandem across all dimensions. This has changed the nature of poverty, with a growing share or “weight” of nonincome dimensions in overall poverty.

What is specific about poverty in the Region? Poor people in the Region have much in common with the poor in other parts of the world; namely, an inability to meet basic material needs. But the Region’s historical legacy, challenges of transition, and unique geographical factors, have clear impact on defining these basic needs. Climatic conditions mean that warm clothing and heating are essential for survival. Demographic factors have their effects too. On the one hand, the rapid aging of the population in many countries means that there are fewer children for the poor to support, boosting the impact of earnings on poverty. But on the other hand, reductions in the family size mean that households in the Region are exposed to shocks that otherwise could be managed within the intrafamily solidarity networks. “Graying” of the population, which brings with it a burden of “rich country” epidemiological patterns, also means additional health care costs.

Transition itself affects the nature of poverty in the Region. The costs of moving large masses of population, which the previous system concentrated around nonviable production units, to new locations and sectors where they can rely on more sustainable livelihoods are enormous, and the process of reallocation has proven to be slow. It is further slowed down by infrastructure bottlenecks (persistent due to neglect of maintenance and low and inefficient investment) and housing market rigidities, which limit population mobility. The inherited production systems also result in persistent differences of productivity across firms with different histories (new, restructured, and old), which in turn result in persistent differences in earnings and pockets of high concentration of poverty among the working population. All of these factors not only determine the nature of poverty in the Region in the present, they are also powerful drivers of future progress in poverty reduction. A discussion of these issues follows in the next chapters.

Notes

1. Throughout this report, \$2.15 per capita per day (in 2000 PPP) is used as the absolute poverty line.
2. The countries not covered by the poverty data for 1998–2003 are Croatia, the Czech Republic, the Slovak Republic, Slovenia, and Turkmenistan. Data from UNMIK were also not used. Moreover, several countries are represented by a single survey (year) or by surveys that are not sufficiently comparable to assess trends in poverty over time: Albania, Azerbaijan, and Serbia and Montenegro.
3. Though no recent data are available for Turkmenistan, it is classified as part of the low income CIS group, with a high level of poverty, based on the data (LSMS 1996) reported in *Making Transition Work for Everyone* (World Bank 2000a).
4. The World Bank's first regional poverty report, *Making Transition Work for Everyone*, used the 1996 set of PPPs. For differences in poverty rates from using other estimates of PPPs, see overview box 1.
5. Turkey is included in the aggregate figures, thus the referral to the ECA Region in the World Bank classification. Poverty for countries with missing data was extrapolated based on their population size and average subregional poverty incidence.
6. Here the distribution of the Region's poor by countries is assessed without Turkey.
7. Because survey data are used to obtain poverty estimates for the population as a whole, they have only a certain degree of precision, which differs across countries, but normally falls in a ± 2 percentage-point confidence interval around the point estimate.
8. Several explanations are advanced to rationalize this apparent puzzle, including dietary patterns, social environment (that is, family structure, the educational system, social networks, and so forth), physical environment (for example, exposure to toxic substances, safety at home and work, housing conditions and degree of overcrowding, and urban-rural differences), genetic endowment, and behavior (for example, adherence to treatment regimens, lifestyle choices like smoking).
9. The child mortality MDG calls for a two-thirds reduction in child mortality during 1990–2015. This goal is not meaningful for countries in the Region with low child mortality because a two-thirds reduction would require attaining child mortality levels that are below what is found in high-income countries. For others with higher mortality, the goal is still relevant. One complicating factor in measuring progress is that many countries use the old Soviet concept of infant mortality, which is contrary to WHO best practices and underestimates infant (and child) mortality. Alternative survey- and model-based methods help address this problem, but are not available with the same frequency as official data.
10. As with child mortality, the maternal mortality MDG—which calls for a reduction by three-fourths in maternal mortality rates—is not realistic in a number of countries. In countries where the goal is relevant, significant improvements are needed if the goal is to be met.

11. Data for the Region are staff estimates based on household surveys. EU figures are reported in EC 2002.
12. See appendix table 5. Note that because of a low poverty headcount with the \$2.15-a-day poverty line in EU-8 countries, data on poverty by education level from this subregion should be used with caution.
13. See chapter 4 for the assessments of secondary school students according to the evaluations of PISA and TIMSS.
14. Refer to appendix table 9 for country-level data on water connection.
15. Sanfey and Tukoz find a strong negative association between country-level inequality and overall life satisfaction in the Region's countries, in contrast to a positive association in the nontransition case.