Social Monitor 2002

The MONEE Project
CEE/CIS/Baltics

unicef

United Nations Children's Fund
Innocenti Research Centre
Florence, Italy

The MONEE Project provides research on the impact of the transition on people's social and economic well-being in the 27 countries of Central and Eastern Europe and the Commonwealth of Independent States. The Project offers information on the social impact of the transition years. It aims to contribute to the international debate on the directions of public policy, drawing attention to emerging issues for children, women and families across the region and keeping the interests of children on the agenda.

Social Monitor 2002 is the first in a new annual series, the purpose of which is to monitor overall socio-economic trends, particularly as they impact on children. The *Social Monitor*, which is published in English and in Russian, builds on the work of eight *Regional Monitoring Reports* that were produced between 1993 and 2001. These are:

1. *Public Policy and Social Conditions*, 1993
2. *Crisis in Mortality, Health and Nutrition*, 1994
3. *Poverty, Children and Policy: Responses for a Brighter Future*, 1995
4. *Children at Risk in Central and Eastern Europe: Perils and Promises*, 1997
5. *Education for All?*, 1998
6. *Women in Transition*, 1999
7. *Young People in Changing Societies*, 2000
8. *A Decade of Transition*, 2001

These are also available in both Russian and English versions.

The MONEE Project likewise produces the annually updated *TransMONEE Database*, a menu-driven downloadable database containing a wealth of statistical information covering the period 1989 to the present on social and economic issues relevant to the welfare of children, young people and women.

In addition, the Project produces *Innocenti Working Papers*, linked to the themes of the MONEE Project.

Publications from the MONEE Project, including this publication and the *TransMONEE Database*, can be downloaded from the UNICEF IRC website:

< www.unicef-icdc.org >

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THE UNICEF INNOCENTI RESEARCH CENTRE

The UNICEF Innocenti Research Centre in Florence, Italy, was established in 1988 to strengthen the research capability of the United Nations Children's Fund (UNICEF) and to support its advocacy for children worldwide. The Centre helps to identify and research current and future areas of UNICEF's work. Its prime objectives are to improve international understanding of issues relating to children's rights and to help facilitate the full implementation of the United Nations Convention on the Rights of the Child in both industrialized and developing countries.

The Centre's publications are contributions to a global debate on child rights issues and include a wide range of opinions. For this reason, the Centre may produce publications that do not necessarily reflect UNICEF policies or approaches on some topics. These publications are produced by the Centre in order to stimulate further dialogue on child rights.

The Centre collaborates with its host institution in Florence, the Istituto degli Innocenti, in selected areas of work. Core funding for the Centre is provided by the Government of Italy, while financial support for specific projects is also provided by other governments, international institutions and private sources, including UNICEF National Committees.

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Foreword

For more than 10 years, the children of Central and Eastern Europe and the Commonwealth of Independent States have had a strong ally in the MONEE Project. This unique research programme has examined the impact of socio-economic transition on the children of the region – on their health, on their education and on the situation of their families.

This report – the first in a new series of annual *Social Monitors* – represents a new direction for the MONEE Project, providing an analysis of overall trends in the region, complemented by articles on education and HIV/AIDS. This new series reflects UNICEF's global commitment to the promotion and monitoring of children's rights.

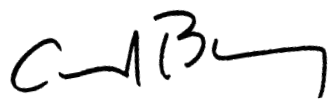
The *Social Monitor* comes at a pivotal moment for children and for UNICEF. In May 2002, world leaders gathered in New York to review the progress made since the historic World Summit for Children in 1990 and to reaffirm their decisive commitment to build a world fit for children. They adopted goals that include a determination to promote and monitor progress for children. Young people from the transition countries were there, and they expect their leaders to deliver on the promises that they made.

Additional resources and political promises will not be enough to do the job. Society as a whole must be mobilized towards the goals for children. The 1990s demonstrated that the greatest advances for children, particularly in the areas of health and education, are achieved through a combination of wide and strong partnerships and sustained political commitment.

We need new and dynamic partnerships with all those who can make a difference. That includes the researchers who have the skills to locate, analyse and distil the data that are needed to create effective policies and programmes for the world's children, to guide advocacy campaigns and to ensure the adequate mobilization of resources for children.

With their help, it is possible to build a world fit for children. The lessons of the 1990s are there to be learned, and, in a $30-trillion global economy, resources are no longer the issue. This is now a question of priorities.

There are four areas that need our particular attention: promoting healthy lives; providing high-quality education; protecting children from abuse, exploitation and violence, and combating HIV/AIDS. For the coming years, these will underpin the work of UNICEF, as well as the implementation of the Plan of Action agreed by world leaders at the Special Session on Children. In each case, authoritative and disaggregated data on the situation of children will be essential. Fortunately, the MONEE Project, with its years of authoritative research on children, is here to show us the way.



Carol Bellamy
Executive Director, UNICEF

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The principal contributors were:

Gerry Redmond	"Social trends in transition"
Marc Suhrcke	"HIV/AIDS and young people: awareness, behaviour and policy"
Martin Godfrey	"Quality of learning: towards 'unilateral educational disarmament'?"
Roumiana Gantcheva	Statistical Annex

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Note: The articles and the Statistical Annex can be downloaded from the IRC website, at <*www.unicef-icdc.org*>. The same applies to the "MONEE project country reports" that are frequently mentioned in the text and in the notes and references for each article. These country reports are produced by the partners of the MONEE project in the transition countries, typically in the region's central statistical offices.

Overview: emerging from a decade of transition

The people of the 27 countries of Central and Eastern Europe and the Commonwealth of Independent States have lived through a remarkable period since the collapse of communism in 1989. Through the 1990s, they struggled with many problems raised by market and democratic reforms. Now, after the turn of the new millennium, a more positive environment for social progress seems to be emerging. The region as a whole has enjoyed unprecedented stability since the Russian financial crisis of 1998. Democratic elections have secured new leaders and new impetus for reform in many countries. The 1999 Kosovo conflict has ushered in a new era in the Balkans, even though ethnic tensions remain. The European Union has made early accession a concrete, achievable objective for 10 transition countries.

Moreover, economic growth has taken place in nearly every country since the late 1990s. The recent global slowdown is expected to have only a limited effect on future prospects. This should be a time of growing optimism in the region. But as the review on "Social Trends in Transition" in *Social Monitor 2002* shows, the evidence of progress in people's well-being is mixed.

Where is the deficit in social progress? Child poverty persists in many countries. While poverty has declined in Russia since 1998, it still affects 3 in 10 young children in that country. And in some countries, despite economic growth, poverty appears to have increased. Average earnings have been climbing since the late 1990s, but employment growth has been weak, and earnings inequality has continued to rise. Eight of the 27 countries – characteristically those rich in children – are now counted among the low-income developing countries by international agencies.

The fragile capacity of the public sector in providing quality service for citizens remains an issue. This is particularly relevant for the poor and for families with children. On average, real public expenditure grew between 1998 and 2000, and in many countries expenditure on education also rose. However, in some of the poorest countries, real spending on health and education actually fell despite economic growth. Participation in education continues to diverge, with improvements in enrolment rates mostly confined to richer countries. Indeed, in three countries – Albania, Moldova and Armenia – the enrolment of children in various education programmes has declined further since 1998.

The stabilizing fertility rates in many countries might well be interpreted as a sign of renewed optimism among families. However, welfare reforms still lag behind. Poverty and social disadvantage are propelling an even higher percentage of newborns into public care. In 8 of 15 countries for which information is available, infant institutionalization rates rose in 2000.

In contrast with the recent improvements in health in many countries, youth and adult mortality has deteriorated in Russia in recent years. Moreover, problems in maternal and child health in the poorer countries of the region appear to be much bigger than earlier thought. New information on Georgia and Turkmenistan, for example, indicates relatively high infant death rates. The incidence of tuberculosis continues to rise, particularly in Central Asia and Romania. Many young people are suffering from sexually transmitted infections. The HIV/AIDS crisis has grown deeper in Russia, Latvia and Ukraine. The number of newly registered infections has skyrocketed in Estonia and increased significantly in Kazakhstan.

The Article "HIV/AIDS and Young People: Awareness, Behaviour and Policy" looks beyond the latest data on registered cases to explore information relevant for preventive action. The majority of the one million people estimated to be living with HIV/AIDS in Central and Eastern Europe and the CIS in 2001 are young, and most have probably been infected in the last few years. How could this have happened?

The evidence suggests that low awareness and unsafe behaviour among injecting drug users, including the sharing of injecting equipment, are important reasons why the epidemic has spread so rapidly. In Belarus and Ukraine, where the epidemic became apparent ear-

liest, an increasing share of new infections is now occurring through sexual – overwhelmingly heterosexual – transmission. There is also a growing number of cases of mother-to-child HIV transmission in some countries. The implications for the future well-being of children and young people are immense.

The Article finds that awareness about ways to prevent the sexual transmission of HIV is considerably lower even in the most affected transition countries than it is in Western Europe. Policy makers urgently need to take steps to equip young people with the knowledge and the means to engage in safer behaviour. This will require a radical shift in attitudes and the design of effective measures for education, prevention and care.

The Article "Quality of Learning: Towards 'Unilateral Educational Disarmament'?" uses new international survey information to analyse how academic standards in schools in the region have survived the transition. It is clear from these surveys that students from Central Europe continue to perform in mathematics and science similarly to children in high-achieving Western countries, and adolescents in Russia and the Baltic states do not fall much behind.

However, students in some of the poorer countries such as Moldova and FYR Macedonia do not perform so well. Moreover, while the knowledge of subjects taught in school appears quite strong among teenagers in transition countries, these teenagers appear less well able than their Western counterparts to apply that knowledge. In most of the low-income transition countries, even the elementary conditions of teaching are compromised by the lack of resources. In the case of Tajikistan, the Article graphically describes what low investment and war damage actually mean in terms of ruined school buildings, wrecked classrooms and the destroyed hopes of students.

Through a desire for education, however, students make extensive efforts in both the richer and poorer countries in the region to overcome disadvantages. This is also true of parents, who are often heavily involved in their children's education. Public policies need to underpin these efforts through, for example, a gradual reform of teaching and examination systems, coupled with greater investment in education. Indeed, the new economic growth in the region and the demographic opportunity of falling numbers of school-aged children offer a window of opportunity for enhanced public investment.

In exploring these themes, the *Social Monitor* is acting as a signpost for public policy action and social reform. Policies need to ensure that all people enjoy the benefits of the transition and that children get a fair share of rising national income. The region's comparative strengths in the education and health sectors need to be maintained and reaffirmed, but these sectors also need to be gradually reformed, so that new public money is combined with more innovative service approaches. The problems of HIV/AIDS and young people leaving the school system with poor qualifications may appear to have little in common with each other, but in many ways they have common roots. If increased quality can be built into education systems, then these same systems can play a greater role in promoting safer behaviour among young people. More than a decade has passed since the start of the transition, but fresh approaches that enable children and young people to protect themselves better from the new risks and to avail themselves of the new opportunities are needed now even more than before.

The Social Monitor *is a new annual publication of the UNICEF Innocenti Research Centre's MONEE Project. Together with future in-depth thematic analyses, it replaces the Centre's* Regional Monitoring Report *series published between 1993-2001 and will continue to identify important emerging issues for children and families in the region.*

1 Social trends in transition

The turn of the new century marked an important moment in the transition of the countries of Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS). The physical and psychological legacy of communism had weakened over the 1990s as new economic, cultural and political structures emerged. But the transition process in the last decade of the old century generally proved more difficult than had been envisaged. The real objectives of transition – raising the living standards of more than 400 million people in the region and developing more humane and democratic societies – sometimes appear to have been forgotten in the face of armed conflict, or placed second to the imperative of economic growth. As the World Bank notes:

> "In the end what matters is people. In the end a country's transition will be judged by whether its citizens live better than they did before. Equity – how people share the benefits and pains of transition – is important. . . . This is especially true in transition countries, where policy makers may be unable to sustain vital, growth-enhancing reforms if large parts of the population feel that transition has left them behind."[1]

Social conditions, human rights and the public policies relating to them are central to institutional reform and economic transformation. Since the early 1990s, the eight *Regional Monitoring Reports* of the UNICEF Innocenti Research Centre have focused on these conditions, rights and policies and, particularly, the impacts on children, young people and women. The *Social Monitor* continues this focus.

This Article reviews recent trends in people's well-being in the 27 transition countries of Central and Eastern Europe and the CIS. Since the late 1990s, many of the pre-conditions for the betterment of this well-being have fallen into place, but the upheaval associated with democratization and economic and social progress in the region is far from subsiding. Ten of the 27 transition countries are moving towards membership in the European Union (EU), but even in these countries huge challenges remain.[2]

How can social and economic trends in the region since the late 1990s be summarized? First, there is growing evidence of *stability*. Many important indicators of well-being are now – two years into the new century – more predictable and changing less from year to year than was the case in the early 1990s. Most of the armed conflicts that blighted the region during the last decade have ceased. Democratic government and active civil society are taking root in an increasing number of countries. There have been fewer large falls in incomes or rises in poverty, and inflation now appears to be under control.

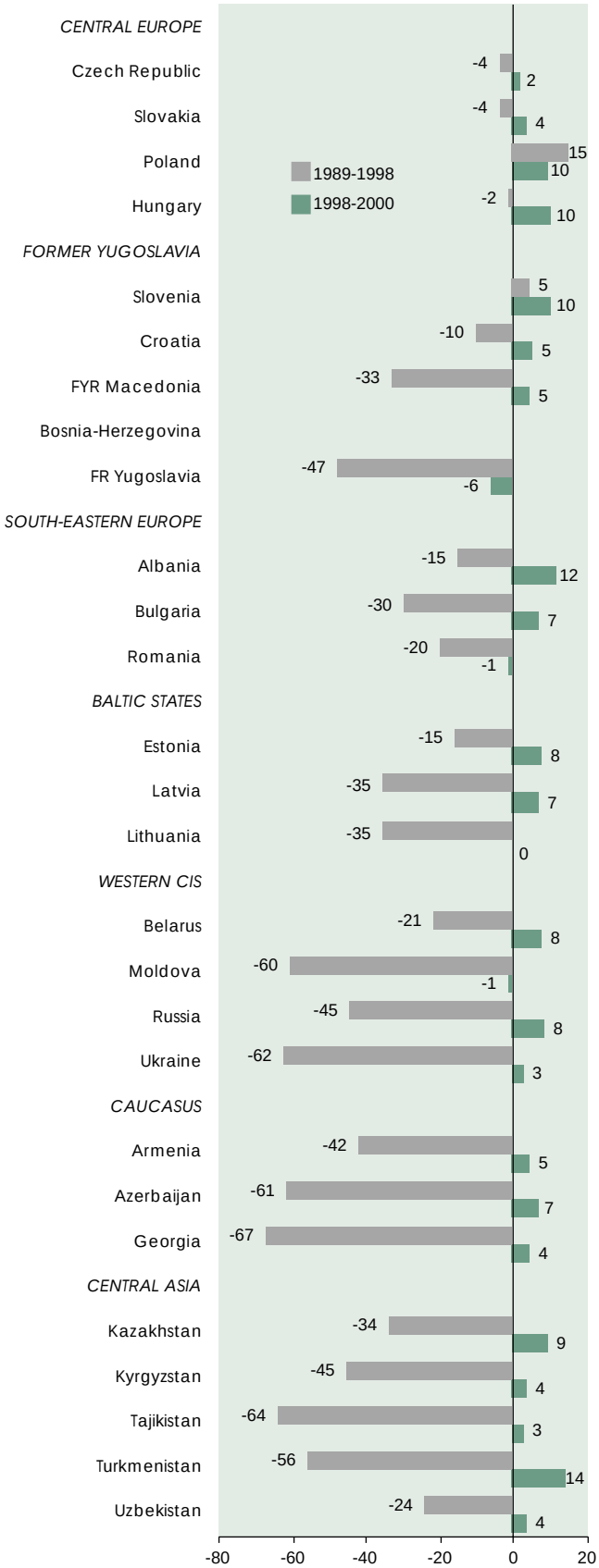
Second, there are continued signs of *improvement.* Not only are many indicators no longer rapidly deteriorating, but many are changing for the better. Economies are growing. Infant mortality has generally declined, and life expectancy, for the most part, is increasing. Public expenditure on key social services such as education and health care is rising.

But amid these positive developments, there are still many signs of *crisis*. One of the most worrying is the escalation of the HIV epidemic in many parts of the region. The crisis is also apparent in the intractability of several other problems: in the huge numbers of children in poverty, in the poor state of education, in the climbing rates of tuberculosis infection and in the continued reliance on the institutionalization of children who are without parental care. None of these problems can be solved overnight, but there are solutions, and, in view of the many positive developments that are evident in the region, there has never been a better opportunity for effective action.

This Article focuses on the changes in indicators of people's well-being since the late 1990s. The year 1998 is a frequently used benchmark for these changes. After the Russian financial crisis of that year, economic growth started to take hold throughout the region for the first time since the beginning of transition. However, an adequate analysis of recent changes in people's well-being is

Figure 1.1

Change in real per capita GDP (per cent of 1989 level)



Source: Statistical Annex, Tables 1.1 and 10.1.

Note: No data are available for Bosnia and Herzegovina on a 1989 basis. The earliest year for Armenia, Croatia and Turkmenistan is 1990.

impossible without a look at the whole transition context: the fading heritage of communism and the momentous changes that have taken place from 1989 onwards. The analysis here of recent trends is fixed firmly within this longer term context.

The Article is divided into five sections, each dealing with a different area of people's welfare. Section 1.1 looks at the consequences of rising national income on people's material well-being, on poverty and on public expenditure. It also examines the problem of growing external debt liabilities in some countries in the region. In Section 1.2, trends in fertility and births to teenage mothers are examined. Section 1.3 analyses health trends: changing life expectancy and infant mortality, increased mortality in Russia and trends in HIV, syphilis and tuberculosis. Trends in expenditure on education, and enrolments in education are the main topics covered in Section 1.4. Section 1.5 looks at the development of alternatives to the institutionalization of children who are deprived of parental care and the sentencing and deprivation of liberty of young people convicted of crimes.

1.1 Income and employment

What are the implications of economic growth for people's well-being? This section first looks at the recent economic growth in the region. Through trends in employment and earnings, poverty, and public expenditure, it then examines the diffusion of this growth to individuals and families. The section also explores the implications for personal well-being of the rising levels of national debt in some countries.

Rising GDP

National income grew in nearly all of the 27 countries in the region between 1998 and the start of the new century. This positive development followed a prolonged period of decline and stagnation through much of the 1990s. Figure 1.1 shows the changes in national income, as measured through per capita GDP, in all countries in the region, except Bosnia and Herzegovina, for which information is not available for much of the transition period. The countries are organized into seven subregions, which are referred to at other points in the Article.[3] The grey bars show the extent to which GDP changed in each country between 1989 and 1998. The green bars show the change between 1998 and 2000. Change in both periods is expressed as a percentage of the GDP in 1989. In Belarus, for example, a 21-per-cent decrease in GDP between 1989 and 1998 was followed

by an 8-per-cent increase between 1998 and 2000, meaning that per capita GDP was 13 per cent smaller in 2000 relative to 1989. The GDP in Poland, on the other hand, grew by 15 per cent up to 1998 and by a further 10 per cent between 1998 and 2000, resulting in a cumulative growth of 25 per cent over the first 11 years of the transition.

After universal deterioration in national income in the early 1990s, Slovenia and the countries of Central Europe were the first to experience economic recovery. By 1998, per capita GDP in these countries was approaching or had surpassed the 1989 levels. This was not the case in other countries in the region. Economic decline was steeper in the western CIS, the Caucasus and Central Asia in the early 1990s than it was in Central and Eastern Europe, and growth came later. The increase in per capita GDP in Central Asia was also slowed by population growth, so that available national income was divided among ever more people. Since 1998, nearly all countries have seen average per capita incomes rise. Moreover, recent projections suggest that economic growth will continue in the region.[4] In terms of recovering to the 1989 levels of GDP, most countries must still make considerable progress, but, with the more recent advances, people's material quality of life throughout the region should be showing signs of improvement.[5]

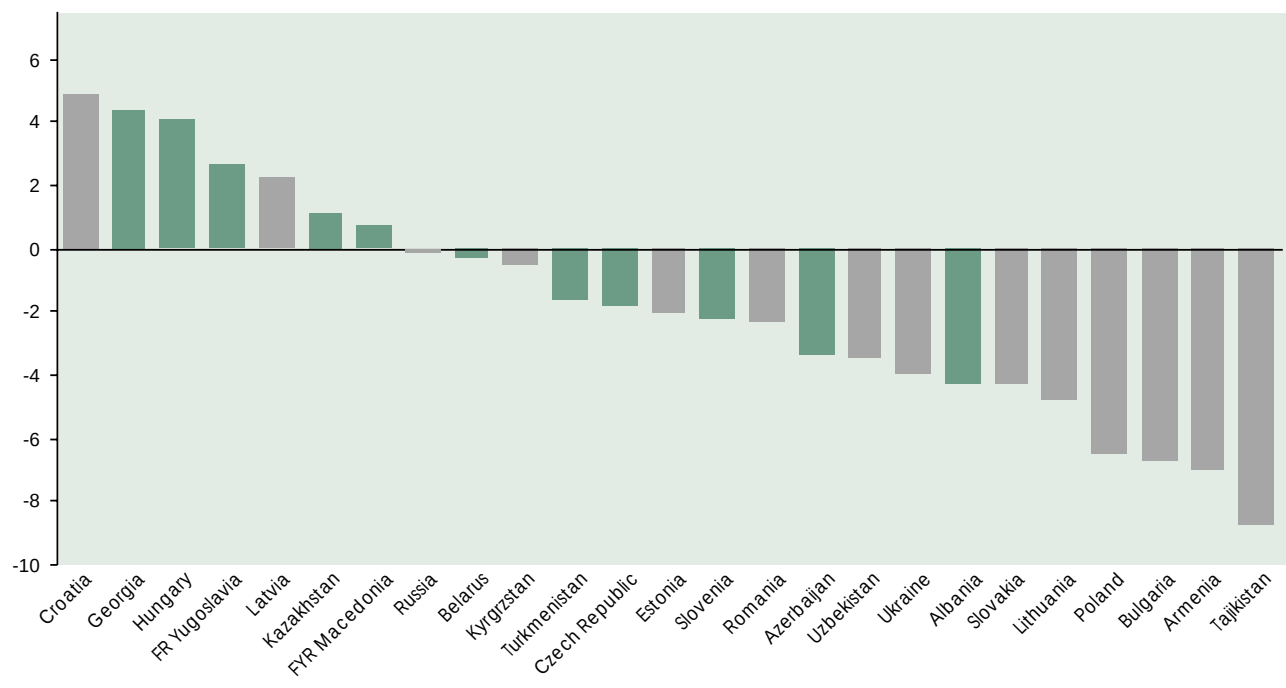
Less employment, higher earnings

Increased national income is the result of more output, which means that more people are engaged in productive activity or that people are producing more. One way in which rising output can filter to families is through the wages earned in employment. Figure 1.2 shows that the percentage of working-age people in employment actually fell in most countries between 1998 and 2000.[6] The green bars indicate countries where per capita GDP increased by more than a 10th. The fact that 6 of the 11 countries where this is the case experienced falls in employment shows that high economic growth does not necessarily lead to job growth.

The pattern of declining employment rates is not surprising. Communist countries were characterized by very high levels of employment (and virtually no unemployment) among both men and women. In 1989, over three quarters of working-age people were employed in most nations of the region, a far higher rate than in the EU, where only one country (Denmark) had a participation rate at this level (see Statistical Annex, Table 10.6).[7] With the onset of transition, it was inevitable that the number of people in employment would fall. This was not only because of economic change. With the advent of increased personal freedom in a range of settings, many people were now able to choose alternatives to

Figure 1.2

Change in the proportion of 15-59-year-olds in employment, 1998-2000 (per cent)



Source: Statistical Annex, Table 10.6.

Note: The green bars represent those countries where per capita GDP increased by more than a 10th between 1998 and 2000.

formal paid employment that were not always available pre-transition. A decline in the proportion of working-age people in employment cannot therefore be seen as purely negative. It may, for example, be associated with young people staying longer in education or with parents choosing to spend more time with their families. Lower employment levels relative to the size of the working-age population may also be associated with higher wages and with increased productivity among those who remain in work.

For many individuals, however, job loss is often associated with hardship. It implies a loss of sense of purpose and a decline in living standards. Income loss is particularly strongly felt among people who have dependent children or who have limited access to unemployment benefits, pensions and other forms of social security. In Hungary, one of the richest countries in the region, only a third of unemployed people received any unemployment payments in 2000.[8] In many CIS countries, there is little or no support for the unemployed.[9] Moreover, employment levels in some countries in the region have fallen well below those in EU countries, where on average about 6 in 10 people of working age were in paid work in 1999.[10] In FYR Macedonia and Croatia, only about 4 in 10 were employed in 2000 (see Statistical Annex, Table 10.6).

While trends in overall employment levels are a key indicator of well-being, the monitoring of women's employment is also important. Employment is a source of women's autonomy, a passport to health, social security and pension benefits and an avenue for social and personal development. In general, trends in employment among women during the late 1990s were much the same as those experienced by men, although, in Armenia and Kyrgyzstan between 1998 and 2000, women's share in total employment decreased. Such trends are significant because women's income plays a critical role in reducing children's poverty. Women who are raising children have been among the main losers in the shift to more competitive labour markets.[11] Whether they are continuing to lose out as some countries return to employment growth will be examined in future issues of the *Social Monitor*.

While employment generally declined, average real earnings increased in most countries in the region between 1998 and 2000. They rose by 25 per cent or more in Albania, Armenia, Azerbaijan, Tajikistan and Uzbekistan. These large increases in earnings in some of the poorest countries in the region have to be seen in the context of earlier declines. In 2000, average real wages in Tajikistan and Uzbekistan, for example, were still less than a quarter of their 1989 value in real terms. In other poor countries, however, earnings continued to fall. This was the case in Kyrgyzstan, Moldova and Ukraine. The Czech Republic was the only country in the region where real earnings in 2000 clearly exceeded the 1989 values (see Statistical Annex, Table 10.9). Available information on earnings inequality indicates that, in Azerbaijan, Czech Republic and Romania between 1998 and 2000, people with high earnings gained more from rises in average wages than did those with low earnings. In Kyrgyzstan and Ukraine, the increases in earnings inequality mean that people employed on low earnings fared even worse than the fall in average wages might suggest (see Statistical Annex, Table 10.10).

In summary, the fact that average earnings have risen in several countries since the late 1990s appears to show that many employed people and their families are sharing in the benefits of increased national income. But employment growth has been weak, and earnings inequality has continued to rise. Therefore, in terms of family incomes, the benefits of economic growth are not being evenly spread.

Has poverty declined?

What has been the impact of increased national income on poverty levels? The evidence for some countries shows that the number of households below national poverty lines rose during the late 1990s. In Estonia, for example, the proportion of households in "extreme poverty" – those which consumed less than four fifths of the official subsistence minimum – increased from 12 to 15 per cent between 1999 and 2000.[12]

The number of people estimated to be living below the national poverty line in Kyrgyzstan climbed steeply between 1996 and 1999, from half to almost two thirds of the population.[13]

In Russia, meanwhile, absolute poverty appears to have decreased in recent years. Table 1.1 compares poverty estimates for Russia from two different sources.

Table 1.1

People living in poverty in Russia during the transition (per cent)

	Goskomstat	Russia Longitudinal Monitoring Survey	
	All persons in poverty	Households in poverty	Children aged under 7 in poverty
1994	–	17	25
1996	–	35	42
1998	–	38	56
1999	39	–	–
2000	34	27	37
2001	30	19	28

Sources: Goskomstat estimates: RECEP (2002), *Russian Economic Trends Monthly Update*, March, Russian European Centre for Economic Policy: <*www.recep.org*> (accessed 10 April 2002), Table 10. Russia Longitudinal Monitoring Survey (RLMS) estimates: Mroz, T., L. Henderson, M. Bontch-Osmolovskii and B. Popkin (2002), "Monitoring Economic Conditions in the Russian Federation: The Russia Longitudinal Monitoring Survey, 1992-2001", April, Carolina Population Center, University of North Carolina: <*www.cpc.unc.edu/projects/rlms/rlms_home.html*> (accessed 23 May 2002).

Note: RLMS and Goskomstat estimates are based on separate household surveys and may employ different poverty lines. RLMS estimates are calculated from household income data using a poverty line based on adjustments for economies of scale and regional-level prices and food baskets.

The data of the Russia Longitudinal Monitoring Survey (RLMS) show that poverty rose steadily between 1994 and 1998, but then declined steeply in 2000 and again in 2001. The Goskomstat data also indicate that poverty fell between 1999 and 2001.

Information on poverty among children is only available in the RLMS. These data show that there was considerable poverty among young children throughout the 1990s, although this also declined between 1998 and 2001. Nonetheless, according to the RLMS measure, 28 per cent of Russian children aged under 7 – over two and a half million young children in all – were living in poverty in 2001.

The definitions of poverty used in the two sources for the Russian data, as well as in the sources for the data on Estonia and Kyrgyzstan cited above, are all different. This means that it is difficult to compare directly the various poverty estimates presented here. Nonetheless, though the poverty lines employed to derive these estimates reflect diverging views on the minimum standard of living acceptable in each country, the sources all find that substantial shares of the population, including children, are still living in poverty. This is a significant point of agreement.[14]

Public expenditure is increasing

Another way in which people's well-being can improve as national income rises is through public expenditure. Even if personal incomes do not change, people may still be better off if the government increases its spending (or spends more effectively) on health care, education and other public services. On average, real public expenditure increased by 5 per cent between 1998 and 2000 in the countries of the region. In Bulgaria, it went up by a third. In Lithuania, Moldova and Romania, however, it decreased by at least 10 per cent.[15] These recent changes must be seen in the context of the large declines in real public expenditure in most transition countries (by an average of one quarter and by considerably more in Azerbaijan, Georgia, Tajikistan, Turkmenistan and Ukraine) during the early and mid-1990s. While "more" is not always "better", the conclusion of the 1998 *Regional Monitoring Report*, on education, is worth noting: "It is difficult to believe that injections of money will have no effect on learning in a school with a leaking roof, broken windows, insufficient heating, and few textbooks and where teachers are obliged to take second jobs to supplement meagre salaries that are paid in arrears".[16]

Have there been any "injections of money" in the key areas of public health and education expenditure in those countries where this expenditure has been the lowest? In the Caucasus and Central Asia, in particular, public expenditure on health care and education fell dramatically in the early 1990s. In Georgia, for example, public expenditure on education amounted to 1.2 per cent of GDP in 1996 (Statistical Annex, Table 7.6). This compares with an average for the whole region of 4.6 per cent in that year. While real GDP increased in all the countries in the Caucasus and Central Asia in the late 1990s, public expenditure on education actually declined in real terms in Kyrgyzstan, although it did rise in Azerbaijan, Georgia, Tajikistan and Turkmenistan.

In general, fewer public resources were directed at health care than was the case with education. In most countries in Central Asia and the Caucasus and particularly in Georgia and Tajikistan, public expenditure on health care was at critically low levels in 2000 (Statistical Annex, Table 6.10). Thus, it is no surprise that, among many other problems, only about half of all births in Tajikistan were attended by skilled personnel in that year (Statistical Annex, Table 6.1).

Growing public debt

The issue of expenditure on public services that improve human well-being is closely linked to the issue of public debt. While debt is often incurred by governments for socially useful purposes, the repayment of the debt is a challenge that must be faced in conjunction with the continued provision of quality public services. During the 1980s, governments in Poland and Hungary borrowed heavily from Western institutions to finance the development of products to be sold in Western markets. The people in these countries suffered considerable hardship during the late 1980s and early 1990s as governments struggled to service these debts. One result in Hungary was the "Bokros Package" of 1995, which curtailed social spending as a response to the enormity of the external debt.[17]

Most countries entered transition with low levels of external debt, and, as Table 1.2 shows, current external debt levels are still generally low. Kyrgyzstan and Tajikistan are the only countries that are currently "severely indebted". They used over a third of their government revenues to service external debt in 2000, though they are also among the poorest countries in the region. Recent analyses by the World Bank and the IMF of the poorest countries in the region suggest that Armenia, Georgia and Moldova, as well as Kyrgyzstan and Tajikistan, may soon face an external debt crisis, with serious consequences for social expenditures.[18]

All five countries suffered a massive economic shock with the break-up of the Soviet Union, particularly with the ending of subsidized energy supplies and other transfers from the Soviet budget. In addition, countries

Table 1.2

The World Bank classification of countries by income group and indebtedness, January 2002

Income group	Severely indebted	Moderately indebted	Less indebted
Low income	Kyrgyzstan Tajikistan	Moldova Uzbekistan	Armenia Azerbaijan Georgia Ukraine
Lower middle income		Bosnia-Herzegovina Bulgaria Russia Turkmenistan	Albania Belarus Kazakhstan Latvia Lithuania FYR Macedonia Romania FR Yugoslavia
Upper middle income		Estonia Croatia Hungary	Czech Republic Poland Slovakia

Source: World Bank (2002), *Global Financial Indicators 2002*, World Bank: Washington, DC, Table A1.7.

Note: Countries are divided among income groups according to a World Bank classification, with gross national income (GNI) per capita for 2000 calculated using the World Bank Atlas Method: low-income countries have per capita GNI of $755 or less; lower middle income countries have per capita GNI of $756-$2,995; higher middle income countries have per capita GNI of $2,996-$9,265, and high-income countries have per capita GNI of $9,266 or more. Slovenia is excluded from the table because it falls in the "high income" bracket. "Severely indebted" means that the present value of debt service to GNP exceeds 80% or that the present value of debt service to exports exceeds 220%. "Moderately indebted" means that either of the two key ratios exceeds 60% of, but does not exceed, the critical levels. All other countries are classified as "less indebted".

endured civil or external conflict in the first years of their existence, hampering economic development and foreign investment. External debt in the five countries rose rapidly during the 1990s as public enterprises continued to import energy, on credit, from Russia and Turkmenistan, which, along with many Western countries and institutions such as the World Bank and the IMF, are now major creditors in the region. The devaluation of national currencies in the wake of the Russian economic crisis of 1998 greatly exacerbated the debt problem, since most external debt (including debts to other CIS countries) was denominated in US dollars.

The IMF-World Bank analysis shows that external debt servicing currently requires a substantial proportion of government revenue in all five countries.[19] It points out that, with hindsight, the projections of economic growth and the ability to repay loans were overly optimistic. Debt servicing levels of the kind these countries face will have severe implications for the amount of public expenditure available for key services such as education and health care over the coming years. This is an issue on which international organizations, creditor countries and the indebted countries themselves will need to cooperate closely.

1.2 Population

At the start of 2001, there were just over 400 million people in the region, similar to the number in 1989. While the overall population of the region has changed little since the onset of the transition, the demographic changes within individual countries have been enormous. One of the universal features of the transition has been the rapid fall in fertility rates.[20] This section examines the most recent trends in total fertility and in births to teenage mothers.

Why is fertility important?

The total fertility rate is the average number of children to which each woman in a country is expected to give birth. It is calculated from prevailing age-specific birth rates.[21] The number of births per woman can have an important influence on people's well-being for a number of reasons. On the one hand, very high or rapidly rising fertility can strain public resources and family incomes, so that children, on average, have poorer nutrition and receive less health care and education. Indeed, the whole population can be less well off, since available resources have to be spread more thinly. A declining fertility rate means that more resources can be devoted to each child, so that children are, on average, healthier and more well fed and well educated.

On the other hand, a low fertility rate will eventually lead to an aging population, so that the number of the elderly as a proportion of the total population grows, and the number of people who are of working age shrinks. This has two important implications. First, each working-age person's contribution to the support and care of the elderly (either direct, or indirect through taxes) will increase. Second, a low fertility rate this year means that in 20 to 40 years' time, there will be relatively fewer adults of reproductive age, so that the future growth of the population will be affected.[22]

Are fertility rates stabilizing?

The large decline in fertility across the region during the 1990s is seen clearly in the falling number of children. There were 105 million children aged up to 17 in the region in 2001, compared to over 120 million in 1989. Between 1998 and 2001, the child population decreased in most countries by between 5 and 10 per cent (Statistical Annex, Table 1.2).

Recent trends in fertility can indicate whether such declines are likely to continue. In the 24 countries for which information is available, almost 5,000 more babies were born in 2000 than in 1999. This was the first time since 1989 that the annual number of babies born had increased in the region. Indeed, the number of births increased in 10 countries (Statistical Annex, Table 2.1), although, for the most part, fertility rates remained low.

A total fertility rate of about 2.1 is necessary for the

population to remain stable over time if there is no appreciable immigration or emigration. In all countries except Albania and the countries in Central Asia, the fertility rate was below the population replacement level at the end of the 1990s. (This is also the case in most advanced industrialized countries.) In 17 countries in the region, the fertility rate was below the average rate for the EU of 1.45.[23]

Nonetheless, there are indications that fertility in many countries is stabilizing. Rates stayed the same or grew in only five countries in the region in 1999, compared to 13 countries in 2000.

Figure 1.3 shows trends in fertility in some of the countries with the lowest rates in the late 1990s. In Latvia, the total fertility rate fell from 2.1 to 1.1 births per woman between 1989 and 1998, a decline from a level that secured long-term population replacement to a level whereby the population could be severely reduced within one generation. However, it has risen since then. The fertility rate improved consistently in Bulgaria after 1997. In several other countries, it increased slightly in 2000. It is difficult to predict whether these recent increases in fertility will continue over the next few years, but it seems plausible that the decrease in fertility in many countries may be bottoming out.

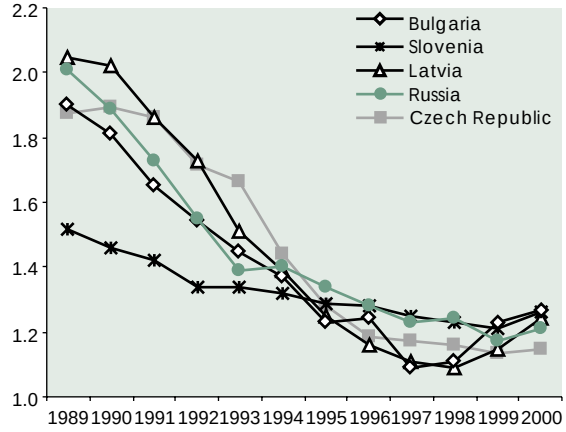
While the fertility rate appears to be stabilizing, the number of abortions continues to fall in most countries. In Romania, for example, the abortion rate in 2000 was only slightly more than one third of the rate in 1990, which was exceedingly high due to the legalization of abortion in that year – one of the first measures passed by the new government after the 1989 revolution. Figure 1.4 shows trends in the five countries where the officially recorded number of abortions exceeded the number of live births in 2000. Across the region, abortion remains one of the main forms of birth control. It is also possible that the actual abortion rates in many countries may be higher than the official rates suggest. Abortions carried out in private clinics, for example, may not be included in the official totals. Survey data for Georgia indicate that in 1999 there were 220 abortions for every 100 live births, compared with an official tally of 45. The official abortion data for FR Yugoslavia are also thought to understate the true figure by up to 40 per cent.[24]

Teen births continue to decrease

Even as the overall fertility rate stabilizes, the teen birth rate continues to decline in many countries. The proportion of women aged 15-19 giving birth has been falling in Central and Eastern Europe since the early 1990s and in the countries of the CIS since the mid-1990s

Figure 1.3

Total fertility rates, 1989-2000 (births per woman)



Source: Statistical Annex, Table 2.9.

Note: The "total fertility rate" is defined in the Glossary.

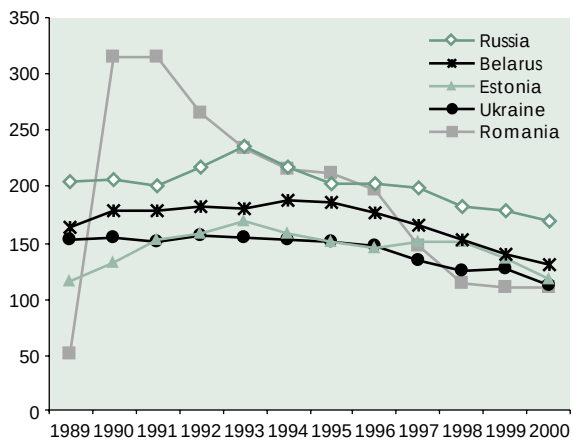
(Statistical Annex, Table 2.4). The share of all births to mothers aged under 20 has also been declining in nearly every country since the mid-1990s. In Uzbekistan, for example, the share of teen births in the total decreased from 10 to 5 per cent between 1997 and 2000 (Statistical Annex, Table 2.5).

Yet, teenage fertility remains higher in most countries in the region than in most OECD countries. In 2000, the highest rates were registered in Bulgaria, Moldova and Romania. Despite the high rates, relatively little is known about the circumstances of teenage mothers in the region. Figure 1.5 shows that the share of teen births occurring outside marriage has increased greatly in every subregion since the start of transition. Teen births outside marriage accounted for more than half of all teen births in 11 countries in 2000 (Statistical Annex, Table 2.7).

This suggests that, while the number of teenage

Figure 1.4

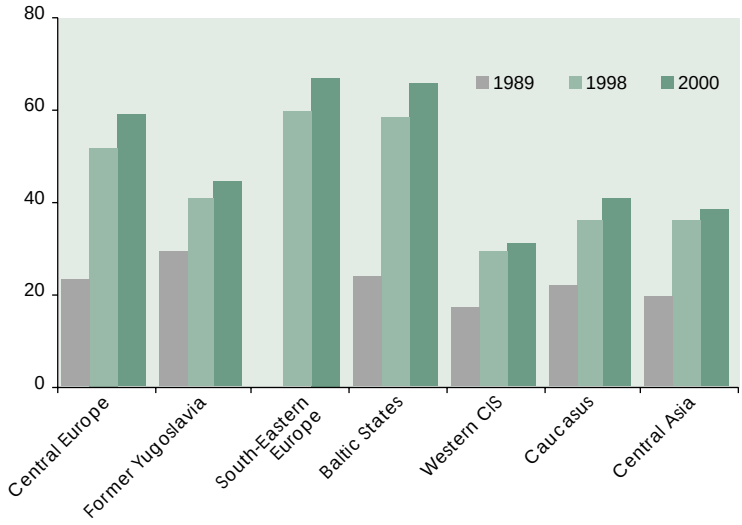
Abortion rates, 1989-2000 (number of abortions per 100 live births)



Source: Statistical Annex, Table 2.10.

Figure 1.5

Share of children born to teenage mothers outside marriage, 1989, 1998 and 2000 (per cent of all teenage births)



Source: Statistical Annex, Table 2.7.

Note: The subregional averages are unweighted. The data for South-Eastern Europe are missing for 1989 and do not include Albania in 1998 or 2000. The data for Central Asia do not include Tajikistan. The data for Bosnia and Herzegovina and for FR Yugoslavia (in Former Yugoslavia) are for 1999 rather than 2000, as are the data for Turkmenistan (in Central Asia).

mothers may be falling across the region, the magnitude of the problems that these mothers face may be increasing. For unmarried teenage mothers in particular, these problems are likely to include prolonged periods of poverty and disadvantage. Evidence from a UNICEF IRC study of the outcomes of teenage motherhood in Western Europe shows that, compared to women in their 20s, teenagers who give birth tend to be less well educated and to face a much higher risk of poverty.[25] There is every reason to expect that teenage mothers and their children in transition countries are also severely disadvantaged; and the difficulties experienced by teen mothers from ethnic minority groups are likely to be particularly acute. The UNICEF IRC report on teenage motherhood in Western Europe concludes that "*teenage motherhood* may be seen as conceptually equivalent to *poverty* – a convenient benchmark on which to focus analysis and policy . . . ."[26]

The same is true of transition countries. One policy response is to ensure that teenage mothers are given adequate support – in ways that are appropriate and accessible – in continuing their education, in seeking employment and in raising their children. In addition, teenagers, both boys and girls, need to be equipped with the knowledge to make mature and responsible decisions about their own lives and their relationships. This is important as a means not only of reducing unwanted teenage pregnancy, but also of promoting greater gender equality in relationships and of reducing abortions and the dangers inherent in unsafe sexual practices, including sexually transmitted infections such as HIV.[27]

1.3 Health

In this section, recent trends in infant and adult mortality in the region are examined. Also analysed are changes in life expectancy, as well as trends in infectious diseases – HIV, syphilis and tuberculosis. The growth in new HIV infections is particularly worrying, and the threat posed to people's health cannot be overestimated. Factors associated with the spread in HIV are more fully examined in the Article "HIV/AIDS and Young People" in this *Social Monitor*.

Is infant mortality declining?

One positive trend in many countries since the start of transition has been the decline in infant mortality. The regional average official rate fell by one third between 1989 and 1999, and, in most countries, this decline continued into 2000 (Statistical Annex, Table 3.1). One exception was Moldova, where the official infant mortality rate increased in 1999 and again in 2000, when it stood at 18.3 infant deaths per 1,000 live births. This compares with a rate of 4.1 in the Czech Republic. Among the major factors associated with infant mortality in Moldova are premature and low-weight births. What is particularly worrying about infant mortality in Moldova is not only that the already high rate has recently increased, but also that there have been no significant improvements in the infant death rate for some time.[28]

In spite of general improvements, Moldova is not alone in giving cause for worry. Recent research shows that, in some countries, official infant mortality rates appear to be lower than the rates estimated from surveys that ask women about their reproductive histories.[29]

One reason that may explain some portion of this difference is the not insignificant fees for birth registration in many countries. In order to avoid the fees, poorer people may not be registering births, and this affects the official rates. If an infant's birth is not registered, then his or her death may not be registered either.[30]

In some countries, there is another reason why official rates may appear lower than alternative estimates. This is the definition of "live birth" that is sometimes employed. In the Soviet Union, particularly premature and low-birthweight infants who survived only seven days or less were not included in infant mortality statistics. This "Soviet definition" is still used to compile official birth and infant mortality statistics in some countries in the region. It tends to produce an infant mortality rate that is lower rel-

ative to a rate produced using the definition of "live birth" recommended by the World Health Organization, or, indeed, relative to rates calculated from survey data.[31]

Recent estimates of infant mortality rates calculated from alternative sources (mostly surveys) are available for Armenia, Georgia, Kazakhstan and Turkmenistan. Figure 1.6 compares these with rates calculated from official administrative information. In all four countries, there are significant discrepancies between administrative and survey-based rates. It is important to stress that, while factors such as the definition of "live birth" and the non-registration of births certainly explain part of the difference, the causes of these discrepancies are not fully understood. Further analysis will be required before official and survey-based rates can be reconciled.

Changing life expectancy

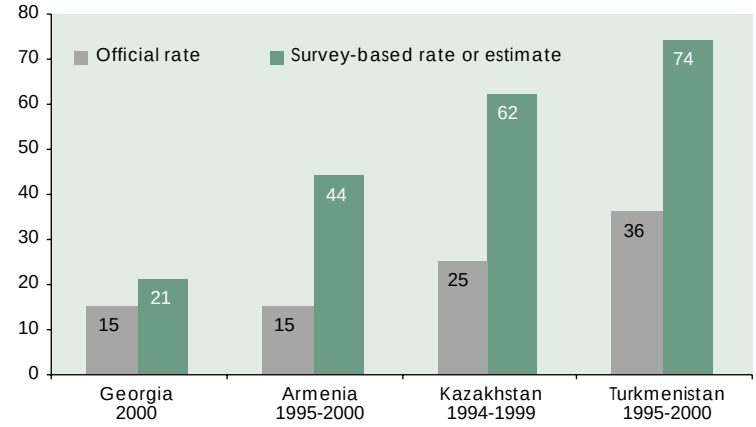
In general, life expectancy among men and women has improved in the region since the start of transition, but particularly since the mid-1990s.[32] The "mortality crisis" that became apparent in many transition countries in the first half of that decade had its greatest impact on men aged between 25 and 60 in the countries of the western CIS and Central Asia and in the Baltic states. Table 1.3 shows life expectancy at birth for men and women in the region in 2000. Countries where life expectancy decreased between 1989 and 2000 are marked in italics. The impact of the mortality crisis is apparent in the low life expectancy among men in Russia, Kazakhstan, Ukraine, Turkmenistan, Belarus and Moldova. In Russia and Kazakhstan, it is about 59 years, which is lower than male life expectancy in India.[33] In Russia, moreover, mortality rates appear to have resumed their upward trend.

The Central Asian states account for five of the eight countries in the region with the lowest life expectancy among women in 2000. This was the case throughout the 1990s, with the worst rates of all in Turkmenistan and Tajikistan. Even so, life expectancy in 2000 among women in Turkmenistan represented an increase over the 1989 figure, from 68 to 70 years. There are also huge inequalities in life expectancy among the women of Turkmenistan. Recent evidence suggests that, on average, women in Ashgabat, the capital, live 10 years longer than their rural counterparts.[34] Women's life expectancy in Moldova, Russia and Ukraine in 2000 was also low by regional standards.

The Czech Republic, Georgia and Slovenia on the other hand, showed relatively high life expectancy in 2000 among both men and women (though still lower than the EU average). However, the official data for Georgia have been disputed.[35] Georgia is one of the few countries in the region (Russia is another) where life expectancy among both men and women appears to have deteriorated since the mid-1990s.

Figure 1.6

Infant mortality: official rates and alternative estimates
(per 1,000 live births)



Sources: DHS (Armenia, Kazakhstan, Turkmenistan): <*www.measuredhs.com*> (accessed 26 March 2002). Georgia: estimate of the Ministry of Labour, Health Care and Social Security; see Tsuladze, G. et al. (2001), *Demographic Yearbook of Georgia*, Georgian Academy of Sciences, Partnership for Social Initiatives-Georgian Centre and Centre for Political Studies: Tbilisi, Georgia, Table 41.

Note: For Armenia, Kazakhstan and Turkmenistan, the years indicate the period to which the rate derived from the survey refers (and not the year in which the survey was carried out). Infant mortality rates from surveys are calculated based on information given by women on their fertility history. The official rates are for the same periods and are averages of annual rates, where applicable.

Is mortality rising in Russia again?

The case of Russia is of particular concern, with recent signs of a significant climb in mortality among adult men and women. Figure 1.7 shows the mortality rates among

Table 1.3

Life expectancy at birth among men and women in 2000 (in years)

	Men	Women
Under 64	*Russia, Kazakhstan, Ukraine,* Turkmenistan, *Belarus, Moldova*	
64 to 67	Kyrgyzstan, *Latvia, Estonia, Tajikistan,* Romania, Hungary, Lithuania	
68 to 70	*Bulgaria,* Uzbekistan, Azerbaijan, Slovakia, Poland, FR Yugoslavia, FYR Macedonia, Armenia	Turkmenistan, *Tajikistan*
71 to 73	Czech Republic, Albania, Slovenia, Georgia	*Moldova, Kazakhstan, Russia,* Kyrgyzstan, Uzbekistan, *Ukraine*
74 to 75	EU average	Romania, *Armenia, Belarus,* FYR Macedonia, FR Yugoslavia, Azerbaijan, Bulgaria, Hungary
76 to 77		Latvia, Estonia, Albania, Slovakia, Lithuania
78 to 80		Poland, Georgia, Czech Republic, Slovenia
81 and over		EU average

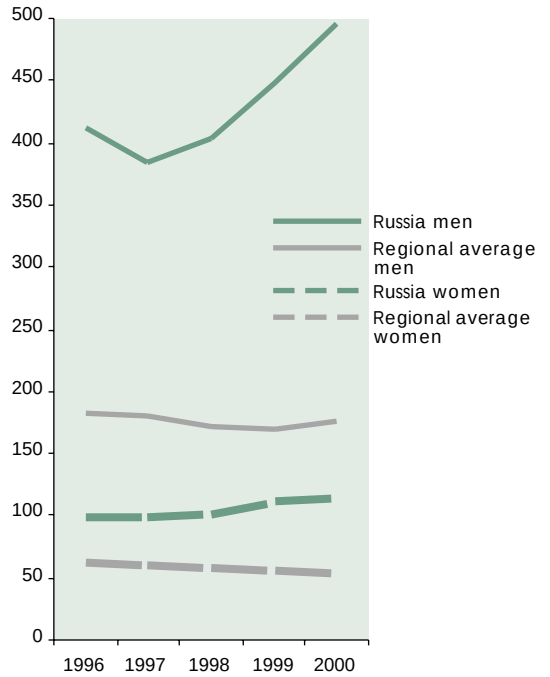
Sources: Statistical Annex, Tables 4.2 and 4.3. EU averages: WHO Health for All database: <*www.who.dk*>, June 2001.

Note: Albania, FYR Macedonia, Tajikistan, Turkmenistan and FR Yugoslavia refer to 1999. Uzbekistan refers to 1998. EU averages refer to 2001. Italics indicate that, between 1989 and 2000, there was a decrease in life expectancy at birth.

Russian women and men aged 20-24 between 1996 and 2000. The increases that occurred after 1997 mean that the mortality rates in this age group in 2000 were higher in Russia than in any other country in the region and higher than at any stage since 1989 (Statistical Annex, Tables 4.4 and 4.5). Death rates went up considerably in the early part of the 1990s, but then fell. However, the decrease that occurred in 1995 and 1996 proved shallow. In absolute terms, the number of deaths among women aged 20-24 rose from 5,000 to 6,000 between 1997 and 2000. Among men, the number jumped from 21,000 to 27,000.

Figure 1.7

Mortality rates among men and women aged 20-24 in Russia, 1996-2000 (per 100,000 relevant population)



Source: Statistical Annex, Tables 4.4 and 4.5.

Note: Regional averages represent the unweighted average mortality rates for men and women aged 20-24 for all 27 countries in the region. Data in respect of the following countries are missing for some years: Bosnia and Herzegovina (1996, 1997 and 2000), FR Yugoslavia (2000), Albania (1997-1999), Tajikistan (1997, 1998 and 2000) and Turkmenistan (2000).

Historically, the most common causes of death among young people in Russia have been accidents and violence: deaths that can be prevented. Previous research shows that the death rate among young men from injury (including traffic and other accidents, homicide and suicide) was higher in the mid-1990s in Russia than in any other European country for which data are available, and it was seven times higher than the comparable rate for the Netherlands, then the lowest rate in Western Europe.[36]

Young adults are not the only people to have been affected by increasing death rates in Russia. Between 1998 and 2000, the mortality rates among Russian women and men aged 25-39 climbed by about one fifth. Death rates also rose among those aged over 40.

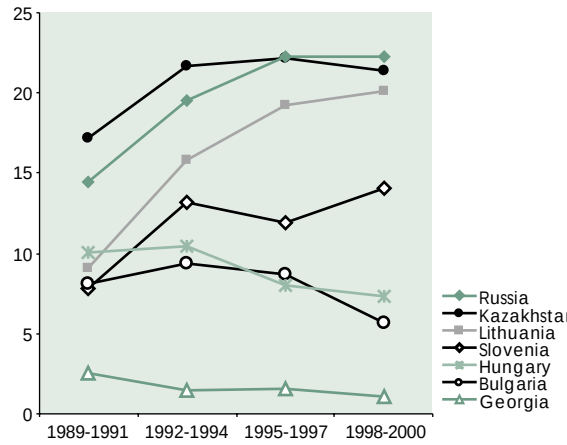
The major cause of death among men and women in their 30s and 40s in Russia during the transition has been circulatory diseases, often associated with psychosocial stress, unhealthy lifestyles and diet, and excessive consumption of alcohol and tobacco.[37] Recent evidence suggests that circulatory diseases may also be responsible for a large proportion of the mounting deaths. Indeed, deaths due to every major cause have risen.[38] Russia has begun to recover from the economic and social turbulence associated with transition and from the most recent financial crisis, in 1998. Average incomes have improved, and public institutions appear more stable than at any time since the collapse of the Soviet Union.[39] Nonetheless, the mortality crisis among the Russian population continues.

Youth suicide

Suicide is an indicator of psychosocial stress and an important contributor to mortality among young people. Over 4,500 teenagers aged 15-19 committed suicide in the region in 1999, more than half of them in Russia. In 2000, suicide was responsible for one quarter of all deaths among 15-19-year-olds in Lithuania and almost one fifth of those in Kazakhstan. The suicide rate among Russian 15-19-year-olds increased substantially in the early years of transition, as Figure 1.8 shows. Other countries with high suicide rates throughout the transition period include Slovenia, the three Baltic states, Belarus and Kazakhstan. In all these countries, the rate in 2000 was considerably

Figure 1.8

Suicide among 15-19-year-olds, 1989-1991 to 1998-2000 (per 100,000 population aged 15-19)



Source: MONEE project database. Statistical Annex, Tables 3.8 and 3.9 give separate suicide rates for women and men aged 15-19.

higher than the average rate among 15-19-year-olds in the EU (7.6 per 100,000).[40] Moreover, the biggest rise in suicides over the 1990s occurred in countries, such as Kazakhstan, where the rate was already high in 1989. On the other hand, the three Caucasus countries recorded very low suicide rates throughout the 1990s, although in some of these countries the recent data may be affected by reporting problems.

The reasons why some young people choose suicide are complex and are often associated with personal and family troubles, bleak prospects and a lack of any sense of purpose or belonging. However, the diversity in the suicide rates and the trends throughout the region is difficult to explain. Experts suggest that suicide rates can be influenced by cultural factors and the consumption of alcohol and other drugs or by changes in social organization and social control.[41] It is also possible that, while the means to commit suicide (for example, firearms or lethal medicines) are more widely available in many countries now than at the start of the transition, one of the ways to reduce deaths from suicide attempts – emergency medical services – may be more scarce.

Suicide, despair and psychosocial stress are problems that need to be addressed through a range of preventive and support measures. One example is telephone counselling services for people who are depressed or in need of help. A network of such emergency telephone services, run by non-governmental organizations and staffed mainly by volunteers, was developed in Lithuania during the 1990s.[42] Services like this represent an important response to problems among young people in general, but particularly to the problems of young people who are in great distress.

HIV and sexually transmitted infections

The HIV epidemic is the biggest threat to young people's health in the region. The high prevalence of other sexually transmitted infections (STIs) such as syphilis and gonorrhoea suggests that the conditions exist for the further spread of HIV, particularly among young people.

In the late 1990s, it appeared that the expansion of HIV in the region might be slowing. While the registered incidence of HIV spread rapidly in Latvia and Russia in 1999, it declined in Belarus, Moldova and Ukraine. Moreover, the disease did not appear to expand to more countries. Nonetheless, as Figure 1.9 shows, in 2000 and 2001, HIV continued to spread rapidly in Latvia and Russia. The annual number of newly registered cases in Estonia shot up from fewer than 1 to 108 per 100,000 between 1999 and 2001. Kazakhstan and Kyrgyzstan also witnessed a large increase in newly registered cases in 2001. Moreover, the number of newly registered cases of HIV began to rise again in Belarus, Moldova and Ukraine in 2000 and 2001. Table 2.1 in this *Social Monitor* shows recent trends in new HIV infections in more detail in all countries in the region.

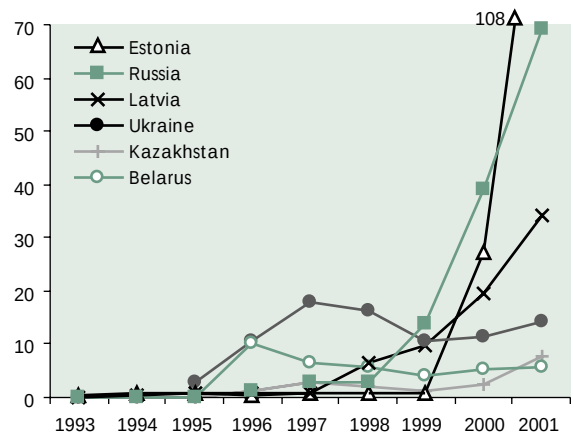
In total, the number of newly registered HIV cases in the region increased almost fivefold between 1998 and June 2001, by which time there were over 200,000 people officially registered with HIV.[43] These numbers represent the tip of the iceberg. The *actual* number of people with the disease is likely to be several times the *registered* number, which is an official count. The Article "HIV/AIDS and Young People" explores the issue in more depth.

Other STIs such as syphilis and gonorrhoea spread rapidly in large parts of the region during the past decade, increasing alongside HIV and often preceding it. Young people have been hardest hit, and the expansion of these diseases indicates a high degree of unsafe sexual behaviour: multiple partners, combined with low use of preventive methods. Figure 1.10 shows that, in many countries, the registered incidence of syphilis increased dramatically in the early 1990s. By 1997, official infection rates in most countries appeared to have peaked, and there was a decline in the newly registered cases in countries such as Kazakhstan, Kyrgyzstan, Moldova and Russia. Even so, the corresponding infection rate in the EU in 1999 was far lower, slightly over 1 per 100,000.[44]

Moreover, it is by no means clear that the decline in the number of registered cases of syphilis represents a true fall in the incidence of the disease among the populations concerned. Before the start of transition, many communist countries possessed networks of venereology clinics offering screening and treatment, as well as the tracing of the sexual contacts of infected people. But there was considerable stigma and sometimes sanctions (for example, hospitalization until cure) associated with

Figure 1.9

Registered cases of HIV (new cases per 100,000 population)



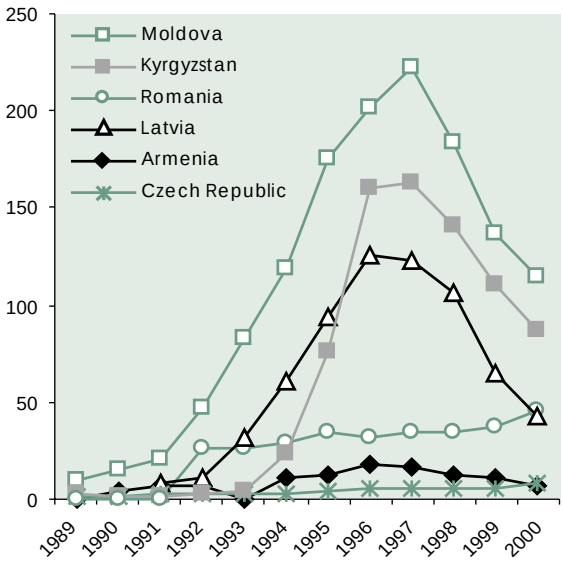
Sources: Statistical Annex, Table 6.9 (1993-2000). The data for 2001 are provided by UNAIDS based on information from national AIDS centres.

attendance at these clinics. With the onset of transition, the funding for public venereology services declined, rendering the services less effective, for example, in conducting sexual contact traces (traditionally a major source of the registration of new syphilis cases). At the same time, alternative private services, providing anonymous and unrecorded treatment of STIs, became increasingly available.[45] Indeed, in the case of Moldova, it is reported that the fall in the official count of new STIs after 1997 was largely due to patients seeking private treatment. It is similarly reported that, in Kyrgyzstan and Tajikistan, people with STIs may be reluctant to seek treatment because of the economic and social consequences, including hospitalization and possible job loss.[46]

In some countries, many young people do not appear to recognize the symptoms of STIs. Evidence from Kazakhstan for 1999 suggests that almost half of adolescent men aged 15-19 and almost four in five adolescent women had no knowledge of STIs other than HIV/AIDS or did not know any of the symptoms of STIs. Even among those people aged between 25 and 29, half of the women and almost a quarter of the men had no knowledge of STIs (other than HIV/AIDS) or of the symptoms of STIs.[47] Ignorance about STIs is of concern not least because such ignorance can facilitate the spread of HIV. People who are sexually active need the protection from STIs and HIV that knowledge provides. They also need to be able to access appropriate and sensitive services for confidential advice and counselling and for treatment.

Figure 1.10

Newly registered cases of syphilis (per 100,000 population)



Source: MONEE project database. Statistical Annex, Table 6.7 gives rates for newly registered cases of syphilis and gonorrhoea combined.

Tuberculosis continues to spread

Tuberculosis has been characterized as one of the emerging health threats in transition.[48] Its reappearance has been associated with poor living conditions, but the disease has not been confined to the poorer countries of the region. Recent data suggest that in many countries, the growth in newly registered cases of tuberculosis has continued. Figure 1.11 shows trends in the expansion of the disease in one country from each subregion. In the countries where the disease was the most widespread in the mid-1990s, for example, Kazakhstan and Romania, the number of newly registered cases has continued to increase. Infection rates, on the other hand, are declining in the countries of Central Europe and the former Yugoslavia. In FYR Macedonia, the infection rate fell from 39 to 33 per 100,000 people between 1995 and 2000. The infection rate in the Czech Republic, at 14 per 100,000 in 2000, was approaching the EU average of 12.[49]

Tuberculosis demands serious policy attention in the region for three reasons. First, it is curable with the proper antibiotics and a high degree of care, although in some countries, notably Estonia, there is substantial incidence of "drug-resistant" tuberculosis.[50]

Second, a person who has HIV is more likely to become sick with tuberculosis. International and pan-European strategies, as well as national action plans, are needed to combat both conditions.

Third, tuberculosis is associated with poor living conditions and malnutrition. As national incomes rise across the region, it can be expected that people's living conditions and nutrition will improve. This in turn should lead to a reduction in the incidence of tuberculosis among adults and children. The widespread problem of tuberculosis should therefore act as an additional spur to policy makers to ensure that reduced poverty and improved living conditions, leading to better health for all, do indeed flow from increased national incomes.

1.4 Education

There has been a marked divergence between richer and poorer countries in the region since the start of transition both in public expenditure on education and in school enrolments. The analysis in this section examines trends in these indicators.

There is recent evidence of improvement in enrolments and the financing of education in many countries, but it is also apparent that, in some countries, the education of a whole generation of children remains in jeopardy. The Article "Quality of Learning" strongly underlines this point.

Enrolment rates continue to diverge

A useful way to gain a view of the extent of the participation of children and adolescents in education is to compare total enrolments with the size of the child population in each country. There were about 10 million fewer children in the region enrolled in educational programmes, from pre-school to secondary, in 2000 relative to the start of the transition. Most of this reduction is explained by the fall in the child population (see Section 1.2). Nonetheless, the proportion of school-age children in education throughout the region also declined from 84 to 77 per cent. Within this overall picture, the trends in enrolment rates have varied widely.

Figure 1.12 shows that, between 1989 and 2000, the proportion of children aged between 3 and 18 enrolled in education decreased in 13 countries and increased in nine. In 1989, four countries in the region had participation rates of 90 per cent or more; in 2000, there were seven. At the other end of the scale, only Tajikistan had a participation rate below 70 per cent at the start of transition. In 2000, there were seven countries with rates below this level. In Armenia, for example, enrolments declined from 76 to 60 per cent among children aged 3-18.

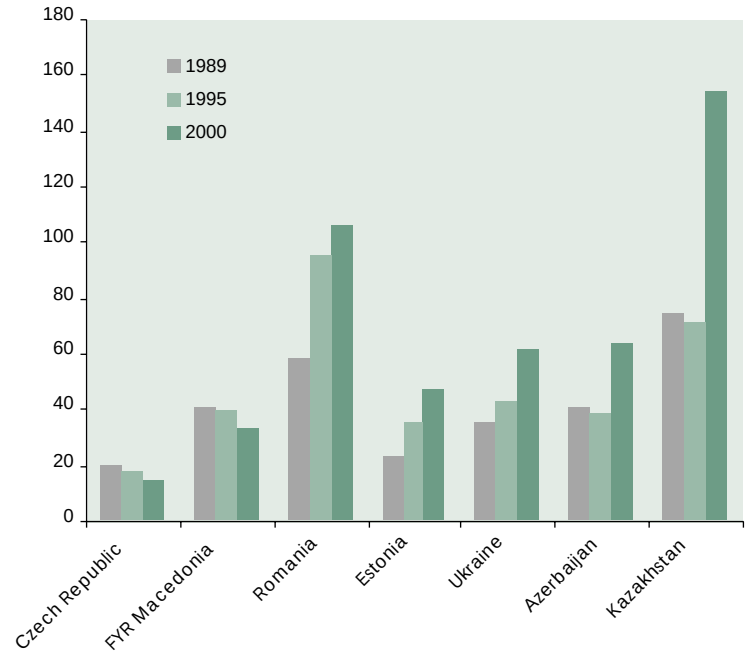
In countries where enrolments declined, the declines were mostly caused by decreases in kindergartens (for children aged 3 to 6) and at the upper secondary level, sometimes supplemented by erosions at the compulsory basic level (see the Glossary for definitions). Already in 1989, the enrolment of children in pre-schools was quite uneven, with high rates in Central Europe and much lower rates in the Caucasus and Central Asia. Across the region, pre-school enrolments fell as employment levels among the population decreased, fees were raised and more parents began to look after their children full time. In the countries of Central Europe and in the Baltic states, pre-school enrolment rates began to recover in the mid-1990s and, by 2000, had returned to the 1989 levels (Statistical Annex, Table 7.1), although, since the population of young children in these countries had sharply declined, the number of pre-school places was considerably lower in 2000 than in 1989. More severe reductions occurred in Moldova, Ukraine, the Caucasus and Central Asia. In Kyrgyzstan, pre-school education suffered greatly from funding cuts, resulting in the closure of large numbers of schools. In Moldova, increased fees for pre-school education reduced the demand for places.[51] On the other hand, by the late 1990s, Georgia and Azerbaijan had begun to experience a revival in pre-school education enrolment rates, albeit from very low levels.

Enrolment in basic education was low (less than 90 per cent) in Albania, Russia, the countries of the Caucasus, Tajikistan and Turkmenistan at the turn of the new century (Statistical Annex, Table 7.2). In Georgia, however, rates had begun to creep up during the late 1990s. In Kyrgyzstan, efforts undertaken in 1997 to raise enrolments among children from poor backgrounds (including the provision of clothes, footwear and learning materials) are reported to have had some success.[52] At the upper secondary level, enrolments among young people aged 15-18 increased in Central Europe, Estonia, Latvia and FYR Macedonia between 1989 and 2000, but remained stable or decreased elsewhere (Statistical Annex, Tables 7.3 and 7.4). In Albania, Romania and Russia, enrolments fell dramatically during the early 1990s, but then improved slightly. In most CIS countries towards the end of the 1990s, there was also a tendency for general secondary and vocational enrolments to rise. The highest combined general secondary and vocational enrolment rate among the 12 CIS countries in 1999 or 2000 was only 71 per cent, in Belarus. This compares with over 75 per cent in the Czech Republic and above 90 per cent in Hungary, Poland and Slovenia.[53]

It is important to note that enrolment in education is not the same as attendance at class. Experience in both rich and poor countries suggests that, even where enrolment rates are high, attendance rates (and therefore educational outcomes) tend to be lower among children from more disadvantaged backgrounds. Ethnic minority children, particularly the Roma in Central and Eastern Europe, are also likely to show low attendance rates, lead-

Figure 1.11

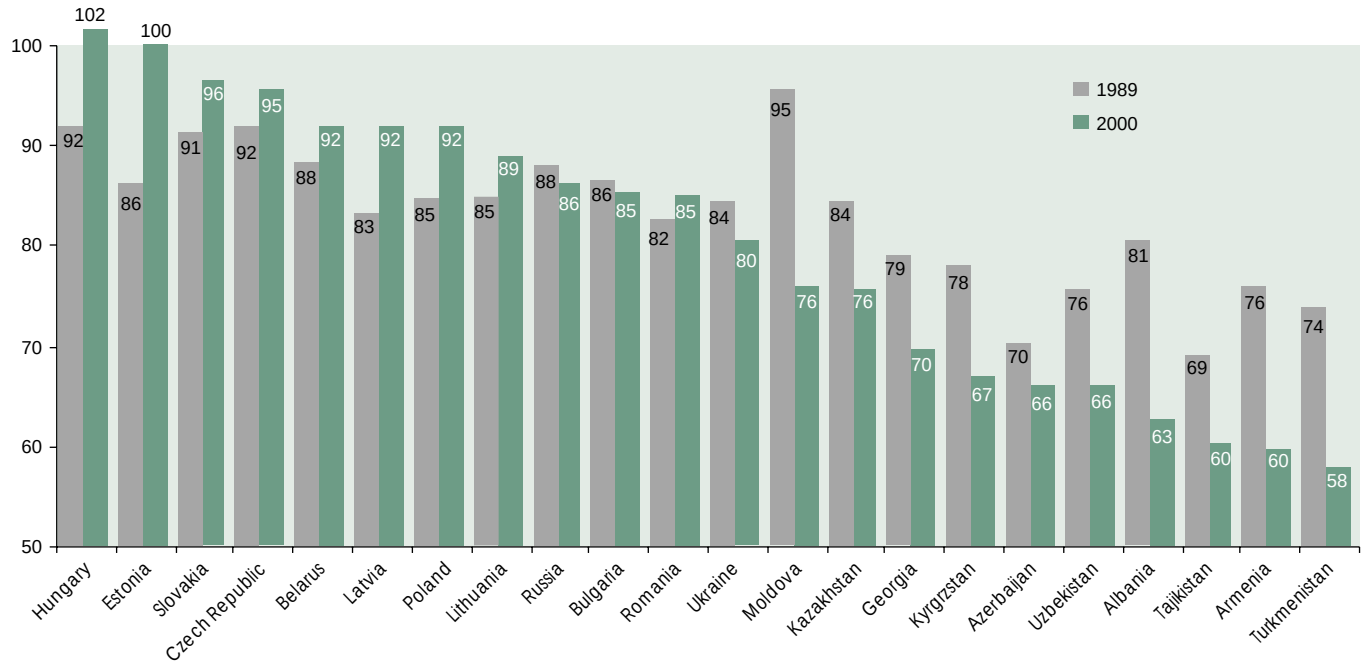
Newly registered cases of tuberculosis, 1989, 1995 and 2000
(per 100,000 population)



Source: Statistical Annex, Table 6.6.

Figure 1.12

Enrolments in pre-school, primary and secondary education, 1989 and 2000 (per cent of population aged 3-18)



Source: MONEE project database.

Note: Poland, Estonia, Romania and Tajikistan refer to 1990 and 2000. Hungary, Turkmenistan and Uzbekistan refer to 1989 and 1999. Estonia for 2000 is calculated based on preliminary results of the 2001 census. Moldova for 2000 excludes Transdniestr. Georgia for 2000 excludes Abkhazia and Tskhinvali. Enrolment rates are gross: the total number of children and young people enrolled in kindergarten and in basic and secondary education as a percentage of the total population aged 3-18.

ing to early school drop-out without qualification and with poor literacy and numeracy skills. In Bulgaria, for example, a 1999 UNICEF study of out-of-school children found that about half of Roma child respondents aged between 7 and 16 were not going to school, even though attendance was compulsory for children of this age.[54]

As Figure 1.12 shows, enrolment rates among children aged 3-18 have clearly diverged since the beginning of the transition, but the differences in the trends at the tertiary level are rather less stark. Most countries enjoyed a boom in tertiary education enrolment during the 1990s. Countries where the expansion was particularly notable include Hungary, Kyrgyzstan, Latvia, Poland, Romania, Slovenia and Ukraine (Statistical Annex, Table 7.5). Moreover, the pace of this expansion was maintained through the late 1990s, even in some of the poorer countries. Between 1998 and 2000, the proportion of youth enrolled in university and other tertiary-level education institutions increased from 20 to 28 per cent in Kazakhstan and from 26 to 31 per cent in Georgia.

Is the crisis easing in the public funding for education?

The growth of enrolments in tertiary institutions across the region is a welcome sign, but the divergence in enrolment rates at lower levels is a cause for concern. Figure 1.12 shows that enrolments have generally increased in the richer countries and fallen in the poorer ones. As the information in Figure 1.13 shows, real expenditure per child on pre-school, basic and secondary education followed the same pattern. The green circles represent change between 1989 and 1996, and the bars represent total change over the 1989-2000 period. Thus, for example, in the case of Poland, expenditure per child rose by 18 per cent in real terms between the start of transition and 1996 and then increased further, so that it was 55 per cent higher by the end of the decade. In the Czech Republic, too, real education expenditure per child increased over the 1990s. Data for the Baltic states, which are only available since the early 1990s and thus exclude the change at the very start of the transition, show a significant improvement in education expenditure per child over the course of the decade. The fall in per-child expenditure was particularly steep in Georgia, Kyrgyzstan and Tajikistan.

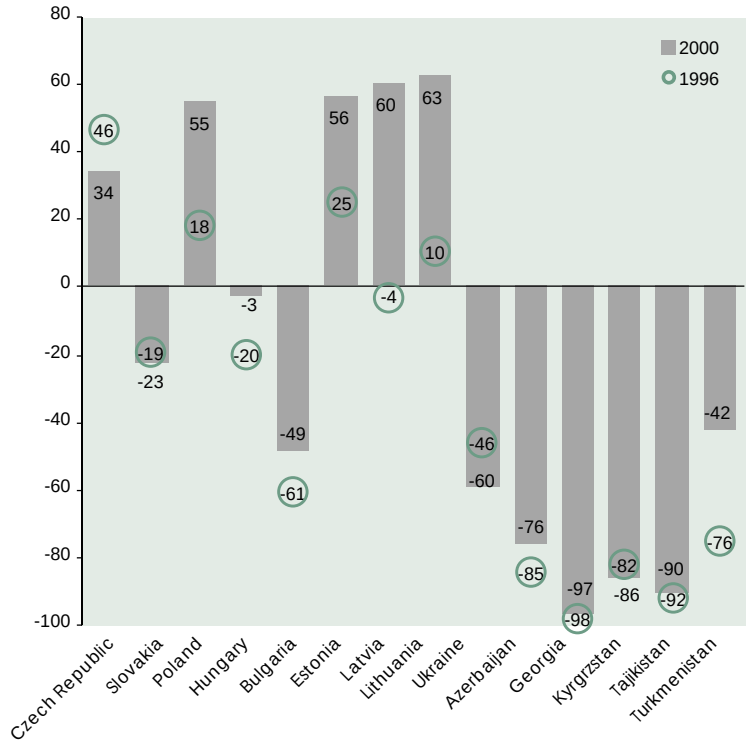
How do countries compare now? Table 1.4 shows public education expenditures per child aged 3-18 for 2000 in dollars converted at purchasing power parity exchange rates. The expenditure comparisons therefore take into account both differing living costs across the region and the number of children among whom available expenditure must be shared. Countries are ordered in terms of spending per child.

In 2000, the Czech Republic spent the most per child on pre-primary to secondary education. Estonia had a lower per capita GDP than Poland and Slovakia, but still spent more per child, because it devoted a higher proportion of GDP to expenditure on education. Slovakia spent less per child on education than did Latvia, even though its per capita GDP was 70 per cent higher.

The case of Turkmenistan shows the difficulties faced by countries (mostly in Central Asia) where the share of school-age children in the total population is large. Among the 15 countries for which data are available, Turkmenistan had the highest public expenditure on pre-school to secondary education as a percentage of GDP, but because 40 per cent of its population consisted of school-age children, expenditure on education per child was lower there than in Lithuania, which had a lower GDP and spent proportionately less of it on education. Kyrgyzstan and Tajikistan also had considerably more children as a share of population than the average. Per capita GDP in these countries was much lower than the average, as was public expenditure on education. The result was very low per child spending ($203 per year in Kyrgyzstan and $54 in Tajikistan). As the Article "Quality of Learning" emphasizes, the poorest countries need to increase their expenditure on education if learning quality is to improve.

Figure 1.13

Real public expenditure per school-age child, 1989 to 1996 and 2000 (per cent change)



Source: MONEE project database.

Note: The earliest year is 1990 for Poland, Hungary and Turkmenistan, 1991 for Bulgaria, 1992 for Estonia and 1993 for Latvia and Lithuania. The middle year is 1995 for Georgia. The latest year is 1998 for Turkmenistan and 1999 for Hungary, Estonia, Azerbaijan and Georgia.

1.5 Children separated from their families

It is estimated that in 1999 there were 1.5 million children in out-of-home care across the region. Of these, about 900,000 were living in institutions.[55] In spite of the implementation of more progressive policies in many countries, the dominant response in respect of children whose parents cannot or will not look after them continues to be institutional.

This section examines recent trends in the institutionalization of children and in the development of alternative forms of care. It also looks at trends in the sentencing of young offenders who have been convicted of crimes.

Table 1.4

Factors associated with levels of public expenditure on education, 2000 (rankings by level of public expenditure per child)

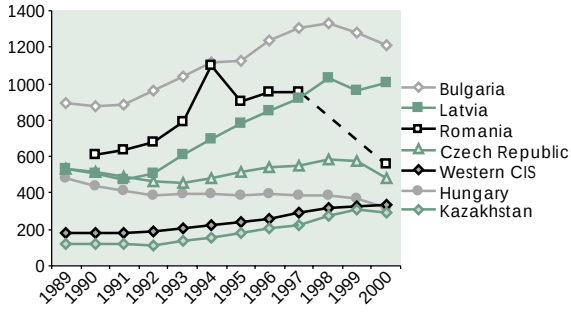
		Per capita GDP (PPP $)	Public expenditure on pre-primary to upper secondary education (% GDP)	Children aged 3-18 (% total population)	Public expenditure on education per 3-18-year-old (PPP $)
1	Czech Republic	13,874	3.86	19.1	2,804
2	Hungary	12,275	4.08	19.5	2,568
3	Estonia	8,551	5.95	21.7	2,345
4	Poland	9,547	4.33	23.2	1,782
5	Latvia	6,340	5.76	21.4	1,706
6	Slovakia	10,878	3.46	22.9	1,644
7	Lithuania	6,840	5.02	22.5	1,526
8	Turkmenistan	7,095	6.08	40.2	1,073
9	Bulgaria	5,254	3.41	18.7	958
10	Ukraine	3,499	2.78	21.3	457
11	Moldova	1,916	4.73	28.3	320
12	Azerbaijan	2,602	3.94	34.6	296
13	Georgia	4,285	1.59	24.0	284
14	Kyrgyzstan	2,524	2.98	37.1	203
15	Tajikistan	1,082	2.12	42.8	54

Sources: MONEE project database and IMF (direct communication).

Note: Hungary, Estonia, Moldova, Azerbaijan and Georgia refer to 1999. Turkmenistan refers to 1998.

Figure 1.14

Children in infant homes, 1989-2000 (per 100,000 children aged 0-3)



Source: Statistical Annex, Table 8.3.

Note: The series for Romania is incomplete. Points are shown only where data are available. Romania, 2000 has been calculated by IRC based on information in the MONEE project country report, Romania, page 90. The series for western CIS is the unweighted average for the four countries in that group.

Infants in institutions

The extent to which countries rely on the placement of infants in institutions is perhaps the strongest indicator of the willingness of authorities to use institutional responses to deal with children who are without parental care.

Infant institutionalization is generally considered especially damaging for child development, and most advanced industrialized countries have sought to support families so that parents are both willing and capable of looking after their children. The placement of children with foster parents is seen as a solution in special cases, and placement in institutional care is rarely used. Replacing infant institutionalization with other forms of care would constitute a major improvement in child protection in the transition region. It would also close a major route to long-term institutional care for children.

The proportion of infants aged 0-3 placed in institutions increased in most countries of the region during the first half of the 1990s. In many of these countries, there was little evidence of a reversal in this trend during the latter half of the decade. Figure 1.14 shows trends in the institutionalization of infants in some countries where the rates of institutionalization have been the highest. During the early 1990s there were big increases in several countries, including Bulgaria, Romania and Latvia, in the proportion of very young children entering institutional care. In the western CIS (where trends in all four countries are similar), institutionalization rates have continued to rise. In Kazakhstan, the proportion of infants in institutions doubled between 1989 and 2000.

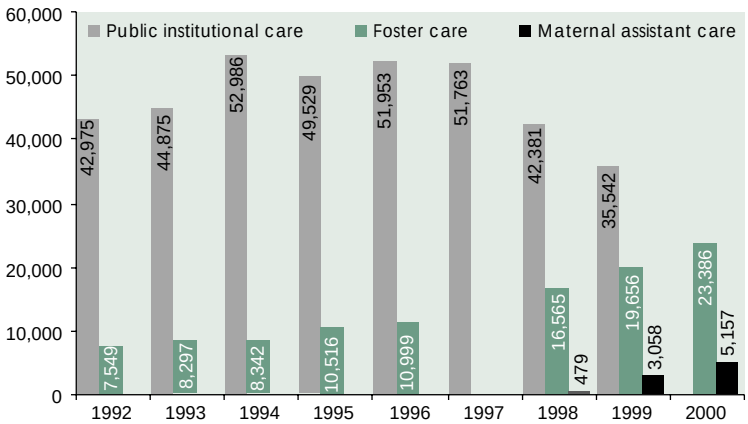
The recent trends are more positive in some other countries. The institutionalization of children has been declining slowly in Hungary since the start of transition due to a consistent shift in policy.[56] The decreases in institutionalization rates in Romania during the late 1990s are also promising. In 1996, there were still almost 9,000 infants in public care institutions in Romania. By 2000, the total appears to have fallen substantially.[57]

Figure 1.15 shows that the number of children of all ages in institutional care in Romania fell after 1997 and that the number of children cared for by foster parents increased. These changes followed the reform of the child protection regime in Romania in 1997. In addition, a new type of non-institutional care, provided by maternal assistants, was established in 1998. Maternal assistants are professional full-time foster carers. In 2000, over 5,000 children were cared for in this way. Even though the number of children in institutional care remains large, the growth of alternative forms of family-based care suggests that the reforms of child protection initiated in 1997 have so far achieved some success.

It is important to note that there are several countries in which family-based care is increasingly being used to replace institutional care. However, the impact on the numbers of children in institutional care in most countries has so far been limited. As the 2001 *Regional Monitoring Report* remarks, "increases across the region have been insufficient to meet the challenge of the huge rises that have occurred in many countries since 1989 in the total number of children in public care".[58]

Figure 1.15

Children in public institutional care and alternative care in Romania (absolute number)



Sources: MONEE project database. MONEE project country report, Romania.

Note: There are no comparable data for the number of children in public institutional care in 2000. Institutional care includes public infant homes, orphanages and some specialized institutional care for children with disabilities, but excludes children in weekly or semestrially based programmes in special schools for the disabled.

Intercountry adoptions continue to rise

Adoption is a permanent type of family-based care that is being used more frequently now than at the start of the 1990s. In 1999, 42,000 adoptions were recorded in 22 countries across the region, one of the highest numbers in any year since the start of transition. While data are

incomplete, it is likely that at least a quarter of all adoptions in 1999 were intercountry adoptions where the child was adopted by a family living in another country, usually an advanced industrialized country.[59] Moreover, the total number of intercountry adoptions appears to have risen steeply, from very few in 1989 to 11,000 in 1998 and as many as 14,000 in 2000.

Most intercountry adoptions originate in three countries: Romania, Russia and Ukraine.[60] Figure 1.16 shows the share of intercountry adoptions for 11 countries between 1998 and 2000. Intercountry adoptions constituted a significant proportion of all adoptions in most of these countries. In Moldova and Belarus, this proportion increased steeply in the late 1990s, even though the total number of children adopted changed little in the two countries. This suggests that intercountry adoptions were replacing rather than augmenting national adoptions. In June 2001, the Romanian Government introduced a one-year moratorium on adoptions from that country. Romania is the eighth country in the region to enact such a measure since the beginning of the transition, underlining the concerns that exist about intercountry adoption. Still, while the Romanian moratorium may reduce the number of adoptions from Romania, it may also increase the demand for adoptive children from elsewhere in the region.

The placement of children for foreign adoption is a political and ethical issue, as well as an issue of child welfare. There is widespread agreement that there should be no trade in the children who are available for adoption and that adoption in the home country is preferable to the intercountry option. Indeed, many children *are* being adopted locally, and this process needs to be promoted.

More could also be done to reduce the number of babies who are placed in institutions or otherwise made available for adoption. For example, equipping young women and men to make positive and responsible decisions about their lives might help reduce the number of unwanted pregnancies. Other steps might include increased efforts to reintegrate the children in institutions with their families and the provision of extra support to parents so as to enable them to raise their children free of poverty. The recent trend towards economic growth in the region should make such policies more feasible.

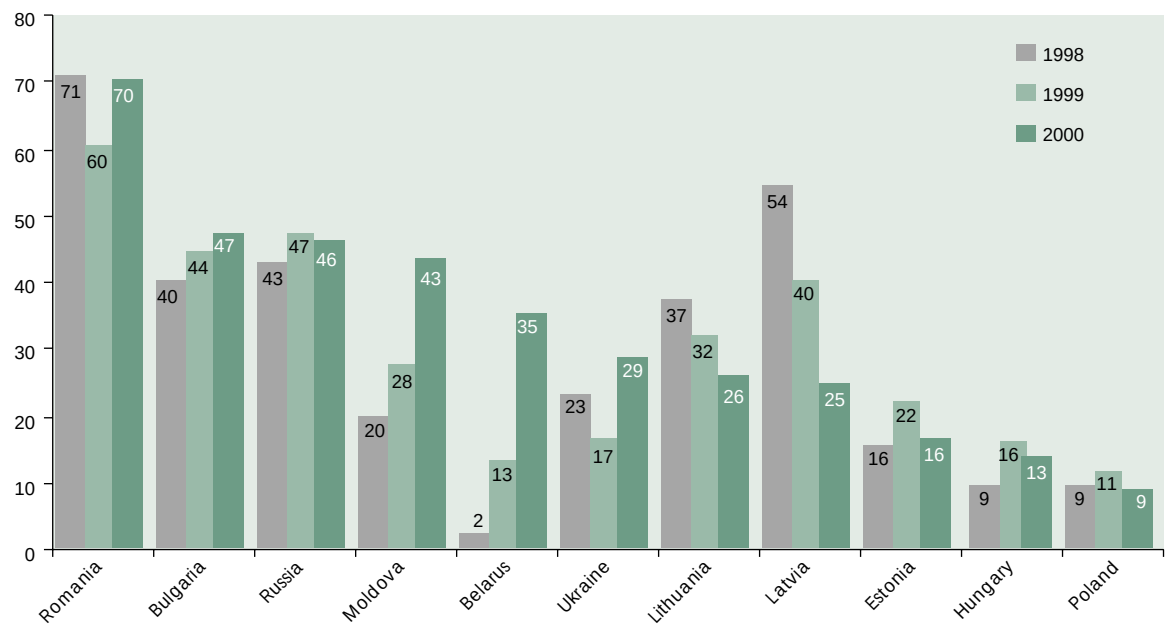
Young people, crime and sentencing

Policy makers in transition countries must confront particular challenges in dealing with the issue of young people in conflict with the law. In the context of the rapid changes and increased social disorganization that have often accompanied the transition, young people in the region are facing an increased risk of conflict with the law because they are finding greater opportunities to experiment with different behaviour and lifestyles.

Indeed, registered crime rates have risen in most transition countries (Statistical Annex, Table 9.1). More crimes were registered in the region in 2000 than in any other year since the start of transition. The number of

Figure 1.16

Intercountry adoptions as a proportion of all adoptions (per cent)

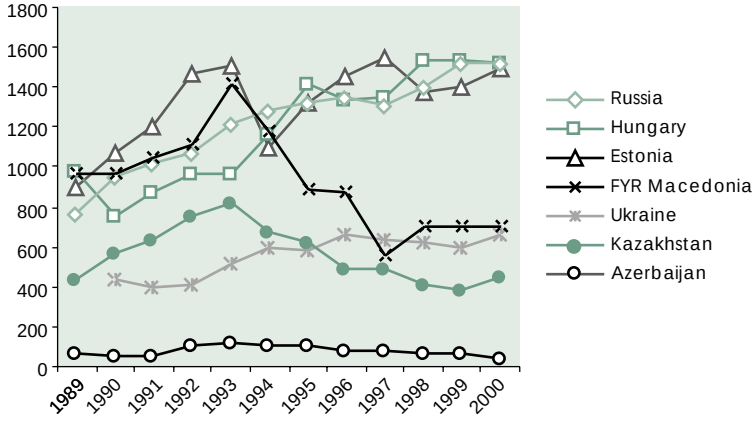


Source: MONEE project database.

Note: Data for some countries may include international adoptions, as well as intercountry adoptions. See the Glossary for definitions.

Figure 1.17

Juvenile sentencing rates (juvenile sentences per 100,000 population aged 14-17)



Source: Statistical Annex, Table 9.4.

Note: For Estonia, juveniles were defined in 1989-1993 as 15-17-year-olds and in 1994-2000 as 13-17-year-olds.

Table 1.5

Custodial sentences for juveniles found guilty of crimes in Ukraine and in England and Wales, 2000

	Ukraine	England and Wales
Total convicted	20,016	39,100
% imprisoned	24.0	16.5
of which:		
Less than two years	*23.6*	*89.9*
Two years or more	*76.4*	*10.1*

Sources: MONEE project country report, Ukraine. RDS (2001), *Cautions, Court Proceedings and Sentencing England and Wales 2000*, Research Development and Statistics Directorate, Home Office: London, Table 4. RDS (2002), *Prison Population Brief England and Wales January 2002,* Research Development and Statistics Directorate, Home Office: London, Table 7.

Note: Ukraine refers to 14-17-year-old men and women. England and Wales refers to 15-17-year-old men. Data for both countries refer to immediate detention upon conviction.

young people convicted of crimes and sentenced also increased on average.

Figure 1.17 compares the trends in a selection of countries in the total sentencing rates among adolescents aged under 18. Russia, Hungary and Estonia had the highest sentencing rates in the region in 2000. In all three countries, the rates had risen substantially since the start of transition, and there is little evidence of a decline. Other countries where sentencing rates increased greatly include Latvia, Lithuania, the Czech Republic and Slovakia. In Azerbaijan, in contrast, the rates remained very low.

There is limited information on the number of young people convicted of crimes who are deprived of their liberty as a consequence of their conviction. While every society uses deprivation of liberty as a sanction, a high rate of imprisonment (whether among adults or young people) is a concern. The deprivation of the liberty of juveniles at any stage in the judicial process is a particularly serious issue, and international standards call for the use of detention only as a last resort and for the shortest possible time. Yet, there is evidence that some countries employ harsh sentencing policies towards juveniles as part of a severe regime for all people who are convicted of crimes. Table 1.5 shows that a quarter of Ukrainian juveniles (aged 14 to 17) convicted of crimes in 2000 were given custodial sentences. Three quarters of these were sentenced to periods in custody of over two years, and 14 per cent were imprisoned for five years or more.[61] This contrasts with the picture in the UK, where only 17 per cent of young male offenders who had been found guilty were placed in detention, and, of those, 9 out of 10 were sentenced for periods of less than two years. In both countries, more juveniles were convicted for property crimes such as theft than for any other offence.

The number and length of custodial sentences of juveniles could be one manifestation of the existence of harsh policies towards young people convicted of crimes. The problem is not simply that too many juveniles are sent to prison, however. In many countries in the region there is a lack of feasible alternatives. Courts in the UK can choose from a range of "community" sentences, including probation, community service, reparation, curfews and drug treatment orders.[62] If restorative, therapeutic, or penitential, but non-custodial options such as these are not available to courts in the region, then it is quite inevitable that a high proportion of juvenile offenders will be subject to periods of detention.[63]

Notes and references

1. World Bank (1996), *World Development Report 1996: From Plan to Market*, Oxford University Press: New York, page 66.
2. The 10 countries are Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Details can be found on the EU website, <*www.europa.eu.int/comm/enlargement/*> (accessed 21 February 2002).
3. The subregions employed here are Central Europe (Czech Republic, Slovakia, Poland and Hungary), former Yugoslavia (Slovenia, Croatia, the former Yugoslav Republic (FYR) of Macedonia, Bosnia and Herzegovina, and the Federal Republic (FR) of Yugoslavia), South-Eastern Europe (Albania, Bulgaria and Romania), the Baltic states (Estonia, Latvia and Lithuania), the western CIS (Belarus, Moldova, Russia and Ukraine), the Caucasus (Armenia, Azerbaijan and Georgia) and Central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan).
4. World Bank (2001), *Global Economic Prospects and the Developing Countries, 2002: Making Trade Work for the World's Poor*, World Bank: Washington, DC. The World Bank predicts an average economic growth of around 3% in the region between 2001 and 2010.
5. GDP is an incomplete measure of national material well-being. For example, it does not adequately capture the value of informal or non-monetary economic activity, which is important in most transition countries. Nonetheless, the pattern shown in this analysis broadly agrees with other evidence on changes in production and incomes in the region. A fuller discussion of the difficulties faced in measuring GDP in transition countries and in comparing GDP before and after the fall of communism is contained in World Bank (2002), *Transition, the First Ten Years: Analysis and Lessons for Eastern Europe and the Former Soviet Union*, World Bank: Washington, DC, Box 1.1. The same publication also provides a detailed analysis of macroeconomic trends over the transition.

6. In some countries, for example Azerbaijan, the number of people in employment grew, but because the number of working-age people rose even more, the *percentage* of working-age people in employment declined.
7. For employment rates among people aged 15-64 in EU countries, see Eurostat (2001), *Eurostat Yearbook 2001: Statistical Guide to Europe*, Office for Official Publications of the European Communities: Luxembourg, page 125.
8. Labour force survey data for Hungary show that, in 2000, 17.2% of those who were unemployed and looking for work (the definition of unemployment recommended by the International Labour Organization) received social insurance-based unemployment benefit, and 16.5% received means-tested unemployment assistance. Information provided by Gyula Nagy, Budapest University of Economics.
9. Klugman, J., J. Micklewright and G. Redmond (2002), "Poverty in the Transition: Social Expenditures and the Working-Age Poor", *Innocenti Working Papers*, No. 91.
10. Eurostat (2001), op. cit., page 125.
11. See *Regional Monitoring Report*, No. 6, pages 27-28.
12. MONEE project country report, Estonia.
13. IMF (2000), "Kyrgyz Republic: Selected Issues and Statistical Appendix", *IMF Staff Country Reports*, No. 00/131, IMF: Washington, DC, page 46 and Table 11.
14. For a fuller discussion of poverty estimates, see *Regional Monitoring Report*, No. 8, pages 31-35.
15. Changes in real public expenditure are calculated based on Statistical Annex, Tables 10.1 and 10.4. The average for the region is the unweighted average for 24 of the 27 countries for which data are available. (Bosnia and Herzegovina, FR Yugoslavia and Belarus are excluded.)
16. *Regional Monitoring Report*, No. 5, page 76.
17. See Csaba, L. (1998), "Bad-Tempered Boom", *Hungarian Quarterly*, Vol. XXXIX, No. 151, pages 29-42.
18. IMF and World Bank (2001), "Armenia, Georgia, Kyrgyz Republic, Moldova and Tajikistan: External and Fiscal Sustainability", 7 February. IMF and World Bank (2002), "Poverty Reduction, Growth and Debt Sustainability in Low-Income CIS Countries", 4 February. Both documents can be found at the IMF website: <*www.imf.org*> (accessed 25 March 2002).
19. Assuming no debt relief and no major economic setbacks, the World Bank and IMF predict that the ratio of debt service to central government revenue will peak at 24% in Armenia in 2002-2003, at 45% in Georgia in 2003, at 31% in Kyrgyzstan in 2003, at 61% in Moldova in 2002 and at 50% in Tajikistan in 2002. See Appendix Tables 9a, 11a, 13a, 15a and 17a, World Bank and IMF (2002), op. cit.
20. See *Regional Monitoring Report*, No. 8, pages 18-21.
21. For a full definition of the total fertility rate, see the Glossary.
22. McDonald, P. (2001), "Low Fertility not Politically Sustainable", *Population Today*, Vol. 29, No. 6 (August-September), page 8. Population Reference Bureau: <*www.prb.org*> (accessed 2 April 2002).
23. The EU figure refers to 1999. See Eurostat (2001), op. cit., page 77.
24. MONEE project country reports, Georgia and FR Yugoslavia.
25. Berthoud, R. and K. Robson (2001), "The Outcomes of Teenage Motherhood in Europe", *Innocenti Working Papers*, No. 86.
26. Berthoud and Robson (2001), op. cit., page 52.
27. See also *Regional Monitoring Report*, No. 7, pages 29-35.
28. MONEE project country report, Moldova.
29. See *Regional Monitoring Report*, No. 8, page 53.
30. For more information on problems in birth registration, see UNICEF (2002), "Birth Registration: Right from the Start", *Innocenti Digest*, No. 9 (March).
31. The Soviet and WHO recommended definitions of a "live birth" are described in the Glossary. It has been estimated that, all other factors being equal, the Soviet definition would result in an infant mortality rate that is 20% lower than a rate calculated using the WHO recommended definition. See McKee, M. and L. Chenet (2002), "Patterns of Health", in McKee, M. and J. Falkingham (eds), *Health Care in Central Asia*, Open University Press and European Observatory on Health Care Systems: Ballmoor, Buckingham, UK.
32. Since life expectancy at birth is calculated in part from official information on infant mortality, a degree of caution in interpreting statistics on life expectancy is desirable, particularly if alternative estimates of infant mortality differ greatly from official counts.
33. Male life expectancy in India in 1999 was 62 years. See World Bank: <*genderstats.worldbank.org*> (accessed 20 March 2002).
34. European Observatory on Health Care Systems (2000), "Health Care Systems in Transition: Turkmenistan", European Observatory on Health Care Systems: <*www.observatory.dk*> (accessed 16 February 2002), page 2.
35. According to the official data, life expectancy in Georgia in 2000 was 73 for men and 78.1 for women. An alternative source estimates life expectancy at birth for men and women at 68.1 and 75.3, respectively. See Tsuladze, G. et al. (2001), *Demographic Yearbook of Georgia*, Georgian Academy of Sciences, Partnership for Social Initiatives-Georgian Centre and Centre for Political Studies: Tbilisi, Georgia, Table 60. See also Statistical Annex, Tables 4.2 and 4.3.
36. See *Regional Monitoring Report*, No. 7, page 22.
37. See *Regional Monitoring Report*, No. 8, page 49.
38. MONEE project country report, Russia.
39. See UNECE (2001), *Economic Survey of Europe*, No. 2, UN Economic Commission for Europe: Geneva, page 14.
40. The average suicide rate among 15-19-year-olds in the EU for 1994-1997 was 7.6 per 100,000 (Eurostat (2001), *Statistics in Focus, Population and Social Conditions, Theme 3: 11/2001*, Office for Official Publications of the European Communities: Luxembourg).
41. For a more detailed discussion of suicide in transition countries, see Mäkinen, I. (2000), "Eastern European Transition and Suicide Mortality", *Social Science and Medicine*, 51, pages 1,405-1,420.
42. See VSO (1999), "It's Good to Talk", *Orbit*, No. 73 (Summer), Voluntary Services Overseas: <*www.vso.org.uk*> (accessed 26 February 2002).
43. EuroHIV (2001), "HIV/AIDS Surveillance in Europe, Mid-Year 2001", *Reports*, No. 65, European Centre for the Epidemiological Monitoring of AIDS: <*www.eurohiv.org/aids.htm*> (accessed 2 April 2002).
44. WHO Health for All (HFA) database: <*www.who.dk*> (accessed 2 April 2002).
45. Riedner, G., K. L. Dehne and A. Gromyko (2000), "Recent Declines in Reported Syphilis Rates in Eastern Europe and Central Asia: Are the Epidemics Over?", *Sexually Transmitted Infections*, Vol. 75, No. 5 (October), pages 363-365.
46. Information on Kyrgyzstan comes from European Observatory on Health Care Systems (2000), "Health Care Systems in Transition: Kyrgyzstan 2000", European Observatory on Health Care Systems: <*www.observatory.dk*> (accessed 16 February 2002). Information on Moldova comes from the MONEE project country report, Moldova. Information on Tajikistan comes from European Observatory on Health Care Systems (2000), "Health Care Systems in Transition: Tajikistan 2000", European Observatory on Health Care Systems: <*www.observatory.dk*> (accessed 16 February 2002), page 6.
47. Respondents to the 1999 Kazakhstan Demographic and Health Survey were asked if they had heard of any STIs other than AIDS, and, if they answered "yes", they were then asked which signs and symptoms of such infections they could identify in women and men. See APM and Macro International (2000), *Kazakhstan Demographic and Health Survey 1999*, Academy of Preventive Medicine (Kazakhstan) and Macro International Inc.: Calverton, MD, Tables 13.7.1 and 13.7.2.
48. See *Regional Monitoring Report*, No. 8, page 52.
49. WHO Health for All database, op. cit.

50. See *Regional Monitoring Report*, No. 8, page 52.
51. MONEE project country reports, Kyrgyzstan and Moldova.
52. MONEE project country report, Kyrgyzstan.
53. There is an important limitation in the data on enrolment rates. They are based on administrative information on the enrolment of children in different types of schools and on the *estimated* population of children and young people in a given age range. Where the population is reasonably stable and where systems for registering births and deaths function smoothly, such estimates are usually reliable. In some countries, however, particularly in the former Yugoslavia and parts of the CIS, there have been conflicts and large migrations of people, but no recent censuses to count changes in the population. In such countries, population estimates and the enrolment ratios derived from them must be treated with caution.
54. UNICEF (1999), "Out of School Youth in Bulgaria", UNICEF Regional Office for Central and Eastern Europe, the Commonwealth of Independent States and the Baltic States: Geneva, Mimeo.
55. This number excludes children and young people in punitive institutions. See *Regional Monitoring Report*, No. 8, pages 95-98.
56. See *Regional Monitoring Report*, No. 8, Sections 5.2 and 5.3.
57. MONEE project country report, Romania.
58. *Regional Monitoring Report*, No. 8, page 104.
59. For definitions of the various types of adoptions, see the Glossary. See also UNICEF (1998), "Intercountry Adoption", *Innocenti Digest*, No. 4 (December), UNICEF Innocenti Research Centre: Florence.
60. The MONEE project database contains intercountry adoption statistics for the year 2000 for the following countries: Belarus, Bulgaria, Croatia, Estonia, FYR Macedonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Russia and Ukraine. Among these countries, four fifths of the intercountry adoptions involved Russian, Romanian, or Ukrainian children. Data on immigrant visas issued to children adopted by families in the US show that the countries listed above account for most adoptions from the region to the US. However, 399 visas were issued in 2000 in respect of children adopted from Kazakhstan. (See Bureau of Consular Affairs, US Department of State (2002), "Immigrant Visas Issued to Orphans Coming to the US", US Department of State: <*www.travel.state.gov/orphan_numbers.html*> (accessed 2 March 2002).) This suggests that the number of intercountry adoptions from Kazakhstan may be greater than that from other countries in the region except Russia, Romania, Ukraine and Bulgaria.
61. MONEE project country report, Ukraine.
62. RDS (2001), *Cautions, Court Proceedings and Sentencing England and Wales 2000*, Research Development and Statistics Directorate, Home Office: <*www.homeoffice.gov.uk/rds*> (accessed 4 April 2002), Table 9.
63. For a more in-depth analysis of the issue of young people in conflict with the law, see *Regional Monitoring Report*, No. 7, Chapter 5.

2 HIV/AIDS and young people: awareness, behaviour and policy

By the end of 2001, there were an estimated one million people with HIV/AIDS in Central and Eastern Europe (CEE) and the Commonwealth of Independent States (CIS), up from 700,000 one year earlier and 420,000 in 1998.[1] Over 13,000 people in the region have fully developed AIDS, and over 5,000 have died.[2] HIV is spreading at a faster rate in some countries in the region than in any other part of the world. It is harming mainly young people.

The countries in the western CIS – Belarus, Moldova, Russia and Ukraine – were the first to be exposed to massive increases in the number of people infected with HIV. Estonia and Latvia were not far behind, and countries such as Kazakhstan are showing early signs of undergoing a similar course. Many countries, for example in Central Europe and the former Yugoslavia, appear to have been more lightly affected. However, current trends in the spread of HIV do not suggest that the epidemic has reached its peak. There is also little evidence that public interventions to halt the spread of HIV in the hardest hit countries have been sufficiently effective. Greater problems may therefore be looming.

The main purpose of this Article is to argue for policy action to combat this major threat to the health and well-being of young people. The spread of the epidemic to date and policies to limit the further expansion of HIV are analysed. The major focus is on three modes of HIV transmission: among drug users who share injecting equipment, from mothers to their babies and via sexual activity. The Article does not claim to carry out a comprehensive review of HIV in the region. Some of the important issues that are not dealt with in detail include HIV transmission among men who have sex with men, HIV in prisons, transmission via medical treatment such as blood transfusions, and the care and treatment of people living with HIV/AIDS. All these issues are relevant to the spread of the epidemic, and they deserve separate and careful analysis.

Section 2.1 examines the evolution of the epidemic, the numbers of the estimated and officially registered infected individuals, and the sources of infection. The initial upsurge in HIV cases in the region was primarily driven by the sharing of infected equipment among injecting drug users. However, there is evidence that, where the disease is most well established, the spread of infections to the non-injecting population via sexual transmission has already begun.

Section 2.2 looks at how governments have responded to the crisis. In most of the hardest hit countries, the gravity of the problem has been underestimated. Precious time has been lost during which targeted interventions could have been highly effective. The countries in the region, including those where the incidence of HIV is currently low, need to engage actively with the problem if they are to prevent a further spread of the epidemic.

The biggest danger in the spread of HIV from injecting drug users to the wider population lies in sexual transmission. Young people's awareness of preventive measures and of safe sexual behaviour are therefore important in halting the spread of the infection. Section 2.3 discusses new survey results which measure young people's awareness of prevention and looks at the stigmatization people with HIV/AIDS may experience.

Section 2.4 contains policy-relevant conclusions.

2.1 The epidemic has not stopped

In this section, underlying conditions that have encouraged the rapid growth of the HIV epidemic are examined. The current extent of the epidemic is analysed, and the characteristics of people infected with HIV – by age, gender and transmission mode – are discussed.

Ominous conditions for the spread of HIV

The explosion of HIV in parts of the region was not wholly unexpected. The conditions that are now fuelling the spread of the disease have been evolving since the start

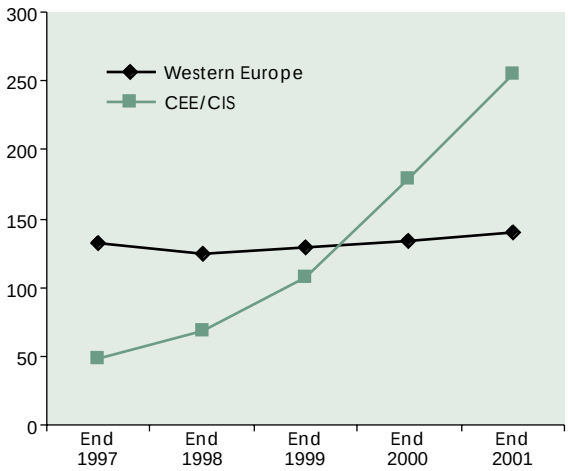
of the transition. First, substance abuse has become much more common among young people. Systemic change has offered opportunities for many to take advantage of new freedoms and rights. But the change has also been associated with considerable dislocation and stress, particularly among young people who are neither in education nor in employment.[3] There is little doubt that the rise in substance abuse among young people in transition countries since the early 1990s is related not only to the increased availability of all forms of drugs, but also to significant psychological, social and economic hardship.[4] In line with the growth in substance abuse, injecting drug use has become more widespread throughout the region since the end of communism. The number of injecting drug users in Russia, Ukraine and Moldova is currently estimated at about 1 per cent of the populations in these three countries.[5]

Second, relative to communist times, people today are engaging in their first sexual experience at a younger age.[6] Moreover, much of this sexual activity appears to be unprotected: many young people are leaving themselves vulnerable to infection. The Article "Social Trends in Transition" discusses the high level of sexually transmitted infections (STIs), such as syphilis and gonorrhoea, in many countries in the region. This is one sign of ongoing unprotected and therefore high-risk sexual behaviour. It also suggests that the shift towards an earlier first experience of sexual activity has not been accompanied by a corresponding increase in knowledge about ways to protect oneself.

Third, the growth in the number of sex workers in the region, many of whom are also substance abusers, is conducive to the spread of HIV. Many large cities in the region have significant numbers of sex workers.[7] Many sex workers inject drugs. They thus become contact points between drug users and the wider population.

Figure 2.1

Estimated number of people living with HIV/AIDS (per 100,000 population)



Source: UNAIDS and WHO (various years), "AIDS Epidemic Update", UNAIDS: <*www.unaids.org*>.

The current extent of the epidemic

The estimated number of people with HIV in the region has risen dramatically every year since 1997. Figure 2.1 shows that the estimated prevalence rate (that is, the number of people living with HIV/AIDS as a proportion of the total population) grew from less than 40 per cent to 175 per cent of the Western European level between 1997 and December 2001.[8] Russia and Ukraine account for nine tenths of all estimated HIV/AIDS cases in the transition countries.

The *estimated* number of people with HIV/AIDS is typically derived from the number of *officially registered* cases, that is, those cases in which people are tested and confirmed as having the HIV infection. Over 200,000 such cases had been confirmed in the region by the middle of 2001.[9] It is important to point out that, since many countries in the region have not yet established effective systems to track the incidence of HIV (Ukraine is one

Table 2.1

Official HIV incidence (newly registered cases per 100,000 population)

	1997	1998	1999	2000	2001
Czech Republic	0.6	0.3	0.5	0.6	0.5
Slovakia	0.1	0.2	0.7	0.5	0.1
Poland	1.5	1.7	1.4	1.6	–
Hungary	0.7	0.7	0.6	0.5	0.8
Slovenia	0.4	0.8	0.8	0.7	0.8
Croatia	0.4	0.3	0.3	0.4	–
FYR Macedonia	–	0.1	0.2	0.2	–
FR Yugoslavia	0.7	0.9	0.5	–	–
Albania	0.1	0.1	0.1	0.3	–
Bulgaria	0.4	0.3	0.3	0.6	–
Romania	2.9	2.6	1.4	1.3	2.1
Estonia	0.6	0.7	0.8	27.1	107.8
Latvia	1.0	6.6	9.9	19.6	34.1
Lithuania	0.8	1.4	1.8	1.8	1.9
Belarus	6.5	5.5	4.1	5.3	5.8
Moldova	10.1	11.2	4.2	4.8	6.4
Russia	3.0	2.7	13.8	38.8	69.1
Ukraine	17.7	16.1	10.5	11.4	14.3
Armenia	1.0	0.2	0.9	0.8	0.8
Azerbaijan	0.1	0.8	1.0	0.7	1.6
Georgia	0.3	0.4	0.6	1.3	1.9
Kazakhstan	2.8	2.0	1.2	2.3	7.8
Kyrgyzstan	0.0	0.1	0.2	0.3	3.0
Tajikistan	–	–	0.1	0.1	0.5
Turkmenistan	–	0.0	0.0	0.0	–
Uzbekistan	0.0	0.0	0.1	0.6	2.2
EU	3.8	4.0	4.0	5.8	–

Sources: Statistical Annex, Tables 1.1 and 6.9. Table 13, EuroHIV (2001), "HIV/AIDS Surveillance in Europe: Mid-Year 2001", *Reports*, No. 65, European Centre for the Epidemiological Monitoring of AIDS: <*www.eurohiv.org/aids.htm*> (accessed 30 March 2002). The information for 2001 has been provided by UNAIDS (personal communication) and is preliminary.

Note: The figures for the EU refer to Belgium, Denmark, Finland, Germany, Greece, Ireland, Luxembourg, Sweden and the UK.

exception), there is a considerable amount of uncertainty surrounding the current estimates, as well as a lack of detailed information to guide targeted policy responses.[10] Therefore, while officially registered cases do not capture the full extent of the epidemic, they are the most readily available source of information on the trajectory of the epidemic and on the characteristics of the people who are infected.

Table 2.1 shows the number of officially registered new HIV infections as a proportion of the total population of the countries in the region in the last five years. HIV has been encountered in all countries, but, in some, the recent trends have been startling. In 1995 and 1996, respectively, Ukraine and Belarus became the first countries in the region to encounter a rapid upsurge in the number of diagnosed infections. The epidemic became apparent in Moldova in 1997 and in Russia and Latvia in 1998. By 2001, it had taken firm root in all five countries. The growth in newly diagnosed infections has been particularly notable in Russia. Estonia and Kazakhstan have recently joined this group of countries with high rates of newly diagnosed cases of HIV. In 2001 Estonia had the highest rate of new HIV infections relative to population size, 50 per cent greater than the Russian rate, and almost 20 times the average European Union (EU) rate in 2000. However, in terms of absolute numbers of new infections, Russia has by far the most serious problem, with 100,000 cases diagnosed in 2001, compared with 7,000 in Ukraine and 1,500 in Estonia.

Other countries have kept official incidence numbers at substantially lower levels, but several exhibited a significant rise in 2001, including Romania, Azerbaijan, Georgia and three of the Central Asian countries. A recent report by the European Centre for the Epidemiological Monitoring of AIDS argues that the number of HIV tests conducted in the region has declined rather than expanded and that the observed trends are not simply the result of more testing, but do indeed reflect a truly exponential increase.[11] While official counts imply that there is little growth in the incidence of HIV in Central and South-Eastern Europe, there is little room for complacency. Recent small-scale surveys in FR Yugoslavia, for example, show that the disease is already well established among injecting drug users, many of whom continue to engage in high-risk practices such as the sharing of injecting equipment.[12]

Table 2.2

Age structure of registered HIV cases, 1997-2000 (per cent)

Age at diagnosis	Western Europe	Central and Eastern Europe	CIS
Under 13	2	26	2
13-19	2	6	18
20-29	28	31	58
30-39	41	20	18
40 and over	26	15	4

Source: Table 17, EuroHIV (2001), op. cit. (Table 2.1).

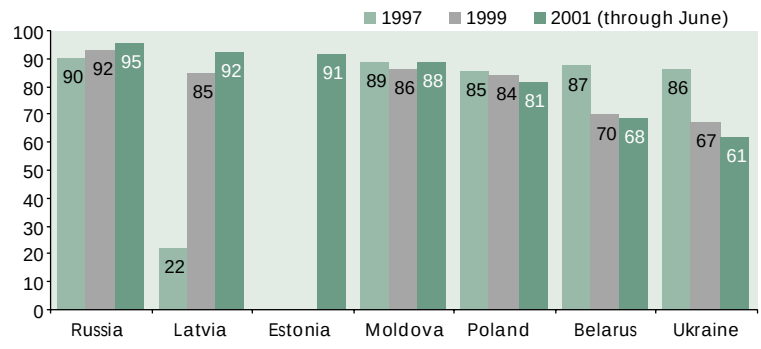
Young people are at the centre of a growing epidemic

Most new HIV infections are occurring among young people, and most of these infections involve injecting drug users. But observed trends in Belarus and Ukraine, two countries where HIV has been established the longest as a major problem, suggest that the importance of the sexual transmission of HIV is also growing.

Table 2.2 shows that the HIV epidemic in the region is overwhelmingly affecting young people. In Estonia, 90 per cent of the newly registered infections in 2001 involved people younger than 29, and 38 per cent involved people aged 15 to 19.[13] Of all the new infections in the CIS between 1997 and 2000, almost eight in ten were registered among people under 29, and one in five was among young people aged less than 20. The share of young people in the cases of new infections was considerably lower in Western Europe. In Central and Eastern Europe, the high share of children under 13 who have HIV is mainly accounted for by those people who were infected in Romania in the early 1990s through blood transfusions and other medical procedures.[14]

Figure 2.2

Share of injecting drug users in newly recorded HIV infections (per cent of total infections where the source of the infection is known)



Source: Tables 13-17, EuroHIV (2001), op. cit. (Table 2.1).

Note: The share of infections not attributable to any source is small in most countries (less than 5% of all infections), but is large in Poland and Russia, where the proportion of these is over 50% in some years.

Figure 2.2 shows the percentage of new diagnoses of HIV attributed to injecting drug use where a cause was known. The vast majority of Estonians and Russians who were diagnosed in the first half of 2001 were infected through shared injecting equipment. But in Belarus and Ukraine, where the epidemic became apparent earliest, the shares attributed to injecting drug use in 2001 were much lower, having declined considerably since 1997.

Figure 2.3 shows the growth in sexual (overwhelmingly heterosexual) transmission as a cause of new infections in Belarus and Ukraine over this time period. In Belarus, for example, 8 per cent of the newly diagnosed HIV infections were attributed to sexual transmission in 1996. By the first half of 2001, the proportion had increased to 32 per cent.

In interpreting Figures 2.2 and 2.3, one should take account of the cases in which the source of infection is uncertain. The proportion of "unknown causes" is negligible in Estonia, Belarus and Ukraine, but it is large in Russia, totalling more than 40 per cent of the number of new diagnoses in 2000 and the first half of 2001. Thus, it is not possible to determine the extent to which the sexual transmission of HIV is growing in Russia. However, it is certain that the absolute number of HIV diagnoses attributed to sexual transmission in Russia more than doubled during the first six months of 2001 relative to the corresponding period in 2000.[15] It is not difficult to imagine that, as in Ukraine and Belarus, the spread of the HIV epidemic to the wider population in Russia via sexual transmission may have already begun.

A further indicator that HIV is spreading more widely is the gender ratio in new infections. Women are generally underrepresented among injecting drug users, but are more equally represented among those people who have been infected with HIV via heterosexual transmission. In the CIS countries as a whole, a quarter of all officially registered infections between 1997 and 2000 were among women.[16] Recent evidence for Ukraine suggests that in 2001 the share of women among the people with new infections was as high as 38 per cent.[17]

Worldwide, about three quarters of HIV infections are caused by sexual transmission. While infections through medical procedures and through mother-to-child transmission have played a role in the spread of HIV in the region (mother-to-child transmission is discussed in more detail below), these causes have so far been less significant in terms of the contribution to the total number of HIV infections. Rather, any decrease in the share of HIV infections among injecting drug users is likely to be an early sign that sexual transmission is gaining importance.[18]

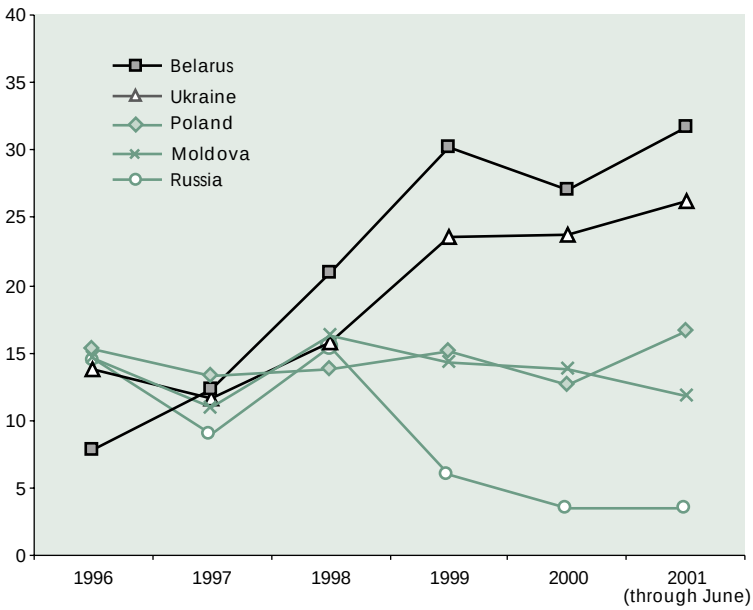
Moreover, the experience of drug-user-driven epidemics in other countries (for example, Thailand) suggests that HIV can quickly spread to the wider population through sexual contact between injecting drug users and people who do not inject drugs.[19] There is some evidence from Russia and Ukraine to support this view. In the Russian oblast of Saratov for example, over half of the 385 sex workers surveyed reported that they had injected heroin during the six months prior to the interview. Of these, a third reported sharing needles.[20] Similar results have been obtained in a recent survey of 426 injecting drug users in the Russian city of Togliatti: four in ten female sex workers who injected drugs did not use condoms consistently with their regular partner, and more than a quarter did not do so with casual sex partners.[21] Moreover, a third of the drug users in the Togliatti study and 40 per cent of the drug users in a separate study conducted in Ukraine reported that their regular sex partners did not inject.[22] These results suggest not only high levels of risky behaviour by injecting drug users in terms of their own drug use, but also in terms of their sexual relations, both commercial and non-commercial, with people who do not inject drugs.

Apart from the results of the data in terms of transmission modes, the information on the spread of HIV infections also indicates that the epidemic is not confined to particular cities or districts. HIV has been registered in all 89 oblasts of Russia, in all 25 oblasts of Ukraine and in all 6 oblasts of Belarus. In the Ukrainian city of Odessa and in several Russian cities, new infections are occurring with increasing frequency among the wider population and are not merely concentrated among high-risk groups such as injecting drug users.

Although the sexual transmission of HIV is increasing in the region, mother-to-child transmission has not so far been regarded as an immediate threat in most countries. Figure 2.4 shows that, nonetheless, the number of HIV infections among children through mother-to-child-transmissions (pre-birth and via breastmilk) in Russia and especially Ukraine increased markedly between 1996 and 2000. In the latter year, the mother-to-child infection

Figure 2.3

Sexual transmission as a cause of newly diagnosed HIV infections
(per cent of infections where the cause is known)

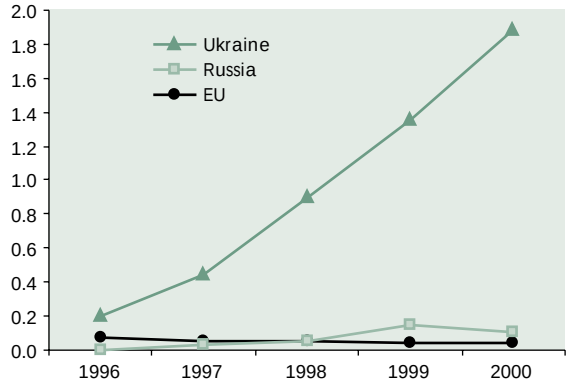


Source: Tables 13-17, EuroHIV (2001), op. cit. (Table 2.1).

Note: The figure includes both heterosexual and homosexual transmissions, but in all countries the overwhelming majority of sexual transmissions are attributable to heterosexual activity. See also the note to Figure 2.2.

Figure 2.4

Newly diagnosed cases in children of HIV infections through mother-to-child-transmission
(per 1,000 live births)



Sources: Statistical Annex, Table 2.1. Table 16, EuroHIV (2001), op. cit. (Table 2.1). Eurostat (1999), "Demographic Statistics, Theme 3: Population and Social Conditions". Office for Official Publications of the European Communities: Luxembourg.

Note: The EU figures refer to Belgium, Denmark, Germany, Greece, Sweden and the UK.

rate in Ukraine was considerably greater than the EU average and the Russian rate. It is estimated that in Ukraine a large proportion of the children with HIV are left in the care of the state, and most of these children live in hospitals, since few other children's institutions accept HIV-infected children.[23]

The growth in the extent of HIV infection among infants is one part of the wider problem of HIV in the region, and it is clearly one that requires urgent attention. Active support for child-rearing needs to be provided to parents with HIV. Health care, education and other services should be provided to the children of HIV-infected parents in ways that are inclusive, non-discriminatory and appropriate to the children's needs.

In summary, the HIV epidemic has spread across several countries of the CIS and across the Baltic states in a very short space of time, and it is now spreading rapidly in Kazakhstan. It is difficult to believe that this expansion will not continue. Moreover, the concentration of the epidemic among young people and the growing importance of sexual transmission as a cause of infection, particularly in Belarus and Ukraine, make the threat of the further spread of HIV to the wider population very real.

2.2 The policy response to date

The course of the HIV/AIDS epidemic is not immutable. Policy intervention can make a difference, particularly at the early stages, as experience in many countries has shown. What has been the policy response in the region?

Policy responses from two perspectives

From a policy maker's perspective, policy in HIV prevention is usually aimed at influencing or reducing the dangers associated with individual high-risk behaviour. Governments can attempt to exert influence in essentially three ways:

- Providing information and creating awareness of the problem (that is, HIV infection) and of the ways to avoid it.
- Lowering the cost of safer behaviour (for example, providing condoms and safe injecting equipment, or other harm-reduction measures).
- Increasing the costs of risky behaviour (for instance, by imposing severe penalties against drug use, sex work, or certain sexual practices).[24]

But from a potential user's point of view, the cold language of 'providing information', 'lowering the cost of safer behaviour', and more ominously 'increasing costs of risky behaviour' may not encourage him or her to change their behaviour or actually use the services that are on offer. For example, emerging experience suggests that young people or people in marginalized groups such as injecting drug users are more likely to use services that are:

- Designed and run with the participation of the people in the target group.
- Respectful of confidentiality.
- Culturally appropriate.
- Offered by workers who understand and are sympathetic to the needs of the target group.
- Affordable and comprehensive.[25]

Policy action to date

The relationship between the effectiveness of services and the way in which they are provided appears to have been learned more quickly in some countries than in others. Poland was one of the first countries in the region to institute a comprehensive policy for HIV prevention among injecting drug users. This included the establishment of needle and syringe exchange programmes.[26]

In 1995, Lithuania initiated a national action plan involving prevention programmes and user-friendly "low threshold" services for drug users, that is, services that are easily accessible by drug users and where anonymous treatment may be available and abstinence from drug-taking is not necessarily a requirement for access to the services. This may partly explain why HIV infections remained at very low levels in Lithuania, while the country's two Baltic neighbours recorded some of the highest

officially registered incidence rates in the region (see Table 2.1).[27]

In Central Asia, Kyrgyzstan took early action to revise legislation and make it less repressive and more effective.[28] Pro-active policies aimed at HIV prevention were adopted as early as 1995. These included some free hospital treatment, syringe exchange for drug users and the mobilization of sex workers and taxi-drivers for the distribution of condoms and information on HIV prevention in Bishkek, the capital city.[29] However, as the upsurge in officially registered infections in Kyrgyzstan in 2001 illustrates (see Table 2.1), efforts may have to be redoubled if the epidemic is not to spread further.

In many other countries in the region, including most CIS countries, the gap between service provision and user needs is captured by the following comment from a young Russian woman who had visited a clinic to get treatment for a sexually transmitted infection:

> "They [the STI therapists] claim they maintain absolute confidentiality, but, at the same time, they ask for my passport. I cannot trust them."[30]

This gap appears to have narrowed relatively little since the end of communism. Some governments, especially some in the CIS, have appeared to favour a punitive approach. Policies, including the criminalization of behaviour such as drug use, sex work and homosexuality, have a long tradition in these countries. In Ukraine, for example, punitive actions against injecting drug users were initially preferred to social support, driving many drug users underground and effectively rendering them unreachable for prevention work. Fears of a breach in privacy and confidentiality, as well as other discriminatory action, have prevented many drug users and other people at high risk from coming forward for information, testing and treatment.[31]

Moreover, national legislation in some countries has inhibited the implementation of harm-reduction measures aimed at lowering the costs of safe behaviour.[32] For example, methadone treatment for heroin addicts thus far has not been allowed under Russian law. The provision of information to high-risk groups and populations in general has often been given a low priority. Authorities in several countries in the region have not favoured sex education in schools or wider educational campaigns aimed at safe injecting and safe sex practices. Outreach activities, such as the targeting of drug users or sex workers, have generally been conducted only on a limited scale.[33]

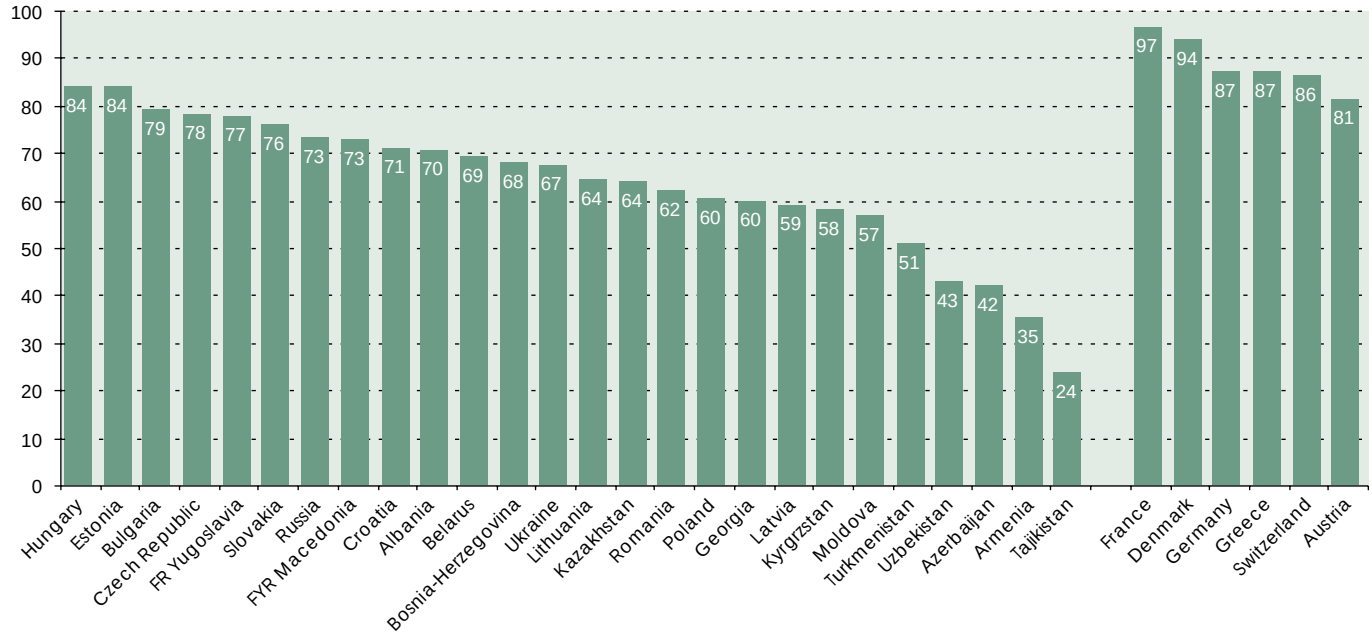
Nonetheless, in CIS countries there are several examples of successful small-scale projects that could be undertaken elsewhere in the region as well. By the end of 2001, there were over 40 needle exchange programmes in Russia.[34] In Svetlogorsk, Belarus, a needle exchange service was set up as a result of a community initiative, which has since developed into an NGO and receives support from government authorities and international organizations. The exchange service also distributes condoms and brochures on HIV/AIDS prevention. An evaluation study has demonstrated that there has been behavioural change towards less risky practices among injecting drug users who have come into contact with the project. A similar project in Ukraine, involving two stationary drop-in centres and one mobile outreach service, has also had some success. A noteworthy positive factor in both these projects is the involvement of current and former injecting drug users in programme design and implementation, ensuring a high degree of acceptability and accessibility on the part of the target group. In turn, the relative success of the projects in terms of reducing risky behaviour has helped promote a positive attitude towards preventive interventions among local authorities and communities. Nonetheless, both projects have encountered severe financial constraints, leading to shortages of equipment and continued dependence on volunteer involvement.[35]

Since injecting drug use continues to account for a major part of HIV infections, policy intervention to prevent infection among drug users must remain a priority across the entire region.[36] Several countries with small HIV numbers are nonetheless exposed to the threat of a more widespread epidemic driven by injecting drug use. For example, among people seeking treatment in Prague, half reported that they had shared injecting equipment in the previous month, while in Bratislava over a third said they had done so. The picture appears similar in the Balkans region, where only FR Yugoslavia currently reports significant HIV infection among drug users, but where the potential for increased infection is real, given the substantial proportion of this group who are sharing needles and engaging in unprotected sexual behaviour.[37]

No country is safe from HIV. Those countries fortunate enough to have escaped lightly so far can learn from the harder hit countries that the peril of HIV should not be underestimated. While it is important to target injecting drug users in order to encourage them to engage in less risky practices, the wider population cannot be ignored. HIV is increasingly being transmitted in some countries via sexual intercourse. One of the key ways to avoid the further expansion of the disease is to raise awareness and promote safer behaviour and sexual practices. But how well prepared are people, youth in particular, to engage in safer behaviour?

Figure 2.5

Awareness among adolescents aged 14-17 about condom use as a means of HIV prevention (per cent)



Source: UNICEF Young Voices: <*www.unicef.org/polls/cee/*>.

Note: Sample sizes are small, averaging about 200 persons per country. Therefore, the differences between countries that are ranked closely together may not be statistically significant. FR Yugoslavia excludes Kosovo. The Young Voices survey for Kosovo shows a figure of 30%.

2.3 Young people's awareness and attitudes

Young people's ability to protect themselves from HIV will ultimately depend on their own safe behaviour, which in large part depends on their knowledge about HIV transmission and their perspective on HIV as an issue that is directly relevant to them. In this section, recent survey data are used to assess the level of awareness about HIV prevention among young people in transition countries and their attitudes towards people with HIV/AIDS.

Assessing the knowledge among young people about the sexual transmission of HIV is particularly relevant in the case of the transition countries because many young people are engaging in unsafe sexual behaviour, as evidenced by the growth in the incidence of STIs in the region (see Section 2.1 above). Safer sexual practices that reduce the risk of HIV infection include sexual abstinence, the maintenance of one faithful sexual partner and reliance on the use of condoms. In Western Europe and in many other parts of the world, condom use has become one of the most successful means of protecting people from HIV.

Three surveys are employed below to examine the level of awareness of the need for prevention: the UNICEF "Young Voices" survey of 2000, the UNICEF Multiple Indicator Cluster Surveys (MICS) conducted most recently in 2000 and the Demographic and Health Surveys (DHS), the latest of which were carried out in 1999 and 2000.[38]

Awareness among adolescents

The attraction of the UNICEF Young Voices survey, in which children and young people aged up to 17 were interviewed about a range of issues, lies in its coverage of all countries in the region, plus some in Western Europe. One might expect that teenagers growing up in post-communist societies have had the opportunity to learn more about HIV and its prevention than would have been the case before the transition.

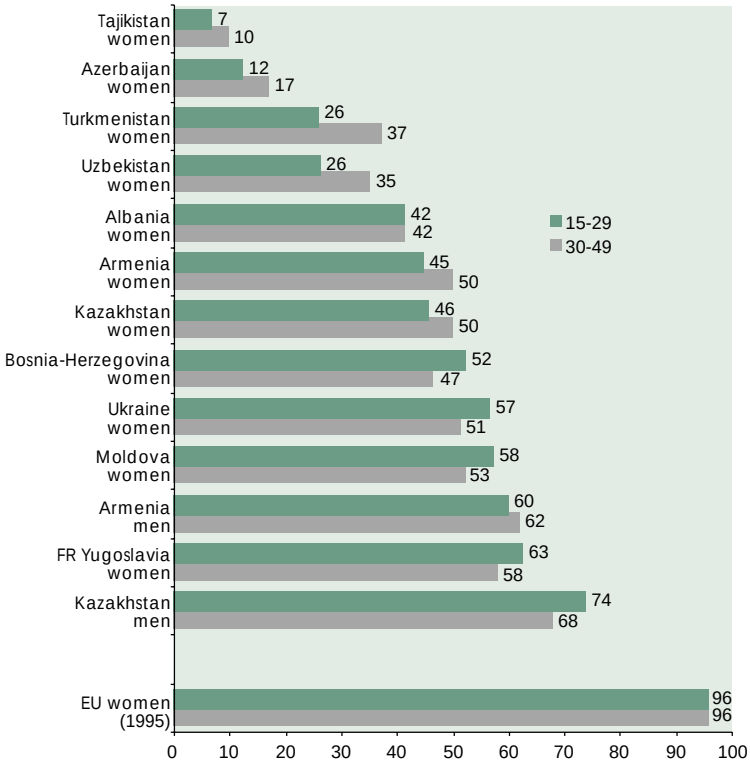
Respondents to Young Voices were asked: "Regarding AIDS and according to your knowledge, what needs to be done to avoid being infected by AIDS?"

Respondents were allowed to give as many answers as they wished. A wide variety of replies were recorded, ranging from "avoid public places (for example, saunas)" to "don't use drugs". The four most common were "use condoms" (given by 51 per cent of the respondents in transition countries), "do not share syringes and needles" (38 per cent), "avoid contact with infected people" (35 per cent) and "have only a single sexual partner" (24 per cent).

Figure 2.5 shows, for all countries in the region and for some Western European countries, the proportion of young people aged 14 to 17 who said "use condoms" in response to the question.[39] Awareness levels on this

Figure 2.6

Awareness about condom use as a means of HIV/AIDS prevention
(per cent of relevant age group)



Sources: MICS 2000 (Albania, Azerbaijan, Bosnia and Herzegovina, FR Yugoslavia, Moldova, Tajikistan, Ukraine, Uzbekistan): <*www.childinfo.org*>. DHS (Kazakhstan 1999, Armenia 2000, Turkmenistan 2000): <*www.measuredhs.com*>. European Commission (1995), "Drug Abuse and AIDS", *Eurobarometer,* 43.0+43.1, March-May, European Commission: Brussels.

issue are higher among Western European teenagers than among teenagers in transition countries, but there are also large differences among the transition countries themselves, with awareness in Hungary and Estonia similar to that in Germany, Greece, Switzerland and Austria, but with teenagers in Central Asia and the Caucasus showing generally much lower levels of awareness. With the exception of Estonia, however, the levels of awareness were generally low among teenagers in countries where the HIV epidemic is now well established: the four western CIS countries, Latvia and Kazakhstan.

In general, adolescents in wealthier countries show better awareness than do those in poorer countries, but, overall, the ranking does not follow a simple pattern of "wealthier = more awareness". For instance, Poland is placed below Russia and Ukraine. And where awareness about condom use as a means of AIDS prevention is low, awareness of other means of prevention, for example attachment to one faithful partner, sexual abstinence, or the avoidance of injected drugs, is also low. In Central Asia, for instance, only a quarter of respondents aged 14-17 cited faithfulness to one partner as a way of avoiding infection, while half indicated that they possessed some knowledge about the dangers of injected drugs.

The case of Estonia is of special interest because of the rapid increase in the official number of HIV infections there recently (see Table 2.1). The high level of awareness about condom use shown in Figure 2.5 is perhaps a result of school sex education programmes among Estonian teenagers.[40] This raises the question about behaviour: while awareness is important, it needs to be acted upon through safer practices. Whether young Estonians apply the awareness of safe sex practices that they appear to have obtained will be crucial in determining whether HIV continues to spread as rapidly as it has been doing since 1999 to the wider population, as well as among injecting drug users.

The awareness and attitudes of 15- to 29-year-olds

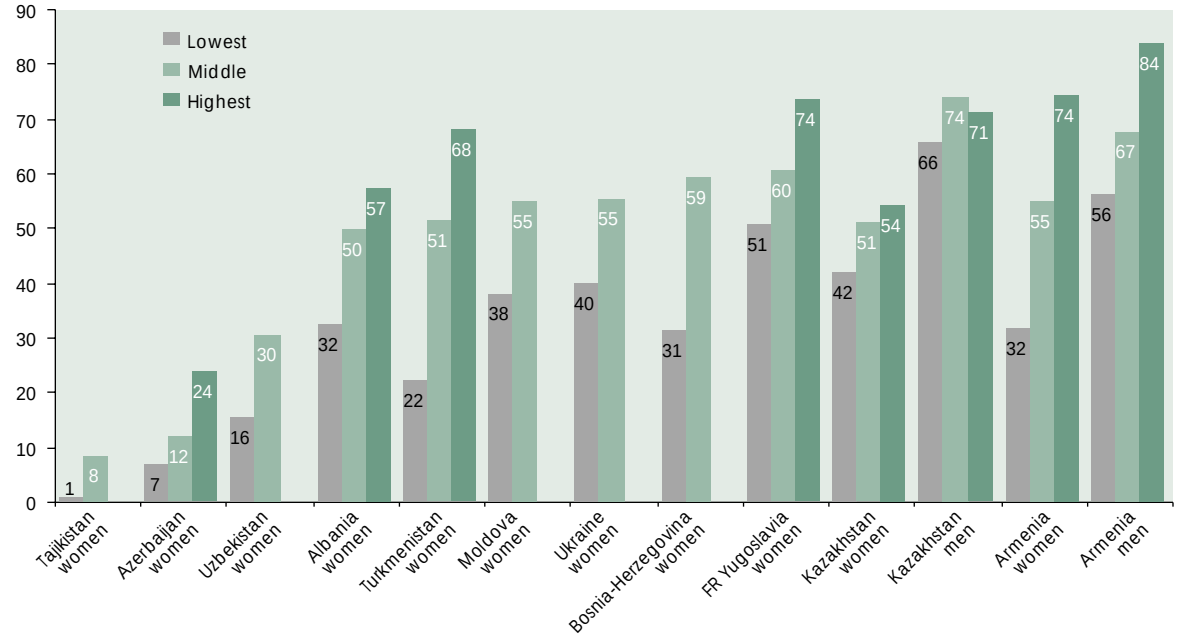
The MICS and DHS are household surveys focusing on various aspects of health, nutrition and fertility. However, only women aged 15-49 are interviewed in the MICS, while both men and women in the same age range are interviewed in the DHS. HIV-related questions were asked of MICS respondents in eight countries in the region (Albania, Azerbaijan, Bosnia and Herzegovina, FR Yugoslavia, Moldova, Tajikistan, Ukraine and Uzbekistan) and of DHS respondents in three countries (Armenia, Kazakhstan and Uzbekistan).[41]

Figure 2.6 shows that, in the countries where the MICS and DHS were carried out, awareness of condoms as a method of protection was low, particularly relative to the almost universal level of awareness in EU countries. Moreover, younger people, for whom the risk of HIV infection is greater, were only slightly more likely to know about condom use than older respondents. In Ukraine, only 57 per cent of young women knew about condoms as a means of HIV prevention. This result is particularly worrying, given that almost 4 in 10 of those people newly diagnosed with HIV in Ukraine in 2001 were women and given the growth in the rate of the sexual transmission of HIV in that country (see Section 2.1). Awareness among women was little greater in Moldova and FR Yugoslavia than in Ukraine, and, among women in Kazakhstan, it was considerably lower. Moreover, in Armenia and Kazakhstan, awareness levels were considerably lower among women than among men.

The generally low level of awareness among women about condoms as a means of prevention of HIV infection and the gap in awareness between men and women in those countries where information is available are disturbing. There is little evidence in the surveys to suggest that awareness of other forms of prevention, for example abstaining from sex or having only one partner, is significantly greater.[42] This implies that, if public education in

Figure 2.7

Awareness about condom use as a means of HIV/AIDS prevention, by educational attainment, women and men aged 15-49 (per cent)



Sources: MICS 2000, op. cit. (Figure 2.6). DHS, op. cit. (Figure 2.6).

Note: The classification of the categories of educational levels differs across countries. Wherever there are two categories, the distinction is between none/primary and secondary or higher. For Albania and FR Yugoslavia, the categories are none/primary, secondary and tertiary. For Azerbaijan, they are secondary or less, college vocational and tertiary. For Armenia, Kazakhstan and Turkmenistan, the categories are primary/secondary, secondary-special and tertiary.

these countries has been a policy goal in the fight against HIV, the efforts to raise awareness have not been fully successful to date.

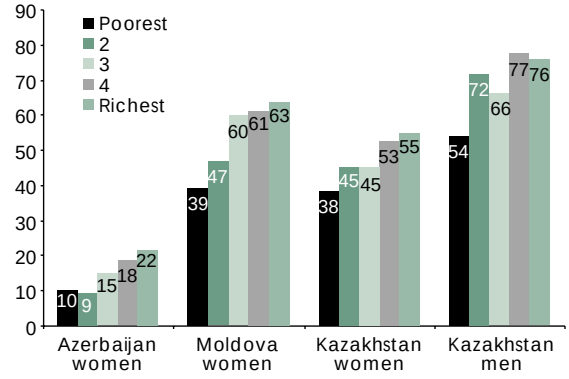
Moreover, the knowledge that does exist is unevenly distributed. Figure 2.7 shows that, in all countries for which data are available, awareness about the advantages of condom use differs substantially according to the educational background of the respondent. Differences in awareness between women with the highest and lowest levels of education are greatest in Turkmenistan, Bosnia and Herzegovina, and Armenia, and the differences between women and men at all levels of education are very large in Kazakhstan. In Kazakhstan, about 5 in 10 women with tertiary education know that condoms are a means of preventing HIV, compared with 7 in 10 men.

A similar picture of inequality obtains when awareness among poorer and richer households is analysed. Figure 2.8 shows that, in Azerbaijan, Moldova and Kazakhstan, awareness about condom use is considerably greater among men and women who live in wealthy households than among those in poorer households. However, even among men and women in the wealthiest households, awareness is low by Western European standards.

It is not only lack of awareness that can hinder policies aimed at preventing the further spread of the epidemic. HIV-related stigma and discrimination are also major obstacles.[43] Stigmatization can occur at various levels, for instance within the family and among friends, at the workplace, at the point of service among health care and other public service providers and in public policy. The degree to which people with HIV face stigma and discrimination is a measure of the negative social consequences. Discriminatory attitudes and repressive policies drive people at high risk of HIV infection away from the help and advice about safer practices, away from the treatment and

Figure 2.8

Awareness of condom use as a means of HIV/AIDS prevention, by wealth quintile, women and men aged 15-49 (per cent)

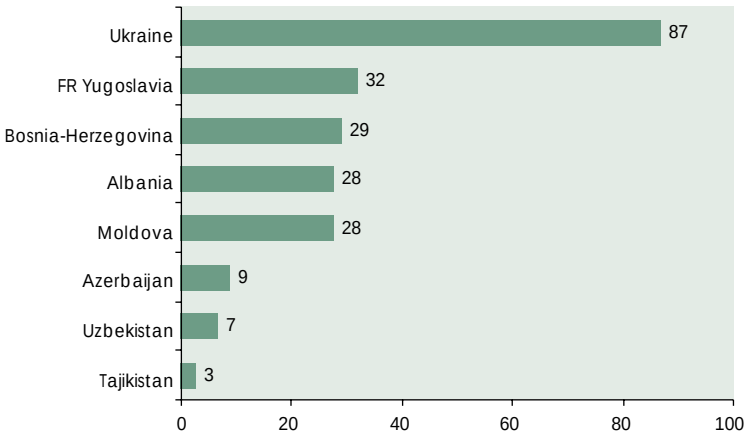


Sources: MICS 2000 (Azerbaijan and Moldova): <*www.childinfo.org*>. DHS (Kazakhstan 1999): <*www.measuredhs.com*>.

Note: For the methodology used to derive wealth quintiles, see Filmer, D. and L. Pritchett (1998), "Estimating Wealth Effects without Expenditure Data or Tears: An Application to Educational Enrolments in States of India", *World Bank Policy Research Working Papers*, No. 1,994.

Figure 2.9

Young women aged 15-29 who agree with at least one discriminatory statement (per cent)



Source: MICS 2000: <*www.childinfo.org*>.

care that they may need, and away from openness with sexual partners. The punitive policies adopted in some countries to increase the costs of high-risk behaviour have not encouraged a tolerant or accepting attitude towards people with HIV/AIDS or towards those at high risk of HIV infection, including injecting drug users, sex workers, men who have sex with men, and children born of HIV-positive mothers (see Section 2.2).

It is possible to assess attitudes towards people with HIV/AIDS for a number of transition countries through an analysis of the MICS surveys. Respondents were asked whether they agreed with the statements, "I would not buy food from someone with HIV/AIDS" and "a teacher with HIV/AIDS should not be allowed to work". Figure 2.9 shows that almost 90 per cent of young women in Ukraine agreed with at least one of these statements, as did about 3 in 10 women in FR Yugoslavia, Bosnia and Herzegovina, Albania and Moldova. Results for all countries must be interpreted with a degree of caution, since no systematic research on stigma has been undertaken in the region. However, anecdotal evidence does support the view that a considerable degree of stigmatization of people with HIV/AIDS does take place, for example in health-care settings and in orphanages in the case of children with HIV-positive parents.

Awareness among young people is limited

The survey findings presented in this section are disturbing. The Young Voices survey shows that the level of awareness about the prevention of HIV transmission is low among teenagers across much of the region. The MICS and DHS surveys confirm this picture. They also suggest that there is considerable inequality in awareness by gender, by education and by household wealth. Women who have low levels of education or who live in poor households are especially disadvantaged. Discriminatory attitudes towards people with HIV/AIDS appear to be common in some countries.

Two important conclusions arise from these findings. First, efforts to raise awareness about HIV need to target young people, but they also need to reach out especially to those people who are disadvantaged. Moreover, women should be a particular focus of awareness-raising policies.

Second, interventions that make HIV/AIDS visible and that promote a general acceptance of people who are living with HIV/AIDS, as well as those at risk of HIV, need to be implemented.

In terms of planning and implementing policies to raise awareness about HIV, countries in the region have some advantages that could be used to good effect. There are extensive health-care services, including services specializing in maternal and child health care. There is a high level of literacy. This means that most men and women are well equipped to learn more about HIV prevention, about injecting drugs and about safe sex through both the national media and more localized settings. Also, most adolescents attend school. Education systems need to address the issue of HIV more openly and include it in the broad area of life skills education.[44] General education initiatives are important and urgently need to be implemented. More specific outreach and peer-education programmes are also needed if the behaviour of people in high-risk groups such as injecting drug users and sex workers is to be made safer.

2.4 Conclusions

The focus of this analysis has been on the characteristics of people who are infected with HIV, the policies adopted to prevent the spread of HIV and the awareness among people about HIV prevention. HIV is spreading rapidly in the region and is harming young people.

Most new infections are being caused by the sharing of injecting equipment among drug users. However, there is evidence of a rise in the number of HIV infections caused by sexual (overwhelmingly heterosexual) transmission in Belarus and Ukraine. Therefore, it is not only injecting drug users in these countries who face a real risk of infection. The epidemic is also now spreading among the wider population. It is difficult to believe that, unless effective policy action is taken, it will not also spread among the wider population in other countries in the coming years, including Russia, where the epidemic is most extensive.

Policies to prevent the expansion of HIV appear to have been effective in some countries, for example Poland and Lithuania. In other countries, they have been less successful. Awareness about the means to prevent the sexual transmission of HIV infection is generally low. Discriminatory attitudes, on the other hand, are worryingly pervasive in some countries.

Four key points for action emerge from this analysis. First, policies need to be implemented to increase the awareness of HIV and of HIV prevention among school-aged adolescents and among the wider public.

Second, in the implementation of policies to increase the awareness of HIV, special attention needs to be paid to young women, particularly those from poorer backgrounds and with low educational levels.

Third, public education efforts should not be aimed only at raising awareness, but also at fostering more inclusive attitudes towards adults and children with HIV/AIDS and towards people at high risk of infection.

Fourth, accessible health care and advisory services are urgently required to address the needs of people in high-risk groups and of young people in general. Through the use of such services, young people should be equipping themselves with the knowledge and awareness to change their own behaviour and that of their peers. The problem of HIV is a challenge for all of society. No country in the region can afford to ignore HIV any longer.

Notes and references

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3. See *Regional Monitoring Report*, No. 7, pages 65-68.
4. See *Regional Monitoring Report*, No. 4, pages 49-52.
5. Dehne, K. L. and Y. Kobyshcha (2000), "The HIV Epidemic in Central and Eastern Europe: Update 2000", UNAIDS: Geneva, Mimeo (29 November).
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9. EuroHIV (2001), op. cit., Table 13.
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16. EuroHIV (2001), op. cit., Table 13, page 30, and Table 15, page 32.
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41. In the MICS and DHS, the sample sizes for each country are about 4,000 to 5,000 households. The questions relating to HIV/AIDS in the MICS and DHS are similar, and the results can therefore be directly compared.
42. In several countries, the percentage of respondents who agreed that "having one faithful uninfected sex partner" as a means of avoiding HIV infection was greater than the percentage who agreed with the statement about condom use, but the difference was generally small.
43. UNAIDS (2000a), op. cit., page 38.
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3 Quality of learning: towards "unilateral educational disarmament"?

Education is of fundamental importance as a human right that allows children and young people to develop to their fullest potential. It is also a force for socialization and local development in neighbourhoods and communities and an essential element in nation-building, citizenship training and the learning of skills for a modern economy. The extent to which education fulfils these roles depends in large part on the quality of the educational experience.

This Article looks at the outcomes of one aspect of education – formal learning. It asks: To what extent is the quality of learning in transition countries under threat?

This is an important issue. In 1983, the US National Commission on Excellence in Education published its report, *A Nation at Risk*, which concluded:

> "If an unfriendly foreign power had attempted to impose on America the mediocre educational performance that exists today, we might well have viewed it as an act of war . . . . We have, in effect, been committing an act of unthinking, unilateral educational disarmament."[1]

Nearly 20 years later, many transition countries face a similar danger of allowing the quality of their schooling to deteriorate. The contexts are very different: something that happened in the world's richest country cannot be fairly compared with developments in countries that are struggling with the results of large declines in output and income and are having to cope with a wide range of institutional and social reforms.[2] Nonetheless, the danger is real and must be confronted.

New information from international surveys is now available that allows comparisons between the outcomes of formal learning in transition countries and the corresponding outcomes in other countries not merely in terms of knowledge, but also in terms of the use of that knowledge in everyday situations. The importance of education for international competitiveness in a globalizing world is perhaps the main reason why such surveys are carried out and why many transition countries are participating in them. Their participation signals a concern that education standards need to be maintained.

This Article is divided into six sections. Section 3.1 examines the multidimensional nature of quality in education and how it relates to the quality of learning – in mathematics, science, languages and other subjects which are formally taught in the classroom. Section 3.2 looks at evidence from international surveys on the quality of learning in transition countries and at the multiple problems associated with learning quality in the region's poorest countries. Section 3.3 analyses some influences on formal learning, including the home environment and differences between urban and rural schools. In Section 3.4 the "factology" approach to teaching and learning, as well as teaching conditions themselves, are discussed. Section 3.5 examines the extent to which greater efficiency in education and the opportunity that falling numbers of school-age children provide can unlock the resources that are necessary to improve the quality of learning. Section 3.6 concludes that "unilateral educational disarmament" has not taken place in the more advanced countries in the region, but that education is in crisis in some of the poorer countries.

3.1 Quality of education and quality of learning

Education is more than gaining knowledge, passing exams and finding employment; it is also child and youth development and a preparation for adult life. Formal learning is part of this process, but its success depends heavily on the health and happiness of children, their home background and the school setting.

This section places the quality of formal learning in these wider contexts of total educational quality and the home environment.

Quality of education

Quality of education has numerous dimensions. The best schools are a locus for socialization where children learn acceptance of others who are different and acceptance of all as equal, where they learn how to form, maintain and if necessary end relationships and where they learn how to deal with hierarchy, conflict and disappointment. The best schools are also places where children acquire an awareness of rights and responsibilities, the functions of the state and other institutions, personal hygiene and safety, the effects of drugs (including alcohol and tobacco), HIV/AIDS and sexually transmitted infections (STIs). They are places where children nurture the interests that will sustain them through their lives – sports, the arts, science, philosophy, knowledge of other peoples' cultures and societies, and so on. Moreover, they are also places to which children enjoy going: free of stress, bullying, violence and discrimination.

In most countries in the world, few schools appear to live up to all these standards. Survey data for advanced industrialized countries and transition countries in the late 1990s suggest that many teenagers are not happy in school.[3] Moreover, evidence for particular countries shows that violence against children in school is not uncommon.[4]

Another shortcoming that is particularly notable in many transition countries occurs in the area of life skills education and healthy living. For example, the Articles "Social Trends in Transition" and "HIV/AIDS and Young People" highlight the poor awareness among young people in the region about STIs and the prevention of HIV/AIDS. Another example is discrimination against ethnic minorities such as Roma, who in several countries are routinely placed in special classes and schools and who often leave school early without having acquired basic numeracy or literacy skills. These issues are not addressed in this Article, but it is nonetheless important to note their significance in quality education.

The home environment

The quality of the outcomes of learning depends not only on what happens in schools; the home environment is also critical. There is a link between education quality and the experience of poverty in the home. This is particularly so in the case of nutrition. The initial two or three years of life are crucial for the physical development of the brain. Malnutrition threatens this development. The lack of some micronutrients, especially iron and iodine, has a seriously negative impact on mental ability and school performance. A nutritional deficit can compromise education in all its dimensions. The high levels of stunting and wasting found in several countries in the region suggest that many children are not receiving the nutrition they need to enjoy their education or to learn effectively. Poverty can also curb attendance at school. Analysis of survey data for several countries in the region shows that children and young people from poorer backgrounds (and indeed, from poorer countries) are less likely to be enrolled in education.[5]

On the other hand, positive factors in the home environment can help children develop interests and habits that boost learning performance at school. Particularly significant is parental interest in education. Survey evidence on the home environment and its relation to learning performance is discussed in more detail in Section 3.3.

3.2 Evidence on learning quality

The quality of learning in the region now must be judged in comparison with the situation before transition. The view that education of high quality was provided under the planned system was perpetuated for years by the excellent results achieved by children in international educational Olympiads, especially in mathematics and science, and there may have been some substance to this. In tests of representative samples of children conducted in 1991 soon after the transition began, children from Hungary, Slovenia and the former Soviet Union achieved scores in mathematics and science that compared favourably with the scores of their counterparts in Canada, France, Israel and the UK.[6] Schools were, of course, an important part of the communist ideology. Though the schools did not encourage individuality or the development of children to their full potential, many countries in the region entered the transition with high average academic standards in a number of key subjects.

What is the level of learning quality in the transition economies now? Two sets of assessments of achievement – in 1995 and 1999 – among eighth-grade (14-year-old) students in mathematics and science in a wide range of countries have now been provided by the Third International Mathematics and Science Study (TIMSS). The OECD International Adult Literacy Survey (IALS) has gauged adult literacy in 23 countries over the 1994-1998 period. The OECD's Programme for International Student Assessment (PISA) has set out to determine how 15-year-olds in 32 countries in 2000 have been able to use what they have learned in reading, mathematics and science.

These studies cover only a limited range of transition countries. TIMSS 1999 includes 11: Bulgaria, Czech Republic, FYR Macedonia, Hungary, Latvia, Lithuania,

Moldova, Romania, Russia, Slovakia and Slovenia; the IALS covers only Czech Republic, Hungary, Poland and Slovenia, and PISA examines the first three in the IALS study, plus Latvia and Russia.[7] The countries of the Caucasus and Central Asia are therefore absent from all three surveys. However, if supported by other information, the surveys enable some inferences to be made about what is happening to educational quality in the region as a whole.

TIMSS

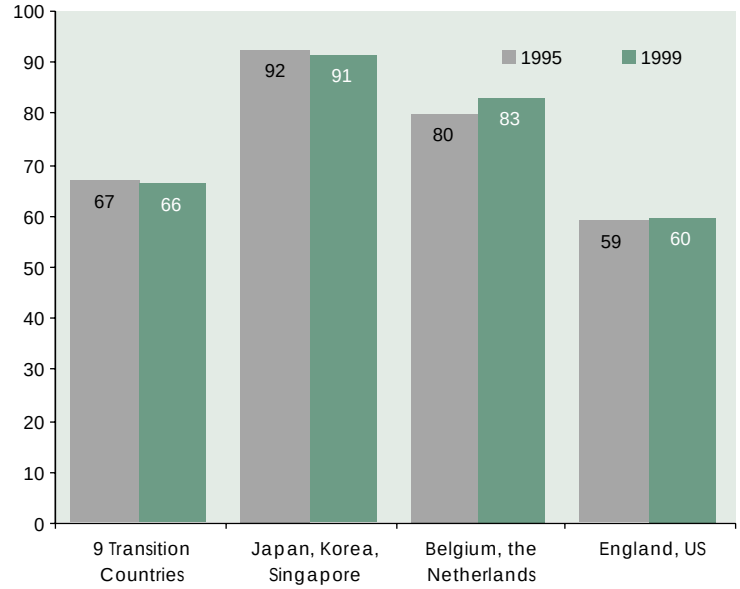
TIMSS is designed to assess knowledge among eighth-grade students (aged about 14 years) in randomly sampled schools.[8] Students are tested on their knowledge in areas of mathematics, including fractions and numbers, geometry and algebra, and in areas of scientific knowledge, including chemistry, the life sciences and physics. Individual achievement data are supplemented by information about the home, classroom, school and national contexts within which learning takes place. In 1999, the survey covered 38 countries, including the 26 countries which had participated in 1995.[9]

The results for most transition countries are quite encouraging. As Figure 3.1 shows, two thirds of students in the nine transition countries for which data are available in both years reach or surpass what the authors of the TIMSS reports describe as the "median international benchmark" in eighth-grade mathematics.[10] Moreover, students in the transition countries perform, on average, better than those in England and the US, although not as well as students in Belgium and the Netherlands or those in the most highly developed Asian countries. Between 1995 and 1999, the Czech Republic was the only transition country where the performance deteriorated significantly (with 14 per cent fewer students reaching the median international benchmark in 1999), and Latvia was the only country where the performance significantly improved (15 per cent more students reached the benchmark in 1999).

Figure 3.2 shows that Slovakia, Slovenia, Hungary and Russia performed well in the 1999 mathematics tests. The proportion of students with scores above the median benchmark in these countries and in Czech Republic, Bulgaria and Latvia all surpassed the proportion in the US and Italy (the transition countries in Figure 3.2 are in green, and the other countries in grey). On the other hand, no transition country was close to Japan. Romania, Moldova and FYR Macedonia did significantly less well. The results for tests in scientific knowledge show a similar picture of achievement in 1999.

Figure 3.1

Eighth-grade mathematics achievement, 1995 and 1999 (per cent of students above the median international benchmark)



Source: Exhibit 1.9, Mullis, I. V. S. et al. (2000), *TIMSS 1999, International Mathematics Report: Findings from IEA's Repeat of the Third International Mathematics and Science Study at the Eighth Grade*, International Study Center, Lynch School of Education, Boston College: Chestnut Hill, MA.

Note: The average scores for groups of countries are unweighted. The transition countries are Bulgaria, Czech Republic, Hungary, Latvia (Latvian-speaking schools only), Lithuania, Romania, Russia, Slovakia and Slovenia. The Belgian score is for Flemish-speaking schools only.

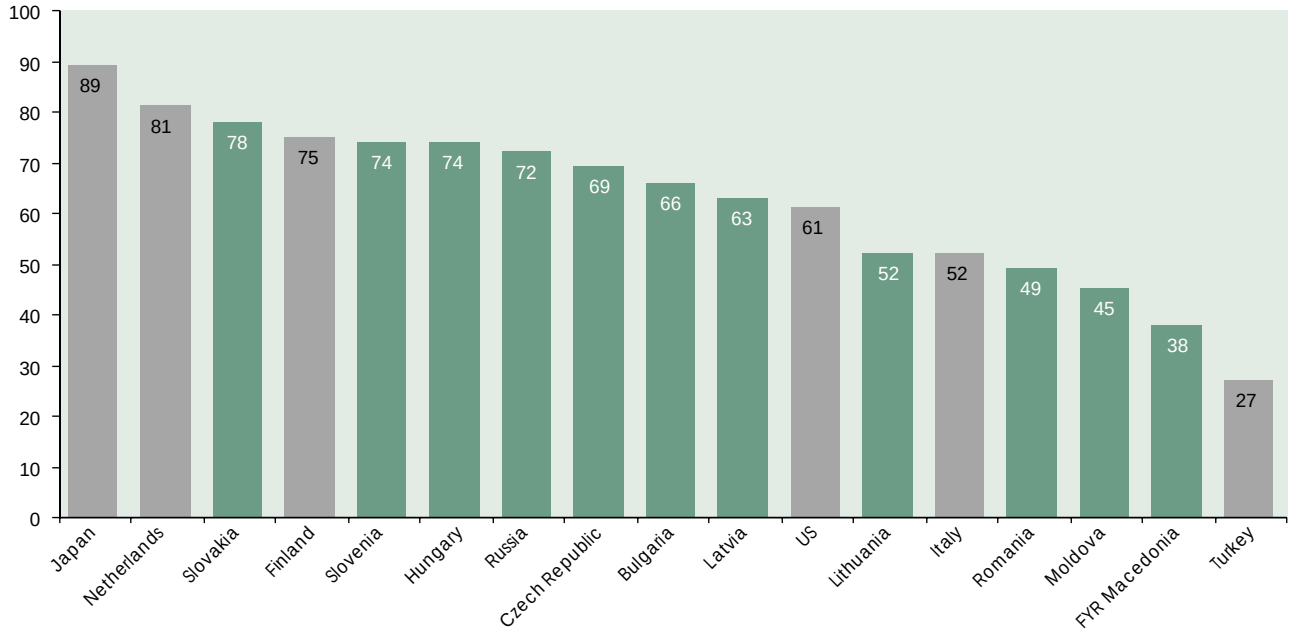
IALS

The TIMSS study tests academic achievement in two important subjects in a rigorous way. The IALS has a different purpose: to measure how well adults use information to function in society and the economy. It defines literacy as, "the ability to understand and employ printed information in daily activities, at home, at work and in the community – to achieve one's goals, and to develop one's knowledge and potential."[11]

The skills measured in the IALS cover three domains: prose literacy (being able to understand newspaper and magazine articles and brochures), document literacy (for example, maps, charts and application forms) and quantitative literacy (calculating bills and receipts). Figure 3.3 shows that, of the four transition countries included in the study, only the Czech Republic matches the average score for eight European Union (EU) countries in the case of 16-25-year-olds who have completed secondary education. The relative weakness of the performance of the other three transition countries should not be exaggerated. The average scores for Poland, the least well performing of the four countries, are only 10-12 per cent worse than the EU averages. These results nonetheless place Hungary and Poland behind most advanced industrialized countries. For example, Hungary's score in prose literacy is exceeded by all countries in the IALS sample except Portugal and Chile.

Figure 3.2

Eighth-grade mathematics achievement, 1999 (per cent of students above median international benchmark)



Source: Exhibit 1.6, Mullis et al. (2000), op. cit. (Figure 3.1).

Note: Latvia refers only to Latvian-speaking schools.

PISA

PISA includes an assessment of the subject skills covered by TIMSS, but takes a broader approach to the measurement in the spirit of the IALS.[12] It covers three domains – reading literacy, mathematical literacy and scientific literacy – and looks at the ability of 15-year-olds to use their knowledge and skills in order to meet real-life challenges.

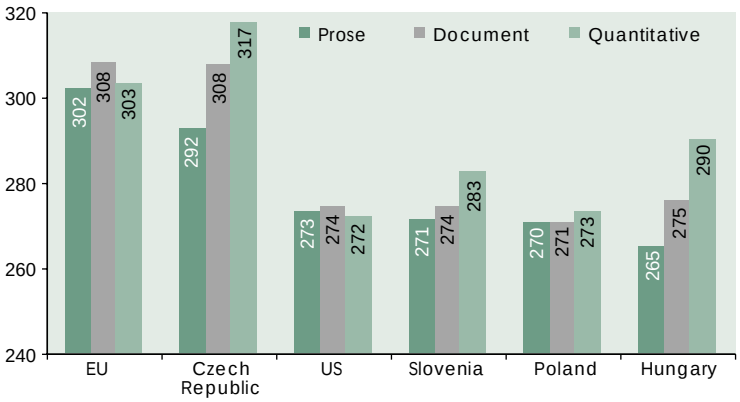
Figure 3.4 shows how students in the five transition countries in the PISA sample performed, on average, in the tests on reading literacy, which is often seen as the key to success in the labour market whatever the level of education.[13] As with the IALS, these results also compare unfavourably with those of TIMSS. The mean scores for all five transition countries were below those for the EU countries and Japan and Korea. The difference between the Russian and Latvian scores and those of the EU is notable, though the reading literacy scores of the other three transition countries are closer to the EU average. In terms of mathematical and scientific literacy, the picture is much the same: the scores for the Czech Republic, Hungary and Poland are a little lower than those for the EU, while the scores for Russia and Latvia are lower still.[14]

In the EU countries, girls do better, on average, than boys in reading, worse in mathematics and the same in science. The performance of girls relative to that of boys is actually better in transition countries than in EU countries. This result suggests that girls, at least in the wealthier parts of the region, are not being left behind. However, it is not clear to what extent this result can be applied to the entire region.

As far as mathematics and science are concerned, TIMSS and PISA do reveal some differences in the performance of transition countries. Table 3.1 shows that, of the four transition countries which are featured in both exercises, the Czech Republic performs best in relation to those advanced industrialized countries that are also featured in both surveys. The results for Hungary and,

Figure 3.3

Literacy scores of 16-25-year-olds who have completed secondary education, 1994-1998 (mean scores)



Source: OECD and Statistics Canada (2000), *Literacy in the Information Age: Final Report of the International Adult Literacy Survey,* Organization for Economic Cooperation and Development: Paris, Table 3.5.

Note: The EU score is a simple average of scores for Belgium, Denmark, Finland, Germany, the Netherlands, Portugal, Sweden and the UK. The score for the US is based on 1992 data.

particularly, Latvia and Russia are more disappointing in the PISA assessments.

The results of these international comparisons can be summarized as follows. The TIMSS assessments in 1995 and 1999 show that, in most of the countries covered, academic standards in mathematics and science are generally being maintained. However, some of the poorer countries such as Moldova and FYR Macedonia are not performing so well.

When the tests are broadened to include reading literacy and the use of academic knowledge and skills, a gap opens up between some of the transition countries (such as Russia and Latvia) and the higher average in the advanced industrialized countries. What poorer countries such as Romania, Moldova, or FYR Macedonia might score in a PISA-type assessment is unclear, but on the basis of the TIMSS results, there may be reason for concern.

Quality and poverty

What about the poorest countries in the region, most of which are excluded from the TIMSS, IALS and PISA exercises? As Figure 1.12 shows, Moldova, Albania and all the countries of the Caucasus and Central Asia had low enrolment rates among school-age children in 2000. (See also Statistical Annex, Tables 7.1 to 7.4.) The evidence presented below on the physical infrastructure of schools in Tajikistan, Moldova and Uzbekistan can help explain these low rates and might lead one to expect that the performance of these schools, in terms of the quality of learning, is poor.

In the region's poorest country, Tajikistan, for instance, the views of many of the participants in a recent focus-group exercise suggest that the quality of education (in the widest sense of "self-realization") and the quality of learning have suffered greatly over the past 10 years.[15] Several of the sixth graders interviewed were unable to multiply single-digit numbers. In the words of one participant,

> "when my elder brothers studied during the Soviet period, they had all the textbooks and could read our classical poets and writers. Now we are poor spiritually as well."

These deficiencies reflect partly a fall in school attendance, due to poverty, but also a deterioration of conditions in schools, due to the outflow of teachers, the destruction of school buildings during the recent civil war and the lack of textbooks and other materials.

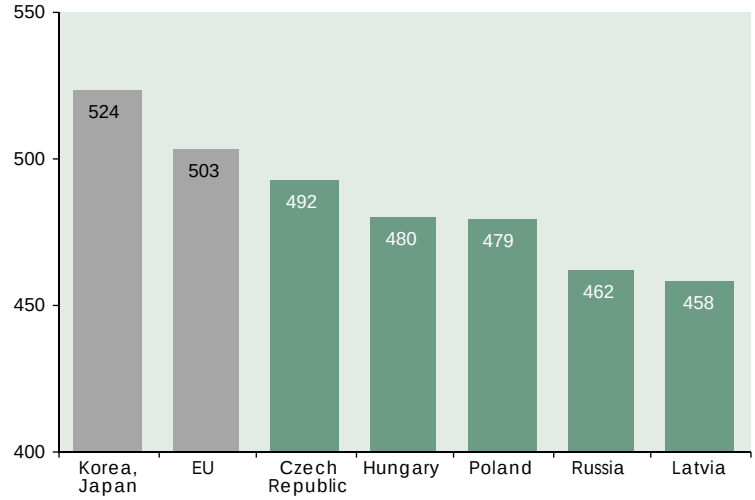
The average salary in education in Tajikistan in 2000 was a quarter of the civil service average and less than an eighth of what a sole income earner in a family with four children needs to keep the family above the official poverty line.[16] As a result of this situation, there has been an exodus of younger qualified teachers, some to private-sector and NGO jobs within Tajikistan (where, as a driver or a cleaner, they can earn as much in a month as they would in a year as a teacher), and others to employment in Russia and other CIS countries.[17]

The focus-group reports on the conditions in Tajikistan's schools are depressing:

> "Many of these schools do not have desks, chairs, windows, doors, heat, or toilets. Hamza notes about her class, 'Between three and four students sit at each desk. There are not enough desks or blackboards in the classrooms.' Classes are cold and wet. Isfandiyor says, 'It is very cold in the school. There are no desks or light bulbs

Figure 3.4

Student performance on the PISA reading literacy scales, 2000 (mean scores)



Source: OECD (2001), *Knowledge and Skills for Life: First Results from PISA 2000*, Organization for Economic Cooperation and Development: Paris, Table 3.6.

Note: Scores for the EU, Japan and Korea are unweighted averages. The EU average covers Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Portugal, Spain, Sweden and the UK.

Table 3.1

Scores in the TIMSS 1999 and PISA mathematics and science assessments (per cent of the average mean scores for advanced industrialized countries)

	Mathematics		Science	
	TIMSS	PISA	TIMSS	PISA
Czech Republic	98	97	101	96
Hungary	100	93	104	96
Russia	99	91	99	89
Latvia	95	88	95	89

Sources: Mullis et al. (2000) op. cit. (Figure 3.1), Exhibit 1.1. OECD (2001), op. cit. (Figure 3.4), Table 3.6. Martin et al. (2000), *TIMSS 1999, International Science Report: Findings from IEA's Repeat of the Third International Mathematics and Science Study at the Eighth Grade,* International Study Center, Lynch School of Education, Boston College: Chestnut Hill, MA, Exhibit 1.1.

Note: Latvia refers only to Latvian-speaking schools in the TIMSS assessments. The score for advanced industrialized countries is the unweighted average for Australia, Belgium (only Flemish-speaking schools in the TIMSS assessments), Finland, Italy, Japan, Korea, the UK (only England in the TIMSS assessments) and the US.

> in the classroom. Most classrooms have no windows'. . . . Electricity and water are also lacking in many locations. Some schools are about to collapse altogether. Many also lack textbooks and paper. In some schools, six to ten students will share a single textbook. Books cost [far more than] what most families can afford. Virtually no school has laboratory equipment to teach science."[18]

This picture is confirmed by visits to five vocational schools, three in Dushanbe and two in Fayzabad rayon, in January 2002. Even the best of these schools is underequipped and facing difficulties in retaining qualified staff. The ones in the most difficult position are those that were damaged during the civil war and its aftermath, when they were the scenes of battles, occupied by combatants and refugees over several years, or stripped of equipment and vehicles. For instance, in one school at a high and cold altitude in Fayzabad, the student accommodations have been devastated; many rooms have no windows or furniture; the central heating does not work, and the kitchen has no piped water and very little equipment. The workshop is wrecked, and vital and expensive machine parts are missing. In the tractor park only three of the 50 vehicles can be used. At another school, which used to be a "model school", materials financed by the state have been employed to repair the main classroom building, but the workshops and student accommodations remain in a poor state. A high proportion of the country's vocational schools are reported to be in a similar, war-damaged condition.

In Uzbekistan, too, shrinking real expenditure on education has led to progressive deterioration in school infrastructure. Three quarters of the rural and half of the urban schools do not have functioning toilets. Teacher salaries have dropped to the equivalent of $6 per month at the market exchange rate, and, as budgets for education have been cut, managers have sought to protect the jobs of teachers and other educational staff. Teacher-student ratios have risen, and workloads have been scaled back significantly, while the share of salaries in current education expenditure has increased, displacing spending on maintenance, learning materials and school infrastructure. As a result, the condition of schools and the quality of education, particularly at primary and lower secondary levels, have fallen in all communities except the few that have been able to supplement school budget financing from local sources.[19]

In Moldova, a quarter of the primary and general secondary schools are in need of refurbishment and repair, and several are in precarious condition. There is no money for teaching materials, newspapers, or magazines. Most secondary schools have no information technology classes, and only 3 per cent of schools have access to the Internet. Skilled teachers are leaving the education system for more well paid jobs elsewhere. Out-of-school activities (related to technology, travel, nature, and so on) have been cut by half since 1992.[20]

These problems are reflected in Moldova's relatively poor results in the TIMSS mathematics and science assessments. In mathematics, significantly fewer Moldovan than Russian eighth-grade students reached the median international benchmark in 1999 (see Figure 3.2), and, in science, Moldova was also ranked very low.

To summarize, it is clear that the quality of learning is being severely compromised in the poorer countries of Eastern Europe for which information is a available. There is little reason to doubt that the situation is similar in the Caucasus and Central Asia.

3.3 Influences on learning performance

This section focuses on two important factors that influence learning quality: the home environment and urban or rural location.

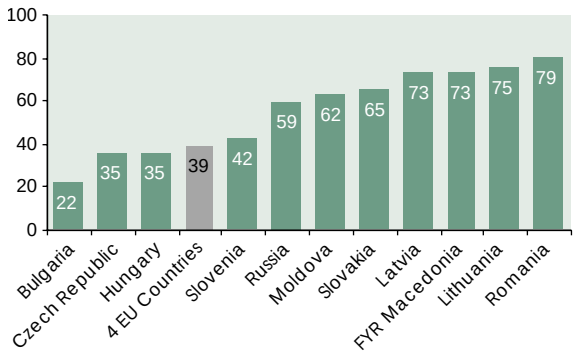
Socio-economic background and home environment

The PISA study shows that, in almost every country, students from the most advantaged socio-economic backgrounds consistently perform the best.[21] Transition countries are no exception. However, the PISA study also points out that the relationship between socio-economic background and performance is far from clear. The types and quality of both the home environment and the schools to which children from different socio-economic backgrounds go may play a part.

A drift towards elitism that is now being seen in some education systems in the region is likely to exacerbate the inequalities in socio-economic backgrounds and in schools. For example, a 1998 OECD review of Russia's education policy notes the increasing emphasis on selective secondary schooling in gymnasia and lycees and the growth of exclusive school-university agreements.[22] (For the definitions of these terms, see the Glossary entry on "enrolment rates by education level".) A small but rising number of private schools caters particularly for the children of the affluent. In general, the needs of non-elite and below-average students have been found to be inadequately addressed.

Figure 3.5

Eighth-grade mathematics students whose schools expect parents to serve on committees (per cent)



Source: Mullis et al. (2000), op. cit. (Figure 3.1), Exhibit 7.4.

Note: Latvia includes only Latvian-speaking schools. The EU is a simple average of per cent scores for Belgium (Flemish-speaking schools only), Finland, Italy and the Netherlands.

The impact of this trend, which is confirmed by more recent research, should not be exaggerated.[23] The distribution of school resources in the region is probably still relatively equal by international standards, and in all transition countries, including Russia, parental wealth seems to have only a modest influence on the performance of students.[24] One reason for this may be the high level of "cultural capital" that most homes in these countries appear to possess: 90 per cent of Russian students in the PISA test reported that their homes contained works of classical literature, compared with fewer than 60 per cent in EU countries. The proportion of students who reported having visited a theatre or an art gallery was higher in the Czech Republic, Hungary and Latvia than in any advanced industrialized country. The PISA tests show that such cultural capital does have a positive impact, particularly on the literacy performance of students.[25]

Other information suggests that another factor is the considerable desire among parents in transition countries that their children do well at school. Figure 3.5 shows that the level of parental involvement in schools is higher in most transition countries than in EU countries. The data in this figure relate to membership on school committees, but parental involvement is also higher in transition countries than in EU countries in areas such as fund-raising and participation in school projects. Direct involvement appears to be one way in which parents can compensate for more restricted resources. There is little doubt that it improves the quality of education.

Moreover, PISA data show that parents in transition countries are more likely to help their children with homework than are parents in EU countries. Whereas a third of students, on average, in EU countries reported receiving help with homework from their mothers several times a month or more, this was true of over half of students in Russia and of more than 40 per cent in the Czech Republic, Hungary and Poland. The students themselves spent more time on homework in most transition countries than in advanced industrialized countries. The TIMSS study shows that students spent over three hours per day on homework in Bulgaria, Latvia, FYR Macedonia, Moldova, Romania and Russia, compared with 2.2 hours in Canada, for example, and 1.8 hours in Finland.[26]

Is this enormous effort on the part of both students and their parents compensating for weaknesses in the education system in transition countries? Figure 3.6 shows the annual number of hours spent on learning in transition countries and in advanced industrialized countries through instruction (grey bars) and in total (green bars), taking account of instruction, the time spent in school when not under formal instruction and homework. The bars are darker for the advanced industrialized countries. Students in most transition countries spend less time under formal instruction than do those in the advanced industrialized countries, but spend more time, on average, in total learning activities. Without these extensive learning activities, students in transition countries might conceivably perform worse in both the PISA and the TIMSS tests. These extensive efforts of the students themselves and of their parents may be compensating somewhat for deficits in the quality of learning in schools throughout the region.

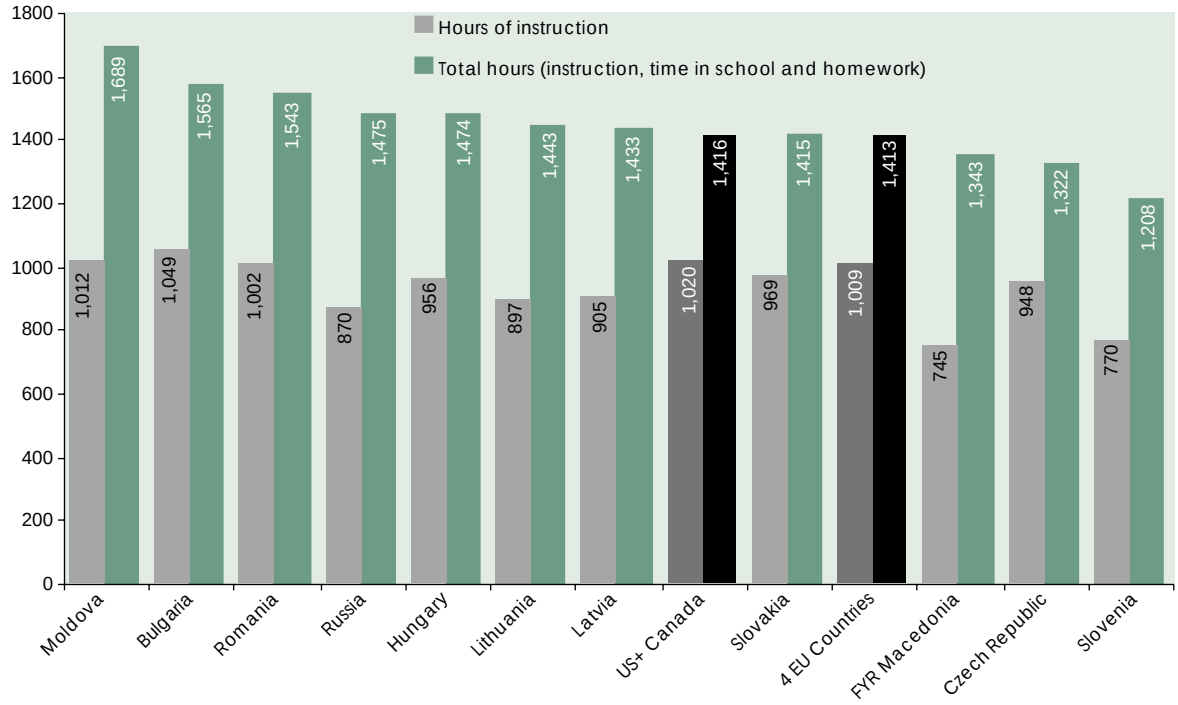
Urban and rural schools

There is evidence to indicate that the quality of learning may be substantially worse in rural schools than it is in urban schools in some transition countries. The TIMSS 1999 assessment shows that this is particularly the case in Hungary and Romania.[27] An OECD review argues in relation to schools in remote areas of Russia:

> "They cannot afford proper maintenance, sanitation is inadequate, and conditions are deteriorating. These schools also lack school materials and textbooks, and highly trained teaching personnel. . . . Rural schools and those located in marginal districts receive less financial support than city schools because parents are less able to give private donations and enterprises are less willing to invest in schools with unexceptional students. The main clients of rural and village schools are children whose parents have minimal education, many of whom are marginally employed in farming and barely scrape together a living."[28]

Figure 3.6

Average time spent in instruction, in school and in doing homework (hours per year)



Source: Mullis et al. (2000), op. cit. (Figure 3.1), Exhibit R1.11, R3.6 and R3.7.

Note: See the note to Figure 3.5.

The comments of a rural parent in Russia's Yaroslavl oblast, who was interviewed in early 2000, are also revealing.

> "In some subjects [teachers] don't know anything at all. . . . And there is the money problem, of course. They don't have a single computer. They don't even know what it means. There are no sewing machines or sports equipment. The gym hall doesn't work. It's much better in the city, of course. It's more interesting for the child – there are more people, they are more developed, quite a different atmosphere. Also, there are teachers you can choose from."[29]

Figure 3.7 shows that, in Russia, Hungary and Poland, principals of rural schools that participated in the PISA exercise were more likely than their urban counterparts to agree that the learning of students was hindered by lack of instructional materials.

3.4 Approaches to teaching and learning

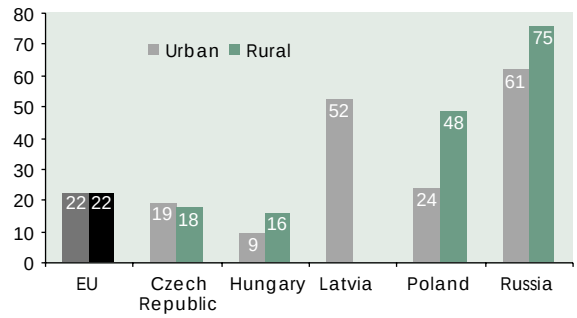
How far do the results of the international tests reported in Section 3.2 reflect the current approaches to teaching and learning in the region's schools? To what extent would increased resources improve the quality of learning? This section looks at the use of "factology" in teaching in the region and at the implications of the introduction of more "progressive" teaching methods.

Factology and progressive methods

The traditional approach to teaching in the region has been characterized as "factology", which focuses on

Figure 3.7

School principals who think that the learning of students is hindered by a lack of instructional materials (per cent)



Source: PISA microdata: <*www.pisa.oecd.org*> (accessed 8 April 2002).

Note: The percentages refer to principals indicating that learning is hindered "to some extent" or "a lot". The EU is a simple average of the per cent scores for Belgium, Denmark, Finland, Germany, the Netherlands, Portugal, Sweden and the UK. No score is given for rural schools in Latvia.

building up among students their awareness of facts or the ability to solve a known class of problem, but not necessarily in applying a given technique to a new problem or in choosing which technique to use to solve a problem.[30] The PISA study shows that, in general, students from transition countries are more likely than students in EU countries to use memorization techniques in learning (for example, repeating items over and over), suggesting that factology is still widely practiced in the region.[31] This may be part of the reason why students in transition countries perform quite well in the TIMSS assessments, which place emphasis on knowledge, but less well in the PISA assessments, which attempt to measure the application of knowledge.

It is tempting to respond to information of this kind with a call for a revolutionary change in teaching methods in the transition countries. Many donor-sponsored attempts at reform point in this direction. However, "progressive" teaching methods (discovery learning, individual "projects", the rejection of whole-class teaching and so on), which were widely adopted in several advanced industrialized countries in the 1970s and 1980s, are now increasingly being questioned and sometimes set aside in favour of a return to traditional teaching and learning strategies.[32] Whole-class teaching is by far the most commonly used method in transition countries, and ensuring that it is done well (protecting the active discourse between teacher and pupils and conveying values about the nature and worth of different ways of thinking, knowing and understanding) may be less risky than trying to transplant new methods which are increasingly being questioned in the countries where they were first employed. There is a danger of throwing out the "baby" of good academic results in mathematics and science with the "bathwater" of old-fashioned teaching methods, particularly in systems that are starved of resources. The gradual and incremental reappraisal of teacher training and retraining and the creation of an environment conducive to better teaching may produce more positive results with less disruption.

Among the requirements for better teaching and learning is the establishment of national examination systems which encourage elaboration and discourage excessive reliance on memorization. Such systems should be transparent, rigorous and fair, allowing children with similar levels of achievement to perform equally well and to be certified as having done so. They should be free of manipulation by teachers either on behalf of their schools, or in favour of particular children, and they should be recognized nationally. They should be untainted by the "illegal payments to support positive outcomes" mentioned in several focus-group interviews.[33]

In many transition countries, these conditions have not yet been met. In Russia, for example, the Ministry of Education is aware of how poorly public examinations measure different levels of ability and knowledge. Very few students fail (for instance, about 1 per cent in the Russian language examinations). Institutions of higher education do not recognize secondary school examination results, so students have to take entrance examinations, usually specific to one institution. As an OECD review comments,

> "Many weaknesses exist in the traditional modes of assessment and new approaches are imperative. . . . Valid, reliable and objective assessment is a prerequisite to providing data for proper certification and monitoring purposes."[34]

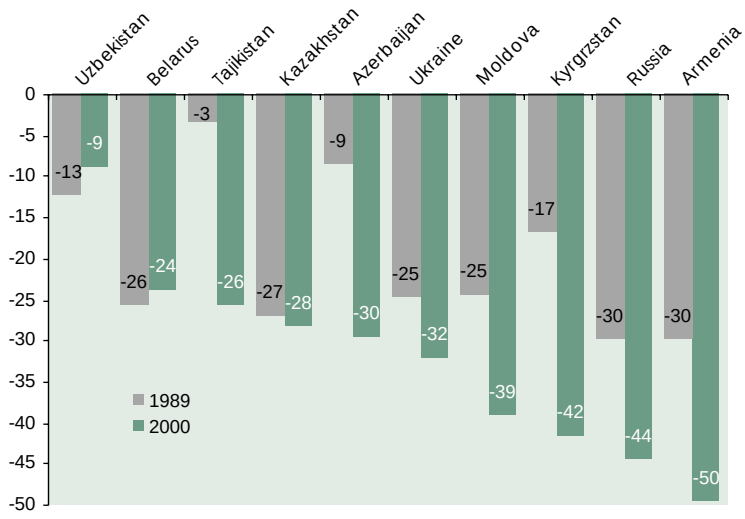
The need for more resources

Creating the conditions for better teaching almost certainly also requires more resources. One important problem facing the region's schools in this respect is the collapse in the purchasing power of teacher salaries. As Figure 3.8 shows for those CIS countries for which data are available, teachers were already underpaid relative to average earnings in 1989, and in most countries the gap between average earnings and the wages of teachers widened during the 1990s. Delays in the payment of salaries have also been common.

There are also relatively few young teachers in the region. Figure 3.9 shows that the proportion of eighth-

Figure 3.8

Comparison of wages in education and average earnings, CIS countries, 1989 and 2000 (per cent difference)

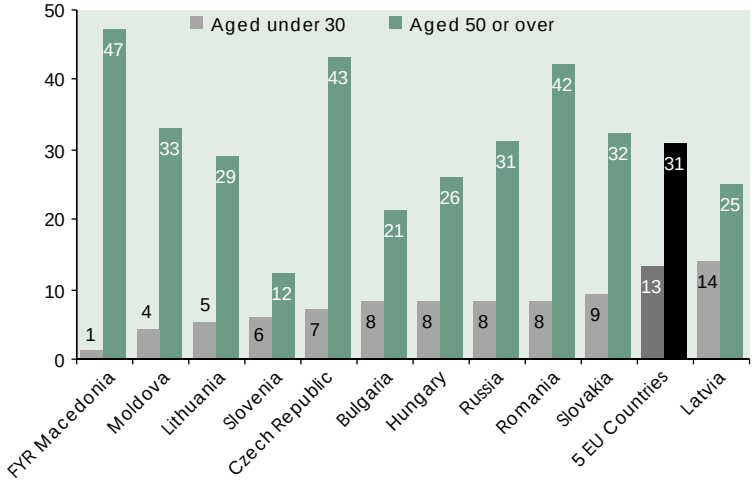


Source: CIS Stat (2001), *Official Statistics of the Countries of the Commonwealth of Independent States, 2001-6,* Interstate Statistical Committee of the Commonwealth of Independent States: Moscow, -CD Rom.-

Note: The later year for Armenia, Kazakhstan and Uzbekistan is 1999.

Figure 3.9

Eighth-grade mathematics students with teachers aged under 30 or over 50 (per cent)



Source: Mullis et al. (2000), op. cit. (Figure 3.1), Exhibit 6.1.

Note: See the note to Figure 3.5.

grade mathematics students with a teacher under 30 years of age is below the EU average in most transition countries, and, in a few countries, notably Czech Republic, FYR Macedonia and Romania, the proportion of students with a teacher aged over 50 is much greater. Mathematics teachers are more well qualified in the region than in comparable countries elsewhere, but, as older staff retire, it may be difficult to recruit young qualified teachers into a severely underpaid profession.

Shortages of materials and equipment are also a problem. The TIMSS data show that, apart from the Czech Republic, Hungary and Slovakia, the countries in the region compare badly with advanced industrialized countries in the extent to which such shortages affect instructional capacity in mathematics and science. This is particularly the case in Moldova and Russia.[35]

3.5 Quality and efficiency

This section explores the possibility that the resources needed for the creation of the conditions for better teaching can come from improvements in efficiency, which the demographic opportunity of falling numbers of children should facilitate.

The demographic opportunity

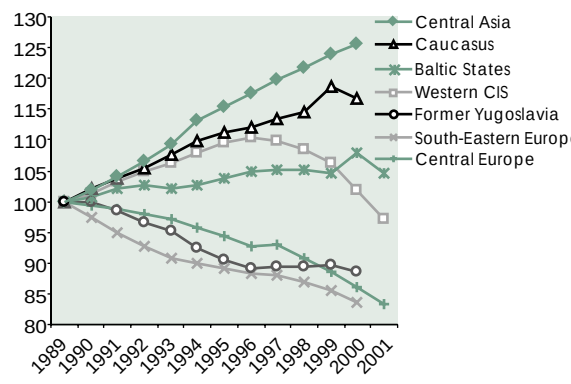
How far can the resources needed to create the conditions for good teaching and learning be generated by making education systems more efficient? A recent World Bank report recommended the following measures: consolidation of schools, reorganization of schools in large towns or cities by grade levels so that common facilities and teaching staff can be used more efficiently, use of multigrade teaching in smaller schools, postponement of specialized curricula to tertiary education, an increase in class sizes, and an increase in teaching loads in exchange for better pay.[36] Whatever the political feasibility of some of these recommendations, demographic trends certainly present some governments with room for manoeuvre in this field.

The number of basic-school-age children is now falling in almost every part of the region. Figure 3.10 shows that in Central and South-Eastern Europe and former Yugoslavia numbers in this age group began to decline at the start of the 1990s. In the western CIS, the drop dates from around 1996, while in the Baltic states and the Caucasus it is only beginning, and in Central Asia it has not yet begun.

Falls of this magnitude (by between 11 and 17 per cent in three subregions and 3 per cent in another) over the decade should have given scope for a reduction in the number of teachers to the benefit of public expenditure per teacher. This demographic opportunity was not immediately grasped. Figure 3.11 shows that the number of basic-education teachers across the region was mostly higher in 1999 or 2000 than in 1989. However, there are signs of change in some countries. The number of teachers has been decreasing in South-Eastern Europe since 1996 and in a few other countries since the late 1990s. It must be hoped that the best or the most qualified teachers are not the only ones who are leaving to take well paid jobs elsewhere and that the demographic opportunity is being seized in a way that is not jeopardizing teaching quality.

Figure 3.10

Population of basic-school-age children, by subregion, 1989-2001 (1989 = 100)



Source: MONEE project database.

Note: The statistics on basic-school-age children cover children aged 7-15 in 14 countries, 7-14 in 10 countries and 6-13 in 3 countries.

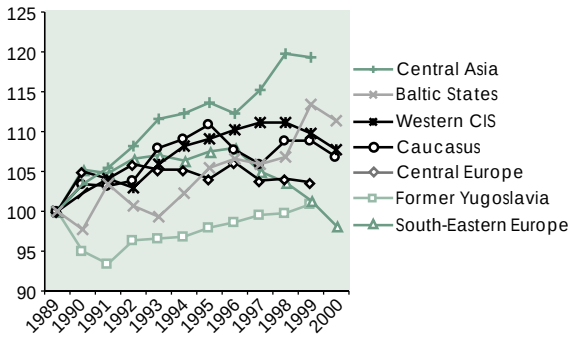
Economic growth and the reform of educational financing systems

Even if all education were reorganized along the lines proposed by the World Bank and the demographic opportunity were fully seized, quality improvements would still be dependent in many countries on raising more tax revenue or changing the composition of government expenditure in order to increase the proportion of GDP that is spent on education. The range of education expenditure within the region was wide in 2000, from 6.8 per cent of GDP in Latvia to 2 per cent in Tajikistan (Statistical Annex, Table 7.6). What this means in terms of the real resources available to education systems relative to pre-transition days depends also on what has been happening to GDP. What it means in terms of the resources available for each child depends, in turn, on what has been happening to the school-age population. The analysis of public expenditure on education in the Article "Social Trends in Transition" shows that the need for more resources is particularly great in the Caucasus and Central Asia because of a combination of low public expenditure and large child populations.

However, it is worth noting that the recent improvement in economic growth in the transition countries provides an opportunity to increase the resources for education. Even in the region's poorest country, Tajikistan, GDP is expected to rise substantially between 2000 and 2005, and, during this period, the Tajik Government expects to raise the proportion of GDP spent on education to 2.6 per cent.[37] This real gain in public education expenditure will not, on its own, be enough to solve the country's problems of quality, but, in conjunction with assistance from international donors, it will be a good start.

Figure 3.11

Changes in number of basic-education teachers, by subregion, 1989-2000 (1989 = 100)



Source: MONEE project database.

Note: Data refer to the average change in the number of teachers for countries in each subregion. Data are not available for Bosnia and Herzegovina and FR Yugoslavia (former Yugoslavia), Latvia (Baltic states), Ukraine (western CIS) and Tajikistan (Central Asia) in any year and for Czech Republic (Central Europe) in 1990 and Kazakhstan (Central Asia) in 1997.

3.6 Conclusions

The results of the international assessments considered in this Article send mixed messages about the quality of learning in the transition countries that participated in the assessments. In the wealthier countries of Central Europe and to a considerable degree in Russia and the Baltic countries, academic standards in two areas of traditional strength, mathematics and science, are being maintained. In the poorer countries of Europe – Romania, FYR Macedonia and Moldova – the quality of learning appears to be lower. There is little doubt that, in the countries of the Caucasus and Central Asia, none of which are represented in the international surveys discussed in this Article, but most of which are troubled by poverty and low expenditure on education, the situation is at least as bad.

However, even in the richest countries in the region, the results of tests of the ability of students to use academic knowledge and skills in three areas – mathematics, science and literacy – are not inspiring. This may in part be the outcome of the factology approach to teaching, whereby reliance on the memorization of facts appears to be more widespread than in EU countries. Still, a revolution in teaching methods is not necessarily the best response. What is needed is to create the conditions for better teaching, including national examination systems.

These uninspiring results would clearly be worse were it not for the considerable effort that parents and the students themselves put into education. This is perhaps the most surprising finding in this analysis. Without these efforts and a "learning-friendly" environment that is common in many homes in the region, the quality of learning would probably be a lot worse, and the spectre of "unilateral educational disarmament" might seem more real than the international survey results suggest.

Improvement is therefore necessary throughout the region. Creating the conditions for better learning, however, also requires more resources. Teachers' pay should be raised, and more resources for equipment and buildings are badly needed. In the poorest countries and even in some parts of the richer ones, the basic prerequisites for quality learning are often simply not available. Greater efficiency can generate some resources to improve quality, and the demographic opportunity of falling numbers of basic-education-age children is making it easier to obtain efficiency gains. However, particularly in the Caucasus, Central Asia and the western CIS, real public expenditure on education must be increased. Renewed economic growth should make this easier to achieve.

In summary, all countries in the region should pay more attention to education. Reforms in education sys-

tems are urgently needed, but they should be incremental, building on the foundations that exist, including the strong level of parental support. Public expenditure on education should be increased and should aim at maintaining and improving learning quality for all. Students from the poorest families and those who are weakest academically need high-quality education as much as the others.

Notes and references

1. Quoted by Lapham, L. H. (2001), "Study Hall", *Harper's Magazine*, Vol. 303, No. 1,816.
2. In one sense, the contexts are comparable. In the US and in many transition countries, the problem is one of growing divergence in the quality of education rather than a universal decline in quality.
3. Low proportions (about 15%) of teenage respondents to the 1997-1998 Health Behaviour in School-Aged Children Survey in advanced industrialized countries and in transition countries agreed with the statement, "I like school a lot". See *Regional Monitoring Report*, No. 7, pages 23-25 and 56-57.
4. A UNICEF survey of child abuse in Georgia revealed that 40% of boys and girls had been subjected to humiliation and insults by teachers in school, and 20% said they had been shaken or pulled by the hair or ears. See Georgian Association of the Red Cross and UNICEF (2000), "Child Abuse Survey in Georgia", UNICEF-Tblisi: Tblisi, Georgia, Mimeo. See also *Regional Monitoring Report*, No. 6, pages 82-83.
5. See *Regional Monitoring Report*, No. 8, pages 54 and 77.
6. See the results of the second International Assessment of Educational Progress, which surveyed 9- and 13-year-olds, reported on page 125, World Bank (1996), *World Development Report 1996: From Plan to Market*, Oxford University Press: New York.
7. An extension of the PISA exercise (PISA+) is being conducted in 2002 in several non-OECD countries, including Albania, Bulgaria, FYR Macedonia and Romania. Further rounds of PISA will also be carried out in 2003 and 2006. See <*www.pisa.oecd.org/*> (accessed 18 March 2002).
8. Mullis, I. V. S., M. O. Martin, E. J. Gonzalez, K. D. Gregory, R. A. Garden, K. M. O'Connor, S. J. Chrostowski, and T. A. Smith (2000), *TIMSS 1999, International Mathematics Report: Findings from IEA's Repeat of the Third International Mathematics and Science Study at the Eighth Grade*, International Study Center, Lynch School of Education, Boston College: Chestnut Hill, MA. Martin, M. O., I. V. S. Mullis, E. J. Gonzalez, K. D. Gregory, T. A. Smith, S. J. Chrostowski, R. A. Garden, and K. M. O'Connor (2000), *TIMSS 1999, International Science Report: Findings from IEA's Repeat of the Third International Mathematics and Science Study at the Eighth Grade*, International Study Center, Lynch School of Education, Boston College: Chestnut Hill, MA.
9. Countries with data from both 1995 and 1999 are (transition countries in *italics*): Australia, Belgium (Flemish-speaking schools), *Bulgaria*, Canada, Cyprus, *Czech Republic*, England, Hong Kong, *Hungary*, Iran, Israel, Italy, Japan, Korea, *Latvia* (Latvian-speaking schools), *Lithuania*, the Netherlands, New Zealand, *Romania*, *Russia*, Singapore, *Slovakia*, *Slovenia*, South Africa, Thailand and the US. Countries with data from 1999 only are: Chile, Taiwan, Finland, *FYR Macedonia*, Indonesia, Jordan, Malaysia, *Moldova*, Morocco, the Philippines, Tunisia and Turkey.
10. Mullis et al. (2000), op. cit., page 42, describe this benchmark as follows:
    "Students can apply basic mathematical knowledge in straightforward situations. They can add or subtract to solve one-step word problems involving whole numbers and decimals; identify representations of common fractions and relative sizes of fractions; solve for missing terms in proportions; recognize basic notions of percents and probability; use basic properties of geometric figures; read and interpret graphs, tables and scales; and understand simple algebraic relationships."
11. Countries included in the IALS are Australia, Belgium (Flemish-speaking schools only), Canada, Chile, Czech Republic, Denmark, Finland, Germany, Hungary, Ireland, the Netherlands, New Zealand, Norway, Poland, Portugal, Slovenia, Sweden, Switzerland, the UK, and the US. For more details on the tests survey respondents were asked to perform, see OECD and Statistics Canada (2000), *Literacy in the Information Age: Final Report of the International Adult Literacy Survey*, Organization for Economic Cooperation and Development: Paris, Appendix A. The quotation is from page x of that publication.
12. OECD (2001), *Knowledge and Skills for Life: First Results from PISA 2000*, Organization for Economic Cooperation and Development: Paris.
13. OECD (2001), op. cit., Box 1.2.
14. OECD (2001), op. cit., Table 3.6.
15. De Soto, H., P. Gordon and F. Saidov (2001), *Voices of the Poor: A Qualitative Assessment of Poverty for the Poverty Reduction Strategy Paper (PRSP)*, World Bank: Washington, DC, pages 38-40.
16. World Bank (2000), "Republic of Tajikistan: Poverty Assessment", Report, No. 20285-Tj, World Bank: Washington, DC, page18.
17. De Soto, Gordon and Saidov (2001), op. cit., page 39.
18. De Soto, Gordon and Saidov (2001), op. cit., page 40.
19. This analysis is based on Mertaugh, M. (2001), "Uzbekistan: Education and Living Standards: Draft Chapter for the Uzbekistan Living Standards Assessment", World Bank: Washington, DC, Mimeo.
20. MONEE project country report, Moldova.
21. OECD (2001), op. cit., Chapter 8.
22. OECD (1998), *Reviews of National Policies for Education: Russian Federation*, Organization for Economic Cooperation and Development: Paris.
23. Mezentseva, E. (1999), "Problems in Russian Schools Seen by Headmasters", *Tacis*, EDRUS 9608, reported in Tacis (2000), *White Book: The Development of Education in the Russian Federation*, Tacis: Moscow.
24. OECD (2001), op. cit., page 143 and Table 6.2.
25. OECD (2001), op. cit., pages 143-146.
26. Mullis et al. (2000), op. cit., Exhibit R1.11.
27. Based on the unweighted mean of the average scores by location reported for Bulgaria, FYR Macedonia, Hungary, Latvia, Lithuania, Moldova, Romania, Russia and Slovenia.
28. OECD (1998), op. cit., page 79.
29. VCIOM (2000), *Social Implications of Restructuring Education in the Yaroslavl Region*, All-Russian Centre for Public Opinion and Market Research (VCIOM): Moscow.
30. World Bank (1996), op. cit., Figure 8.1.
31. OECD (2001), op. cit., Table 4.6.
32. Crighton, J. (1999), "Learning to Change: Learning and Assessment in Post-Communist Schools", UNICEF Innocenti Research Centre: Florence, Mimeo. The principle behind discovery learning is that learning is going on all the time. Students are encouraged to discover meanings for themselves not only in the classroom, but also in out-of-class activities. The organizational strategy of whole-class teaching (or teacher-led learning) is to work on a single task with all students at the same time.

33. See also *Regional Monitoring Report*, No. 8, page 82.
34. OECD (1998), op. cit., page 91.
35. Mullis et al. (2000), op. cit., Exhibits R4.1 and R4.2.
36. Berryman, S. E. (2000), *Hidden Challenges to Education Systems in Transition Economies*, World Bank: Washington, DC, Table 4.1.
37. IMF (2001), *Republic of Tajikistan: Staff Report for the Second Review under the Third Annual Arrangement under the Poverty Reduction and Growth Facility, and Request for Waiver of a Performance Criterion*, IMF: Washington, DC, Table 5.