Education Equity Now!

A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States
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GLOBAL INITIATIVE ON
OUT OF SCHOOL CHILDREN

Education Equity Now!

A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States
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A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States

## Acronyms

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<th>Description</th>
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<tr>
<td>5DE</td>
<td>Five Dimensions of Exclusion</td>
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<tr>
<td>CEE/CIS</td>
<td>Central and Eastern Europe and the Commonwealth of Independent States</td>
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<tr>
<td>CMF</td>
<td>OOSCI Conceptual and Methodological Framework</td>
</tr>
<tr>
<td>CRPD</td>
<td>Convention on the Rights of Persons with Disabilities</td>
</tr>
<tr>
<td>DHS</td>
<td>Demographic and Health Surveys</td>
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<tr>
<td>EFA</td>
<td>Education for All</td>
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<tr>
<td>EMIS</td>
<td>Education Management Information System</td>
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<tr>
<td>EU</td>
<td>European Union</td>
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<tr>
<td>EU8</td>
<td>Eight countries that acceded into the European Union in 2004: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>GNI</td>
<td>Gross National Income</td>
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<td>GPI</td>
<td>Gender Parity Index</td>
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<tr>
<td>HDI</td>
<td>Human Development Index</td>
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<tr>
<td>ICLS</td>
<td>International Conference of Labour Statisticians</td>
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<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
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<tr>
<td>ILO</td>
<td>International Labour Organization</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>IPEC</td>
<td>International Programme on the Elimination of Child Labour</td>
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<tr>
<td>ISCED</td>
<td>International Standard Classification of Education</td>
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<td>MDG</td>
<td>Millennium Development Goal</td>
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<td>MICS</td>
<td>Multiple Indicator Cluster Survey</td>
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<td>MoRES</td>
<td>Monitoring Results for Equity Systems</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OOSC</td>
<td>Out of school Children</td>
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<tr>
<td>OOSCI</td>
<td>Out of school Children Initiative</td>
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<tr>
<td>PETS</td>
<td>Public Expenditure Tracking Surveys</td>
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<tr>
<td>PISA</td>
<td>Programme for International Student Assessment</td>
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<tr>
<td>PPP</td>
<td>Purchasing Power Parity</td>
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<tr>
<td>SMIS</td>
<td>School Management Information System</td>
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<tr>
<td>TLSS</td>
<td>Tajikistan Living Standards Survey</td>
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<tr>
<td>UCW</td>
<td>Understanding Children’s Work</td>
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<td>UIS</td>
<td>UNESCO Institute for Statistics</td>
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<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNESCO</td>
<td>United Nations Educational, Scientific and Cultural Organization</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>UNPD</td>
<td>United Nations Population Division</td>
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<td>WFP</td>
<td>World Food Programme</td>
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Foreword

All children and adolescents have the right to quality education. Yet this report finds that in the region of Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS), which is mostly home to middle-income economies, 2.5 million children of basic school age and 1.6 million children of pre-primary school age are out of school. At the upper secondary level, non-enrolment rates increase significantly in most countries. Additionally, there are many more children, perhaps millions, from the most marginalized communities, that are excluded from national data collection procedures and thus are invisible in national indicators on education. For example, there are an estimated 5.1 million children with disabilities in the region whose educational status is largely unknown.

In the context of the fast-approaching 2015 deadline to realize the Millennium Development Goals and the discussions around the post-2015 development agenda, it is more urgent than ever for governments and their partners to act to include every child in the region in quality learning. This study – Education Equity Now! A regional analysis of the situation of out of school children in the region – proposes the following priorities for action in countries in the region.

1. **Every child in school.** One child out of school is one too many; every child has the right to education. High school enrolment rates in the region are a testament to the commitment of countries in the region to ensuring children’s right to education. The work ahead requires closing the equity gaps in education participation by focusing on improved education policies for the inclusion of the most marginalized children.

2. **Every child learning.** The quality of education is crucial to ensuring that young people’s learning outcomes are relevant to the labour force, their personal growth and the society where they live. To improve educational outcomes, urgent attention is needed to better assess the overall levels of learning and the gaps in skills and knowledge, with particular attention to the equity gaps in learning that impede the most marginalized children. More and smarter investment is required to improve the quality of teaching-learning processes, with special attention to the quality of teacher education, recruitment and assessment systems.

3. **Every child learning early and enrolling on-time.** Early childhood education is a right for every child and is also a smart investment. Providing early learning services to the most marginalized children is the most cost-effective strategy for reducing equity gaps in access and learning in basic education and for helping children to enrol in school on-time. All children should start grade 1 at age 6 and should have access to one year of pre-primary education. In CEE/CIS this means a significant expansion in the number and types of early learning services available.
4. **Every child supported by effective and efficient governance systems.** Reducing equity gaps in school participation and learning requires steadfast commitment from governments. In CEE/CIS this means strengthening equity-enhancing government systems and encouraging inter-sectoral communication, coordination and collaboration around monitoring and responding to cases of out of school children. This requires financing mechanisms that enhance opportunities for marginalized children in remote schools, and seeking the views of young people and families.

UNICEF will continue to advocate and support countries to close equity gaps in school participation and learning outcomes. I trust the evidence presented in this report will inspire governments and their partners across the region to intensify their efforts to improve equity. Together we can include all children in quality learning.

Marie-Pierre Poirier  
Regional Director, UNICEF  
Central and Eastern Europe and the Commonwealth of Independent States
Executive Summary

Profiles of excluded children

Around 2.5 million children are out of school in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS) region. The percentage of out of school children (OOSC) ranges from 0.5 per cent in Bulgaria and Kazakhstan to 16.8 per cent in Montenegro\(^1\) at the primary-age level, and from 0 per cent in Kazakhstan to 12.7 per cent in Bulgaria at the lower secondary-age level. However, at lower secondary-age level data is missing for around one third of the CEE/CIS countries (7 of the 22 countries), highlighting the challenge of providing timely education data in many CEE/CIS countries, which needs to be addressed.

Pre-primary enrolment rates

Pre-primary education is not compulsory in many countries in the region and, hence, pre-primary-age children are not technically considered out of school in those countries. However, the importance of pre-primary education as a preparatory stage for primary is well established and lack of pre-primary is an important drop-out risk. Prior to the transition period in the 1990s pre-schools were fairly well established throughout the region, with the exception of countries such as Kyrgyzstan and Tajikistan where enrolment in pre-primary has always been low. However, following the dissolution of the Soviet Union enrolment rates in pre-primary programmes and frameworks dropped significantly. Although pre-primary enrolment rates have steadily increased over the past decade across the region, in some countries they are still below the pre-1990 level. In Azerbaijan, Bosnia and Herzegovina, Georgia, Kyrgyzstan, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey and Uzbekistan more than 45 per cent of pre-primary-age\(^2\) children are not in school.

National pre-primary enrolment rates disguise significant regional and sub-national differences: in certain regions or districts pre-primary rates are far lower than in others. For example, in the DRD region of Tajikistan only four per cent of pre-primary-age children are in school, and similarly in Kyrgyzstan pre-primary enrolment in some districts is below three per cent. In general, pre-primary enrolment tends to be lower in rural areas due to the lack of pre-school infrastructure and because poverty levels tend to be higher in those areas. Due to the relatively high cost of pre-primary, enrolment in pre-primary education is generally affected far more by poverty than is primary and lower secondary education. Hence, regional differences in pre-primary enrolment are likely to be closely related to disparate poverty levels by region. Household data for a number of CEE/CIS countries shows that pre-primary enrolment rates among the poorest quintile (i.e. poorest 20 per cent) are a fraction of enrolment rates among the wealthiest quintile. This highlights the

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\(^{1}\) According to UIS 2012 data, the out of school children rate at primary-age level for Albania is 20.1 per cent, the highest in the region; however this figure is likely too high due to inflated population estimates. It is in the process of being updated based on new census data at the time of writing of this report.

\(^{2}\) Children one year younger than the official primary age, according to the Dimension 1 definition.
important role of governments in meeting the costs of pre-primary education and targeting the acute needs of children from the poorest families.

Profiles of out of school children

At primary-age level the proportion of out of school children is relatively low in most CEE/CIS countries, and it is mainly at lower secondary level that larger numbers of children begin to drop out. However, there are some important exceptions: in five CEE/CIS countries – Azerbaijan, Montenegro, Moldova, Romania and Serbia – the number of primary-age out of school children increased in the past decade, which is a very worrying trend. Three additional countries also experienced steep increases in out of school children – Kyrgyzstan, Ukraine and Uzbekistan – although the situation improved in 2010. Another concern is that Central Asia is, after sub-Saharan Africa, the region with the highest proportion of primary-age out of school children expected to never enter school. A total of 51 per cent of children are in this out of school children category, posing the most serious challenge to policymakers.

At lower secondary-age level the number of out of school children has risen significantly in at least three countries: Bulgaria, Moldova and Romania. In Bulgaria, the rate of lower secondary-age out of school children increased more than five-fold between 2003 (2.3 per cent) and 2010 (12.7 per cent).

Just three countries account for over two-thirds of the total number of lower secondary-age out of school children in the region: Turkey, the Russian Federation and Uzbekistan. In these three countries combined, almost one million children of lower secondary age are out of school.

Certain groups of children are more likely to be out of school. Across the region girls are on average more likely to be out of school, with 5.4 per cent of primary-age girls out of school compared with 5.0 per cent of boys, and 6.5 per cent of lower secondary-age girls out of school compared with 6.0 per cent of boys. On the other hand, in some CEE/CIS countries the situation is reversed and boys are more likely than girls to be out of school. Within-country differences are often greater than between-country differences and reflect the complexity of addressing the problem of out of school children. A look at data from Kyrgyzstan serves to illustrate this complexity. Although data from the 2006 Multiple Indicator Cluster Survey (MICS 2006) shows that boys are more likely to be out of school than girls, the situation for most out of school girls is worse, as they are much more likely to never enter school or drop out early.

Roma children

Roma children are much more likely to be out of school compared with non-Roma children, and many drop out before completing primary or lower secondary education. Only an estimated 20 to 25 per cent of Roma children in CEE countries attend secondary schools, although it is difficult to obtain an accurate analysis of the situation for Roma children.

As Dimension 3 data is not available for seven countries, it is possible that the situation is deteriorating in more than three countries.
because of the scarcity of data, including data on the actual numbers of children from this group. There is a great need for more recent and more detailed education statistics for Roma children, including data for particular sub-groups. This could be used to better identify specific profiles of Roma children who are at risk of being excluded. For example, in Croatia and The former Yugoslav Republic of Macedonia, for which data is available separately for Roma girls and boys, it was found that Roma girls are much more likely to be out of school than Roma boys.

**Children with disabilities**

Children with disabilities are also much more likely to be out of school, although again due to lack of data it is very difficult to analyse the severity of the situation. Nevertheless, it is possible to make estimates using as a guideline the international benchmark for the proportion of the population with a disability. Based on this benchmark, an estimated 3.6 million children with a disability in the region are not officially recognized, and are hence not receiving the support and care that they need. In addition, the 1.5 million children with a disability who are recognized also often do not receive adequate support and care and tend to be segregated into special schools. Disability is still largely treated as a medical condition, with little differentiation made between impairment, illness and disability, although there is a gradual shift towards a ‘social model’ of disability and towards inclusive education, where children with disabilities are integrated into mainstream schools. Progress is patchy, and currently large numbers of children with disabilities remain excluded from education. Enrolment at pre-school and secondary levels is particularly low.

**Child labour**

Child labour poses a significant drop-out risk in the region; in rural communities in particular many children are engaged in some kind of work in the agriculture sector. The kind of work influences the risk of exclusion from education. For example, in Tajikistan urban working children are more than three times as likely as rural working children to be out of school. This could be because children in rural areas generally do unpaid seasonal agricultural work, whereas in urban areas working children are more often family bread winners and more often need to work year round. There also tends to be significant regional variation in child labour rates. For example, in Kyrgyzstan the percentage of children involved in child labour ranges from as low as 0.5 per cent in the capital Bishkek to 62.5 per cent in the largely rural Issyk-Kul province.

**Transition rates to secondary education**

Transition rates from primary to lower secondary are generally high in CEE/CIS countries, with the exception of Bosnia and Herzegovina where the transition rate is just 83.6 per cent. Turkey has made enormous progress over the past decades, both in terms of increasing transition rates and in reaching gender parity. The transition rate increased from just 31 per cent in 1977 to 96.7 per cent in 2008, and gender parity was achieved in 2008. Just two decades earlier – in 1990 – girls were much more likely to stop schooling after primary education, with only 69 girls continuing on to secondary education for every 100 boys.
Overage children

Looking at additional risk factors for dropping out of school, it was found that a number of countries have a high proportion of overage pupils. In Bosnia and Herzegovina, around one quarter of enrolled children are overage, and in Ukraine, Azerbaijan, Georgia and Albania the proportion of overage children is around or above seven per cent. With the exception of Georgia these countries were also among those countries with the highest rates of primary-age children out of school4.

Low performance in school

Another important risk factor is low performance in school. In the majority of CEE/CIS countries participating in the OECD’s Programme for International Student Assessment (PISA), more than 20 per cent of 15-year-olds are unable to perform tasks above the second lowest reading level. In four CEE/CIS countries more than half of pupils are unable to perform tasks above the second lowest reading level – Albania (57 per cent), Azerbaijan (72.7 per cent), Kazakhstan (58.6 per cent) and Kyrgyzstan, where this is the case for 83.3 per cent of children. The education system has failed these children, as they do not have the basic literacy skills to participate fully and meaningfully in society. In addition, in Albania, Azerbaijan and Kyrgyzstan those taking the PISA tests are those who have already passed through a selection process, as by age 15 a significant proportion of children have dropped out in these countries. The low quality of education is likely to be an important contributing factor to the high drop-out rate.

Upper secondary enrolment

Upper secondary enrolment rates are much lower than lower secondary enrolment rates, as many children drop out at the end of compulsory education. However, upper secondary enrolment – in terms of the gross enrolment rate – has risen considerably over the past decade. Across the region, the gross enrolment ratio in upper secondary ranges from 61.3 per cent in Tajikistan to over 100 per cent5 in Uzbekistan. In Albania, Moldova, Romania and Tajikistan there has been a huge increase in upper secondary gross enrolment over the past decade, whereas in Ukraine and Kyrgyzstan there has been a significant decline over the same period. Gender inequality increases at upper secondary level, although all countries are seen to be moving towards gender parity for the gross enrolment ratio.

Differences between primary adjusted net enrolment6 and secondary net enrolment rates reveal the different priorities across the region. Bulgaria, Georgia, Kyrgyzstan and Turkey are close to reaching universal enrolment for primary-age children, but enrolment at secondary level trails behind by more than 15 per cent. In contrast, in Uzbekistan and

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4 As indicated in a previous footnote, the out of school children rate at primary-age level for Albania is 20.1 per cent, the highest in the region, although the figure is likely too high due to inflated population estimates. This figure will be revised based on new population census data. But even were it only half this level it would still be very high in comparison with other countries in the region.

5 The gross enrolment ratio can be greater than 100 per cent as a result of grade repetition and the entry at ages younger or older than the typical age at that grade level.

6 Adjusted net enrolment is the number of pupils of the school-age group enrolled in either primary or secondary education expressed as a percentage of the total population in that age group.
Moldova’s enrolment at the secondary education level is very high compared with the rest of the region, although at the same time they do have relatively high rates of primary-age out of school children compared with other countries in the region.

The different profiles of out of school children discussed in this chapter as well as the different categories of out of school children (those entering late, those who dropped out and those who will never enter) reflect the different underlying reasons why children are out of school. This is looked at in more detail in Chapter 3.

**Barriers and bottlenecks**

The barriers and bottlenecks leading to exclusion from education have been analyzed according to four different types: those which influence a household’s decision to enrol a child – ‘demand-side’ socio-cultural barriers and ‘demand-side’ economic barriers; and those which involve the ability, or willingness, of education systems to deliver education to all – ‘supply-side’ barriers, and political, governance, capacity and financial bottlenecks. In addition, they have been analyzed separately by profiles of out of school children, as children with different profiles are affected very differently by the different types of barriers and bottlenecks. Although it is not possible to generalize causes of exclusion for the entirety of the CEE/CIS region, this analysis has sought to identify and disentangle some of the key factors, linking them to the profiles of out of school children, as discussed in Chapter 2, and focusing in particular on those issues which are broadly relevant across all countries in the region.

**Demand-side barriers**

Throughout the world girls are more likely to be out of school, and this is also the case – on average – in the CEE/CIS region, as discussed in Chapter 2. However, in some CEE/CIS countries boys are more likely to be out of school. The trend also changes over time – from Dimension 2 to Dimension 3 and beyond compulsory education, and within each country may vary significantly according to region and socio-economic characteristics. For example, in Tajikistan girls in wealthy families and living in urban areas are not much more likely than boys to be out of school, but are far more likely to be out of school if they are from poor families or live in rural areas. Analyzing the causes is also not straightforward. On the one hand, in some countries in the region practices and attitudes favouring men over women are on the increase following the collapse of Soviet rule, such as arranged marriages, child marriage and patrilocality. On the other hand, the gender gap in countries where girls’ enrolment was much lower narrowed in the last decade, notably in Tajikistan and Turkey. It is perhaps useful to also consider socio-cultural barriers in the context of economic barriers. Poverty rates in terms of the population living under US$2 a day at purchasing power parity (PPP) have declined significantly in both Tajikistan and Turkey (World Bank, 2011). With reduced financial pressures, families may decide to keep both girls and boys in

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7 Data for secondary net enrolment was not available for Moldova, but the secondary gross enrolment ratio was 104 per cent in 2010.
8 This report employs the Five Dimensions of Exclusion model. For a definition of each of the five dimensions, see section 1.2.
9 Patrilocality is when a wife joins the extended family of her husband following marriage.
school. At the same time boys also face socio-cultural pressures to drop out from school to financially support their families. In Armenia, for example, boys are more likely to work in unskilled jobs (for example, construction) whereas girls – having fewer such opportunities – have a greater incentive to stay in school.

‘It is a self-perpetuating cycle where social exclusion and poverty lead to exclusion from education, and low levels of education leads to further social exclusion and poverty.’

Roma children face many different kinds of barriers. Among them are those of a socio-cultural nature including discrimination, early marriage for girls and the language spoken at home, as well as social exclusion and poverty and related problems such as lack of birth registration. It is this combination of factors of exclusion which makes Roma children particularly likely to be out of school, and also makes their situation particularly difficult to address. It is a self-perpetuating cycle where social exclusion and poverty lead to exclusion from education, and low levels of education leads to further social exclusion and poverty. Poverty also drives migration for economic reasons, and frequent migration is itself a cause of social exclusion (not being part of the community). It also causes children to miss school, fall behind and ultimately drop out. All these factors are therefore closely interlinked and should not be considered as separate barriers.

Children with disabilities face widespread discrimination in the region. This includes discrimination from teachers, which affects the attitudes of parents. Fear of social stigma can prevent parents from having their child assessed and make them reluctant to seek help. As discussed earlier, only 1.5 million of an estimated total of 5.1 million children with disabilities and special education needs are currently registered in the region. Socio-cultural attitudes towards disability are a crucial obstacle to overcome in registering children with disabilities and recognizing their rights and needs. Disability also makes families more vulnerable to poverty, because of lost wages from having to take care of children with disabilities as well as associated medical and other costs – such as the cost and difficulty of transportation to school.

Even if school is supposedly free, there are many indirect costs of education which can make it prohibitively expensive for families living in poverty. This includes the cost of school uniforms, textbooks and other school materials, lunch money, transportation costs and even bribes. For example, in Kyrgyzstan unofficial payments for free and compulsory education have increased since the breakup of the Soviet Union. Children of migrant families are particularly vulnerable because they often do not have the required registration documents.

Poverty is closely linked to child labour, and particularly in Central Asia and the Caucasus many children from low-income families need to earn money to support their families. Children may even be the only breadwinners in some families, placing a huge burden on their shoulders. In such circumstances, even though working children may still attend school their level of engagement is likely to be reduced. Work may cause them to be absent for long periods and less likely to be able to do homework. Financial pressures and long work hours can interfere with their ability to concentrate at school. All these factors increase their chances of dropping out. The impact varies according to the type, duration and regularity of work – and this in itself can vary significantly by area and between girls and boys. In rural areas seasonal agricultural work is more common, which can be very
intensive for a certain period of time but does not affect the rest of the year. Girls are more likely to work in the home and take care of siblings whereas boys are more likely to be engaged in physically heavy work such as construction. These factors influence the amount of time children spend working, how stressful and draining the work activities are, and ultimately how those activities affect their engagement with school.

Supply-side barriers

Pre-primary enrolment rates are generally very low in the CEE/CIS region, as discussed in Chapter 2. One of the key causes is the lack of pre-primary infrastructure, including crèches, nurseries and pre-school institutions, which has deteriorated, particularly in the poorer former Soviet countries. For example, in Tajikistan the number of pre-primary school institutions dropped from 944 to 485 between 1991 and 2008.

Another important supply-side barrier is the lack of adequate water and sanitary facilities in schools. This particularly affects the participation of adolescent girls. Moreover, the situation has worsened in some areas since 1990. In Tajikistan, many schools – particularly in rural areas – have only simple pit latrines and lack a water-supply system. Besides the facilities themselves, privacy is also an issue. In many schools there are no separate toilets for girls and boys, and the infrastructure itself may not provide an adequate level of privacy, which particularly discourages teenage girls from going to school.

Schools and classrooms are often not accessible to children with disabilities, and more generally schools often lack the required infrastructure and resources. Unfortunately, the concept of ‘defectology’\(^\text{10}\) continues to influence the design of education provision for children with disabilities. This is rooted in a medicalised approach in which children with disabilities are considered to be ‘defective’ from the norm. This has led to the mass institutionalization of children with disabilities, while many such children are confined to the home. This is also related to prevailing discrimination and social stigma, as discussed above.

Given the historical marginalization of children with disabilities, it is perhaps not surprising that there are significant supply-side barriers to inclusive education for such children in the region. Typically, schools are poorly resourced and lack specialized special education teachers and counsellors, while many countries lack a good curriculum for children with disabilities and special needs, and public transport is often not accessible to children with mobility problems.

Roma children in many countries in the region have been disproportionately segregated into special schools. This has been justified in terms of ‘socialization defects in the family’, language issues, and other socio-cultural factors which have led to the mistaken evaluation that these children are unable to follow a standard education path in regular schools. Even those Roma children who attend regular schools have often ended up in Roma-majority schools, remaining segregated geographically from non-Roma children, while those Roma children who attend school with non-Roma children have tended to be segregated by classroom or within the classroom. Furthermore, the facilities in Roma-majority schools tend to be neglected, as they are in special schools, while curricula are inclined to be mono-

\(^{10}\) UNICEF does not support this approach.
cultural and do not take account of the Roma language or culture. Many Roma children face huge challenges because the language of instruction is not the language they speak at home. In addition, few Roma have opportunities to attend pre-school – either because none are available or due to their prohibitive cost, further reducing their opportunities to successfully continue into mainstream education.

The low quality of education is a major problem in many countries in the region. This leads to a lack of engagement in school, increasing the risk of drop-out. As discussed earlier, learning achievement tends to be much lower in rural areas compared with urban areas. This is indicative of the large inequities within countries with respect to the quality of schools, which is looked at in more detail below. Out-dated curricula and teaching practices – preparing students for memorisation of facts rather than the application of skills which are critical for performance in knowledge-oriented economies – are also significant obstacles to improving the quality of education. The lack of pre-primary, as discussed previously, is another important factor which especially affects the learning opportunities of socio-economically disadvantaged children. In some countries, particularly in Kyrgyzstan and Tajikistan, the low salary levels and prestige of the teaching profession is a key issue. This results in a loss of qualified individuals from the teaching profession to more attractive professions as well as to other countries.

**Political, governance, capacity and financing bottlenecks**

The centralized nature of the education system in some countries in the region acts as a significant barrier to reforms and the adoption of policies and strategies which could reduce exclusion from education. Local authorities do not have the power and flexibility for independent decision-making and responding to local needs. At the same time, moves towards decentralization, if poorly implemented, can worsen the situation of children who are excluded or at risk of exclusion. New procedures and responsibilities can lead to mismanagement of funds if not accompanied by adequate training. Moreover, decentralization initiatives which are not carefully monitored, managed and coordinated can open up opportunities for corruption. Empowering communities can also further widen the gap between schools in socio-economically advantaged and disadvantaged communities.

The distribution of education financing is an important consideration in identifying uneven and unbalanced spending geographically (for example, between regions), or between different levels of education. For example, Moldova has a very high proportion of education expenditure going to upper secondary and a very low proportion going to the primary education level compared with other countries in the region – or indeed the world. At the same time, it has one of the highest rates of primary-age children out of school in the region. Meanwhile in Turkey, the South Eastern Anatolia region has received lower educational investments than other regions. The region is characterized by lower enrolment rates and much higher student-to-classroom ratios compared with other areas. Lack of funding can also result in harsh school conditions, such as in Tajikistan where there are schools which do not have adequate heating during winter time.
In terms of vertical equity – the application of differential funding levels for recipients whose needs differ – the results for countries participating in PISA reveal glaring inequalities between socio-economically advantaged and disadvantaged schools. Rather than providing additional or better resources to socio-economically disadvantaged schools – as is the case in countries such as Estonia, Hungary, Germany and Poland – the opposite is the case in the CEE/CIS countries examined, with the exception of Serbia. Socio-economically disadvantaged schools are in general less likely to have full-time teachers, in particular full-time teachers with a university-level degree. They also tend to have much lower levels of educational resources.

In terms of measures adopted to advance inclusive education for children with disabilities, there has been some progress. Most countries in the region are signatory to the UN Convention on the Rights of Persons with Disabilities. However, a number of countries have not yet ratified the Convention and are not legally bound to implement inclusive policies for children with disabilities. Moreover, even for those countries which are committed, progress has been sporadic and inclusive education policies are generally not harmonized with general education planning. They lack budgetary support, action frameworks, indicators and implementation committees, and there is still confusion between the concepts of integration and inclusion. In addition, there is a gulf between policy and what happens in practice. Lack of resources is often cited as a barrier to change, even though evidence suggests that the provision of inclusive education is cost-effective. Moreover, beyond the policy level what is also required is a shift in attitudes, not just at the level of the government, but also within communities and schools, including the attitudes of teachers and parents.

Although this chapter discusses different types of barriers in relation to specific profiles of out of school children, it is often a combination of barriers which lead to exclusion from education. A good example is the case of Roma children in Romania. The wealthiest quintile of Roma children here were found to be no more likely to be out of school than non-Roma children. On the other hand, many Roma children are also poor, lack access to or cannot afford pre-primary education, attend poorly resourced schools, do not speak the language of instruction at home, and may be more likely to be involved in child labour. It is this combination of factors, rather than ethnicity in and of itself, which greatly increases their likelihood of being excluded from education. In the same way, other barriers such as those related to poverty, disability and gender are not necessarily a significant barrier on their own – but become significant in combination with other characteristics and corresponding barriers to education.

Policies and strategies

Global context, regional challenges and education reforms

Following the dissolution of the former Soviet Union and Yugoslavia, the newly independent and newly autonomous countries in the region have struggled with weakened administrative structures, fewer and less stable financial resources and lowered governing capacity. These challenges to effective governance stem largely from a lack of formal training in public
finance or management at various administrative levels, the absence of reliable monitoring and evaluation mechanisms, the absence of community involvement in planning and policy-making, and a political culture of less-than-transparent budget allocations, susceptible to corruption. Additional policy challenges are posed by the creation and reconfiguring of new cultural and political identities, giving rise to ethnic tensions. The outmigration of educated labour or ‘brain drain’ also poses significant challenges, in particular for the smaller countries in the region.

In this context, following the collapse of communist regimes there was a period of significant reform to educational structures and curricular contents, followed by steps towards more coherent and coordinated policy ‘frameworks’ – often following external models. These initiatives have since been brought into closer alignment with national priorities. Education reforms which have taken place across the region include the development and implementation of learning assessments, the introduction of more choice and flexibility in terms of school types, corresponding educational pathways and curricular offerings, and the recognition of the right to education as a fundamental human right as enshrined in article 26 of the Universal Declaration of Human Rights. Recognizing, exposing and opposing the violations of human rights in education remains a challenge, however. At the same time, political instability and rapid changeover of high-level education decision-makers has characterized some CEE/CIS countries, leading to uneven implementation of reform and even reversal of existing policies.

Strategies and policies addressing specific profiles of out of school children

Significant learning gaps between children from different socio-economic groups already exist in grades 1 and 2, and in most schools these gaps tend to widen rather than close in subsequent grades. The evidence is clear that pre-primary education plays a crucial role in narrowing this gap, and its effects continue throughout a child’s school and post-school life. Although enrolment in pre-school is very low throughout the region, as discussed in Chapter 2, a number of countries in the region have now introduced a compulsory preparatory year of pre-primary or lowered the entrance age of primary by one year. Kyrgyzstan recently introduced 100-hour and 240-hour pre-primary programmes, which were seen as a more cost-effective way of scaling-up access. However, at least one year of full-time pre-primary education is needed to help children successfully transfer into primary education. Moreover, in spite of these initiatives, in practice many children remain without access to pre-primary education, and up-scaling pre-primary will take time. Introducing pre-primary may be costly in the short-term, but in the long-term it is expensive not to invest in pre-primary, as it is the most cost-effective period in which to invest in a child’s life.

‘Introducing pre-primary may be costly in the short-term, but in the long-term it is expensive not to invest in pre-primary, as it is the most cost-effective period in which to invest in a child’s life.’

A number of innovative strategies have been adopted across the region which address the exclusion of Roma children from education. For example, Romania has implemented social and media campaigns to combat prejudice and stereotyping of Roma, established school
inspectorates for monitoring and advising on issues specific to Roma, and incorporated inclusive and intercultural education as part of teacher training. Meanwhile, Albania launched a summer school programme for disadvantaged Roma and other marginalized children in collaboration with various partners, including the Ministry of Education and Science and NGOs. It aimed to bring ‘invisible’ children who do not attend school into the system, as well as engage children at risk of dropping out, by demonstrating that school can be a welcoming and child-friendly environment. The programme included various educational and recreational activities, such as sports and excursions.

From a legal and administrative point of view, policies and strategies are required which acknowledge the difficulties facing Roma and other children who do not have a birth certificate, and facilitate the means for children and their families to obtain them.

In reducing barriers to education for children with disabilities, a significant step has been made by many countries in the region by being signatory to the UN Convention on the Rights of Persons with Disabilities, as discussed in Chapter 3. However, not all countries have ratified the Convention and even though laws or legal resolutions are an important first step, there is a long way to go in practice. For example, educational institutions need to be made accessible to children with disabilities, and suitable transportation to school needs to be organized. Laws and regulations are useless if they are not being implemented, and implementation may be ineffective if it is not closely monitored. Changing deeply engrained attitudes and practices towards children with disabilities takes a multi-pronged effort involving the government, NGOs, civil society, the private sector and media organizations. The ‘Behavioural Change Campaign’, launched by UNICEF in Montenegro, is an example of a successful media campaign. It employed strategies including the display of billboards showing children with disabilities in a positive light, music festivals and the involvement of local celebrities. Increasing the visibility of children with disabilities is in itself an important step, as in many countries children with disabilities live ‘behind closed doors’, reinforcing stigma and stereotyping. Going beyond media campaigns, it requires a paradigm shift from an approach based on ‘defectology’ and medical intervention, which emphasizes segregation, to one which is child-centred, family-focused and based on inclusive education.

Gender discrimination takes different forms in different countries. In some countries in the region girls are more likely to be out of school, whereas in others the reverse is true. The situation also changes by level of education and by contextual factors such as poverty and location. Strategies and policies need to take into account the context-sensitive nature of gender discrimination. For example, in Tajikistan a key area of focus would be to improve the inadequate sanitation facilities, particularly in rural areas, which particularly discourage adolescent girls from attending school. In Armenia, boys are more likely to drop out as they face strong societal pressure to financially support their families. A media campaign targeting boys’ low participation in education would therefore need to take this into account. Campaigns may also encourage the participation of both girls and boys, such as ‘Hey Girls Let’s Go to School’, launched in Turkey, which resulted in an estimated increase in enrolment of 250,000 girls and 100,000 boys. It is important to have gender-specific strategies and policies for both girls and boys, in order to address the specific reasons why girls and boys are out of school or drop out.
There is no straightforward approach to improving the outcomes of children performing poorly in school. School factors which influence the quality of education are heavily debated, but as discussed in Chapter 3 the evidence shows that teacher quality is consistently the most important single school factor affecting pupils’ learning achievement. Any strategy to improve teacher quality should consider how to improve the level of prestige of the teaching profession to attract top-tier candidates, for example through increasing the salaries of teachers and through media campaigns. Another important strategy is the equitable distribution of resources to schools through formula funding, which should at the very least close the currently large discrepancies between socio-economically advantaged and disadvantaged schools. Pre-school, as discussed above, also plays an important role in raising learning achievement, particularly for socio-economically disadvantaged children.

An important factor not related to the school environment is children’s health, which is a factor in reducing absenteeism, ensuring healthy cognitive development and improving levels of concentration at school. Initiatives to improve children’s health include deworming, vaccinations, school-feeding programmes, micro-nutrient supplementation and food fortification, and improved water and sanitation facilities in schools.

Many families simply cannot afford the cost of education, in particular pre-school. The abolition of fees for compulsory education is a first step to reducing economic barriers to education, but it is far from sufficient. Free pre-school – whether compulsory or not – should also be considered. In addition, the indirect costs of education can be significant, including transportation, school uniforms and education materials, as well as unofficial costs including corruption. In countries including Kyrgyzstan and Tajikistan social benefits are too low to cover these costs for the poorest families. In addition, around the region there are poor children who are eligible but do not receive any or sufficient support; some do not have the required documentation, or else are unaware of their rights, while others are prevented by errors or corruption. For example, in Turkey it was found that only two per cent of monthly transfer payments to widows and orphans reach the poorest quintile, whereas 44.6 per cent go to the richest quintile. Social assistance needs to be carefully monitored and evaluated to identify such problems, to ensure that the funding which is available reaches those people who need it most.

Poverty, child labour and exclusion from education are closely related. The cost of schooling may not be considered just in terms of the direct and indirect costs, but also in terms of earnings lost due to the child not working. For the poorest families the contribution of child labour can be substantial – even crucial. Consequently, the same policies and strategies which aim to reduce poverty are also effective in reducing child labour. One innovative strategy employed in parts of Armenia which specifically targets working children is to allow for a school to close for a short period during harvest season, as a significant proportion of pupils are in any case absent during this time. The school can then schedule additional time or school days over the following weeks (for example, during weekends) to catch up, thereby ensuring that no one falls behind. In some urban areas of Albania schools offer evening classes for working youth. These are strategies which enable children to continue to work without dropping out from or falling behind in school. However, in some contexts directly preventing child labour would be more appropriate – in particular to combat abusive or hazardous forms of child labour.
Management, governance and finance policies and strategies

As discussed above, inclusive education – for all learners regardless of their difficulties or their differences – requires a paradigm shift, in particular when it comes to children with disabilities. It requires a shift from the consideration of the disabling aspects of the child, to the disabling aspects of their social and physical environments. Inclusive education entails recognizing the diverse needs of children and developing appropriate curricula, classroom arrangements, pedagogical strategies and learning styles. In practice such approaches tend to be limited to select geographic pockets and there is a significant gap between official recognition of inclusive education and its implementation. Although it requires many aspects to come together, the implementation of inclusive education does not necessarily entail huge costs. Strategies include converting special schools into resource centres serving mainstream schools, adjusting teacher-training programmes to incorporate inclusive education issues, and collaborating with NGOs and civil society to promote inclusive education in schools.

An inclusive education strategy also requires a robust information management system in order to monitor children, identify and target at-risk children, and organize appropriate, early intervention. Several CEE/CIS countries have recently undertaken initiatives to improve the monitoring of excluded children and children at risk of exclusion. In Turkey, a sophisticated e-School Management Information System (SMIS) was established which was successfully used to identify a large number of non-enrolled children, resulting in a reduction in the number of non-enrolled children from around 300,000 to 100,000 within just two years. In Armenia, Kyrgyzstan and Romania, similar initiatives are under way. A web-based School Management Information System has numerous advantages over paper, or even non-school-based information management systems, for identifying excluded and at-risk children. For example, it enables tracking at the individual rather than the aggregated level, enabling the recording of detailed individual characteristics to better identify at-risk children; it can lead to much more timely data when it is entered by the school directly into a central system; and it tends to be much more accessible – by diverse stakeholders and at different levels (for example, at national, regional and school levels).

The computerization and automation of information and management systems is also essential to the systematic and orderly running of a more decentralized education system. As discussed in Chapter 3, highly centralized education systems impede the implementation of policies and strategies which target excluded and at-risk children. There has been a tendency – both globally and in the region – to move towards more decentralized education systems, which has numerous advantages, but also potential pitfalls. It can lead to greater transparency in decision-making, more efficient and flexible resource management, more community involvement, and greater autonomy at decentralized levels – empowering local decision-makers to be more responsive to needs. On the other hand, it also opens up opportunities for corruption and misuse of funds, and can lead to mismanagement due to more complicated resource flows and management processes. For this reason, decentralization efforts need to be accompanied by capacity development (i.e. through training and the development of practical tools and instruments), controls and financial regulations, monitoring of information and financial flows to identify and prevent corrupt practices, and the computerization and automation of tasks and processes which facilitate this.
Introduction

Education is a human right for all children and adolescents.
1.1 Global Initiative on Out of School Children

The Global Initiative on Out of School Children (OOSCI) was jointly launched by UNICEF and the UNESCO Institute for Statistics (UIS) in 2010 to accelerate efforts toward the goal of universal primary education in 2015. The goal of the Initiative is to achieve a breakthrough in reducing the number of out of school children. The issue of out of school children is one of high priority for realizing not just the Education For All (EFA) goals and Millennium Development Goal (MDG) to achieve universal primary education, but also for achieving all other MDGs. Education is a fundamental requirement for poverty eradication, gender equality, reduction of child mortality and improvement of maternal health, elimination of HIV and AIDS and other diseases, and environmental sustainability.

Since the six EFA goals were adopted in Dakar in 2000 much progress has been made in reducing the number of out of school children. However, progress appears to be slowing and an estimated 61 million primary-school-age children and 71 million lower secondary-school-age children were still out of school globally in 2010 (UIS, 2012). ‘Reaching the unReached’ is becoming increasingly difficult because of the complex, multi-dimensional nature of inequalities which keep the remaining 131 million school-age children out of school. Moreover, the issue of out of school children is not confined to just the primary-school level. Pre-primary and lower secondary are also crucial to reaching the EFA and MDG goals, and are therefore part of the framework set out by the OOSC Initiative. The figures for out of school children also mask three basic types of out of school children: first, those who have not gained access to school and are unlikely to do so in the future; second, those who have not been enrolled in the past but are likely to enrol in the future, typically at the non-normative older age; and third, those who were enrolled in the past but dropped out or withdrew (UNESCO, 2009; UNICEF and UIS, 2011a).

The OOSC Initiative builds on the Children Out of School: Measuring Exclusion from Primary Education report, jointly published by the UNESCO Institute for Statistics and UNICEF in 2005. The new initiative introduces the ‘Five Dimensions of Exclusion (5DE)’ model, which recognizes the importance of pre-primary (Dimension 1) in addition to primary education (Dimension 2), and goes beyond primary to include also lower secondary education (Dimension 3) (UNICEF and UIS, 2011a). Moreover, the model focuses not just on children out of school, but also on those at risk of dropping out or withdrawing from primary school (Dimension 4) or lower secondary school (Dimension 5). Addressing the whole life cycle of children’s educational needs, including the transitions between the basic levels of education, is necessary to successfully reach universal primary education. Evidence shows that pre-primary education is the key to success in primary education and that widening access to lower secondary opportunities increases primary completion rates and improves school-to-labour market transitions.

Twenty-six countries\(^ {11} \) from seven regions are engaged in the OOSC Initiative. Besides Central and Eastern Europe and the Commonwealth of Independent States, the other regions are Eastern and Southern Africa, West and Central Africa, the Middle East and

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\(^{11}\) The 26 participating countries are: Bangladesh, Bolivia, Brazil, Cambodia, Colombia, Democratic Republic of the Congo, Ethiopia, Ghana, India, Indonesia, Kyrgyzstan, Liberia, Mexico, Morocco, Mozambique, Nigeria, Pakistan, Philippines, Romania, South Sudan, Sri Lanka, Sudan, Tajikistan, Timor-Leste, Turkey and Zambia.
Introduction

A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States

North Africa, East Asia and the Pacific, South Asia, and Latin American and the Caribbean. There are four participating countries in the UNICEF CEE/CIS region: Kyrgyzstan, Romania, Tajikistan and Turkey.

This report covers all countries in the UNICEF CEE/CIS region, but focuses in particular on the four participating countries, drawing on the in-depth analyses of the out of school children country reports. These four countries were selected because they have some of the largest groups of out of school children in the region and face a diverse range of barriers and bottlenecks that lead to exclusion from education.

For the purposes of this report, UNICEF CEE/CIS region is divided into four sub-regions as follows:

Central and Eastern Europe: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo12, Montenegro, Romania, Serbia, The former Yugoslav Republic of Macedonia.

The Caucasus: Armenia, Azerbaijan, Georgia.

‘Reaching the unreached’ is becoming increasingly difficult because of the complex, multi-dimensional nature of inequalities.

The UNICEF and UNESCO Institute for Statistics (UIS) Global Initiative on Out of school Children (OOSCI) aims to achieve a breakthrough in reducing the number of out of school children worldwide.

Education is a fundamental requirement for poverty eradication.

Introduction

Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan.

Western CIS: Belarus, Moldova, the Russian Federation, Ukraine.

Turkey is not included in any of the sub-regions above but is part of the UNICEF CEE/CIS region.

The following countries are not included in the UNICEF CEE/CIS region but are geographically and historically linked to the countries in the UNICEF region and are therefore used as a comparison group: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. These are the eight countries that acceded into the European Union (EU) in 2004, also known as the EU8 countries. For a map of the UNICEF CEE/CIS region, please see Annex 4.

This report does not cover all groups of out of school children, but analyses the profiles of what are considered to be the most significant groups of out of school children in the region, summarizing the major barriers and bottlenecks, and briefly reviewing policy initiatives that have shown a potential to cut the number of out of school children by reducing barriers and bottlenecks. While it is recognized that the CEE/CIS countries each have different barriers and bottlenecks, and policies and strategies, relating to out of school children, nine main overarching profiles of children who are excluded from education and/or at risk of being excluded across the region have been identified:

1. Children of pre-primary age.
2. Children from ethnic minorities, in particular Roma children.
3. Children with disabilities and special education needs.
4. Children from the poorest households.
5. Working children.
7. Children performing below expected academic standards.
8. Adolescents.
9. Children belonging to multiple out of school children risk groups.

For some countries in the region that are close to reaching 100 per cent enrolment of children in primary and lower secondary, the focus is shifting towards upper secondary. Drop-out increases towards the later grades of lower secondary and then rises steeply for upper secondary. For this reason, the report includes a special focus on adolescents, both in lower- and upper secondary education, who are at high risk of dropping out in many CEE/CIS countries. Although upper secondary is generally not compulsory in the CEE/CIS region, it is of crucial importance for equipping youth with the knowledge and skills required for competing in a globalized world.

The next section introduces the Five Dimensions of Exclusion model, which provides an analytical framework for the report. The following sections give an overview of the CEE/CIS...
A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States

region, in particular the socio-economic context, including the impact of the global financial crisis, the impact of conflict and disasters caused by natural hazards in the region, and the education system in CEE/CIS countries. The demographic context is discussed in Chapter 3.

1.2 The Five Dimensions of Exclusion model

This report employs the Five Dimensions of Exclusion (5DE) model, which was used by all 26 participating countries in the OOSC Initiative (UNICEF and UIS, 2011a). It provides a broader, more complex and equity-oriented view of exclusion from education than is addressed by the Millennium Development Goals. The model of the 5DE presents five target groups of children for the data and policy analysis that span three levels of education: pre-primary, primary and lower secondary; and two different population groups: children who are out of school, and those who are in school but at risk of dropping out. Each group represents a distinct Dimension of Exclusion that requires specific statistical and policy analysis. The term ‘exclusion’ has a broad meaning for the purpose of this study. Children who are out of school are excluded from education, while children who are at risk of dropping out may be excluded within education – because, for example, they face discriminatory practices or attitudes within the school.

The 5DE also seeks to systematically disaggregate statistics on out of school children according to characteristics such as wealth, disability, location (residence), gender, race/ethnicity and age group. In addition, it looks at the interaction between these disparities which create complex and mutually reinforcing patterns of disadvantage and barriers to schooling.

In general, children of primary or lower secondary-school age are considered as being in school if they participate in primary or secondary education (International Standard Classification of Education [ISCED] levels 1, 2 and 3) 13. Children of primary or lower secondary age who do not participate in education programmes at ISCED levels 1, 2 and 3 are considered as being out of school, including those in pre-primary and non-formal education.

The Five Dimensions of Exclusion are defined as follows:

| Dimension 1: Children of pre-primary-school age who are not in pre-primary or primary school. |
| Dimension 2: Children of primary-school age who are not in primary or secondary school. |
| Dimension 3: Children of lower secondary-school age who are not in primary or secondary school. |
| Dimension 4: Children who are in primary school but at risk of dropping out. |
| Dimension 5: Children who are in lower secondary school but at risk of dropping out. |

---

13 ISCED is the International Standard Classification of Education designed by UNESCO to facilitate comparisons of education statistics and indicators of different countries on the basis of uniform and internationally agreed definitions.
Introduction

Education Equity Now!

Figure 1 – Five Dimensions of Exclusion (5DE)

<table>
<thead>
<tr>
<th>Dimension 1</th>
<th>Dimension 2</th>
<th>Dimension 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not in pre-primary school</td>
<td>Attended, but dropped out</td>
<td>Attended, but dropped out</td>
</tr>
<tr>
<td>Pre-primary-age children</td>
<td>Will never enter</td>
<td>Will never enter</td>
</tr>
<tr>
<td>Primary-age children</td>
<td>Will enter late</td>
<td>Will enter late</td>
</tr>
<tr>
<td>Primary-school students</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower-secondary-age children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower-secondary-school students</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Five Dimensions are displayed in Figure 1. Dimensions 4 and 5 focus on children who are in school but at risk of dropping out or withdrawing. Understanding more about these groups of children is key to preventing them from becoming the out of school children of tomorrow (Lewin, 2007). Dimension 4 covers children in primary school who are considered at risk of dropping out, and Dimension 5 covers children in lower secondary school who are considered at risk. In summary, the 5DE, through both the *out of school* and *at-risk* Dimensions, set out specific groups of children who are not participating in the intended level of education for the intended duration and at the intended age (due to overage and repetition).

There are several important aspects to note regarding the 5DE:

**Dimension 1** represents a group of children who do not benefit from pre-primary education and who may therefore not be adequately prepared for primary education, placing them at risk of not entering into primary education, entering late, or, if they do enter, at risk of dropping out or withdrawing. Although pre-primary education programmes may be longer than one year, the 5DE propose a standard approach for all countries by focusing on pre-primary participation of children in the year preceding the official entrance age into primary school. This is done in the interest of simplicity and to allow cross-national comparisons. As an example, if the official primary entrance age in a country is six years, Dimension 1 includes children aged five years who are not in pre-primary or primary education. Dimension 1 may not be considered to be out of school if pre-primary school is not considered as part of compulsory education. However, non-attendance of pre-primary education is an important risk factor for dropping out of compulsory education in the future.

Each of the out of school Dimensions 2 and 3 is divided into three mutually exclusive categories based on previous or future school exposure: children who attended in the past...
A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States

and dropped out, children who will never enter school, and children who will enter school in the future. Therefore, the following categories of out of school children can be identified:

1. OOSC who will never enter (primary or lower secondary) school;
2. OOSC of primary-school age who will enter primary school late;
3. OOSC who dropped out from primary school;
4. OOSC who dropped out from lower secondary school.

Children in Dimensions 4 and 5 – those in school but at risk of being excluded from education – are grouped by the level of education they attend, regardless of their age: primary (Dimension 4) or lower secondary (Dimension 5). This is different from Dimensions 2 and 3, which group out of school children by their age: primary age (Dimension 2) and lower secondary age (Dimension 3). The framework thus covers two different types of populations: the population of out of school children of school-going age, and the population of at-risk pupils of any age in primary or lower secondary school.

The following section provides a brief overview of the education systems in the CEE/CIS region in terms of starting age and duration of compulsory education.

1.3 Barriers and bottlenecks analysis

The OOSC Conceptual and Methodological Framework sets out the following structure of barriers and bottlenecks in relation to the Five Dimensions of Exclusion, in order to analyse the diverse causes of exclusion from education (UNICEF and UIS, 2011a):

- **Demand-side socio-cultural barriers**: socio-cultural practices, emotional experiences of children, violence in the home and community, value placed on the educational process in the home and community, and other socio-cultural factors which act as barriers to education.

- **Demand-side economic barriers**: household poverty, school fees and other indirect costs of education, child labour and other economic factors which act as barriers to education.

- **Supply-side barriers**: issues with school infrastructure and resources, teachers, school and classroom management, school safety, school curriculum and language, and other supply-side factors which act as barriers to education.

- **Political, governance, capacity and financing barriers**: lack of political commitment to inclusion, non-conducive legal and administrative frameworks, inequitable budget allocations and resource distribution, and other political, governance, capacity and financing factors which act as barriers to education.

These barriers and bottlenecks correspond closely to the determinants in the UNICEF Monitoring Results for Equity Systems (MoRES) framework. The MoRES determinants and corresponding barriers and bottlenecks are shown in Table 1.
Table 1 – Comparing the OOSCI conceptual and methodological framework barriers and bottlenecks with the MoRES determinants framework

<table>
<thead>
<tr>
<th>MoRES determinant categories and sub-categories</th>
<th>OOSCI Conceptual and Methodological Framework – Barriers and Bottlenecks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enabling Environment</td>
<td>■ Social Norms</td>
</tr>
<tr>
<td>■ Legislation/Policy</td>
<td>■ Demand-side socio-cultural barriers</td>
</tr>
<tr>
<td>■ Budget/Expenditure</td>
<td>■ Political, governance, capacity and financing barriers</td>
</tr>
<tr>
<td>■ Management/Coordination</td>
<td>■ Supply-side barriers</td>
</tr>
<tr>
<td>Supply</td>
<td>■ Availability of essential commodities and inputs</td>
</tr>
<tr>
<td>■ Access to adequately staffed services, facilities and information</td>
<td>■ Supply-side barriers</td>
</tr>
<tr>
<td>Demand</td>
<td>■ Financial access</td>
</tr>
<tr>
<td>■ Cultural practices and beliefs</td>
<td>■ Demand-side economic barriers</td>
</tr>
<tr>
<td>■ Demand-side socio-cultural barriers</td>
<td>■ Demand-side socio-cultural barriers</td>
</tr>
<tr>
<td>Quality</td>
<td>■ Quality of infrastructure/curricula/service provision</td>
</tr>
<tr>
<td>■ Supply-side barriers</td>
<td>■ Political, governance, capacity and financing barriers</td>
</tr>
</tbody>
</table>

1.4 Education system in CEE/CIS countries

This section gives a brief overview of the education system in CEE/CIS countries in terms of the entrance age of the different levels of education and the duration of compulsory duration.

The entrance age of pre-primary education is three years in all CEE/CIS countries (although nursery can start at an earlier age) (UIS, 2012). Pre-primary education is not compulsory in most countries in the region. In Moldova and Romania, pre-primary or kindergarten from age three to six is free and optional (IBE, 2011). A number of countries in the region have in recent years established a compulsory pre-primary preparatory year: Bosnia and Herzegovina14, Bulgaria, Kazakhstan, Moldova, Romania and Serbia (partial15). In Bulgaria, a two-year pre-school education which is compulsory for five- and six-year-olds was being introduced from 2010/11. Although a preparatory year of pre-primary is not compulsory in Kyrgyzstan, the government recently launched compulsory shortened 100-hour and 240-hour preparatory pre-primary programmes for six- to seven-year-olds who are not already enrolled in pre-primary school (UNICEF, 2012a).

---

14 The Framework Law on Pre-school Education in Bosnia and Herzegovina of 2007 determines that pre-school is an integral part of the education system and envisages one year of compulsory pre-school attendance. However this has not yet been adopted nation-wide.

15 Four hours per day during at least six months.
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Table 2 – Education systems in CEE/CIS countries

<table>
<thead>
<tr>
<th></th>
<th>Entrance age of primary</th>
<th>Entrance age of lower secondary</th>
<th>Duration of primary</th>
<th>Duration of lower secondary</th>
<th>Duration of compulsory education</th>
<th>Compulsory pre-primary preparatory year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>6</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>Armenia</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>No</td>
</tr>
<tr>
<td>Belarus</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>Yes</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>Yes</td>
</tr>
<tr>
<td>Croatia</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>No</td>
</tr>
<tr>
<td>Georgia</td>
<td>6</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>Yes</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>Limited</td>
</tr>
<tr>
<td>Montenegro</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>Moldova</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>Yes</td>
</tr>
<tr>
<td>Romania</td>
<td>6</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>Yes</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>11</td>
<td>No</td>
</tr>
<tr>
<td>Serbia</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>Partial</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>6</td>
<td>11</td>
<td>5</td>
<td>4</td>
<td>9</td>
<td>No</td>
</tr>
<tr>
<td>Turkey¹</td>
<td>6</td>
<td>11</td>
<td>5</td>
<td>3</td>
<td>8</td>
<td>No</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>7</td>
<td>10</td>
<td>3</td>
<td>5</td>
<td>10</td>
<td>No</td>
</tr>
<tr>
<td>Ukraine</td>
<td>6</td>
<td>10</td>
<td>4</td>
<td>5</td>
<td>12</td>
<td>No</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>7</td>
<td>11</td>
<td>4</td>
<td>5</td>
<td>12</td>
<td>No</td>
</tr>
</tbody>
</table>

Sources: IBE, 2011; IEA, 2012; UIS, 2012

The entrance age of primary education ranges from six to seven years of age, although in some countries compulsory education may start earlier due to the compulsory year of pre-school. The duration of compulsory education ranges from eight years (in Bulgaria, Croatia, Serbia and Turkey) to 12 years (in Ukraine and Uzbekistan), as illustrated in Figure 2. A number of CEE/CIS countries have recently restructured or are currently restructuring the education system, lengthening the duration of compulsory education from eight to nine years.

¹ A new ‘4+4+4’ education system is being introduced in Turkey, with four years of primary education, first level; four years of primary education, second level; and four years of secondary education. In this new system, compulsory schooling would be increased to 12 years.
years (in Albania, Armenia, Bosnia and Herzegovina, and Montenegro), from nine to 10 years (in Romania and Turkmenistan), or from nine to 11 years (in the Russian Federation) (IBE, 2011). In Bulgaria, a change to the structure of the education system is being envisaged where the duration of compulsory education will be increased as of 2015, and a restructuring which would increase the duration of compulsory education is also being proposed in Croatia. In Tajikistan, the starting age of primary education is planned to be changed from seven to six years of age, adding an additional year of compulsory education. This is expected to be implemented around 2020 (UNICEF, 2012c, in press). In Turkey, a law to increase the duration of compulsory education from eight to 12 years was passed in Parliament in 2012.

*Figure 2 – Duration of compulsory education in the CEE/CIS region*

The duration of compulsory education ranges from 8 years to 12 years in the region.

Table 3 gives an overview of national policies on school entry and promotion for 11 CEE/CIS countries (IEA, 2012). As noted above, the education system has been undergoing restructuring in a number of CEE/CIS countries, and this level of change in the region is reflected in the number of countries where the age of entry policy has changed over the past decade – in seven of the 11 countries listed below. The overview in Table 3 further suggests that policies on promotion and retention vary significantly throughout the region, at least for the early grades; in eight of 11 countries there is automatic promotion to the next grade, ranging from the first grade only to automatic promotion in the first five grades. For the later grades, promotion generally depends on academic progress and examinations.

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The boundaries and names shown and the designations used on the maps in this report do not imply official endorsements or acceptance by the United Nations.
Table 3 – National policies on school entry and promotion for 11 CEE/CIS countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Official policy on age of entry to primary school</th>
<th>Based on parental discretion, usual practice on age of entry to primary school</th>
<th>Policy on promotion and retention in grades 1–8</th>
<th>Age of entry policy changed within past 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armenia</td>
<td>Children must be 6 years old to begin the following December 31st.</td>
<td>n/a</td>
<td>Automatic promotion for Grades 1–5, dependent on academic progress for Grades 6–8.</td>
<td>Yes</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>Children must begin school at age 6. Children must be 6 years old by the end of September to begin school on September 15 of the same year.</td>
<td>Children born before the end of November the year they turn 6 who are identified as talented by the Ministry of Education testing commission can begin school on September 15 of the same year.</td>
<td>Automatic promotion for Grades 1–4, dependent on academic progress for Grades 5–8.</td>
<td>No</td>
</tr>
<tr>
<td>Croatia</td>
<td>All children must begin school by 7 years of age. Children must be at least 6 years of age by the end of March to begin the following September.</td>
<td>Children typically begin school at age 7 because their parents feel they will benefit from being more mature.</td>
<td>Students in Grades 1–3 must obtain minimum standards in most subjects; students in Grades 4–8 must obtain all minimum standards for promotion to next grade.</td>
<td>Yes</td>
</tr>
<tr>
<td>Georgia</td>
<td>Compulsory schooling begins at age 6. According to the Law on General Education, children can begin the calendar year of their 6th birthday.</td>
<td>n/a</td>
<td>Automatic promotion for Grades 1–4, dependent on academic progress for Grades 5–8.</td>
<td>Yes</td>
</tr>
</tbody>
</table>
### Official policy on age of entry to primary school

<table>
<thead>
<tr>
<th>Country</th>
<th>Policy on promotion and retention in grades 1–8</th>
<th>Age of entry policy changed within past 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kazakhstan</td>
<td>Parents can postpone enrolment for one year.</td>
<td>Yes</td>
</tr>
<tr>
<td>The former Yugoslav Republic of Macedonia</td>
<td>n/a</td>
<td>Yes</td>
</tr>
<tr>
<td>Romania</td>
<td>Automatic promotion for Grades 1–5, dependent on academic progress for Grades 6–8.</td>
<td>Yes</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Children typically begin at age 7 because their parents feel they will benefit from being more mature.</td>
<td>No</td>
</tr>
</tbody>
</table>

---

**Notes:**
- Parents can postpone enrolment for one year.
- Automatic promotion for Grades 1–5, dependent on academic progress for Grades 6–8.
- Children must be at least 6.5 years of age by the end of August to begin in September.
- Promotion is automatic for Grade 1 and dependent on academic progress for Grades 2–8.

---

**Transition led to divergent economic and political trajectories in the region**
### Official policy on age of entry to primary school

<table>
<thead>
<tr>
<th>Country</th>
<th>Official policy on age of entry to primary school</th>
<th>Based on parental discretion, usual practice on age of entry to primary school</th>
<th>Policy on promotion and retention in grades 1–8</th>
<th>Age of entry policy changed within past 10 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serbia</td>
<td>Children must begin by the time they are 7.5 years of age. Children begin school in September when they are at least 6.5 years of age.</td>
<td><em>Schools may recommend one year of continued preparatory preschool for children not considered school-ready.</em></td>
<td>Automatic promotion for Grade 1, generally automatic for Grades 2–3, except per parent request; in Grades 4–7, students failing 2 or more subjects must pass makeup exams.</td>
<td>Yes</td>
</tr>
<tr>
<td>Turkey</td>
<td>Children begin in September of the calendar year of their 6th birthday.</td>
<td>Children can begin a year later, at parental discretion.</td>
<td>Automatic promotion for Grades 1–3, dependent on academic progress for Grades 4–8.</td>
<td>No</td>
</tr>
<tr>
<td>Ukraine</td>
<td>Compulsory schooling begins at age 6. Children must be at least 6 years of age by September 1st.</td>
<td><em>Parents can decide if children begin school at age 6 or 7.</em></td>
<td>Retention decided by parents; students can take external examinations to advance into higher grade levels.</td>
<td>No</td>
</tr>
</tbody>
</table>

Sources: IEA, 2012

### 1.5. Socio-economic context

The collapse of communism in the late 1980s and early 1990s and the transition from socialist centrally-planned economies towards market-based economies has taken the CEE/CIS region into divergent economic and political trajectories. The transition led to severe recession and, subsequently, much economic hardship in many CEE/CIS countries. Problems of economic and political restructuring were in parts of the region compounded by armed conflict and disasters caused by natural hazards. While some CEE/CIS countries...
Introduction

have made enormous strides forward since the 1980s, other countries in the region are still recovering from the long period of recession and significant economic decline. For example, Georgia, Moldova, Ukraine and Tajikistan currently have a lower Human Development Index than they had prior to transition (UNDP, 2011). Countries in Central and Eastern Europe have generally fared better. The Czech Republic, Estonia, Hungary, Poland, Slovakia and Slovenia, all of which joined the European Union (EU) in 2004, and Bulgaria and Romania, which joined in 2007, have made remarkable progress in terms of economic and human development. Given the divergent economic and social conditions in the CEE/CIS region, it is more appropriate to think of it as a ‘region of regions’ (UNICEF, 2005c).

Today, most countries in the UNICEF CEE/CIS region are middle-income countries. The exceptions are Kyrgyzstan and Tajikistan, which are considered to be low-income countries, and Croatia, which is classified as a high-income country (World Bank, 2011b).

Global financial crisis

The global financial crisis of 2008 and 2009 affected the CEE/CIS region more severely than any other region and reversed some of the gains that had been made. Figure 3 shows the impact of the global financial crisis in terms of GDP growth rates for all countries in 2009 in the first chart (left), with UNICEF CEE/CIS and EU8 countries highlighted in dark blue and orange, respectively. The economic situation of UNICEF CEE/CIS countries is illustrated in greater detail in the second chart (right). UNICEF CEE/CIS countries are highlighted in dark blue and EU8 countries are highlighted in orange. The first chart illustrates that about half of all countries had negative growth rates in 2009 (bars pointing to the left of the middle line, each bar representing a country). The charts show that many CEE/CIS countries – in particular countries in Central and Eastern Europe (including EU8 countries) – were among the worst affected by the crisis. Real GDP growth rates dropped below -10 per cent in Armenia and Ukraine, and below -5 per cent in Bulgaria, Croatia, Hungary, Montenegro, Moldova, Romania, the Russian Federation and Slovenia. Most countries in the region had negative real GDP growth rates in 2009.

The CEE/CIS region was also slow to recover, and four CEE/CIS countries (Croatia, Kyrgyzstan, Latvia and Romania) had negative economic growth rates even in 2010. In some countries, the economic collapse was on a similar scale as during the transition depression in the early 1990s. Unemployment rates have also risen sharply since 2008, and youth unemployment rose more than in any other region in 2009 (ILO, 2011). Bosnia and Herzegovina, Kosovo18, The former Yugoslav Republic of Macedonia and Turkmenistan had the highest unemployment rates in the world in 2010, at over 25 per cent (IMF, 2011). The financial crisis also impacted remittances in the region. Tajikistan in particular is highly dependent on remittances from abroad and is the top receiver of remittances in the world (World Bank, 2011). Due to the financial crisis, remittances in Tajikistan dropped by a third, and this was partially responsible for the sharp economic slowdown in 2009 (IMF, 2010).

18 UNSCR 1244.
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Figure 3 – Real GDP growth (annual % change) (2009)

Source: IMF, 2011

Human development

The Human Development Index (HDI) can be used to provide insight into the level of socio-economic development in the region, as it combines several key indicators. It is a composite index combining life expectancy, wealth in terms of GNI per capita (PPP$), and mean of years of schooling for adults aged 25 years and expected years of schooling for children of school-entering age. Figure 4 shows the Human Development Index of CEE/CIS countries within a regional context. It ranges from 0.58 for Tajikistan to 0.77 for Romania (UNDP, 2010). Five of the 10 bottom movers in the Human Development Index – defined by UNDP as those countries which have made the least progress since 1970 percentage-wise – are in the CEE/CIS region.

The two poorest countries in the region are Tajikistan and Kyrgyzstan, which in recent years have not just been affected by the financial crisis but also by conflict and disasters caused by natural hazards. Tajikistan and Kyrgyzstan are also among the poorest countries in the world, with GDP per capita (PPP$\textsuperscript{19}) of 2,039.9 and 2,380.8, respectively (IMF, 2011). This is less than a tenth of the GDP per capita of the EU8 countries Slovenia and the Czech Republic.

\textsuperscript{19} Based on the current ‘international dollar’ adjustment.
It should be noted that the Human Development Indices of Kyrgyzstan and Tajikistan, although low, are actually higher than would be expected given the level of wealth in terms of GNI per capita. This is because the other two components of the index – life expectancy, and mean and expected years of schooling – are relatively high compared with other countries at a similar economic level.

Poverty, income inequality and child well-being

Poverty rates have declined in many CEE/CIS countries, in particular over the last decade. For example, in Moldova half the population was living on less than $2 a day at PPP in 1988, but two decades later just 12.5 per cent was living at this level. However, in some CEE/CIS countries poverty rates (in terms of the population living under $2 a day at PPP) remain very high (World Bank, 2011): the two poorest countries in the region, Kyrgyzstan and Tajikistan, had poverty levels of 21.7 per cent and 27.7 per cent respectively in 2008. Recent data is not available for some countries, such as Uzbekistan and Turkmenistan.
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It is worrying that in some CEE/CIS countries – notably Azerbaijan, Bulgaria and Georgia (for which recent data is available) – poverty rates have been increasing, as shown in Figure 5.

There is a close correspondence between poverty rates and under-five mortality rates (World Bank, 2011). The countries with the highest poverty rates (for which data is available) also have very high under-five mortality rates: Tajikistan (61.2 deaths per 1,000 children), Kyrgyzstan (36.6 deaths per 1,000 children) and Uzbekistan (36.1 deaths per 1,000 children). Poverty also increases the chances of malnutrition and illness, which can lead to reduced school attendance, increased drop-out and impaired cognitive development (Sridhar, 2008). Moreover, poor health can also lead to disability such as blindness (often caused by vitamin A deficiency). In terms of exclusion from education, poor health is more likely to affect girls than boys, as girls are more likely than boys to be absent from or drop out of school to take care of family members who are ill.

Under-five mortality rates for CEE/CIS countries are displayed in Figure 6.

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20 Based on 2005 international prices.
In spite of high levels of poverty in many CEE/CIS countries, child mortality rates have dropped significantly in all countries in the region. Countries with particularly steep declines in child mortality rates are shown in Figure 7. In Turkey, the child mortality rate is about one-tenth of what it was in 1960, and half of the mortality rate a decade ago. In Albania, child mortality is currently less than a tenth of the 1960 rate.

Recent data on poverty is not available for many CEE/CIS countries. However, an indication of poverty levels can be provided by combining GDP per capita with the Gini coefficient\(^\text{21}\). GDP per capita on its own is not a good indicator of potential poverty levels, as the example of Turkey illustrates. Turkey is in the middle of the range in the CEE/CIS

\(^{21}\) The Gini coefficient is a measure of inequality of income distribution.
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region in terms of GDP per capita, but as a result of high inequality in income distribution it has one of the highest levels of poverty and under-five mortality rates.

The scatter plot in Figure 8 combines GDP per capita (y-axis) and the Gini coefficient (x-axis) – where higher values indicate greater inequality. It highlights the diversity of the region in terms of both income and income inequality. Although most CEE/CIS countries are middle-income countries, GDP per capita based on PPP\(^{22}\) ranges from 2,039.9 in Tajikistan to 18,338.5 in Croatia – a nine-fold difference (IMF, 2011). In terms of income inequality, it illustrates the very wide Gini coefficient range in the UNICEF CEE/CIS region, ranging from very low in Azerbaijan to high in Georgia, The former Yugoslav Republic of Macedonia, the Russian Federation, Turkey and Turkmenistan. The narrower Gini coefficient range of EU8 countries is shown for comparison.

Figure 8 – GDP per capita (PPP)\(^{23}\) plotted against Income Gini coefficient (2010)\(^{24}\)

Sources: IMF, 2011 and UNDP, 2010

Poverty rates have declined in many CEE/CIS countries, in particular over the last decade; worryingly in some CEE/CIS countries poverty rates have recently been increasing.

\(^{22}\) Based on current international dollar.

\(^{23}\) Ibid.

\(^{24}\) The Gini coefficient is from the 2010 UNDP Human Development Report, but the source data is from different years for different countries.
Child poverty rates have also declined in most countries in the CEE/CIS region, but percentage-wise more children live in poverty compared with the total population. This is illustrated in Figure 9, showing the child poverty rate as a proportion of the overall poverty rate (i.e. child poverty rate divided by the overall poverty rate) (UNICEF and the University of York, 2011). In most of the countries compared, child poverty is significantly higher than the overall poverty rate; in Belarus it is even twice as high\(^{25}\). Data for the CEE/CIS region, comparing consumption in households with per capita consumption below PPP $2.50 a day for children aged 0 to 15 to the general population, led to the same conclusion: child poverty rates tend to be significantly higher (UNICEF, 2009a). These results indicate that improvements in poverty rates need to be interpreted cautiously. In addition, social assistance benefits in CEE/CIS countries for families and children tend to be very small, and usually do not provide adequate protection from poverty (UNICEF, 2009a). They are also very small in proportion to social protection spending on pensions and privileges. Children may benefit from pensions, but pensions do not specifically target the poor.

**Figure 9 – Child poverty rate as a proportion of overall poverty rates in selected CEE/CIS countries, 2009\(^{26}\)**

In most countries analyzed, child poverty is significantly higher than the overall poverty rate.

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\(^{25}\) Please note that both the definition of poverty used and the age range for children vary from country to country. The age range for child poverty is 0-18 in Armenia, <18 in Belarus and Serbia, 0-14 in Croatia, <16 in Georgia, 0-17 in Kyrgyzstan, <15 in Montenegro and Romania, population with 1 child <6 in Bulgaria, and <6 in Tajikistan.

\(^{26}\) Data is from 2009, except for Bulgaria (2010) and Uzbekistan (overall poverty rate is from 2008, child poverty rate is from 2008).
1.6 Contextual factors affecting out of school children

Conflict and violence

Violent conflict, and the lack of security it engenders, remains one of the foremost reasons why children do not attend school around the world. About 42 per cent of the world’s out of school children of primary age live in conflict-affected poor countries (UNESCO, 2011). In the CEE/CIS region, a number of violent conflicts have occurred in the past two decades: the conflict in the Nagorno-Karabakh region between Armenia and Azerbaijan from 1988 to 1994, which is still unresolved; the series of wars fought in the former Yugoslavia from 1991 to 1995 in Bosnia and Herzegovina, Croatia and Slovenia; the civil war in Tajikistan in the 1990s; the Kosovo conflict from 1998 to 1999; the violence in Chechnya from 1999 to 2009; violence along the Russian and Georgian border in 2008; and interethnic violence in southern Kyrgyzstan in 2010.

As a result of this conflict, millions of families have been displaced. In Bosnia and Herzegovina, over 15,000 children were killed during fighting (Bush and Saltarelli 2010). In the recent conflict in Kyrgyzstan, an estimated 400,000 children were displaced (Solodunova, 2011). Kyrgyzstan, one of the world’s poorest countries, has one of the highest ratios of military-to-primary education spending in the world – with almost four times as much spent on the military as compared with primary education (UNESCO, 2011). In the 2008 violence between the Russian Federation and Georgia, around 300,000 Georgians fled, and those who have returned face a lack of qualified teachers, dilapidated schools and prohibitive costs of textbooks and transport. As a result of the conflict between Armenia and Azerbaijan, about 570,000 people still remain displaced. A 2005 survey found that 58 per cent of displaced families were unable to send their children to school with the prohibitively high costs of schooling (although internally displaced students are supposed to receive free uniforms and books from the government). In Chechnya, two wars displaced over 800,000 people. The educational infrastructure was destroyed in many areas and 142 of the 437 schools are still being repaired, with a continuing shortage of teaching materials and lack of trained teachers. Although most children of primary-school age are back in school, about 80 per cent of children need psychological support as a result of the conflict and there is a shortage of trained counsellors.

Educational services and infrastructure can be restored to pre-war levels, but this can take many years. Other consequences of conflict are post-war trauma, displacement and resulting alienation, unemployment and the general impact of conflict on people’s livelihoods. These factors increase the risk of dropping out or withdrawing and dropping out from school, and tend to be more difficult to address. Teachers are also displaced, and this too can have a long-term impact on the learning opportunities of children affected by conflict.

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27 UNSCR 1244.
28 Data is from circa 2007, from various sources.
29 Ibid.
30 Ibid.
31 Ibid.
There is little data on the impact of conflicts on education, and refugees or children who are displaced may not be reflected in education statistics. However, cross-country analysis which examined the quantitative impact of conflict on education found that states in civil war experience a significant decline in enrolment depending on the severity of the conflict (Lai and Thyne, 2007). Lai and Thyne (2007) estimated that an increase of about 1,000 people killed per year in a civil war leads to reductions in expenditures of about 2 to 2.7 per cent and enrolment by about 1.4 per cent at primary education level, 1.4 to 2 per cent at secondary education level and 2.7 to 3.4 per cent at tertiary education level. During particularly severe conflicts, the number and proportion of children dropping out from school during the period of conflict can reach a very high level (UNESCO, 2011). There is also evidence that conflicts reinforce existing inequalities associated with gender and poverty. Furthermore, educational disparities themselves play a role in fuelling conflict, resulting in a “self-reinforcing cycle of violence and rising inequality” (UNESCO, 2011: 134). It has been found that conflicts often occur in areas of extreme educational disadvantage (UIS, 2010a).

Some of the conflicts in the CEE/CIS region took place over a decade ago, and very little education enrolment data is available for this time. However, it is clear from existing research that conflict poses significant challenges for national education systems. The evidence shows that while some children may return to school after a conflict, most children do not, resulting in entire generations with a significant educational deficit (UIS, 2011c).
Disasters caused by natural hazards

The CEE/CIS region is particularly prone to natural hazards such as earthquakes, floods, avalanches, landslides and drought. Every year from tens of thousands to hundreds of thousands of people are affected by disasters caused by natural hazards in the region. This section gives a brief overview of just a few of the major disasters caused by natural hazards which have taken place in recent years to highlight their scale and impact.

Almost all countries in the region are at risk from earthquakes, which can be of devastating proportions – such as the 1988 Spitak earthquake in Armenia, which killed 25,000 people and left 517,000 people homeless (UNICEF and UNISDR, 2011). Earthquakes killed 20,636 people in Turkey between 1980 and 2010 and affected almost 16 million people. More recently, the 2003 earthquake in Kazakhstan affected over 43,000 people.

Floods, landslides and mudflows are also common in the region. They include the 2002 flood in Albania, which affected nearly 17,000 families and inundated 30,000 hectares of agricultural land; the 2003 flood in Azerbaijan, which affected 31,500 people; the 2004 flood in Bosnia and Herzegovina, which affected 275,000 people; the 2005 flood in Kazakhstan, which affected 25,000 people; and the 2010 flash flood in Tajikistan, which directly affected 16,000 people – and some 70,000 people in their access to safe drinking water. Over 1.6 million people in Romania, almost 2.2 million people in the Russian Federation and over 2.6 million people in Ukraine were affected by floods between 1980 and 2010. They can cause entire villages to disappear, as in Kazakhstan in 2010 when three villages were completely lost to water.

Extreme temperatures are another major concern in the CEE/CIS region. Between 1980 and 2010 extreme temperatures in the Russian Federation killed 57,680 people and affected over 750,000 people between 1980 and 2010.

Droughts are common in many CEE/CIS countries, mainly affecting pastoralist and agricultural communities who depend on livestock and crops for their livelihoods. The 2000 drought, which impacted several countries, affected 297,000 people in Armenia, 700,000 people in Georgia and about 2.6 million people in Moldova. Between 1980 and 2010 drought affected 2 million people in Kyrgyzstan and 3.8 million people in Tajikistan.

Similar to violence and conflict, disasters caused by natural hazards have significant consequences for the provision of education in affected areas, through the destruction of school infrastructure as well as roads and communications, and the displacement of people. Disasters caused by natural hazards can also lead to millions or even billions of dollars of economic losses and have enormous, long-term impacts on people’s livelihoods. This in turn has an impact on the ability of people affected by such disasters to afford the direct and indirect costs of schooling. Even when schools and houses are rebuilt, the economic repercussions will continue to be felt. As discussed in later chapters, poverty is one of the most important factors leading to exclusion from education.

Further research

Although the impact of conflict, violence and disasters caused by natural hazards on children’s exclusion from education is of crucial importance in the CEE/CIS region, a lack
of information hinders more in-depth desk research. For this reason the discussion on children affected by conflict, violence and disasters caused by natural hazards is limited to this section and is not analysed in greater detail in the following chapters. There is a great need, therefore, of in-country research – both quantitative and qualitative – on how conflict, violence and disasters caused by natural hazards affect education in the short and long term.

1.7 Methodology and data sources

This report makes use of existing data sources and is mainly based on desk research. The desk research was complimented by information obtained through focus group discussions with teachers, school heads and government officials at various levels of education administration in Albania, Armenia, Kyrgyzstan, Romania and Tajikistan, as well as visits to Roma communities in Albania.

The main sources of data used in this report are as follows:

- UIS Data Centre (UIS, 2012);
- UNICEF TransMONEE Database (TransMONEE, 2011);
- UCW (Understanding Children’s Work) (UCW, 2011);
- MICS (Multiple Indicator Cluster Survey) (MICS, 2006);
- DHS (Demographic and Health Surveys) (DHS, 2008).

Most of the education data used in this chapter is administrative data from the UNESCO Institute for Statistics (UIS, May 2012 release). Compared with survey data, administrative data is generally more recent, more widely available, can better provide trends over time, and tends to be more suitable for cross-national comparisons (discussed below). Household survey data is used for more detailed analysis, such as the relationship between school attendance and wealth quintiles and rural-urban differences.

Data from the country reports on out of school-children – in particular disaggregated household survey data from the country reports – was used for more in-depth analysis. However, this data was not used for cross-national comparisons. As a result, the out of school children figures used in cross-national comparisons in this report are in some cases different from the figures cited in the country reports, which are based on household survey data or administrative data from the Ministry of Education. Because of the consistency in the methods used to calculate the figures, which allows for direct comparisons across countries, this report uses UIS data for cross-national comparisons. All UIS figures on out of school children are calculated using enrolment figures based on ISCED-level age ranges\(^3\) (from country administrative data) and projections of the school-age population.

\(^3\) ISCED is the International Standard Classification of Education designed by UNESCO to facilitate comparisons of education statistics and indicators of different countries on the basis of uniform and internationally agreed definitions.
based on population census data, from the United Nations Population Division (UNPD). Data for Dimensions 1, 2 and 3 (out of school children of pre-primary, primary and lower secondary age, respectively), as discussed above, is calculated by comparing the estimated population for each age group with the total enrolment in this age group.

As a result of the different sources of data available for collecting statistics on out of school children, there may be several figures for any particular country – for example, there may be one figure from UIS (based on administrative and population projection data), one or more figures from household surveys, and yet another figure from the Ministry of Education, which may use a different method for calculating numbers of out of school children (for example, based on reporting of drop-outs and out of school children from schools rather than using population census data). One source of data is not necessarily better than another, and comparing figures from different sources is an important means of verification. If the figures are very similar, this gives confidence that the sources are reliable; if they are very different, then this can be indicative of problems with one or several of the data sources. The potential problems which can lead to unreliable estimates are discussed in more detail below.

Providing timely data on education – and on out of school children in particular – was a challenge for many CEE/CIS countries. There was very little education data for some countries33, while for many countries data was missing for particular indicators, and in some cases only relatively outdated data was available (i.e. from 2006 or earlier). For example, Dimension 3 (children of lower secondary age) data was unavailable for eight CEE/CIS countries, while 2009 Dimension 3 data by gender was available for only about half of the countries in the region. The exclusion of certain CEE/CIS countries from some of the comparisons and analysis limits the scope of analysis not just for these countries, but also for the region as a whole. For example, it could be that some of the highest levels of gender disparities, or rural-urban disparities, in enrolment may be in those CEE/CIS countries for which no data was available. In addition, it was a challenge finding disaggregated education data, which was often available only from household survey data. The lack of availability of education data is in itself a serious issue which will need to be addressed to better identify the means to reducing the number of out-of-school in the CEE/CIS region. This issue will be returned to in the concluding chapter.

Data reliability is also an issue. It can have various causes, including inaccurate school-age population estimates leading to inaccurate enrolment-rate calculations, and children registering for but not attending school. There are also numerous ways in which errors could have been introduced, such as poorly-kept records in schools, data-entry errors, errors in merging and aggregation and the various other steps taken to reach the final numbers, and so on. Data cleaning is an important step in resolving such errors, but this process is not always carried out, or else only partially. Surveys such as DHS and MICS are in some cases considered to provide more reliable figures than administrative data by providing attendance rates rather than enrolment rates, and through a robust methodology and quality-control process which increases the reliability of the data. Survey data also has

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33 Although Kosovo (UNSCR 1244) data was not yet available in international databases (such as the UIS Data Centre) at the time of writing this report, some education data can be found through the Statistical Office of Kosovo http://esk.rks-gov.net/ENG/.

Data on out of school children is scarce across the region
Education Equity Now!

the advantage of linking education data with other data collected during the survey, such as indicators of wealth or socio-economic status. However, unlike administrative data, survey data suffers from sampling error\(^{34}\). For small sub-populations (such as poor rural girls or poor rural girls aged six), the sampling errors can become so large that figures for these sub-populations cannot be used to make reliable observations or comparisons. For out of school children rates based on administrative data and population census data, it needs to be taken into account that census data is not always very accurate (Carr-Hill, 2012). A census is normally only carried out every 10 years, and population estimates become less reliable the longer it is since the last census date. This is further discussed in the Conclusion in relation to Albania – which is an example of how inaccurate population data can strongly skew out of school children figures.

As indicated above, survey data (for example, data from the MICS and DHS household surveys) and administrative data often provide different out of school rates. There can be several causes. Unlike administrative data, which records enrolment, surveys usually measure school attendance. But attendance rates are often lower than enrolment rates, as children may be enrolled but never attend school. Other differences arise because surveys are subject to sampling error, and both types of data may suffer from other reliability issues, as discussed above.

The charts in Figure 10 compare survey data (dark blue) and administrative data (light blue) with regards to percentages of out of school children in Kyrgyzstan, Tajikistan and Turkey. The charts show data for different years and age groups, with four charts showing data for out of school children of primary age (Dimension 2) and one chart (Tajikistan, 2008) showing data for out of school children of lower secondary age (Dimension 3). As can be seen from these charts, in some cases the out of school rates are very similar, whereas in others they are very different. This raises questions as to the reliability of the data and to which of the two sources is more likely to be accurate. Depending on which source of data is used, the analysis can be quite different. For example, according to survey data in Turkey, at primary-age boys are more likely than girls to be out of school. According to administrative data, the opposite is the case – girls are more likely to be out of school. The chart of primary-age children out of school in Tajikistan in 2005 (top-right) shows just how large differences between survey and administrative data can be. The out of school rates are much higher according to survey data – 11.1 per cent compared with just 2.5 per cent in administrative data. The difference is largest for boys, with 10.6 per cent out of school according to survey data compared with 0.71 per cent in administrative data. Therefore, according to survey data, there were fifteen times more boys out of school in 2005.

These charts serve as a reminder that a level of caution is required in analysing data on out of school children, as in some cases data may be off by a few per cent or more. Where small sub-populations are concerned based on household survey data, one needs to be particularly cautious about the reliability of the data.

\[^{34}\text{Sampling error is the amount of inaccuracy arising from using only a sample (or portion) of the population rather than the whole population.}\]
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Figure 10 – Percentage of out of school children: comparison of survey and administrative data

Source: UIS, 2011; TLSS, 2009; MICS, 2006; DHS, 2008
Large equity gaps in access to education in the region keep the most marginalized children out of school.

Profiles of excluded children
2.1 Overview

In the CEE/CIS region the rate of out of school children is highest in Dimension 1, children of pre-primary age. Around one-third of children in the region aged one year less than the official primary-school entrance age are out of school. As discussed in the previous chapter, these children may not technically be out of school if pre-primary is not part of compulsory education. However, pre-primary is now recognized as a crucial preparatory stage before primary schooling commences and is an important at-risk factor for dropping out of school.

Enrolment rates in primary (Dimension 2) and lower secondary (Dimension 3) are fairly high in the CEE/CIS region in comparison to other regions with similar levels of economic development. Nevertheless, there is still a long way to go to reach 100 per cent enrolment, and in some countries the number of out of school children has increased significantly over the past decade. Moreover, large numbers drop out at lower secondary age (Dimension 3) and enrolment drops further for upper secondary-age children. This general age-wise trend for out of school children in the CEE/CIS region is illustrated in Figure 11.

Figure 11 – Trend in enrolment in the CEE/CIS region

Overall, the estimated number of out of school children in the CEE/CIS region is 1,093,765 children of primary-school age (Dimension 2), and 1,435,083 children of lower secondary-school age (Dimension 3) (UIS, 2011b). Therefore, around 2.5 million children (2,528,848) are out of school in the CEE/CIS region.

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35 This figure is for illustrative purposes only and does not represent exact figures. Data for upper secondary age is a rough estimate.

36Dimension 2 refers to primary-age children who are neither in primary nor in secondary school.

37These figures are UIS estimates based on UNPD population data from the 2010 revision, using the latest available country data (most recent year since 2007).
are out of school. In percentage terms, on average 5.2 per cent of primary-age children and 6.2 per cent of lower secondary-age children are out of school. In some countries boys are more likely to be out of school and in other countries girls are more likely. However, overall girls are more likely to be out of school: 5.4 per cent of primary-age girls are out of school compared with 5.0 per cent of boys, and 6.5 per cent of lower secondary-age girls are out of school compared with 6.0 per cent of boys.

This chapter analyses the data on out of school children in each Dimension as described above. It focuses specifically on the profiles of children who are likely to be out of school or at risk of being excluded. These are: children of pre-primary age, children from ethnic minorities – in particular Roma children, children with disabilities and special education needs, children from the poorest households, working children, children affected by gender discrimination, children performing below expected academic standards, adolescents and children belonging to multiple out of school children risk groups. As discussed in the previous chapter, the out of school children rates in this report used for cross-national comparisons may be different to those reported in the country reports on out of school children, due to the different data sources used.
2.2 Dimension 1: Children without access to pre-primary education

Overview of data on pre-primary-age children out of school

According to the ISCED classification, pre-primary education represents the initial stage of organized instruction which is primarily designed to introduce very young children to a school-type environment. However, the purpose of pre-primary tends to vary around the world. In the 5DE model, which was discussed in the previous chapter, Dimension 1 represents the percentage of children aged one year less than the official primary entrance age who are not in pre-primary or primary education. According to this definition, 32.7 per cent of pre-primary-age children – a total of 1,627,490 children – are not in enrolled in either pre-primary or primary education in the CEE/CIS region (UIS, 2012)\(^\text{38}\).

It should be noted that these figures are not derived from net enrolment rates at pre-primary level, as net enrolment rates are based on the official pre-primary age, which is different for each country. As indicated above, Dimension 1 figures refer only to children one year younger than the official entry age for primary education. This is more suitable for comparability across countries, as children may enter pre-primary at various ages and pre-primary education also varies in duration. Moreover, pre-primary net enrolment rates can be misleading when estimating numbers of out of school children at this level because they exclude children of pre-primary age who are actually enrolled in primary education\(^\text{39}\). As a result of the method used to derive Dimension 1 figures, they are often much lower than the figures would be for all children of pre-primary age who are out of school. For example, in Kyrgyzstan 84.3 per cent of all pre-primary-age children are not enrolled in pre-primary education (based on the net enrolment rate), compared with 45.4 per cent of children aged one year less than the official primary age not enrolled in pre-primary or primary education (UIS, 2012).

In many CEE/CIS countries, pre-primary enrolment levels are still far behind the levels of enrolment in primary and lower secondary. As shown in Figure 12, over 45 per cent of pre-primary-age children are neither in pre-primary nor primary education in Kyrgyzstan, Georgia and Turkey. The figure rises to over 60 per cent of children in The former Yugoslav Republic of Macedonia, Uzbekistan, Azerbaijan, Bosnia and Herzegovina, and Tajikistan. Tajikistan has one of the lowest pre-primary net enrolment rates in the world (UIS, 2011b). Dimension 1 data is missing for Armenia, Kosovo\(^\text{40}\), Turkmenistan and Ukraine.

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\(^{38}\) These figures are UIS estimates based on UNPD population data from the 2010 revision, using the latest available country data (most recent year since 2007).

\(^{39}\) The pre-primary net enrolment rate is the number of pupils in the theoretical age group for pre-primary education enrolled in pre-primary education expressed as a percentage of the population in that age group.

\(^{40}\) UNSCR 1244.
Profiles of excluded children

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Figure 12 – Chart of Dimension 1: percentage of pre-primary-age children who are not enrolled in pre-primary or primary schools (2007-11)\textsuperscript{41}

![Pre-primary enrolments chart]

Source: UIS, 2012

The map in Figure 13 highlights the significant disparities in Dimension 1 figures between countries in the region, ranging from 0.9 per cent in Montenegro to 86.4 per cent in neighbouring Bosnia and Herzegovina and 92.1 per cent in Tajikistan.

Figure 13 – Map of Dimension 1: percentage of pre-primary-age children who are not enrolled in pre-primary or primary schools (2007-11)

![Pre-primary enrolments map]

Source: UIS, 2012

Pre-primary enrolments dropped significantly in many CEE/CIS countries during the transition period in the 1990s. In some of these countries pre-primary enrolment never

\textsuperscript{41} Data is the latest available from 2009 to 2011, with the exception of Armenia which is from 2007.
recovered, whereas in others pre-primary enrolment is now back to the pre-1990s level or has even exceeded this level. Some examples of steep drops and varying subsequent trajectories are shown in Figure 14. For historical data only gross enrolment ratios are available, which show enrolments in pre-primary regardless of age as a percentage of the official pre-primary-age group.

The gross enrolment ratio in pre-primary for Kazakhstan dropped steeply from 1990 to 1999, from 75.1 per cent to 14.8 per cent. It then climbed again to 47.7 per cent in 2011, which although still far from the 1990 level did represent significant progress over the decade. There was a similar trend in Moldova (highlighted in Figure 14), where pre-primary gross enrolment dropped from 72.7 per cent in 1991 to a low point of 42.4 per cent in 2001. It subsequently increased to 75.5 per cent in 2010, surpassing the 1991 level. In contrast, pre-primary gross enrolment in Armenia and Uzbekistan declined significantly during the 1990s and then reached a plateau, never recovering. In Armenia, the gross enrolment rate in pre-primary was 31.1 per cent in 2010, almost half of the peak level of 55.9 per cent in 1988. In Uzbekistan, the gross enrolment rate declined from its peak level of 55.7 in 1991 to 23.6 per cent – less than half – in 1999. It remained at around that level over the next decade (standing at 25.6 per cent in 2011). In Kyrgyzstan, some progress has been made since the rapid decline in the early 1990s, but the level of 19.1 per cent in 2010 was still nowhere near the 1990 level of 33.9 per cent. In Tajikistan, pre-primary gross enrolment has always been very low, never exceeding 16.6 per cent and most recently falling to 8.7 per cent (in 2010).

Figure 14 – Pre-primary gross enrolment ratio in selected CEE/CIS countries

In terms of gross enrolment rate in pre-primary, countries where significant progress has been made are Belarus, Bulgaria, Croatia, Republic of Moldova, Romania, the Russian Federation, Turkey and Ukraine. The countries where there has been a significant decline in pre-primary gross enrolment rate are Armenia, Kazakhstan, Kyrgyzstan and Uzbekistan, as described above. In a number of CEE/CIS countries, progress in terms of the pre-primary gross enrolment rate has been mixed or stagnant. In Azerbaijan, The former Yugoslav Republic of Macedonia, Montenegro, Serbia and Tajikistan it has remained largely unchanged over the
past decades\textsuperscript{42}. In Albania and Georgia, progress has been made over the past 15 years, but pre-primary gross enrolment has yet to surpass the 1990 level.

**Gender differences in child enrolment in pre-primary education**

In most CEE/CIS countries there are no significant differences in the girls’ and boys’ net enrolment rate in pre-primary. The chart in Figure 15 shows the percentage difference from gender parity of ‘1’ where girls’ and boys’ pre-primary net enrolment ratio is equal. Gender parity is generally considered to exist when up to a maximum of three per cent fewer or three per cent more girls are enrolled compared with boys (UNICEF and UIS, 2011a)\textsuperscript{43}. This is marked by the first line in the chart, above and below the middle point. Tajikistan far exceeds this line: around 16 per cent fewer girls than boys are enrolled in pre-primary (Gender Parity Index [GPI] of 0.84). More worryingly, the situation has deteriorated since 2003 when only five per cent fewer girls than boys were enrolled in pre-primary. Turkey also exceeds this line: around five per cent fewer girls than boys are enrolled in pre-primary and this level has not changed since 2004. In Georgia, 20 per cent more girls than boys are enrolled in pre-primary. This level has fluctuated considerably from year to year, however, with the average level being 12 per cent more girls than boys between 2002 and 2007 (the years for which data is available).

**Figure 15 – Gender parity for pre-primary net enrolment ratio (2010)**\textsuperscript{44}

\textsuperscript{42} For Montenegro, data is available only as of 2001; for Serbia as of 1999.

\textsuperscript{43} Referring to net enrolment – the number of pupils in the theoretical age group for pre-primary education enrolled in pre-primary education expressed as a percentage of the population in that age group.

\textsuperscript{44} Data is from 2010, except for Georgia (2007), Turkey and the Russian Federation (2009), and Kazakhstan and Uzbekistan (2011).
Regional (residence) differences in children not in pre-primary education

Enrolment in rural areas tends to be far lower than in urban areas. For example, in Tajikistan an estimated 25.6 per cent of children aged three to five years\textsuperscript{45} attended pre-primary in the capital Dushanbe in 2006 compared with just 3.6 per cent in rural areas (TLSS, 2007). Enrolment may also vary significantly between regions or districts. For example, attendance rates are three times higher in the region of Sughd (12 per cent) compared with the region of DRD (4 per cent). In Kyrgyzstan, enrolment in pre-primary was five times higher in urban areas (24.4 per cent) compared with rural areas (4.2 per cent) in 2009 (UNICEF, 2011b). Moreover, in some districts (’rayons’) enrolment was below 3 per cent (UNICEF, 2012a).

\textsuperscript{45} Pre-school in Tajikistan is from three to six years of age. These figures are therefore not an accurate reflection of pre-school enrolment, as inclusion of data for six-year-olds would likely lead to higher pre-primary enrolment figures.
Children not in pre-primary by wealth quintiles

Figure 16 shows the percentage of three- and four-year-olds\textsuperscript{46} attending early learning programmes by level of wealth (poorest and richest quintiles) for a selection of countries, including six CEE/CIS countries: Albania, Georgia, Kyrgyzstan, Serbia, Tajikistan and Uzbekistan. The gaps in attendance in early learning programmes between children from rich and poor households are very large. Attendance of children in the poorest households is less than 1 per cent in Tajikistan, under 10 per cent in Kyrgyzstan, Serbia and Uzbekistan and under 20 per cent in Georgia. In comparison, attendance rates for the richest households are over 20 per cent in Tajikistan, over 40 per cent in Kyrgyzstan and Uzbekistan and well over 60 per cent in Georgia and Serbia. The attendance gap between the poorest and richest households is also very large in Albania, but noticeably less so than in the other five CEE/CIS countries.

**Figure 16 – Percentage of three- and four-year-olds attending early learning programmes, by wealth, 2005—2007**\textsuperscript{47}

Source: Adapted from UNESCO, 2011: 34; Nonoyama-Tarumi and Ota, 2010

The following sections discuss out of school children at the primary education level (Dimension 2) and lower secondary education level (Dimension 3).

\textsuperscript{46} Note that this age range is not compatible with the Dimension 1 definition of ‘one year younger than the official primary age’.

\textsuperscript{47} Data are for the most recent year available during the period specified.
2.3 Dimension 2: Overview of data on primary-age children out of school

An estimated 1,093,765 children of primary-school age (Dimension 2) are out of school in the CEE/CIS region, which is equivalent to 5.2 per cent of the total\(^\text{48}\). At the country level, the rate of primary-age children out of school ranges from a low 0.5 per cent in Bulgaria up to 16.8 per cent in Montenegro (UIS, 2012). According to UIS 2012 data, the out of school children rate at primary-age level for Albania is 20.1 per cent, the highest in the region; however this figure is likely too high due to inflated population estimates. The figure is in the process of being updated based on new population census data at the time of writing of this report. This is further discussed in the Conclusion. Dimension 2 data is missing for Kosovo\(^\text{49}\), Georgia and Turkmenistan.

The bar chart in Figure 17 reveals the large variation in the rates of primary-age children out of school. Besides Montenegro, a large percentage – over 10 per cent – of primary-age children are out of school in Azerbaijan, Bosnia and Herzegovina, and Romania. It is interesting to note that in Tajikistan – the poorest country in the CEE/CIS region – only 2.2 per cent of primary-age children are out of school. Moreover, those countries listed above with the highest primary-age out of school children figures are not the poorest countries in the CEE/CIS region. Rather, they have a GDP per capita at PPP ranging from around four to six times greater than Tajikistan’s. In the CEE/CIS region as a whole, there is a slight trend towards increasing GDP per capita at PPP being somewhat correlated with an increase in out of school children of primary-school age, in contrast to the expected and worldwide trend of a decrease in out of school children. This counter-intuitive trend is caused by low-income countries such as Tajikistan and Kyrgyzstan, which have a low rate of out of school children of primary-school age, and relatively higher income countries such as Azerbaijan, Montenegro and Romania, which have a much higher rate of out of school children.

In a number of CEE/CIS countries, the percentage of primary-age out of school children has steadily declined over the past decade. Particularly impressive reductions in out of school children have been made in Georgia (from 9.8 per cent in 2004 to 0 per cent in 2009) and Kazakhstan (from 6 per cent in 2000 to 0.3 per cent in 2010). In The former Yugoslav Republic of Macedonia, the percentage of primary-school age out of school children quadrupled from 2001 to 2008, before falling significantly to just 1.8 per cent in 2010.

However, in five CEE/CIS countries there has been a clear increase in the percentage of primary-age out of school children in recent years. The trends over time for the five countries – Azerbaijan, Montenegro, Moldova, Romania and Serbia – are shown in Figure 18\(^\text{50}\). Several other countries in the region – Kyrgyzstan, Ukraine and Uzbekistan – witnessed steep increases in the percentage of out of school children, although the situation improved in 2010 (the most recent year for which data is available). This is hopefully the start of a downward trend in out of school children in these countries.

\(^{48}\) These figures are UIS estimates based on UNPD population data from the 2010 revision, using the latest available country data (most recent year since 2007).

\(^{49}\) UNSCR 1244.

\(^{50}\) Albania has been excluded, as the upward trend is likely to correspond at least partially to inflated population estimates over time rather than actual out of school numbers, which is further discussed in the Conclusion.
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Figure 17 – Percentage of out of school children of primary-school age in CEE/CIS countries (2010)\textsuperscript{51}

![Diagram showing percentage of out of school children in CEE/CIS countries (2010)]

Source: UIS, 2012

Figure 18 – Steep rises in the percentage of out of school children of primary age in selected countries (1998-2010)

![Diagram showing steep rises in the percentage of out of school children in selected countries (1998-2010)]

Source: UIS, 2012

\textsuperscript{51} Data is from 2010 except for Armenia (2007); the Russian Federation and Turkey (2009); and Kazakhstan and Uzbekistan (2011).

In a number of CEE/CIS countries, the percentage of primary age out of school children has steadily declined over the past decade; however, in five countries the numbers have increased.
In some countries, where the proportion of lower secondary-age children out of school is small, the absolute numbers of out of school children may in fact be quite large, and vice versa. This is, of course, a function of the size of the school-age population. These differences are reflected in the maps shown in Figure 19 and Figure 20. The Russian Federation has a primary-age out of school children rate which is below the regional average of 6.2 per cent. At the same time, it has the largest absolute numbers of primary-age out of school children, together accounting for over one-third of all out of school children in the region – a total of 382,587. In contrast, Montenegro has one of the highest primary-age out of school children rates in the region, although the total number of out of school children in this age group numbers only 5,555. Clearly, the challenge faced by countries in reducing the number of out of school children depends on both the rate and absolute numbers of such children.
Figure 19 – Map of primary-age out of school children by percentage (2010)\(^\text{52}\)

Source: UIS, 2012

Figure 20 – Map of primary-age out of school children by absolute numbers (2010)\(^\text{53}\)

Source: UIS, 2012

The chart in Figure 21 shows regional averages of three groups of out of school children: primary-age children who have dropped out, children who are currently out of school but expected to enter in the future, and children who are expected to never enter school.

\(^{52}\) Data is from 2010 except for Armenia (2007); the Russian Federation and Turkey (2009); and Kazakhstan and Uzbekistan (2011).

\(^{53}\) Ibid.
In both Central and Eastern Europe and Central Asia (which corresponds closely to the Commonwealth of Independent States54), the share of primary-age out of school children who dropped out is relatively low (9 per cent and 8 per cent respectively). However, it should be noted that Figure 21 looks only at primary-age out of school children. In the CEE/CIS region, most drop-outs occur at lower secondary level, which is discussed in the next section.

Of great concern is that, after Sub-Saharan Africa, Central Asia has the highest proportion of primary-age out of school children expected to never enter school: a total of 51 per cent. This out of school children category poses the most serious challenge to policy-makers (UIS, 2011b). In contrast, in Central and Eastern Europe the biggest group of out of school children are those entering primary school late, with a total of 55 per cent in the category ‘likely to enter school in the future’.

**Figure 21 – School exposure of primary-age out of school children by region (%)**, 2010

![Bar chart showing school exposure of primary-age out of school children by region](chart)

Source: adapted from UIS, 2012b

Although the categorization of out of school children by region helps set regional priorities, it should be taken into account that there are significant variations within regions. Moreover, even within a country there can be significant variations between different profiles of out

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54 Central Asia excludes CIS countries Belarus, Moldova and Russia, and includes the non-CIS country Mongolia.
of school children. For example, in Kyrgyzstan a very large proportion of the out of school children population enters school late – in contrast to the general trend in Central Asia (UNICEF, 2012a). In addition, the situation of out of school children can be completely different when comparing girls and boys, and rural and urban areas.

A closer examination of the categories of out of school children reveals that the situation is not always as clear-cut as out of school children figures might suggest. This is illustrated by Figure 22, which shows categories of primary-age out of school children in Kyrgyzstan by sex. There are no significant differences in out of school rates for girls and boys in Kyrgyzstan. However, when examining the categories of out of school children by sex, it becomes apparent that primary-school-age boys in Kyrgyzstan are around twice as likely to enter school late (by age 17) compared with girls, are less likely than girls to never enter school, and are far less likely than girls to have dropped out from school. Out of school girls are nine times more likely than boys to have dropped out (24.3 per cent girls compared with just 2.7 per cent boys). In general, out of school girls are most likely to never enter school, whereas out of school boys are most likely to enter school late.

**Figure 22 – Categories of primary-age out of school children in Kyrgyzstan by sex (2005)**

![Bar chart showing percentages of girls and boys expected to enter school by age 17, and those who dropped out or never entered school.](image)

Source: MICS, 2006 in UNICEF, 2012a

Figure 23 shows a similar pattern for rural and urban areas. In rural areas primary-age out of school children are most likely to never enter school (49.7 per cent rural), whereas in urban areas they are most likely to enter school late – by age 17 (64.5 per cent).

This data from Kyrgyzstan illustrates the complexity of addressing the problem of out of school children. Why are out of school boys much more likely to enter school late (by age 17)? Why are out of school girls much more likely to have dropped out of primary school? The reasons are different for different profiles of out of school children. This is looked at in more detail in the profiles of out of school children sections, below.

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55 Compulsory education in Kyrgyzstan is up to age 15 (end of lower secondary). However, the fixed limit of 17 years of age is used for this calculation in the Five Dimensions of Exclusion (5DE) model.
2.4 **Dimension 3: Overview of data on lower secondary-age children out of school**

It is estimated that a total of 1,435,083 children of lower secondary-school age (Dimension 3) are out of school in the CEE/CIS region, which is a rate of 6.2 per cent (UIS, 2011b)\(^56\). At lower secondary age large numbers of children start to drop out. Although only 1 per cent higher than the percentage of primary-age children out of school, it should be noted that these children are in most cases unlikely to return to school and consequently are permanently excluded from education. In contrast, the 5.2 per cent figure for primary-age out of school children includes many children who will enter primary school late; in other words, a significant proportion of the 5.2 per cent are not permanently excluded. This is an important distinction which needs to be taken into account when comparing the difference between primary- and lower secondary-age out of school rates.

The percentage of lower secondary-age children out of school ranges from 0 per cent in Kazakhstan to 12.7 per cent in Bulgaria, as shown in Figure 24. However, it should be noted that Dimension 3 data was not available for the four CEE/CIS countries with the highest percentages of primary-age out of school children: Albania\(^57\), Azerbaijan, Bosnia and Herzegovina, and Montenegro. Consequently, some of the countries with the highest proportion of out of school children of lower secondary age may not be reflected in the Figure 24 chart. Dimension 3 data is also missing for Kosovo\(^58\), The former Yugoslav Republic of Macedonia and Turkmenistan.

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\(^56\) These figures are UIS estimates based on UNPD population data from the 2010 revision, using the latest available country data (most recent year since 2007).

\(^57\) As noted previously, the out of school children figure for Albania needs to be adjusted based on new census data. However, even if the revised figure is only half of the existing figure, it would still be one of the highest rates in the region.

\(^58\) UNSCR 1244.
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Figure 24 – Percentage of out of school children of lower secondary age in CEE/CIS countries (2010)\(^{59}\)

![Percentage of out of school children of lower secondary age in CEE/CIS countries (2010)](image)

Source: UIS, 2012

As discussed in the previous section, in some countries, where the proportion of out of school children is small, the absolute number of out of school children may be very large, and vice versa. The maps in Figure 25 and Figure 26 show the proportion of lower secondary-age children out of school (above) and the absolute numbers (below). For Turkey and Uzbekistan, the percentage of lower secondary-age children out of school is below the CEE/CIS average (4.6 per cent and 3.7 per cent, respectively). However, in terms of absolute numbers these countries – together with the Russian Federation – have the largest number of out of school children in the region. Combined, the three countries account for over two-thirds of the total number of lower secondary-age out of school children in the region – a total of 965,631. Clearly, the percentage figure alone does not reflect the magnitude of the out of school children situation.

Large reductions in the percentage of lower secondary-age out of school children have been made in Croatia (from 6.8 per cent in 1999 to 0.8 per cent in 2010) and Georgia (from 14.8 per cent in 2005 to 8 per cent in 2009). However, the most impressive reductions are in Tajikistan and Turkey. In Tajikistan, a quarter of lower secondary-age children were out of school in 1999, and in 2010 this figure was reduced to just 3.7 per cent. Similarly, in Turkey the percentage of lower secondary-age children out of school was reduced from 22.8 per cent in 1999 to just 4.6 per cent in 2009. These steep declines are shown in Figure 27.

\(^{59}\) Data is from 2010, except for Armenia (2007), Georgia, Romania, the Russian Federation and Turkey (2009), and Kazakhstan (2011).
Profiles of excluded children

Figure 25 – Map of lower secondary-age out of school children by percentage (2010)\(^{60}\)

Source: UIS, 2012

Figure 26 – Map of lower secondary-age out of school children by absolute numbers (2010)\(^{61}\)

Source: UIS, 2012

In Turkey the percentage of lower-secondary-age children out of school was reduced from 22.8 per cent in 1999 to just 4.6 per cent in 2009.

\(^{60}\) Data is from 2010, except for Armenia (2007), Georgia, Romania, the Russian Federation and Turkey (2009), and Kazakhstan (2011).

\(^{61}\) Ibid.
Figure 27 – Steep declines in the percentage of out of school children of lower secondary age in selected countries (1999-2010)

Source: UIS, 2012

In eight CEE/CIS countries the situation has worsened, with increasing numbers of lower secondary-age children out of school in Armenia, Belarus, Bulgaria, Kyrgyzstan (following a decrease from 2004 to 2008), Moldova, Romania, Serbia and Uzbekistan. The trends for three countries with particularly steep increases are shown in Figure 28. In Bulgaria, the rate of lower secondary-age out of school children increased more than five-fold between 2003 (2.3 per cent) and 2010 (12.7 per cent). In Moldova, the rate of lower secondary-age out of school children more than doubled between 2000 (5.1 per cent) and 2010 (12.5 per cent). In Romania, following a period of steady decline, the lower secondary-age out of school children rate went up from 1.7 per cent in 2007 to 5.8 per cent in 2009 – a three-fold increase in just two years.

Figure 28 – Steep rises in the percentage of out of school children of lower secondary age in selected countries (1999-2010)

Source: UIS, 2012

In eight CEE/CIS countries there are increasing numbers of lower-secondary-age children out of school.
Adolescents

Many countries in the CEE/CIS region have experienced a decline in population since 1991, presenting a unique opportunity to ensure that vacated spaces in schools are replaced by out of school adolescents (UIS, 2010b). However, as discussed above, the rate of out of school adolescents of lower secondary-school age has actually increased in at least eight CEE/CIS countries. A UNICEF study involving 2,444 youth between the ages of 13 and 24 conducted in Kosovo, Georgia and Tajikistan looked at the key factors affecting education quality, how to improve education quality for youth, and related aspects including unemployment and dropout (UNICEF, 2011e). This study, which included both a survey component and focus group discussions with youth, found that many youth drop out for financial reasons – because of the high cost of education, the lack of financial support from the family, and the desire or need to earn an income. Ironically, many adolescents need to work in order to be able to afford continued education, yet work causes them to drop out. Adolescents face a unique set of challenges and these and other barriers to education for them are discussed further in the next chapter, on barriers and bottlenecks. The section on upper secondary education later in this chapter continues the discussion on out of school adolescents in the CEE/CIS region.

Adolescents of lower secondary-school-age are in most cases unlikely to return to school and are permanently excluded from education.

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62 It is possible that the rate increased in more than eight countries, as data is not available for some countries.
63 UNSCR 1244.
2.5 Gender differences in out of school children

Differences in enrolment by gender vary greatly throughout the region, with boys more likely to be out of school in some countries and girls more likely to be out of school in others. However, the largest gender differences are in countries where girls are more likely to be out of school. Figure 29 shows gender differences in out of school children of primary-school age, with the left side showing countries where boys are more likely to be out of school, and the right side showing countries where girls are more likely to be out of school (sorted in order of increasing disparity).

Girls of primary-school age in particular are more likely to be out of school in Tajikistan (4 per cent of girls compared with 0.5 per cent of boys), Turkey (3.3 per cent of girls compared with 1.8 per cent of boys) and Uzbekistan (8.5 per cent of girls compared with 5.9 per cent of girls). As a ratio, the difference in Tajikistan is especially large: girls of primary-school age are eight times more likely to be out of school compared with boys.

Countries where boys of primary-school age in particular are more likely to be out of school include Armenia (5 per cent of boys compared with 2.4 per cent of girls), Bulgaria (0.7 per cent of boys compared with 0.3 per cent of girls), Croatia (5.2 per cent of boys compared with 3 per cent of girls), Kazakhstan (0.6 per cent of boys compared with 0.3 per cent of girls) and The former Yugoslav Republic of Macedonia (2.7 per cent of boys compared with 0.8 per cent of girls).

Figure 29 – Percentage of primary-school-age out of school children, girls and boys (2010)∗

Source: UIS, 2012

∗ Data is from 2010 except for Armenia (2007); the Russian Federation and Turkey (2009); and Kazakhstan and Uzbekistan (2011).
In a number of CEE/CIS countries the gender gap at primary level has narrowed in the last decade, notably in Tajikistan, though it still has the highest gender gap in primary enrolment, and Turkey, where the gap is seen to be rapidly closing. The trends for these two countries in terms of the Gender Parity Index for the primary net enrolment rate are shown in Figure 30. The top line of the graph represents gender parity (1).

Figure 30 – Gender Parity Index for primary net enrolment rate, Turkey and Tajikistan (1994-2011)

Source: UIS, 2012

The gender parity gap may widen considerably at lower secondary level, as is the case in Turkey. This is illustrated in Figure 31, which shows age-specific enrolment and Gender Parity Index by age in Turkey. The Gender Parity Index is close to 1, indicating equal enrolment rates for girls and boys, up to around 12 years of age. From 13 years of age the GPI declines, signifying a marked reduction in girls’ enrolment compared with boys’ enrolment. It is also at age 13 that large numbers of children start to drop out from school, as shown by the line for the age-specific enrolment rate.

Data for gender differences in lower secondary-age out of school children is available for only 10 CEE/CIS countries. For those countries where data is available, the biggest discrepancy is in Turkey, where 6.7 per cent of girls are out of school compared with just 2.6 per cent of boys. The biggest discrepancy in the other direction is in the Russian Federation, where 10.5 per cent of boys are out of school compared with 8.3 per cent of girls. The fact that girls are more likely to drop out as adolescents in some countries and boys in other countries is a reflection of the different societal pressures on male and female youth, and these pressures tend to increase as they get older. The analysis of age, sex and poverty below sheds some light on to the complex relationship between these three characteristics. The discussion of gender in the next chapter on barriers and bottlenecks reflects on the reasons for gender differences in out of school rates.

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65 The Gender Parity Index for net enrolment in primary education is the ratio of the female-to-male values of the net enrolment ratio in primary education. A GPI of 1 indicates parity between sexes.

66 The original source of this data is the Milli Eğitim Statistikleri (National Education Statistics) in Turkey, and the data is from 2010; it is therefore more recent than the GPI data for Turkey from UIS, discussed above, which is from 2009.
Figure 31 – Age-specific enrolment and Gender Parity Index for 5- to 16-year-olds (2010)

Source: adapted from UIS, 2012d, in press

Figure 32 – Percentage of lower secondary-school-age children out of school, boys and girls (2010)

Source: UIS, 2012

67 Data is from 2010, except for Armenia (2007), Romania, the Russian Federation and Turkey (2009).
The following sections focus on specific profiles of out of school children in Dimensions 2 and 3. Gender differences in enrolment are particularly high among Roma, which is discussed further in the next section.

2.6 Children from ethnic minorities

This report focuses on the Roma ethnic group, which is by far the largest such group in the CEE/CIS region and one of the most disadvantaged. Although often treated as a single group, Roma language and dialects, culture and religion can vary greatly from one region to another. Roma have faced severe discrimination throughout their history, and to this day many Roma communities live in slums characterized by poverty, poor health and living conditions, high levels of unemployment and a lack of access to quality education (UNICEF, 2009c).

The number of Roma living in CEE/CIS countries is difficult to estimate, and approximations vary greatly. For example, despite an estimated Roma population of between 1.8 and 2 million in Romania only 619,000 people declared themselves to be ethnic Roma in the 2011 census (Open Society Institute, 2006; UNDP, 2012). Besides Romania, the largest populations of Roma are in Bulgaria, the Czech Republic, Hungary, Serbia and Slovakia. Turkey may have a large population of Roma, but as in some other countries in the region there are no firm estimates. The total population of Roma in Europe is estimated to be around 12 to 15 million (European Parliament, 2005). Social stigma leads many Roma to not report their ethnic identity. In addition to a lack of reliable population estimates, there is a
lack of information on Roma in general as ethnically disaggregated data is rarely collected. In some countries, such as Romania and Slovakia, privacy legislation prevents any reporting on ethnicity (UNESCO, 2010).

Reliable education statistics on Roma are particularly scarce. However, the data that is available shows conclusively that Roma children are far less likely to be enrolled in and complete primary and secondary education. In central and eastern European countries only around 20 to 25 per cent of Roma children attend secondary school (UNESCO, 2010). In addition, Roma children who do enrol are more likely than non-Roma children to drop out before completing basic education (UNICEF, 2011d). Moreover, many Roma children are tracked to ‘special’ schools and classrooms which are normally intended for children with disabilities, because of their language differences, discrimination and mistaking ethnic, linguistic and behavioural patterns for learning disabilities. This has led to a large equity gap in the quality of education between Roma and non-Roma children, in addition to the large access gap, which is discussed further in Chapter 3.

Figure 33 provides estimates of the numbers of Roma who have completed primary and secondary education, although this data is mostly from 2001–2002 so is by now fairly outdated. In Romania, the situation improved considerably, according to 2007/8 survey data, with 76.7 per cent of Roma children aged 14 to 17 completing primary school, compared with 31.7 per cent (aged 15 and above) in 2002 (UNICEF 2011b; Fleck, G. and Rughini, 2008; Open Society Institute, 2006).

Figure 33 – Percentage of Roma aged 15 and above who completed primary
and secondary education

There is evidence that gender differences in school enrolment are much higher among Roma compared with the general population. According to the 2001 Croatian Census, only a quarter of the Roma who completed secondary education were female (World Bank, 2004a). Similarly, in The former Yugoslav Republic of Macedonia less than a third of Roma who completed secondary education in the 2001/2002 school year were female (World Bank, 2004c).
Although data on Roma children is scarce, data is even more limited for other minority ethnic groups in the CEE/CIS region. Ethnicity is not always recorded in administrative data and household survey data. However, in Kyrgyzstan and Tajikistan household survey data does include ethnicity, and the percentage of out of school children by ethnic group can be calculated. The Tajikistan Living Standards Survey (TLSS) data shows that levels of out of school children are similar for the main ethnic groups – Tajik, Uzbek and Russian (UNICEF, 2012c, in press). However, for other – smaller – minority ethnic groups, the percentage of out of school children is much higher at both primary and secondary education levels. In Kyrgyzstan, where the main ethnic groups aside from Kyrgyz are also Uzbek and Russian, a slightly different picture emerges (UNICEF, 2012a). Here, the percentage of out of school children is also higher for the ‘other’ ethnic group category. However, it is Russian children who are most likely to be out of school at primary age – largely because they enter primary school late. It is Uzbek children who are most likely to be out of school at lower secondary age.

The ‘other’ ethnic group category should of course not be generalized, as the situation for each ethnic group is different. The section on children belonging to multiple out of school children risk groups below looks in more detail at one particular ethnic group belonging to the ‘other’ category in Kyrgyzstan – the highly marginalized Lyuli. It is clear that in addition to Roma there are other ethnic groups who are marginalized in the CEE/CIS region, and there may be many more that remain invisible to the public eye.

### 2.7 Children with disabilities and special education needs

Children with disabilities and special education needs are often excluded from mainstream education and are segregated into special schools and classes, residential institutions or remain in their homes. Even worse, many children with disabilities are not enrolled in any education programmes. In this regard, progress across the region has been uneven, as Figure 34 illustrates. In poorer CEE/CIS countries, the proportion of children enrolled in basic special education declined during the 1990s.

A greater share of children in the CEE/CIS region are now identified as children with disabilities, from around 500,000 at the onset of transition to 1.5 million, due largely to the greater recognition of disability (UNICEF, 2011c). However, between 1 million and 3.6 million children with disabilities are still not officially recognized, depending on data sources. In 2005, the benchmark established by the European Academy of Childhood Disabilities indicated that a rate of children with disabilities of at least 2.5 per cent was the ‘norm’ (with 1 per cent having serious conditions) (UNICEF, 2005a). However, the WHO/World Bank World Disability Report of 2011 indicates that 5.1 per cent is a more accurate benchmark (with 0.7 per cent of children 0-14 years of age having a severe disability), based on a wide range of datasets (WHO & World Bank, 2011). With the total child population in the region estimated at just over 100 million, according to the WHO/World Bank benchmark around 5.1 million children are estimated to have a disability. In addition, in some CEE/CIS countries only around 1 per cent of basic education students are identified as having special education needs. These figures are even inflated in some countries as, for example,
children from disadvantaged or socially vulnerable families, including Roma children, can also end up in special schools. This indicates that the needs of many, if not most, children across the broader range of disabilities and educational needs are not being addressed.

Figure 34 – Enrolment in basic special education programmes, 1989 and 2001 (rates per 100 of relevant population)

Source: UNICEF, 2005a: 19

Children with disabilities are often segregated in ‘special schools’ (or classrooms) rather than mainstream schools. This is related to the fact that across the region disability is seen primarily as a chronic medical condition requiring remediation, health care, rehabilitation and institutionalisation, with little differentiation made between disorder, impairment, illness and disability. At the same time there has been a shift internationally towards the adoption of a ‘social model’ of disability, and the recognition of the rights of people with disabilities, rather than considering only the ‘problems to be solved’. This culminated with the adoption of the UN Convention on the Rights of Persons with Disabilities (CRPD), in 2006. Progress remains patchy, but there has been some advancement in integrating children with disabilities into mainstream schools in the CEE/CIS region, notably in Bulgaria, Hungary, Lithuania, Romania and The former Yugoslav Republic of Macedonia.

It has proven to be difficult to substantially reduce or eliminate enrolment in special schools. However, the number of children in the region who are registered as having a disability and are reportedly receiving education services in special schools is rather small by comparison to the total. Out of the total 1.5 million children who are registered with a disability only 219,000 (14.5 per cent) attend special schools. It is likely that the remaining 1,281,000 children registered with disabilities – as well as the estimated 3.6 million children with disabilities who are not registered – encompass a large portion of those who are out of school or at risk of dropping out.

Large numbers of children with disabilities in the region are completely excluded from education, in particular those with intellectual disabilities and those children with disabilities...
Profiles of excluded children

Around 5.1 million children are estimated to have a disability in the CEE/CIS region from birth. For example, in Tajikistan around three quarters of school-age children with disabilities do not attend any school (UNICEF, 2012a). According to a UNICEF (2008) survey on the situation of children with disabilities in Kyrgyzstan, it was found that 43.4 per cent were not going to school. In Kyrgyzstan, almost all the basic special education schools are in the two biggest cities, Bishkek and Osh, and very few children have access to basic special education (Eurasia Foundation of Central Asia, 2010). The situation is worse in rural and remote areas where there are no nearby special education programmes for children with disabilities.

The participation of children with disabilities and special education needs at pre-school and secondary levels is even lower and has generally advanced less than enrolment in basic education. Yet pre-school and early intervention services are key strategies for ensuring inclusion in later grades.

Children with disabilities in residential care

Related to the issue of children with disabilities and special education needs is the institutionalization of children. The CEE/CIS region has the highest number of children in residential care in the world – over 626,000 in 22 countries (UNICEF, 2010a). As noted in the UNICEF report At home or in a home? Formal care and adoption of children in Eastern Europe and Central Asia, “the Soviet legacy system continues to dominate the child-care
system with its tradition of placing children who were abused and neglected or those with disabilities into institutions” (UNICEF, 2010a: 4).

UNICEF estimates that in the CEE/CIS region a child with a disability is almost 17 times more likely to be institutionalised than a child without a disability (UNICEF, 2012e). In spite of ongoing reforms, institutional care is increasing rather than decreasing – from 1.5 per cent of the population in 2000 to 1.7 per cent in 2007. Children with disabilities and special education needs represent a large proportion – over one third – of children in residential care. Where there are no suitable education facilities nearby, parents of children with disabilities may resort to boarding schools or other institutions for their children, either because support services do not exist or because parents seek day-care facilities to allow them to work.

The proportion of children with disabilities in residential care with respect to the population of 0- to 17-year-olds has decreased in some CEE/CIS countries and increased in others over the past two decades. Figure 35 shows CEE/CIS countries where the rate of children with disabilities in residential care is increasing, such as Croatia (from 291.4 to 438.3 per 100,000 between 1990 and 2008).

**Figure 35 – Children with disabilities in residential care per 100,000 children 0-17 years of age, selected CEE/CIS countries (1989-2009)**

```
0 200 400 600 800
291.4 2478 265.2 277.1 225.6 292.7 353.1 347.5 379.6 438.3
Czech Republic
Croatia
Georgia
Romania
Bosnia and Herzegovina
Latvia
Turkmenistan
Ukraine
Albania

Source: TransMONEE, 2011
```

However, de-institutionalization should not be an end-goal in itself. Rather, it should be part of a comprehensive and systematic reform designed to meet the needs of families and children, and encompass a wide range of support services. This is further discussed in the chapter on Policies and Strategies.

### 2.8 Children from the poorest households

Across the world children from the poorest households are more likely to be out of school. They are more likely to drop out because they need to work to support their families and themselves, and indeed child labour is by itself an important cause of drop-out – a cause which is further discussed below in the section on working children. Children from poor
families are also more likely to not attend or stop attending school because the costs of schooling cannot be met. These and other barriers to education for poor children are discussed in detail in the next chapter.

As discussed above, many Roma communities are characterized by poverty. The 2009 Household Budget Survey conducted in Romania provides an interesting insight into the relation between Roma children, poverty and out of school rates (UNICEF, 2012b, in press). Only a fraction of Roma households in the sample were from the wealthiest quintile, but interestingly in these families not a single child was out of school. In contrast, in the poorest quintile of Roma households 12.9 per cent of primary-age children and 12.6 per cent of lower secondary-age children were out of school. This data suggests that at least in Romania it is a combination of poverty and belonging to a marginalized ethnic group which leads Roma children to be out of school, and being Roma in and of itself is not necessarily a risk factor.

An examination of poverty in relation to sex and age further highlights the complexity of the poverty dimension and its impact. Data from Kyrgyzstan, Tajikistan and Turkey show how poverty affects girls and boys differently in different countries. In Tajikistan, girls are more affected by poverty than boys in terms of their likelihood of being out of school (UNICEF, 2012c, in press). In the poorest quintile, primary-age girls are more likely to be out of school than boys, whereas in the wealthiest quintile boys are more likely to be out of school. This is a reflection of prevailing socio-cultural attitudes towards girls’ education in Tajikistan among poor families. The situation is very different in Kyrgyzstan, where boys are more affected by poverty than girls, at least at lower- and upper secondary education levels, as illustrated in Figure 36 (UNICEF, 2012a). At lower secondary-age level, in the poorest households around twice as many boys than girls are out of school.

**Figure 36 – Percentage of out of school children by age group, sex and wealth quintile in Kyrgyzstan (2005)**

Source: UNICEF, 2012a based on MICS, 2006 data
In addition, the gap between rich and poor grows for boys as they get older. By the time boys reach upper secondary age, almost a quarter of the poorest quintile is out of school, compared with less than 10 per cent of the wealthiest quintile. For girls, the gap between rich and poor is much smaller. This may be because adolescent boys from low-income families face greater pressure to start earning an income.

In Turkey, the situation for girls is similar to Tajikistan. Girls from the poorest households are more likely to be excluded from education, except at primary education age. Figure 37 illustrates another trend for Turkey: poverty affects older children more than younger children, and this is the case for both girls and boys. Children from the poorest quintile are more likely to be out of school as they get older – suggesting that they drop out from school. Poor girls in particular are likely to be out of school as adolescents. On the other hand, children from the wealthiest quintile are not much more likely to be out of school as they get older, except boys once they reach the age of 14 to 17.

These examples serve to emphasize the significance of poverty’s association with many other out of school children risk factors. The importance of looking at a combination of characteristics of out of school children, and not just one characteristic in isolation (such as poverty, ethnicity, age or sex), is further discussed in the section on belonging to multiple out of school children risk groups, below.

**Figure 37 – Percentage of out of school children by age level, sex and wealth quintile in Turkey**

Source: UNICEF, 2012d, in press, based on DHS 2008 data
2.9 Working children

Child labour and exclusion from education are closely related, as many out of school children are engaged in some form of work activity, including in the agriculture sector, various trades and unpaid domestic work. Even if working children do go to school, work may cause them to be absent frequently and do worse at school. As a result, they are at a higher risk of dropping out.

Figure 38 shows child labour rates in CEE/CIS countries, which range from 0.9 per cent in Romania to 32.4 per cent in Moldova.

It should be noted that the data used to produce the chart in Figure 38 is from various years and sources and no standard definition of child labour was employed across all studies.

Translating the legal concept of child labour into statistical terms for measurement is not straightforward. The 18th International Conference of Labour Statisticians (ICLS) in 2008 made a significant step forward in this regard when it adopted the first-ever set of global standards for translating the international legal standards on child labour into statistical terms. The child labour measure used in the Global Out of school Children Initiative is
based on the measurement guidelines contained in the 18th ICLS resolution, and restricts
the scope to children up to and including 14 years of age, as it is the most common upper
age limit for basic schooling\textsuperscript{68}.

**Figure 38 – Percentage of children aged 5 to 14 engaged in child labour in
CEE/CIS countries (2000-2007)**

![Graph showing percentage of children engaged in child labour in CEE/CIS countries](image)

UNICEF Childinfo, 2011

The data in Table 4 is based on these measurement guidelines. It shows the percentage of
children aged 5-14 involved in child labour, as well as the percentage of children involved in
child labour who are out of school, for Kyrgyzstan, Romania, Tajikistan and Turkey. In each
column, the highest and second-highest figures are highlighted in dark and light shades,
respectively, in order to help identify the most important factors affecting involvement in
child labour and exclusion from education.

The percentage of children involved in child labour is just 0.8 per cent in Romania and 2.8 per
cent in Turkey, compared with 10 per cent in Tajikistan and more than a quarter of children in
Kyrgyzstan. On the other hand, children in Romania and Turkey engaged in child labour are far
more likely to be out of school, in particular in Turkey where over half of child labourers are
out of school. Furthermore, in Turkey girls involved in child labour are also much more likely
than boys to be out of school. The opposite is the case in Romania, where boys involved in
child labour are twice as likely to be out of school compared with girls.

\textsuperscript{68} The child labour measure comprises three groups:
1. Five- to 11-year-olds in economic activity (i.e., those engaged in any activity falling within the United Nations System
   of National Accounts (SNA) production boundary for at least one hour during the reference week). Economic activity
   covers children in all market production and in certain types of non-market production, including production of goods
   for own use. It includes forms of work in both the formal and informal sectors, as well as forms of work both inside
   and outside family settings;
2. 12-14 year-olds in non-light (or ‘regular’) economic activity (i.e., those engaged in any activity falling within the SNA
   production boundary for at least 14 hours during the reference week);
3. 5-14 year-olds in hazardous unpaid household services (i.e., those engaged in the production of domestic and perso-
   nal services for consumption within their own household, commonly called ‘household chores,’ for at least 28 hours
   during the reference week).
In Tajikistan urban working children are more than three times as likely as rural working children to be out of school.
Older children (aged 12 to 14) are more likely than younger children (aged 5 to 11) to be involved in child labour as well as to be out of school. However, in Kyrgyzstan although older children are somewhat more likely to be involved in child labour it is younger child labourers who are far more likely to be out of school.

Child labour can be very location-specific. In the Kyrgyzstan capital Bishkek, only 0.5 per cent of children are involved in child labour compared with 62.5 per cent in Issyk-Kul province. In Tajikistan, the child labour rate is similarly low in the capital Dushanbe: 2.5 per cent compared with 23.4 per cent in the Gorno-Badakhshan autonomous province. In both Kyrgyzstan and Tajikistan, regional disparities in child labour rates are much greater than disparities based on the rural/urban ratio, gender or age. Consequently, this is an important consideration in combating child labour. Unfortunately, some surveys which measure child labour do not allow for disaggregation by region or district. This could be an important component to include in future surveys.

2.10 **Children belonging to multiple out of school children risk groups**

As discussed earlier in this chapter, children from ethnic minorities, children with disabilities and special education needs, children from the poorest households, working children, children affected by gender discrimination and adolescents are more likely to be
out of school. However, those children with more than one of these characteristics are even more likely to be out of school. Numerous household surveys show that the risk of being excluded from education rises for children belonging to more than one out of school children risk group, and rises further for children belonging to more than two out of school children risk groups\(^2\). For example, while children from poor households are more likely to be out of school in Tajikistan, girls from poor households are particularly likely to be out of school. Similarly, while Roma children are more likely to be out of school in Romania, Roma children from poor households are particularly likely to be out of school.

The Lyuli ethnic minority community in Kyrgyzstan is an example of how belonging to multiple out of school children risk groups compounds the risk of exclusion from education (UNICEF, 2011f)\(^3\). The Lyuli community is very poor and from an early age children are involved in child labour to support their families. Only around 40 per cent of school-age Lyuli children are enrolled in school. In addition, those children who do attend school often do so irregularly. Every day before school starts, teachers make a tour around the school to ‘collect’ children. Of those children that do enrol in 1st grade, only a fraction make it to 9th grade; in 2012 over three times as many children were enrolled in 1st grade compared with 9th grade.

The Lyuli community is highly marginalized and prejudice makes it difficult to find better work outside of their communities. In addition, the prospect of discrimination and bullying reduces the likelihood of Lyuli youth continuing education outside their communities. The local school does not go beyond 9th grade. In a community of around 4,000 people, only 80 people have completed 10th grade and only two have completed higher education.

Gender discrimination is reflected in the fact that more than twice as many boys are enrolled compared with girls (277 boys compared with just 120 girls). Early marriage is one of the reasons why girls are more likely to drop out.

For Lyuli children, it is a combination of risk factors – poverty, belonging to a marginalized ethnic group, child labour, and gender discrimination – which causes around 60 per cent of children to be out of school. The barriers to education corresponding to various out of school children profiles are discussed in the next chapter, addressing the issue of why particular out of school children profiles or combinations of risk factors lead to a greater likelihood of being out of school. The following section looks at children who are attending school, but are at risk of dropping out.

2.11 Dimensions 4 and 5: Children at risk of exclusion

Dimensions 4 and 5 represent children who are at risk of dropping out or withdrawing from the primary and lower secondary levels of education. Two indicators which reflect dropout are survival to the last grade of primary, and transition rates from primary to lower secondary education, which are looked at below. This section also looks at factors which

\(^{2}\) The sample size of household survey limits the levels of disaggregation that can be accurately reported. Although four or more OOSC profile characteristics could be combined, the sample size would generally be too small to produce meaningful estimates of education participation.

\(^{3}\) Information on the Lyuli community is based on a UNICEF 2011 report as well as information (such as enrolment data) obtained during a May 2012 visit to the Lyuli community school.
increase the risk of drop-out. There is, of course, a correspondence between profiles of children who are out of school, as discussed earlier in this chapter, and profiles of children at risk of dropping out of school. Children living in Roma communities and children with a disability, for example, are at greater risk of dropping out from school. Lack of pre-primary experience (Dimension 1) is also a factor which increases the drop-out risk, as discussed earlier in this chapter. This section looks at additional factors which are known to increase the risk of drop-out: grade repetition, being overage and poor academic achievement (UNESCO and UIS, 2011). Poor academic achievement in particular is a very pertinent issue for the CEE/CIS region.

As discussed earlier in this chapter, the CEE/CIS region generally has a lower proportion of drop-outs among primary-age out of school children compared with other regions in the world. Instead, exclusion from education is more likely caused by children never entering school, entering late or dropping out from lower secondary school. This is reflected in the relatively high transition rates and survival rates to the last grade of primary, as discussed below. However, there are two issues which need to be kept in mind. The first is that drop-out rates are often under-reported, which may particularly be the case where there is per-capita funding and reporting drop-outs directly impacts school financing. It is not known to what extent drop-out rates are under-reported, but it needs to be taken into consideration that actual drop-out rates may be higher in some CEE/CIS countries. Secondly, national figures disguise potentially high regional and local inequalities. For example, as discussed above in the section on children belonging to multiple out of school children risk groups,
in the Lyuli community in Kyrgyzstan the majority of children dropped out between grades 1 and 9, with a large percentage dropping out prior to completing primary education. However, the nation-wide survival rate to the last grade of primary in Kyrgyzstan is 97.6 per cent (UIS, 2012). Of course, low drop-out rates at national level do not preclude such cases at the local level.

**Survival rates to the last grade of primary**

The survival rate to the last grade of primary indicates the percentage of pupils starting grade 1 who are expected to reach the last grade of primary, regardless of repetition. Consequently, survival rates give an indication of the risk of drop-out during primary school. As shown in Figure 39, survival rates are high – close to 100 per cent – for most CEE/CIS countries (note that the chart starts from 92 per cent). Bulgaria and Turkey have the lowest survival rates, with six out of every 100 children not reaching the last grade of primary. Survival rates are very similar for girls and boys in most CEE/CIS countries. The biggest disparities are in Azerbaijan and Tajikistan, where survival rates are 100 per cent for boys but only 97 per cent for girls – this means that three per cent of girls do not reach the last grade of primary (for Tajikistan the latest data is from 2005).

**Figure 39 – Survival rate to the last grade of primary (%, 2008)**

![Survival rate to the last grade of primary](chart)

Source: UIS, 2011b

**Transition rates from primary to lower secondary**

Transition rates from primary to lower secondary are generally high in CEE/CIS countries, as shown in Figure 40 (note that the chart starts from 75 per cent). The clear exception is Bosnia and Herzegovina, where the transition rate is just 83.6 per cent. This is followed by Turkey (96.7 per cent), Albania (96.9 per cent), Romania (97.6 per cent), and Bulgaria and Serbia (both 97.9 per cent).

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74 Data for Belarus, Estonia, the Russian Federation, Tajikistan and Turkey are from 2007; for Armenia and The former Yugoslav Republic of Macedonia from 2006.

75 The transition rate to (lower) secondary is the number of new entrants to the first grade of secondary education (general programmes only) in a given year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education in the previous year.
Turkey is a notable success story, with enormous progress made over the past decades both in terms of increasing transition rates and in reaching gender parity. The transition rate increased from just 31 per cent in 1977 to 96.7 per cent in 2008 (the latest year for which data is available). As many girls as boys now go on to attend secondary school after primary⁷⁶, but just two decades earlier – in 1990 – the Gender Parity Index for the transition rate was a very low 0.69.

Figure 40 – Transition rate from primary to secondary (2009)⁷⁷

Repetition rates

Data on repetition rates is not available for a number of CEE/CIS countries, but the available data shows that repetition rates are generally quite low – below 1 per cent at primary level and secondary levels for most countries. The gender imbalance in repetition rates is a cause for concern, however. Boys are more likely than girls to repeat grades in all CEE/CIS countries, in particular at lower secondary level. More than 70 per cent of repeaters in lower secondary education are boys in Bosnia and Herzegovina, Croatia, Kyrgyzstan, The former Yugoslav Republic of Macedonia and Moldova, as shown in Figure 41.

Source: UIS, 2012

⁷⁶ The Gender Parity Index of the transition rate was 1.0 in 2008, the latest year for which data is available.
⁷⁷ Data is from 2009, except for Armenia (2007), Moldova, the Russian Federation and Turkey (2008), and Kazakhstan and Uzbekistan (2010).
Profiles of excluded children

Figure 41 – Proportion of boys among repeaters in primary and lower secondary education, as a percentage of total repeaters in the respective level of education (2009, boys per 100 repeaters)\(^7\)

Source: TransMONEE, 2011

Overage children

Being overage can be the result of grade repetition or of late entry into school. As repetition rates are generally low, as discussed above, it is likely that late entry into primary school is the most common cause of being overage.

Figure 42 shows the over-age enrolment ratio in CEE/CIS countries. The proportion of overage children is very high in Ukraine (8.2 per cent), Azerbaijan (7.7 per cent), Georgia (7.1 per cent) and Albania (6.9 per cent). Albania\(^7\) and Azerbaijan are also among the countries with the highest proportion of primary-age children out of school, and Ukraine has the fifth-highest rate of out of school children. This suggests a potential link between the problem of overage pupils and children not attending or dropping out of primary school.

In Turkey, being overage brings about a higher risk of exclusion from education due to an administrative regulation which places a maximum age of attendance (14 years of age) on children in basic education (UNICEF, 2012d, in press). Continuing basic education beyond 14 years of age requires a petition for an extension of up to two years, and beyond that a child’s enrolment is terminated. In addition, late entry is common – although primary education starts at age six, 29.9 per cent of six-year-olds and 5.9 per cent of seven-year-olds are more likely than girls to repeat grades in all CEE/CIS countries, in particular at lower-secondary level.

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\(^7\) Data is from 2009, unless otherwise indicated: *data is from 2008; **data is from 2006.

\(^7\) As noted previously, the out of school children figure for Albania needs to be adjusted based on new census data. However, even if the revised figure is only half of the existing figure, it would still be one of the highest rates in the region.
olds are not enrolled. These children are more likely to be from households with low income levels, low education levels, and whose parents are unemployed. In Kyrgyzstan, late entry to primary education is also very common. Primary education starts at age seven, but around 30 per cent only enrol at age eight according to MICS (2006) data. This is a serious concern, as a wide range of research studies have found that overage children are at greater risk of dropping out (for example, Hammond et al., 2007).

![Figure 42 – Over-age enrolment ratio (2010)](image)

Source: UIS, 2011b

**Children performing below expected academic standards**

In schools where educational quality is poor, students are more likely to drop out or withdraw from school. Moreover, being in school and out of school should not be construed as a simple dichotomy – those who have access to learning opportunities and those who do not – as some children who are in school have much greater opportunities for learning than others. Consequently, in any analysis of exclusion from education it is also important to analyse the differences in learning achievement of those who are in school.

The charts in Figure 43 show the average achievement levels of 15-year-olds in reading, mathematics and science for those CEE/CIS countries that participated in PISA 2009, which is coordinated by the OECD (though non-OECD countries can also participate).

Kyrgyzstan has the lowest reading, mathematics and science scores of the countries participating in PISA. It has a reading score of 314, compared with a mean of 500 and standard deviation of 100 for OECD countries. The implication of these scores can be better understood with reference to the seven levels of literacy. The following is a description of tasks at the lowest reading level, 1b, and second lowest reading level, 1a (OECDa, 2010: 59):

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60 Data is from 2010 except for Hungary, Turkey and Georgia, which is from 2009; Montenegro, which is from 2008; and Armenia, which is from 2007.
Figure 43 – PISA Reading, Mathematics and Science scores (2009)

About half of 15 year olds have not mastered basic reading, mathematics and science skills, according to OECD’s PISA assessment.

Source: OECD, 2011a
At **level 1a**, tasks require the reader to locate one or more independent pieces of explicitly stated information; to recognize the main theme or author’s purpose in a text about a familiar topic, or to make a simple connection between information in the text and common, everyday knowledge. Typically, the required information in the text is prominent and there is little, if any, competing information. The reader is explicitly directed to consider relevant factors in the task and in the text.

At **level 1b**, tasks require the reader to locate a single piece of explicitly stated information in a prominent position in a short, syntactically simple text with a familiar context and text type, such as a narrative or a simple list. The text typically provides support to the reader, such as repetition of information, pictures or familiar symbols. There is minimal competing information. In tasks requiring interpretation the reader may need to make simple connections between adjacent pieces of information.

In Kyrgyzstan, close to 30 per cent of pupils are at the lowest level of literacy in the PISA scale (1b), and almost 30 per cent of pupils fall below the minimum score for the lowest level of literacy. This means that more than half of pupils, almost 60 per cent, have not reached the second lowest literacy level (1a) and are unable to do tasks at level 1a as described above.

The next lowest scoring country participating in PISA is Azerbaijan, where around 36 per cent of pupils have not reached the second lowest reading level.

Figure 44 shows the percentage of pupils who are below PISA reading level 2, which means they are at either level 1a, level 1b or below level 1b.

**Figure 44 – Percentage of pupils who are below PISA reading level 2 (2009)**

Source: PISA, 2009
In four CEE/CIS countries, more than half of pupils are unable to perform tasks above the second lowest reading level: Albania (57 per cent), Azerbaijan (72.7 per cent), Kazakhstan (58.6 per cent) and Kyrgyzstan (83.3 per cent). In Bulgaria, Montenegro and Romania more than one third of pupils are level 1b or below.

The scatter plot in Figure 45 shows a clear trend in decreasing PISA reading scores with decreasing GDP per capita based on PPP (or vice versa). With the exception of Kyrgyzstan and Albania, the poorest CEE/CIS countries did not participate in PISA. Therefore, in all likelihood poor quality of education is not limited to the countries listed above. Armenia, Georgia, Moldova, Tajikistan, Ukraine, Uzbekistan and Turkmenistan are all poorer than Albania and Azerbaijan in terms of GDP per capita based on PPP\(^{81}\) (IMF, 2011). It is likely that poor quality of education is a significant issue in many CEE/CIS countries, assuming that the trend shown in the scatter plot would be followed for the CEE/CIS region, and indeed the same trend is true for all countries participating in PISA, with just a few exceptions.

Figure 45 – PISA mean reading scores plotted against GDP per capita at PPP (2009)

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81 Current international USD.
Performance on PISA tests is generally much lower in rural areas than in urban areas, and gets progressively lower the smaller and more remote the community; scores are highest in large cities, followed by smaller cities, towns, small towns and villages. This is shown in the line graph in Figure 46, which shows mean science score differences for UNICEF CEE/CIS programme countries (based on PISA 2006 data).

Figure 46 – Differences in mean PISA science scores by school location in UNICEF CEE/CIS programme countries (2006)

Source: adapted from UNICEF, 2009b based on PISA 2006 data

2.12 Upper secondary education

Although this report is mainly concerned with children of compulsory school age who are out of school or at risk of exclusion, it is important to also look at upper secondary education. As noted in the introduction, a number of CEE/CIS countries are reaching 100 per cent enrolment in primary and lower secondary education, but significant numbers are still dropping out or withdrawing from school at upper secondary level. In order to acquire the knowledge and skills required for competing in a globalized world, the youth of today need to go beyond lower secondary education. Lower secondary education (ISCED level 2) generally maintains and deepens the educational aims of primary schooling, although in some countries it is institutionally distinct from primary education and has more in common with upper secondary education (UIS, 2005). Upper secondary education (ISCED level 3) often marks the end of compulsory schooling and consists of diverse structures, tracks and programmes (UNESCO, 2007). It also typically features a more specialized teaching staff.
Due to the lack of data for net enrolment rate in upper secondary, this section focuses on gross enrolment ratios in upper secondary and net enrolment rates in lower- and upper secondary education combined.

Enrolments in upper secondary (in terms of gross enrolment) have increased significantly over the past decade in many CEE/CIS countries (UIS, 2012). Across the region, the upper secondary gross enrolment ratio ranges from 61.3 per cent in Tajikistan to over 100 per cent in Uzbekistan. Those countries with particularly large increases in upper secondary gross enrolment are shown in Figure 47. In Tajikistan, the upper secondary gross enrolment ratio increased from 45.2 per cent in 2000 to 61.3 per cent in 2010. In Albania, the gross enrolment ratio almost doubled from 42 per cent in 2000 to 81.3 per cent in 2010, even though there was a significant decline in 2009. In Moldova, following a significant decline in 2000 down to 58.1 per cent, the gross enrolment ratio increased rapidly to 86.3 per cent by 2010. In Romania, the gross enrolment ratio increased steadily from 69.9 per cent in 2000 to 98 per cent in 2010.

**Figure 47 – Gross enrolment ratio in upper secondary education, upward trends over time, selected CEE/CIS countries (2000 – 2010)**

In a few countries the slope is negative, and those with particularly steep declines are shown in Figure 48. In Ukraine, where the gross enrolment ratio was close to or above 100 per cent from 2000 to 2003, it dropped to 78.3 per cent in 2010. The steepest decline was in Kyrgyzstan, where the gross enrolment ratio declined from 87.3 per cent in 2000 to 61.5 per cent in 2010.

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82 Upper secondary gross enrolment rate is the number of pupils enrolled in upper secondary, regardless of age, expressed as a percentage of the population in the theoretical age group for upper secondary education.

83 Secondary net enrolment rate (lower and upper secondary combined), is the number of pupils in the theoretical age group for secondary education enrolled in secondary education expressed as a percentage of the population in that age group.
Progress has been uneven in some countries. For example, in Kazakhstan (shown in Figure 48) the gross enrolment ratio declined from 99.5 per cent in 2000 to 67 per cent in 2008, but subsequently rebounded to 86.6 per cent in 2011. In Uzbekistan, there was a very steep decline in the gross enrolment ratio in 2001 and 2002, but since then gross enrolment ratios have increased to over 100 per cent, up to 129.3 per cent in 2011.

Differences between primary adjusted net enrolment and secondary net enrolment rates are shown in Table 5, for countries where (recent) data is available for both indicators. In Bulgaria, Georgia, Kyrgyzstan and Turkey there is a difference of more than 15 per cent. This suggests that in these countries much greater priority was given to primary education than to secondary education. In contrast, in Uzbekistan the net enrolment rate in secondary education was actually higher by 2.7 per cent in 2009. This indicates that secondary education receives relatively high priority – especially when considering that 8.3 per cent of children of primary-school age were still out of school in 2009 (but down to 7.2 per cent in 2011 in the latest data available\(^{84}\)). The same appears to be true for Moldova, where the secondary gross enrolment ratio\(^{85}\) increased from 86 per cent in 2003 to 104 per cent in 2010, and at the same time the country has one of the highest rates of primary-age out of school children in the region.

\(^{84}\) For the secondary net enrolment rate, the latest data is from 2009.

\(^{85}\) Data for secondary net enrolment was not available for Moldova.
Profiles of excluded children

Table 5 – Differences in enrolment between primary adjusted net enrolment and secondary net enrolment (%), 2010

<table>
<thead>
<tr>
<th>Country</th>
<th>Primary adjusted net enrolment rate (%)</th>
<th>Secondary net enrolment rate (%)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
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<td>86.3</td>
<td>-9.9</td>
</tr>
<tr>
<td>Belarus</td>
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<td>86.5</td>
<td>-5.5</td>
</tr>
<tr>
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<td>82.7</td>
<td>-16.8</td>
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<td>-4.8</td>
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</tr>
<tr>
<td>Uzbekistan</td>
<td>88.7</td>
<td>91.3</td>
<td>2.7</td>
</tr>
</tbody>
</table>

Source: UIS, 2012

Gender inequality is greater at upper secondary level than at any other level, although the situation has improved in many countries over the past decade. Countries which have made particular progress are shown in Figure 49, and are seen to be converging towards gender equality (represented by the middle line). However, in Ukraine – where once more boys than girls were out of school – the situation has now reversed, with more girls than boys out of school.

Gender inequality in the region goes both ways. Boys are far more likely to continue on to upper secondary in some countries, such as Tajikistan (Gender Parity Index of the gross enrolment ratio for upper secondary 0.7) and Turkey (GPI 0.85)\(^8\). In other countries the opposite is the case, with girls far more likely to be enrolled in upper secondary in Belarus, (GPI 1.21) and Azerbaijan (GPI 1.13)\(^8\). In terms of gross enrolment, the ratio of girls to boys in upper secondary has changed significantly in many CEE/CIS countries. For example, in Azerbaijan, which currently has one of the highest ratios of girls to boys in the region, the opposite was the case just two years previously (2007) when it had one the highest enrolments of boys to girls in the region. Since this refers to gender parity of the gross

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\(^8\) Data for Kazakhstan is from 2011, and for Georgia, Romania, Turkey and Uzbekistan from 2009.

\(^8\) Data is from 2008.

\(^8\) Data is from 2009 for Azerbaijan and from 2007 for Belarus.
enrolment ratio, it should be taken into account that it could also reflect larger numbers of overage pupils among girls or boys.

**Figure 49 – Gender Parity Index of the gross enrolment ratio in upper secondary over time, selected CEE/CIS countries**

![Graph showing gender parity index over time for selected CEE/CIS countries.](image)

Source: UIS, 2011b

Overall, with some exceptions, the region is making progress both in terms of enrolments in upper secondary education and in terms of gender parity. In some countries, such as Croatia, Serbia and Uzbekistan, enrolment at secondary level is even surprisingly high, considering that large numbers of children are still out of school at primary level.

### 2.13 Analytical summary

Around 2.5 million children are out of school in the CEE/CIS region. The percentage of out of school children ranges from 0.5 per cent in Bulgaria and Kazakhstan to 16.8 per cent in Montenegro at the primary-age level, and from 0 per cent in Kazakhstan to 12.7 per cent in Bulgaria at the lower secondary-age level. However, at lower secondary-age level data is missing for around one third of the CEE/CIS countries (seven of the 22 countries), highlighting the challenge of providing timely education data in many CEE/CIS countries. This needs to be addressed.

**Pre-primary enrolment rates**

Pre-primary education is not compulsory in many countries in the region and hence pre-primary-age children are not technically considered out of school in those countries. However, the importance of pre-primary education as a preparatory stage for primary is well established and lack of pre-primary is an important drop-out risk. Prior to the transition period in the 1990s, pre-schools were fairly well established throughout the region, with the exception of countries such as Kyrgyzstan and Tajikistan where enrolment in pre-primary has

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89 According to UIS 2012 data, the out of school children rate at primary-age level for Albania is 20.1 per cent, the highest in the region; however this figure is likely too high due to inflated population estimates. It is in the process of being updated based on new census data at the time of the writing of this report.
always been low. However, following the dissolution of the Soviet Union enrolment rates in pre-primary programmes and frameworks dropped significantly. Although pre-primary enrolment rates have increased steadily over the past decade across the region, in some countries they are still below the pre-1990 level. In Azerbaijan, Bosnia and Herzegovina, Georgia, Kyrgyzstan, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey and Uzbekistan more than 45 per cent of pre-primary-age children are not in school.

National pre-primary enrolment rates disguise significant regional and sub-national differences: in certain regions or districts pre-primary rates are far lower than in others. For example, in the DRD region of Tajikistan only 4 per cent of pre-primary-age children are in school, and similarly in Kyrgyzstan pre-primary enrolment in some districts is below 3 per cent. In general, pre-primary enrolment tends to be lower in rural areas, due to the lack of pre-school infrastructure and because poverty levels tend to be higher in rural areas. Due to the relatively high cost of pre-primary, enrolment in pre-primary education is generally affected far more by poverty than are primary and lower secondary education. Hence, regional differences in pre-primary enrolment are likely to be closely related to disparate poverty levels by region. Household data for a number of CEE/CIS countries shows that pre-primary enrolment rates among the poorest quintile are a fraction of enrolment rates among the wealthiest quintile. This highlights the important role of the government in meeting the costs of pre-primary education and targeting the acute needs of children from the poorest families.

Profiles of out of school children

At primary-age level the proportion of out of school children is relatively low in most CEE/CIS countries, and it is mainly at lower secondary level that larger numbers of children begin to drop out. However, there are some important exceptions. In five CEE/CIS countries – Azerbaijan, Montenegro, Moldova, Romania and Serbia – the number of primary-age out of school children has been increasing in the past decade, which is a very worrying trend. Three additional countries – Kyrgyzstan, Ukraine and Uzbekistan – have also seen steep increases in out of school children, although the situation improved in 2010. Another concern is that Central Asia is, after sub-Saharan Africa, the region with the highest proportion of primary-age out of school children who are expected to never enter school – a total of 51 per cent. This poses the most serious challenge to policy-makers.

At lower secondary-age level the number of out of school children has risen significantly in at least three countries – Bulgaria, Moldova and Romania. In Bulgaria, the rate of lower secondary-age out of school children increased more than five-fold between 2003 (2.3 per cent) and 2010 (12.7 per cent).

Just three countries account for over two-thirds of the total number of lower secondary-age out of school children in the region – Turkey, the Russian Federation and Uzbekistan. In these three countries combined, almost one million children of lower secondary-school age are out of school.

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90 Children one year younger than the official primary age according to the Dimension 1 definition.
91 As Dimension 3 data is not available for seven countries, it is possible that the situation is deteriorating in more than three countries.
Certain groups of children are more likely to be out of school. Across the region girls are on average more likely to be out of school: 5.4 per cent of primary-age girls are out of school compared with 5.0 per cent of boys, and 6.5 per cent of lower secondary-age girls are out of school compared with 6.0 per cent of boys. On the other hand, in some CEE/CIS countries the situation is reversed and boys are more likely than girls to be out of school. Within-country differences are often greater than between-country differences and reflect the complexity of addressing the problem of out of school children. A look at
data from Kyrgyzstan serves to illustrate this complexity. Although MICS (2006) data shows that boys are more likely to be out of school than girls, the situation for most out of school girls is worse, as they are much more likely to never enter school or drop out early.

Roma children

Roma children are much more likely to be out of school compared with the non-Roma population and many drop out before completing primary or lower secondary education. Only an estimated 20 to 25 per cent of Roma children in central and eastern European countries attend secondary schools. It is difficult to obtain an accurate analysis of the situation for Roma children because of the scarcity of data, including data on the actual numbers of Roma children. There is a great need for more recent and more detailed education statistics for Roma children, including data for particular sub-groups of Roma children. This could be used to better identify specific profiles of Roma children who are at risk of being excluded. For example, in Croatia and The former Yugoslav Republic of Macedonia, for which data is available separately for Roma girls and boys, it was found that Roma girls are much more likely to be out of school than Roma boys.

Children with disabilities

Children with disabilities are also much more likely to be out of school, although due to the lack of data it is very difficult to analyse the severity of the situation. However, it is possible to make estimates using as a guideline the international benchmark for the proportion of the population with a disability. Based on this benchmark, an estimated 3.6 million children with a disability in the region are not officially recognized, and are hence not receiving the support and care they need. In addition, the 1.5 million children with a disability who are recognized also often do not receive adequate support and care and tend to be segregated into special schools. Disability is still largely treated as a medical condition, with little differentiation made between impairment, illness and disability, although there is a gradual shift towards a ‘social model’ of disability and towards inclusive education, where children with disabilities are integrated into mainstream schools. Progress is patchy, and currently large numbers of children with disabilities remain excluded from education. Enrolment at pre-school and secondary levels is particularly low.

Child labour

Child labour poses a significant drop-out risk in the region, and particularly in rural communities many children are engaged in some kind of work in the agriculture sector. The kind of work influences the risk of exclusion from education. For example, in Tajikistan urban working children are more than three times as likely as rural working children to be out of school. This could be because children in rural areas generally do unpaid seasonal agricultural work, whereas in urban areas working children are more often family bread winners who need to work year round. There also tends to be significant regional variation in child labour rates. For example, in Kyrgyzstan the percentage of children involved in child labour ranges from as low as 0.5 per cent in the capital Bishkek to 62.5 per cent in the province of Issyk-Kul.
Transition rates to secondary education

Transition rates from primary to lower secondary are generally high in CEE/CIS countries, with the exception of Bosnia and Herzegovina where the transition rate is just 83.6 per cent. Turkey has made enormous progress over the past decades both in terms of increasing transition rates and in reaching gender parity. The transition rate increased from just 31 per cent in 1977 to 96.7 per cent in 2008, and gender parity was achieved in 2008. Just two decades earlier – in 1990 – girls were much more likely to stop schooling after primary education; only 69 girls continued on to secondary education for every 100 boys.

Overage children

Looking at additional risk factors for dropping out of school, it was found that a number of countries have a high proportion of overage pupils. In Bosnia and Herzegovina, around one quarter of enrolled children are overage, and in Ukraine, Azerbaijan, Georgia and Albania the proportion of overage children is around or above 7 per cent. With the exception of Georgia, these countries were also among those countries with the highest rates of primary-age children out of school92.

Low performance in school

Another important risk factor is low performance in school. In the majority of CEE/CIS countries participating in PISA, more than 20 per cent of 15-year-olds are unable to perform tasks above the second lowest reading level. In four CEE/CIS countries, more than half of pupils are unable to perform tasks above the second lowest reading level – Albania (57 per cent), Azerbaijan (72.7 per cent), Kazakhstan (58.6 per cent) and Kyrgyzstan, where this is the case for 83.3 per cent of children. The education system has failed these children, as they do not have the basic literacy skills to participate fully and meaningfully in society. In addition, in Albania, Azerbaijan and Kyrgyzstan those taking the PISA tests are those who have already passed through a selection process, as by age 15 a significant proportion of children have dropped out in these countries. The low quality of education is likely to be an important contributing factor to the high rate of drop-out.

Upper secondary enrolment

Upper secondary enrolment rates are much lower than lower secondary enrolment rates, as many children drop out at the end of compulsory education. However, upper secondary enrolment – in terms of gross enrolment rate – has risen considerably over the past decade. Across the region, the gross enrolment ratio in upper secondary ranges from 61.3 per cent in Tajikistan to over 100 per cent in Uzbekistan. In Albania, Moldova, Romania and Tajikistan there has been a huge increase in upper secondary gross enrolment over the past decade, whereas in Ukraine and Kyrgyzstan there has been a significant decline over the same

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92 As indicated previously, the out of school children rate at primary-age level for Albania is 20.1 per cent, the highest in the region, although this figure is likely too high due to inflated population estimates. This figure will be revised based on new population census data. But even if it is only half of this level, it would still be very high in comparison to other countries in the region.
period. Gender inequality increases at upper secondary level, although all countries are seen to be moving towards gender parity for the gross enrolment ratio.

Differences between primary adjusted net enrolment and secondary net enrolment rates reveal the different priorities across the region. Bulgaria, Georgia, Kyrgyzstan and Turkey are close to reaching universal enrolment for primary-age children, although enrolment at secondary level trails behind by more than 15 per cent. In contrast, in Uzbekistan and Moldova93 enrolment at the secondary education level is very high compared with the rest of the region, although at the same time they have relatively high rates of primary-age out of school children compared with other countries in the region.

The different profiles of out of school children discussed in this chapter as well as the different categories of out of school children (those entering late, those who dropped out and those who will never enter) reflect the different underlying reasons why children are out of school. This is looked at in more detail in the next chapter.

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93 Data for secondary net enrolment was not available for Moldova, but the secondary gross enrolment ratio was 104 per cent in 2010.
Barriers and bottlenecks leading to children’s exclusion from education in CEE/CIS are very complex and interconnected.

Barriers and bottlenecks
This chapter analyzes key barriers and bottlenecks that lead to exclusion from education. It links the profiles of out of school children discussed in the previous chapter with the corresponding causes of exclusion, focusing in particular on the participating countries in the OOSC Initiative: Kyrgyzstan, Romania, Tajikistan and Turkey. As the analysis in this chapter concentrates on barriers and bottlenecks related to specific profiles, and mainly within a few CEE/CIS countries, it should not be seen as a comprehensive summary of all barriers and bottlenecks leading to exclusion from education in the CEE/CIS region.

The chapter is divided into four types of barriers and bottlenecks: demand-side socio-cultural barriers, demand-side economic barriers, supply-side barriers, and political, governance, capacity and financial bottlenecks. This division is for the purpose of gaining a deeper insight into the different kinds of barriers and bottlenecks which lead to exclusion, although in reality it is often a combination of these barriers which cause children to be out of school or at risk of dropping out.

### 3.1. Demand-side socio-cultural barriers

This section discusses socio-cultural practices in the household, community and at school which act as barriers to education, focusing on attitudes towards girls, Roma children and children with disabilities and special education needs.

#### Attitudes towards adolescent girls

*“In the majority of cases, girls are not allowed to continue their education, and they marry forcefully. As for educated girls, they are not allowed to work, and as their parents see such an outcome, do not support their daughters’ education.”*

—Female participants in a focus group in Panjakent Town, Tajikistan (UNICEF, 2011e: 114).

Practices and attitudes favouring men over women have been making a comeback since the collapse of Soviet rule in some CIS countries (UNDP, 2010). These include arranged marriages, child marriage, bride kidnapping, the practice of women wearing a veil and patrilocality (when a wife joins the extended family of her husband following marriage). Such customs mainly affect adolescent girls, and at lower- and upper secondary education levels many girls drop out because of family obligations. Once girls reach puberty, their freedom becomes more restricted.

On the other hand, many CEE/CIS countries have made progress towards inclusion of girls in primary and secondary education, as discussed in the previous chapter. Turkey in particular has made enormous strides, and to a lesser extent Tajikistan, although both countries are still among those with the lowest levels of girls’ participation in education in the region. It should be noted that the trends discussed in the previous chapter are national aggregates and the situation for girls is often significantly worse in poor households and in rural areas, where practices and attitudes favouring men over women are more common.

For example, MICS (2006) data for Tajikistan indicates that girls from poor families and/or living in rural areas are far more likely to be out of school than girls from wealthy families and/or living in urban areas.
Social exclusion and discrimination of Roma communities is a major barrier to Roma children’s participation and learning.
In Turkey the following groups of gender-related values leading to exclusion of girls have been identified (UNICEF, 2012d, in press):

- Patriarchal practices arising from the axis of ‘chastity-honour-sexuality’, in particular arranged child marriage or engagement and early marriage for girls. These practices place girls at risk of dropping out from school.

- Family’s expectations of a child’s future which are shaped around gender roles. Turkey has one of the lowest representations of women among professional and technical workers, female legislators and senior officials in the world, and correspondingly one of the greatest disparities in female to male earned income (UNDP, 2007). It is also one of the lowest ranked countries in UNDP’s Gender Empowerment Measure – a measure of inequalities between men’s and women’s opportunities. Whereas boys typically need a good education to find a good job, for girls the priority is lower as families tend to envision a good marriage and motherhood for girls rather than good employability prospects.

- Compared with boys, girls generally have much greater responsibilities in the home in terms of doing household chores and taking care of family members. Girls who need to spend significant amounts of time on household chores during the week are more likely to be excluded from education.

Similar reasons for girls’ exclusion from education have been identified in Georgia and Tajikistan (UNICEF, 2011e; UNICEF, 2012c, in press). Traditional values emphasize strict gender identities and roles, where a boy is considered a future breadwinner whereas a woman’s role is to be a homemaker, take care of the children and serve her in-laws. As in Turkey, girls have greater responsibilities at home, doing household chores and taking care of family members. This can cause them to miss school. Early marriage can cause girls to drop out, as well as families’ unwillingness to send girls to school for fear of immoral behaviour, or because they are not allowed to travel alone to school.

A UNICEF study of youth in Tajikistan found that a lack of parental support was the most cited reason as the cause of drop-out among female youth, in particular in rural areas (UNICEF, 2011e). Female youth were around three times as likely as male youth to indicate that parents were unable or unwilling to support their education. They are frequently not expected or encouraged to continue their education. As females are often not allowed or expected to work outside of their household responsibilities, parents see little reason to support their education.

The same UNICEF study of youth conducted in Georgia found that early marriage was the top reason for drop-out among youth interviewed (UNICEF, 2011e). This was also an important reason for many drop-outs in Tajikistan.

Attitudes towards boys

Socio-cultural norms can also affect boys’ participation. In some CEE/CIS countries – in particular, Armenia and Belarus – boys are more likely than girls to drop out of school (see Chapter 2). In Armenia, many boys leave school to work and financially support their families due to cultural expectations and strong societal pressure (Hashmi, n.d.). In
addition, boys are more likely to work in ‘unskilled’ jobs (for example, construction, fishing and transportation of goods), which demand few, if any, formal educational qualifications in secondary education. Girls tend to have fewer opportunities for ‘unskilled’ jobs and this provides another incentive to remain in school. The lack of male teachers as potential role models may also be a significant factor, as male teachers work to engage boys in constructive and learning-related activities (Jha and Kelleher 2006).

**Attitudes towards Roma children**

As discussed in the previous chapter, Roma are disproportionately excluded from education. There are many reasons why Roma children face exclusion, among them reasons of a socio-cultural nature: social exclusion and discrimination against Roma communities, the practice of early marriage, language spoken at home and parents’ ability to support their children’s schooling.

**Poverty and social exclusion of Roma children**

Many Roma children live in conditions of poverty that create barriers to access. With restricted household incomes, many families cannot afford the associated costs of attending school. It has become increasingly common for children to abandon their education to help with economic activities. Roma boys tend to operate in the informal sector, while girls stay home to attend to children and chores. In other cases, children may need to leave school because the family migrates for work, or because they are homeless. Other barriers, such as living in remote, isolated and crowded Roma settlements, also impede access to quality education. Crowded settings and the lack of amenities deter the acquisition of basic hygiene habits and hinder the completion of homework. Parents often lack the capacity to help their children with homework, and have limited understanding of the environment and support that their children need to study (Roma Position paper).

In some cases, especially for girls, cultural and social pressures from within Roma communities hinder access. For some Roma women, early marriage and pregnancy reduce their opportunities for education. Additional characteristics, such as the scarcity of books or lack of adequate lighting and table space in the home, linguistic barriers, and a lack of academic support outside of school make it hard for Roma children to fit in to the school structure. This is especially the case in the absence of pre-school. The inflexibility of school systems to accommodate these circumstances exacerbates these barriers and compounds the children’s exclusion.

Some Roma parents prefer to enrol their children in special schools. These Roma families feel that segregated schools offer the opportunity for their children to be educated with their Roma peers, provide additional support in the form of food and materials, are better known to their communities, are located nearby, are safer for their children, and the teachers and staff are more accommodating and understanding of Roma. Some parents may also explicitly request the transfer of their
children to a special school in order to be able to receive the allowances available for children with disabilities. Desegregation, where it has been attempted, has frequently faced resistance from both the majority communities and the staff of special schools. The lack of willingness and preparedness of regular schools to integrate children with special needs is also a barrier to ending these practices of segregation.

Closely linked to migration and social exclusion is another major barrier facing Roma children – a lack of birth registration. Many Roma children are not registered at birth. The reasons are many: there is a widespread mistrust of state institutions, many hospitals are not welcoming, mothers are not insured and ambulances will not drive into Roma communities in some areas. As a result, many Romani women do not give birth in hospitals, increasing the risk that their child will not be registered. Where Roma have wed before the legal age of marriage, young mothers may be reluctant to present themselves in hospitals or register their children. In other cases, young parents may simply be unaware of the requirement to register their child – or they may be unregistered themselves – fear hostility from authorities when doing so, or be inhibited by their lack of literacy, unfamiliarity with the language in which the forms are written, and the costs of registration.

The Committee on the Rights of the Child has on many occasions drawn attention to the low level of birth registration in Roma communities, for which the consequences can be significant. The lack of official identity papers for some Roma children renders them all but invisible in many municipalities. It can result in being denied citizenship, which closes the door, for example, to getting a passport, an identity card or to being able to vote. Furthermore, without a birth certificate children have no guaranteed protection under state legislation relating to child labour, early marriage or commercial sexual exploitation. In emergency or conflict situations, unregistered children are less likely to be able to be traced, reunited with families and provided with appropriate protection.

Governments across the region overwhelmingly fail to prioritize and consider the specific needs of Roma for inclusion into the educational system, and appropriate platforms and mechanisms for Roma communities to voice their concerns and influence decisions are still largely missing. Even when measures and policies have been drafted to improve Roma education, there has been a lack of political will to ensure their implementation. The 2007 Decade Watch Update stated that although it has been reported that there are “increasing signs of enhanced and more systematic attention to Roma inclusion across most countries, integrated inclusion policies with a focus on achieving and demonstrating results remain a distant goal.” In fact, most governments think about Roma inclusion in terms of projects and sporadic measures but not in terms of programmes or integrated policies that would address systemic issues, such as discrimination. Regular monitoring and evaluations of initiatives to address education for Roma children also remain inadequate.

Weak legislation continues to be a problem. At the national level, not all EU countries have specific anti-discrimination laws on education, and the implementation
The proportion of parents with low levels of education is higher among Roma. This contributes to the vicious circle of exclusion from education. In Romania, it was found that children of unschooled or only primary-schooled families were much more likely to drop out of school (UNICEF, 2012b, in press), and hence these children themselves become future parents with low levels of education. Parents of children with low levels of education are less able to provide the educational support children require, and numerous studies (such as TIMMS, PISA and SACMEQ) have shown that parents’ level of education has an impact on the educational attainment of their children.

Discrimination against Roma communities exacerbates, and is largely to blame for, the challenges of poverty and social marginalization. Decades of exclusion and segregation of Roma communities make non-Roma parents, and some Roma parents, hesitant to support inclusive education, which has lead to the segregated education systems. Many countries in the region have all-Roma schools, and many countries have special schools where Roma children are unjustifiably over-represented. The quality of education tends to be much poorer in these schools. These issues can cause Roma communities to have understandably negative perceptions of education and the education system, which in turn can lead Roma children to drop out early. Discrimination and bullying at school from school staff, teachers and sometimes children affects motivation and school performance, deters children from attending school, and increases the risk of drop-out.

Roma are traditionally nomadic and many families continue to migrate frequently today. This also acts as a barrier to education participation. Roma may move from one place to another according to the season, for economic reasons or because of social dynamics inside the community. This can cause children to miss school, fall behind and ultimately drop out (UNICEF, 2012b, in press). Children are at risk of being out of school both when they migrate with their parents as well as when they are left behind in the care of relatives. Children left behind need to adapt to new family structures, and the lack of parental guidance affects children’s emotional well being. Relatives may also not have the time and resources to take adequate care of additional family members, and children may be neglected. In addition,
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Barriers and bottlenecks

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older siblings may assume parental responsibilities, taking care of their younger sisters and brothers, which may cause the older children to withdraw from school.

Attitudes towards children with disabilities and special education needs

The negative stigma associated with disability makes educational inclusion of children with disabilities a slow and difficult process (UNICEF, 2007). Discriminatory attitudes can impact the exclusion of children with disabilities in various ways (UNICEF, 2012b, in press; 2011c):

- Discrimination can result in parents’ reluctance to label their children as having a disability. Parents may not get their child assessed because of the social stigma associated with labelling their child.
- Parents of children without disabilities may be against the inclusion of children with special education needs in the same class as their children, making inclusive education difficult to achieve.
- The negative attitudes of teachers towards children with disabilities can also be problematic. Teachers may not see the potential for children with learning difficulties to make progress, and may lack the training and resources to do so.

One mother in Bulgaria, frustrated with the negative attitudes of teachers towards her child with a disability, expressed this as follows: “She is getting little help from the teachers at school. Even if she [the teacher] decides to pay more attention to her, she considers it an effort that is not worth it.” (UNICEF, 2005a: 53).

Discrimination against children with disabilities is widespread; disability is seen primarily as a chronic medical condition requiring remediation, health care, rehabilitation and institutionalization.

© UNICEF
In Turkey, discrimination against children with disabilities is widespread. A study to measure disability-based discrimination found that more than half of individuals with a disability (57.6 per cent) face discrimination most of the time, or always (UNICEF, 2012d, in press).

In Montenegro, a UNICEF 2010 survey discovered that only 42 per cent of people would accept a child with disabilities going to the same school as their child, and that only 20 per cent of people would accept a child with disabilities as a best friend of their child. Furthermore, 41 per cent of people said that children with disabilities should be kept in special institutions.

As discussed in the previous chapter, only 1.5 million of an estimated total of 5.1 million children with disabilities and special education needs are currently registered in the region. Socio-cultural attitudes towards disability are a crucial obstacle to overcome in registering children with disabilities and recognizing their rights and their needs.

### 3.2. Demand-side economic barriers

Demand-side economic barriers refer to families’ inability to send their children to school for economic reasons. This section discusses the impact of high levels of poverty and inequality on exclusion from education. Poverty and exclusion from education is closely associated with working children, who miss school in order to work and support themselves and their families, and children with disabilities and special education needs, who are more likely to be poor and more likely to be excluded from education as a result. These two profiles of children at risk of exclusion from education are discussed in separate sections below.

As discussed in the introduction, GDP per capita on its own is not a good indicator of poverty, as income distribution varies greatly from one country to another. For example, Georgia has the highest rate of children of lower secondary age out of school (13.6 per cent), much higher than Kyrgyzstan and Tajikistan, even though in terms of GDP per capita Georgia is twice as wealthy (IMF, 2011). On the other hand, Georgia has a much higher level of income inequality and correspondingly high levels of poverty, with about one third of the population living on less than $2 a day, which is similar to the poverty rate in Kyrgyzstan (UNDP, 2010; World Bank, 2011).

Poverty impacts school participation even if there are no enrolment fees. The indirect expenses of schooling such as school uniforms, textbooks and other school materials, lunch and transportation costs are unaffordable for some families. Poverty also makes families more vulnerable to the economic repercussions of shocks such as disasters caused by natural hazards, violent conflicts and loss of jobs. Such events are more likely to lead to the educational exclusion of poor families.

Poverty levels can vary significantly within countries, between different regions and between urban and rural areas. In rural areas poverty levels are often much higher, such as in Turkey where more than twice as many live under the poverty line in rural areas (UNICEF, 2012d, in press).

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55 http://www.unicef.org/montenegro/15868.html
Exclusion of working children

The following describes the situation of working children and why it leads to exclusion from education, in the words of children from Tajikistan (Saidov, 2007: 41-50):

“Many of us do not have textbooks; some of my classmates cannot even afford to buy a regular notebook. Children from poor families are working after classes to support their family. During classes, while sitting behind their desks they keep thinking how to earn something to feed their families. After the classes they usually run home, leave their textbooks and notebooks there, change and go out again. They return home tired at night and go to sleep straight away. They almost never do their homework.”

–Focus group, 6-11 years of age, Ragun.

“Our parents are desperately trying to make both ends meet. They cannot buy us everything we need for school. Textbooks are expensive. It is because of life conditions that a lot of children do not go to school or skip classes too often. They wash cars, draw handcarts, help their families in whatever way they can.”

–Daler, 14 years of age, Gunbazi, Kanibadam.

“There are many children from poor families in our school. The market is located close to the school. Many school children go to school in the morning and afterwards go to work at the market. Some of them often have to drop out of school because it is hard to study and work at the same time. They come home completely exhausted and fall asleep as soon as they have had their supper.”

–Rahima, 13 years of age, Dushanbe.

In Central Asia and the Caucasus, many children from low-income families need to earn money to support their families. In some families, these children are the only bread-winners (Saidov, 2007: 41). This is particularly the case where parents have left to work in the Russian Federation or other countries but do not provide support (usually fathers), where parents are disabled, in families with many children and where parents are addicted to drugs or alcohol. The income working children make is often crucial for supporting themselves as well as their families. Money is both made through income generating activities, as well as saved – by not spending it on school expenses.

The kind of work tends to differ in rural and urban areas, and as a result the impact on exclusion from education also differs. In urban areas, children are more likely to work for money. They often work in markets, typically unloading trucks (mainly older boys) and selling produce. Work and school may be combined. Because children are more likely to be able to earn an income, the temptation for families and children to work can be greater than it is to go to school. In rural areas, work is often mobile or seasonal agricultural work (for example, cotton picking in Tajikistan). For seasonal work, parents may intend for their children to miss school for just a few months. However, this increases the chances of the child dropping out from school completely. Such absenteeism may be hidden from official statistics, as children may be recorded as enrolled even though they miss many days of school.
Although girls and boys often work in the same sectors, they tend to be involved in different kinds of work. This differentiation, as with rural versus urban work, has an impact on girls’ and boys’ exclusion from education. Girls are more likely to work in the home, looking after siblings or other families’ children, and do domestic work. Domestic work is among the least regulated of all occupations. This makes girls particularly vulnerable to violence, exploitation and abuse (UNICEF, 2006). Girls are also more likely to suffer the triple burden of housework, schoolwork and work outside the home. Boys are more likely than girls to do paid work, which can increase incentives for boys to work instead of going to school. Boys are also more likely to be involved in physically heavy work such as construction, unloading goods and drawing handcarts.

Child labour leads children to drop out from school not only because they need to work during school hours, but also because it causes them to fall behind with their studies. Children who work are more likely to be absent from school, have less time to do homework, and may simply be too exhausted to study. All these factors place them at greater risk of early drop-out.

Exclusion of adolescents

As discussed in the previous chapter, adolescents are at particular risk of dropping out, especially once they have completed compulsory education. Female and male youth face different kinds of pressures in different countries – including family, societal and school pressures – and it is often a combination of factors which lead children to drop out. A UNICEF study involving 2,444 youth in Georgia, Kosovo96 and Tajikistan looked at youth perspectives on education and education quality, including reasons for dropping out or withdrawing from education (UNICEF, 2011e). Financial reasons featured foremost in their responses: they could not meet the costs of education and/or wished to start earning an income. The low quality of education also poses an economic barrier as many youth feel they need to pay for outside tutoring in order to prepare for exams. The inability to pay for private tutoring was indicated as one of the key difficulties in Kosovo97 and Georgia. In Georgia and Tajikistan, corruption also appears to be a significant cost issue, as about one fifth of youth respondents in these countries reported that earning good grades may require some form of bribery. In Tajikistan, a lack of parental support – including financial support from parents – was the most cited reason as the cause of drop-out.

“I left school to learn my profession. I was young and did not take it seriously, and I didn’t have anybody to support me... I started to help [a shoemaker] and finally left school to work more and make more money.”


Early marriage was an important factor leading to dropout in both Georgia and Tajikistan – for both female and male youth in Georgia and mainly for female youth in Tajikistan. Marriage leads to children and family responsibilities, including financial responsibilities, putting pressure on married couples to work to support their family. In Tajikistan, a lack of spousal support for continued education is an additional reason for drop-out.

96 UNSCR 1244.
97 Ibid.
The absence of a strong link between formal education and employment prospects for many youth is another important factor that deters youths from continuing their studies. Employment prospects are bleak in the region, with 21 per cent of youth unemployed in 2009. This was the third highest unemployment rate globally, following North Africa and the Middle East. In Kosovo and Georgia, around half of working youth interviewed indicated that they did not perceive their education to be relevant and useful to their work. They cited high levels of unemployment, mismatches between the skills learned at school and those required for work, and nepotism and discrimination in the job market. In Tajikistan, youth were more optimistic about the usefulness of education. On the other hand, “school did not interest me” was the second most commonly cited factor as the reason for drop-out among youth in Tajikistan, with a quarter of respondents naming this as a key factor.

98 UNSCR 1244.
Exclusion of children with disabilities and special education needs

Poverty is both a cause and a consequence of disability and it affects not only children with disabilities, but also their immediate families. Lack of equitable access to resources such as education, employment, health care, social and legal support systems make families of children with a disability particularly vulnerable to poverty. Lost wages from having to take care of children with a disability as well as associated medical and other costs are all contributing factors. As one mother indicated, “I have to look after my son, so I cannot work. Because of my son I still have to live with my parents, they help me with him” (Eurasia Foundation of Central Asia, 2010: 21). The costs can be crippling for families who are already struggling to make ends meet.

Disability can also affect the school participation of children without disabilities who may need to take care of a sibling, parent or relative with a disability, or need to work to make up for lost wages (UNICEF, 2012c, in press).

The cost and difficulty of transportation is also an issue (UNICEF, 2005; Eurasia Foundation of Central Asia, 2010). For example, in Kyrgyzstan many families of children with disabilities cannot afford public transportation (UNICEF, 2012a). Moreover, children with moderate or severe disabilities often cannot take public transportation on their own, and the time and cost of accompanying a child can be prohibitive. Even getting out of the home can be problematic for children with impaired mobility should they need to take the stairs.

3.3. Supply-side barriers

This section analyses the supply-side barriers to education. It first looks at the unique regional demographic context of the CEE/CIS region and its implications, followed by an overview of public expenditure on education. The profiles of out of school children which have been identified as being strongly affected by supply-side barriers are subsequently discussed.

Demographic context

The CEE/CIS region overall has the lowest population growth rate in the world – a result of low birth rates, an increase in adult mortality rates in some countries and migration flows, the latter of which are caused by poor economic conditions and high levels of unemployment. Thirteen CEE/CIS countries have negative growth rates, as shown in Figure 50.

In the long run, low population growth rates are projected to lead to an ageing population, as shown in Figure 51 – the projected population pyramid for Serbia in 2050. An ageing population has many important consequences, including challenges for public health, a shrinking labour force and resulting strains on the social protection system. However, it will also lead to falling levels of education spending.
Figure 50 – Population growth rates in CEE/CIS countries (2010)

Source: UNPD / World Bank (2011)

Figure 51 – Projected population pyramid for Serbia in 2050

Source: UN DESA, 2011

The opposite is the case for young populations, and in some CIS countries a large proportion of the population is of school age, particularly in Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan, as shown in the population pyramids in Figure 52. Tajikistan, Turkmenistan and Uzbekistan along with Kazakhstan also have the highest population growth rates in the CEE/CIS region (1.7 per cent for Tajikistan, 1.3 per cent for Turkmenistan, 1.4 per

http://esa.un.org/wpp/population-pyramids/population-pyramids.htm
cent for Uzbekistan and 2.4 per cent for Kazakhstan) (UNPD/World Bank, 2011\textsuperscript{100}). High levels of population growth and large school-age populations put pressure on resources for schooling and can negatively impact pupil-teacher ratios, teacher salaries and public expenditures per pupil (UN DESA, 2003; UNESCO, 2010). For example, as a result of the large school-age population in Kyrgyzstan, expenditure per pupil is below the international average even though expenditure on education in proportion to GDP is among the highest in the world (OECD, 2011\textsuperscript{b}). Demographics have a significant effect on the financing of the education system, which in turn affects access, quality and equity in education. In addition, poor families with many children may not be able to bear the expense of all their children going to school.

**Figure 52 – Population pyramids for selected CEE/CIS countries**

Due to rapid urbanization, urban population growth rates in most CEE/CIS countries are much higher than rural population growth rates (UNPD/World Bank, 2011\textsuperscript{101}). Urban

\textsuperscript{100} Data is from 2010, original source of data is UNPD accessed through the World Bank database.

\textsuperscript{101} Ibid.
population growth rates are above 1 per cent even in countries where national growth rates are negative. Countries with the highest levels of urbanization in terms of difference between rural and urban population growth rates include Albania (-0.83 per cent rural; 1.9 per cent urban), Bosnia and Herzegovina (-1.28 per cent rural; 1.2 per cent urban), Georgia (-1.26 per cent rural; 1.6 per cent urban) and Turkey (-0.27 rural; 2.1 per cent urban). This has implications for planning in both rural and urban areas. In urban areas, education facilities need to be expanded to cope with increasing enrolments, whereas in rural areas the shrinking population could lead to financial pressures on and eventual merging of smaller schools, increasing average distances to school.

**Lack of pre-primary infrastructure**

As discussed in Chapter 2, pre-primary enrolments rates in the CEE/CIS region are very low compared with enrolment in primary and secondary, and Tajikistan has one of the lowest levels of pre-school enrolment in the world. Public expenditure on pre-school education in countries such as Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan is very low, and there is a great shortage of pre-primary facilities. The infrastructure of crèches, nurseries and pre-school institutions has deteriorated, particularly in the poorer former Soviet countries (UNICEF, 2007).

The decline in the number of permanent pre-school institutions in Tajikistan during transition is shown in Figure 53. The number of pre-primary school institutions dropped from 944 to 485 between 1991 and 2008. In rural areas the drop has been particularly severe, although since 2000 there has been a slight upward trend, whereas in urban areas the downhill trend has continued. The TLSS survey from 2007 asked households why they did not send children to pre-school. By far the most common reason (more than half of respondents) was that no pre-school facilities were available (State Committee on Statistics of the Republic of Tajikistan and UNICEF, 2009).

**Figure 53 – Number of permanent pre-school institutions in Tajikistan**

![Figure 53](image)

Source: TAJSTAT, 2011

In Kyrgyzstan, there was a similarly sharp decline in pre-school institutions, from 1,696 institutions in 1990 down to 400 in 2000, followed by a slight increase in recent years,
to 488 in 2008 (UNICEF, 2012a). To meet the demand, there are many unaccounted for private pre-schools which, so as to avoid investigations and taxes, are not registered.

**Absence of adequate water and sanitary facilities in schools**

An important supply-side barrier, which particularly affects the participation of adolescent girls, is the absence of adequate water and sanitary facilities in schools. The Central Asia region is marked by a sharp disparity in water and sanitation facilities between rural and urban areas, and the situation has worsened in some areas since 1990 due to deteriorating infrastructure. The absence of water and sanitary facilities is especially problematic in Tajikistan, where many schools, particularly in rural areas, have only simple pit latrines and lack a water supply system (UNICEF, 2012c, in press). A mapping analysis of UNICEF-supported schools in 2008 found that only 41 per cent of schools had an adequate water supply (UNICEF, 2010b). In addition to the sanitary facilities, lack of privacy and lack of separate toilets for girls and boys also discourage some children from going to school, especially teenage girls.

**Lack of infrastructure and resources for children with disabilities and special education needs**

In spite of significant advances in recognizing the rights to education of children with disabilities in the CEE/CIS region, many countries are still struggling to provide inclusive and equitable access to schooling for children with disabilities (UNICEF, 2012e). There is a lack of social-service providers and human resources, and insufficient coordination between ministries providing services to children with disabilities. In addition, the concept of ‘defectology’, described in the box below, continues to influence the design of education provision for children with disabilities.

**The discipline of ‘defectology’ in the CEE/CIS region**

Throughout the CEE/CIS region, during the Soviet era children with disabilities were treated through the lens of ‘defectology’, a term developed in the Soviet Union by Vygotsky in the 1920s and based on the philosophy that disabilities are faults that can be corrected if appropriate services are provided. ‘Defectology’ is a discipline rooted in a medicalised approach in which children with disabilities are considered ‘defective’ from the norm. It has evolved as a distinct and separate discipline from educational science, and employs clinical, physiological, psychological and pedagogical approaches to determine the means of correcting and compensating defects through a system of special education. The consequence of this approach has been the systematic placement of children, according to type of disability, in residential institutions so that they can grow and develop with support, and protected from general society. The medical profession, trained in ‘defectology’, would typically recommend institutional care as the best solution for caring for newborns or young children with disabilities, an approach reinforced by the virtual complete lack of any community-based
Pre-school is particularly important for children with disabilities and special educational needs, as they can play an important role in identifying health problems and developmental disorders at an early stage (UNICEF, 2005). As discussed in the previous section, there is a general lack of pre-school facilities, and pre-school programmes for children with disabilities are even scarcer.

Within schools, there is a general shortage of facilities and trained personnel to work with children with disabilities and special education needs in many CEE/CIS countries (UNICEF, 2005; UNICEF, 2012a). In particular, there is a lack of adequate infrastructure, accessible transportation, and trained school leaders, teachers and assistants. As discussed above, transportation to school is a major barrier to education for children with disabilities. There
is a lack of free or affordable transportation options for children with disabilities. In addition, public transport is often not accessible to children with mobility problems, and pedestrian crossings generally do not have audio-visual signalling.

Inclusive education entails that children with special education needs are educated in mainstream schools, which in addition to personal and social benefits can also be more cost-effective. However, this requires a shift in the way the education system, schools and teachers consider students’ care, learning and development, with teachers in mainstream schools willing and capable of teaching diverse classrooms that include children with special education needs. This is aggravated by an antiquated, inflexible curriculum in most countries across the region, as well as the use of remedial approaches to teaching children with disabilities. As evidenced in Turkey, mainstreaming practices for children with special education needs introduced in 1997 have been hindered by inadequate in-class support for children with special education needs and a lack of special education teachers in these schools. This lack of specialized special education teachers and counsellors is another obstacle faced in the region.
Isolation is especially an issue for children with disabilities staying in residential institutions. For example, in Tajikistan those children with disabilities who are not excluded from education generally stay in boarding schools and have no contact with the outside world (UNICEF, 2012c, in press). They normally never leave the grounds. This level of segregation makes it difficult for children to adjust to the outside world if they leave the institution. Moreover, the segregated upbringing and the fact that children with disabilities are hidden from society compounds existing prejudice against people with disabilities.

Segregation of Roma children in education

"The first thing that comes to my mind is that we need food to eat and a good home, to live like human beings and not like animals. Look in what terrible conditions we live! Why should I send my granddaughter to school if the government doesn’t provide me with a home and transport to school?"

—Roma grandmother living in a shack in Albania, taking care of multiple grandchildren whose parents had migrated abroad.

As illustrated by this grandmother from a Roma community, a single strategy is insufficient in addressing the barriers facing Roma children in accessing education. Free education, even free textbooks and free transportation to school, are insufficient; rather, policies must address a wide range of complex and interrelated barriers in order to achieve results for Roma children. Yet throughout the region policies are overly simplified, fragmented and inadequately implemented. The existing barriers faced by Roma children are exacerbated by segregation, as explained in the box below.

Segregation of Roma children in education and causes of poor educational outcomes

The segregation of Roma children in education takes three key forms:

- **Segregation between schools.** Most Roma students attend Roma-majority schools that exist in predominantly Roma areas. Ghettoization, changing demographics and non-Roma students pulling out of schools where the proportion of Roma students is rising result in de facto segregation of entire schools.

- **Segregation within schools.** Even where schools are more heterogeneous, Roma students are often separated from the majority by being placed into remedial classes. They may be segregated in classrooms by being put into specific areas of the class, or into entirely separate classes.

- **Segregation into special schools.** In many countries of Central and South-Eastern Europe, Roma children are disproportionately streamed into special schools. Available data and anecdotal evidence indicates that the remedial special schools function as a de facto substandard parallel system of education for Roma children. This phenomenon is justified in terms of the ‘socialization defects in the family’ and to insufficient kindergarten attendance among Roma, leading to the children being socio-culturally disadvantaged and, as a consequence, unable to study.
at the same speed as other children. It is therefore argued that they require the use of special pedagogical tools and methods within a special school or a remedial class. These negative assessments are, in part, a consequence of unfair entry testing when children start regular primary school. Superficial examinations and partial examiners, compounded by linguistically and culturally insensitive tests, can and do serve to distort evaluation scores. In other cases, instructors, who mistake ethnic, linguistic and behavioural patterns for learning disabilities, earmark Roma children for special schools. Once in a special school, students do not receive an education of a standard equal to regular schools.

Almost all aspects necessary for quality education tend to be missing for Roma students. The cumulative impact of this leaves Roma children vulnerable and unsupported within the education system. As synthesized below, the prerequisites for inclusive education are not in place, meaning that schools often inhibit Roma children’s educational success.

- **Teaching quality and methods.** Undifferentiated and child-unfriendly teaching methods are common across the region. Such teaching glosses over variations in abilities and skills that stem from differing cultural backgrounds, making it impossible to accommodate the needs and socialization of most Roma children. In residentially segregated and special schools, the quality of education is worse. Teaching in a Roma-dominated or special school is a low-prestige job, which is perceived as both more demanding and less satisfying than teaching in the mainstream (the proportion of teachers having no degree at all is much higher in special schools and in special classes than elsewhere). Research findings in Hungary in 2002, for example, showed that in those schools where over 75 per cent of pupils were Roma, an average of 30.8 per cent of teachers were unskilled; at schools with less than 25 per cent Roma students, an average of 17.4 per cent of teachers were unskilled.

- **Language.** Many Roma children face huge challenges in school because the language of instruction is not in their first language. This can and does place them at a significant disadvantage in comparison with other children. Even if Roma children speak the majority language, gaps in communication can occur, since social context and culture directly influence language and speech. Roma students also have to learn in a school that is steeped in the majority culture, which they may experience as an alien and often hostile environment. Schools are not equipped to teacher children with minority mother tongues.

- **School environment.** The infrastructure of special schools is often of the same substandard quality as schools that are residentially segregated. In Hungary, the majority of special schools are in buildings in need of repair, lack space, equipment and supplies, and have shortages of qualified staff. Roma-majority schools are also often neglected in terms of infrastructure, or built near polluted areas, and sometimes are without basic sanitation and facilities, which negatively affects the health of the children.
Barriers and bottlenecks

Curricula. Most national curricula remain monocultural and non-inclusive, with limited mention of Roma history and culture. They render Roma children invisible, ignoring their interests and individual skills, making it harder for these children to relate to the material. Curricula also mostly overlook the fact that many Roma children speak primarily Romani; bilingual learning is mostly absent.

Prejudice and hostility. Negative assumptions about the intellectual inferiority of Roma children are widespread across the region. Stereotypes held by teachers lower their expectations and inspire weaker instruction. For example, 47 per cent of teachers in Slovakia believed that Roma children could not succeed in school, and 88 per cent believed that Roma children are less capable than their non-Romani peers. In a survey conducted by the European Roma Rights Centre, children testified that teachers systematically ignore them in the educational process. Verbal and physical castigation of Roma classmates by majority students is not uncommon. According to a survey of Hungarian schooolteachers, Roma are the least preferred students out of all minorities. Under these conditions, it is not surprising that Roma children suffer from lower self-esteem, academic performance, enrolment and retention rates, and a poorer ability to transition between levels of education.

The low educational achievement among Roma can in large part be attributed to poor quality or non-existent institutions and support for the development, care and education of very young children. The problems are compounded by the fact that a majority of the parents of Roma children have themselves received an inadequate education, making them less empowered to claim the right to quality education for their own children.

Since 1989, there has been widespread elimination of free kindergartens from most of the countries in CSEE. Kindergartens that remain are too expensive for most Roma families, do not have adequate space and are underfunded. When a kindergarten is available, there is usually little effort to create a diverse environment in which the Roma language and culture is acknowledged, and home-based and community approaches for the youngest children and their mothers do not exist. Furthermore, as the Roma population’s economic situation has deteriorated since 1989, access to prenatal care and health services for infants and toddlers has also diminished. However, the Roma communities are largely excluded from the early childhood development education and care services that do exist in the region. This lack of provision contributes to a lack of readiness for school, which in turn serves to impact negatively on children’s capacity to benefit from primary education. Even where such services do exist, they are often fragmented, with services for children under three years old separated from services for three- to five-year-olds, resulting in a lack of continuity for families, patchy or absent services, inconsistency in quality and little input from the parents.

Low quality of education

The quality of education is low in many CEE/CIS countries, as the PISA results discussed in the previous chapter indicate. Poor learning environments can lead to reduced motivation in pupils, low results in achievement tests, and poor perceptions of schooling in the community, all of which can increase the likelihood that children drop out. Many youth interviewed in Georgia, Kosovo\textsuperscript{102} and Tajikistan expressed their dissatisfaction with the quality of education and how it reduces engagement and interest in further education (UNICEF, 2011e). A significant proportion also felt that their classes and teachers did not prepare them adequately to pass exams, driving youth to pay for outside tutoring.

It is very difficult to conclusively identify specific factors which affect the quality of education. School resources and pupil-teacher ratios have been found to generally have a minimal impact on PISA results, although the impact can vary greatly from one country to another (UNICEF, 2009b). However, the evidence indicates that teacher quality is consistently the most important school factor affecting pupils’ learning achievement (Hanushek, 2011). A teacher can have a huge impact – and some teachers are capable of producing much bigger gains in student learning than other teachers year after year. No other school factor has been found to have quite the same kind of impact as teachers.

\textsuperscript{102} UNSCR 1244.
In Kyrgyzstan and Tajikistan, low salaries deter many from working as teachers, leading to a shortage of qualified teachers and causing talented individuals to seek out better job opportunities (UNICEF, 2012a; UNICEF, 2012c, in press). Tajikistan has also lost many qualified teachers due to external migration. The percentage of trained teachers in primary is just 64 per cent in Kyrgyzstan and 88 per cent in Tajikistan, although this is an improvement from the situation a decade ago (UIS, 2011b)\(^{103}\). Besides losing qualified individuals to more attractive professions, low salaries can reduce teacher motivation, lead teachers to take on additional jobs to supplement their income, and affect teacher performance.

Another important factor related to the quality of teaching is the curriculum and outdated teaching practices. In many CEE/CIS countries, rote memorization of formula and rules, memorizing facts, and being able to read a certain number of words per minute are emphasized over higher-order thinking skills – a remnant of the old Soviet approach (UNICEF, 2009b). In Kyrgyzstan, a related issue is the poor quality of textbooks (UNICEF, 2012a). The language of instruction and education materials can also be a barrier to learning, and children may do poorly at school because the language of instruction is other than their mother tongue. Estonia’s success in PISA can be partially attributed to its efforts to reform the curriculum.

The lack of pre-primary programmes (Dimension 1) in some CEE/CIS countries is also an important factor leading to reduced school performance later in life. The significant, positive role of high-quality early-childhood programmes in cognitive development is well established, but often insufficiently recognized by governments (for example, Engle et al. 2007; Grantham-McGregor et al., 2007; Walker et al., 2007). Moreover, evidence shows that investing in pre-primary is the most cost-effective period in a child’s life to invest in with respect to cognitive benefits and future economic returns. Early intervention can also reduce future disparities in achievement between pupils of different socio-economic groups. Therefore, investing in pre-primary education is of crucial importance in order to increase school performance later in life, particularly for children from poor households. Disadvantaged children benefit more from these programmes than advantaged children, and younger children (two to three years of age) benefit more than older children (five to six years of age) even after adjusting for the duration of the programmes (Engle et al. 2007).

### 3.4. Political, governance, capacity and financing bottlenecks

Political, governance and capacity bottlenecks are related to the political, institutional, legal and administrative environment, which for various reasons can block the creation and implementation of effective policies and strategies targeting out of school children. This includes the lack of political commitment, lack of transparency and accountability mechanisms, lack of clearly defined roles and responsibilities, lack of effective delegation and devolution of responsibility, weak monitoring and evaluation mechanisms, and insufficient inter-sectoral coordination – which is crucial as the issue of out of school children inherently requires a multi-sector approach. Financial bottlenecks, discussed later in this

\(^{103}\) Data is from 2008.
section, relate to issues such as inequitable budget allocations and resource distribution, and funding gaps affecting out of school children and children at risk of dropping out.

### Administrative regulations

In Turkey, administrative regulations introduced in 2008 can cause children to enrol in school late or not at all (UNICEF, 2012d, in press). Children now need to be registered in the population records and have a citizenship number in order to enrol in school, whereas the previous system allowed for temporary enrolment of these children. Moreover, children living in Turkey but citizens of another country require a foreign identity number and a resident permit, requiring the payment of an initial as well as an annual fee. Refugees and asylum seekers are exempt from these fees, but problems with the waiving of fees have been encountered in practice and, moreover, unregistered migrants are unable to apply at all. For these reasons, administrative regulations particularly increase the risk of foreign migrant children from being excluded from education.
Centralization and bureaucracy

In CEE/CIS countries such as Kyrgyzstan, Tajikistan and Turkey, the highly centralized nature of the education system acts as a barrier in enacting reforms and implementing policies and mechanisms which could reduce exclusion from education (UNICEF, 2012a; UNICEF, 2012c, in press; UNICEF, 2012d, in press). The emphasis on control and compliance with centrally mandated prescriptive regulations can hamper innovation and action. Local authorities do not have the power and flexibility for independent decision-making and responding to local needs. However, in Kyrgyzstan moves towards decentralization and sharing responsibilities for education with parents and local governments has also led to greater inequality, as it enables wealthier communities to create elite schools, whereas poorer communities may get further marginalized. Similar decentralization efforts in Romania which provide schools with greater autonomy may also have similar mixed outcomes (UNICEF, 2012b, in press). Whereas greater autonomy of decisions such as teacher requirement and the implementing of specific programmes and projects can have positive outcomes, it can also lead to greater inequalities between well-resourced schools and those schools in poor communities with limited resources. Consequently, such decentralization initiatives need to be carefully monitored, managed and coordinated. The absence of monitoring systems to track schools and school performance hinders the identification, targeting and improvement of the weakest elements (UNICEF, 2009b).

The impact of decentralization on Roma

The problem of access to education for Roma is compounded by decentralization. While decentralization can often be a positive development, allowing for adjustments to policy and initiatives according to local needs and priorities, it has been characterized in some countries in the region by poor implementation, which runs counter to the objectives established at a national level. The misuse of per-capita funding arrangements in Hungary is an illustration of inappropriate local application of a national policy. In Romania, although County School Inspectorates were set up to make sure schools were upholding the right to inclusive education for Roma children, their lack of training and understanding of the issues resulted in the continued practice of in-school segregation.


Education financing

Public expenditure on education as a percentage of GDP varies greatly in the CEE/CIS region, ranging from 1.9 per cent in Azerbaijan, one of the lowest rates in the world, to 8.2 per cent in Moldova, one of the highest rates in the world. Expenditure on education as a percentage of GDP is comparatively low – below 4 per cent – in the CIS countries.
Kazakhstan (2.8 per cent), Georgia (2.9 per cent), Armenia (3.1 per cent) and Tajikistan (3.5 per cent), as well as in Slovakia (3.6 per cent). For comparison, the OECD average is around 4.6 per cent (OECD, 2010d).

**Figure 54 – Public expenditure on education as % of GDP in Europe and CIS (2007-8)**

A high public expenditure on education as a percentage of GDP does not necessarily mean that education is well funded. The Kyrgyz Republic is among the countries with the highest total expenditure in education in proportion to its GDP as well as one of the countries with the highest fraction of total public expenditure allocated to education (OECD, 2011b). In spite of the significant budget allocated to education, expenditure per pupil is below average internationally, mainly because a relatively large proportion of the population is enrolled in the educational system. This places a heavy financial burden on the system. In addition, Kyrgyzstan and Tajikistan are the poorest countries in the region, so as a percentage of GDP expenditure on education may be high in comparison with other countries, but not in terms of actual spending on education.

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Source: UIS, 2011b

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Data for Belarus, Croatia, Germany, Kazakhstan, Poland, Romania and Ukraine are from 2007.
National spending figures can mask uneven distribution of spending within the countries. For example, the South Eastern Anatolia region of Turkey has received lower educational investments than other regions, and the region is characterized by lower enrolment rates and much higher student-to-classroom ratios compared with other regions (UNICEF, 2012d, in press).

In Tajikistan, the consequences of the lack of funding for schools has an especially detrimental effect during winter time, when the lack of electricity can cause schools to close early or continue on in candle light, and inadequate heating leads to poor learning conditions as well as illness and resulting absence from school (UNICEF, 2012c, in press).

The low enrolments in pre-primary in some CEE/CIS countries such as Azerbaijan, Kyrgyzstan, Tajikistan and Turkey discussed in the previous chapter can be directly attributed to low expenditures on pre-primary as a percentage of total public expenditure on education (UIS, 2011b). The expenditure on pre-primary for these countries is lower than in other CEE/CIS countries – although data for this particular indicator is missing for many countries.

In Moldova, the proportion of education expenditure on upper secondary in 2007 was higher than in many much wealthier countries, yet at the same time it has one of the highest rates of primary-age children out of school in the region, and this rate has more
than doubled in recent years. However, in 2008 the proportion of expenditure on upper secondary was significantly reduced and expenditure on pre-primary was increased, as was expenditure on lower secondary. Nevertheless, the proportion spent on primary is still one of the lowest in the world.

It is therefore important to consider the distribution of education expenditure within countries both geographically and by level of education. Uneven and unbalanced spending between regions, or between different levels of education, can increase the risk of children being excluded in those regions or levels of education that receive a disproportionately low share of the budget allocation.

In addition, both the level and manner of financing education can be discriminatory, exclusionary and unfair, whether deliberate or not. Many countries in the region “underfund public education and have increasingly shifted educational costs from the state to individuals [which] disproportionately affects the poorest regions and most excluded populations, including the Roma” (UNICEF, 2011d: 21). Moreover, although basic education is free, “fiscal reform measures have brought the introduction of official and unofficial charges… even if pupils are able to learn, incidental fees, such as extra-curricular lessons and excursions, limit their participation” (UNICEF, 2011d: 21).

**Vertical equity: compensation for socio-economic disadvantage**

In addition to ensuring adequate financing of education at different levels, countries also need to ensure that financing is distributed equitably. The introduction of per-capita funding, if well implemented and taking into account equity as part of the funding formula, can lead to significantly more equitable distribution of resources to schools. One of the purposes of per-capita funding is to ensure the fair and transparent distribution of resources, as well as provide additional funding to poor communities.

Two forms of equity can be distinguished (Ross and Levačič, 1999: 29):

1. Horizontal equity: the like treatment of recipients whose needs are similar.
2. Vertical equity: the application of differential funding levels for recipients whose needs differ.

The OECD report *Preparing Teachers and Developing School Leaders for the 21st Century* examined school characteristics and mean socio-economic background of schools across OECD member countries and partner countries participating in PISA (Schleicher 2012). Table 6 correlates the two, and by doing so sheds light on differences in vertical equity across the participating countries. Based on PISA data from 2009, it correlates various school characteristics with the mean school socio-economic background – i.e. the socio-economic background of the pupils in that school. Areas highlighted in green indicate that disadvantaged schools are more likely to have more or better resources. Areas highlighted in red indicate that advantaged schools are more likely to have more or better resources. The figures are in bold if the relationship is statistically different from the OECD average.
Table 6. Comparison of school characteristics and school mean socio-economic background (2009)

<table>
<thead>
<tr>
<th>Simple correlation between the school mean socio-economic background and:</th>
<th>Percentage of full-time teachers</th>
<th>Percentage of certified teachers among all full-time teachers</th>
<th>Percentage of teachers with university-level degree (ISCED 5A) among all full-time teachers</th>
<th>Index of quality of school’s educational resources</th>
<th>Computer/student ratio</th>
<th>Student/teacher ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>OECD average</td>
<td>-0.07</td>
<td>0.04</td>
<td>0.15</td>
<td>0.13</td>
<td>-0.08</td>
<td>0.15</td>
</tr>
<tr>
<td>Germany</td>
<td>-0.15</td>
<td>-0.02</td>
<td>-0.02</td>
<td>0.06</td>
<td>-0.18</td>
<td>0.28</td>
</tr>
<tr>
<td>Albania</td>
<td><strong>-0.25</strong></td>
<td>0.00</td>
<td><strong>0.38</strong></td>
<td><strong>0.44</strong></td>
<td><strong>0.24</strong></td>
<td>0.15</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>0.05</td>
<td>-0.06</td>
<td><strong>0.44</strong></td>
<td>0.19</td>
<td>0.17</td>
<td>0.23</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>-0.08</td>
<td>0.17</td>
<td>0.17</td>
<td>0.09</td>
<td>-0.17</td>
<td>0.21</td>
</tr>
<tr>
<td>Croatia</td>
<td>0.09</td>
<td>0.02</td>
<td><strong>0.28</strong></td>
<td>0.09</td>
<td>0.17</td>
<td>0.32</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td><strong>0.23</strong></td>
<td>0.04</td>
<td><strong>0.34</strong></td>
<td>0.21</td>
<td>-0.12</td>
<td><strong>0.44</strong></td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td><strong>0.17</strong></td>
<td>0.08</td>
<td><strong>0.35</strong></td>
<td>0.27</td>
<td><strong>0.13</strong></td>
<td>0.27</td>
</tr>
<tr>
<td>Romania</td>
<td>0.05</td>
<td>0.10</td>
<td>0.11</td>
<td>0.20</td>
<td>-0.07</td>
<td>-0.02</td>
</tr>
<tr>
<td>Russian Federation</td>
<td><strong>0.18</strong></td>
<td>0.08</td>
<td>0.31</td>
<td><strong>0.26</strong></td>
<td>0.02</td>
<td><strong>0.29</strong></td>
</tr>
<tr>
<td>Serbia</td>
<td>0.10</td>
<td>0.06</td>
<td>0.06</td>
<td>-0.01</td>
<td>0.00</td>
<td>0.11</td>
</tr>
<tr>
<td>Turkey</td>
<td>0.12</td>
<td>-0.04</td>
<td>0.04</td>
<td>0.04</td>
<td>-0.06</td>
<td>-0.26</td>
</tr>
</tbody>
</table>

- Disadvantaged schools are more likely to have more or better resources, in **bold** if relationship is statistically different from the OECD average.
- Advantaged schools are more likely to have more or better resources, in **bold** if relationship is statistically different from the OECD average.
- Within-country correlation is not statistically significant.

Source: Schleicher, 2012

In most OECD and CEE/CIS countries which took part in PISA, except for Turkey, the student-teacher ratio is better for socio-economically disadvantaged schools. This is a positive sign, but perhaps not so surprising given that student-teacher ratios are often lower in rural and remote areas – exactly those areas where schools are more likely to be socio-economically disadvantaged.

In general, in terms of the school characteristics listed above there is less equity in CEE/CIS countries which participated in PISA than there is in OECD countries, with the notable exception of Serbia. That is to say, in participating CEE/CIS countries there is a wider gap in school conditions favouring socio-economically advantaged over socio-economically disadvantaged.
disadvantaged schools. Moreover, in a number of countries it is significantly worse than the OECD average in terms of the percentage of full-time teachers (in Kazakhstan, Kyrgyzstan and the Russian Federation), percentage of teachers with a university-level degree among full-time teachers (in Albania, Azerbaijan, Croatia, Kazakhstan and Kyrgyzstan), the index of quality of the school’s educational resources (in Albania and the Russian Federation), and the computer to student ratio (Albania and Kyrgyzstan). With respect to these factors there is a strong imbalance, where socio-economically advantaged schools are much better staffed and resourced. There is still a long way to go before these CEE/CIS countries reach the level of vertical equity of OECD countries such as Estonia, Hungary, Ireland, Germany, Poland and the Republic of Korea. In these countries, socio-economically disadvantaged schools have slightly better school resources to compensate for socio-economic disadvantage. Germany is included in Table 6 as an example of a country with a relatively high level of vertical equity. However, it should of course be taken into account that these figures give only a rough indication of the compensation for socio-economic disadvantage and do not show the full picture.

Ideally, children from poor socio-economic backgrounds should be in schools with the same or better conditions than children from wealthy socio-economic backgrounds. The per capita funding formula would need to take this information into account in order to correct the current imbalance favouring socio-economically advantaged schools. In addition, as discussed previously in this chapter, there are significant geographical disparities as well which need further analysis and consideration.

**Children with disabilities**

Most countries in the region are signatory to the UN Convention on the Rights of Persons with Disabilities. However, as shown in Table 7, a number of countries have not yet ratified the Convention. Although they are bound by the Convention on the Rights of the Child, which is inclusive of all children, Albania, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan have not yet ratified the Convention on the Rights of Persons with Disabilities, as of the writing of this report. These countries are therefore not legally bound to implement inclusive policies for children with disabilities.

**Table 7 – CEE/CIS countries which have signed and ratified the convention on the Rights of Persons with Disabilities**

<table>
<thead>
<tr>
<th>Country</th>
<th>Signature</th>
<th>Ratification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albania</td>
<td>22 Dec 2009</td>
<td>-</td>
</tr>
<tr>
<td>Armenia</td>
<td>30 Mar 2007</td>
<td>22 Sep 2010</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>9 Jan 2008</td>
<td>28 Jan 2009</td>
</tr>
<tr>
<td>Belarus</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Bosnia and Herzegovina</td>
<td>29 Jul 2009</td>
<td>12 Mar 2010</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>27 Sep 2007</td>
<td>22 Mar 2012</td>
</tr>
</tbody>
</table>

Even for those countries committed to inclusive education for children with disabilities, the shift towards an inclusive education strategy and implementation of inclusive education policies at the ground level takes time and political commitment. Inclusive education policies which are being implemented and included in national education strategic plans are generally not harmonized with general education planning (UNICEF, 2011c), effectively becoming parallel systems of education. They lack budgetary support, action frameworks, indicators and implementation committees, and there is still confusion between the concepts of integration and inclusion. In addition, there is a gulf between policy and what happens in practice on the ground. Lack of resources is often cited as a barrier to change, even though evidence suggests that the provision of inclusive education is cost-effective. Moreover, beyond the policy level what is also required is a shift in attitudes, not just at the level of the government but also within communities and schools, including the attitudes of teachers and parents.

The shift towards inclusive education for children with disabilities is therefore far from simple. But it is necessary and achievable. Some of the potential policies and strategies in addressing these issues are discussed in the following chapter.

**Transparency, corruption and accountability**

A lack of transparency and accountability and high levels of corruption are prevalent in a number of countries in the region. According to surveys and assessments conducted by Transparency International, eight CEE/CIS countries are among those countries with the highest perceived levels of public sector corruption in the world, with rankings between 143 and 177 out of 182 countries (Transparency International, 2011). Corruption in education...
Barriers and bottlenecks

A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States

takes such forms as selling answers to exams or bribery to pass examinations, schools requesting additional tuition fees, and teachers pressurizing parents to pay for private tuition for their children (Dedze, 2005). The burden of corruption in terms of the fraction of income paid in bribes is much greater for poorer households (Hallak and Poisson, 2002). Hence, informal and bribery costs in particular increase the risk of exclusion from education for children from poor families.

In Kyrgyzstan, unofficial payments for free and compulsory education have increased since the breakup of the Soviet Union (UNICEF, 2012a). Children of migrant families are particularly vulnerable because they often do not have the required registration documents, leading to unofficial payments for their enrolment.

Unofficial payments can also be required to pay for instruction or use of computers which is otherwise withheld. As described by a child in Tajikistan: “If any student pays one or two somoni, then they can use the computer. Otherwise, they are not allowed to use the school computers for learning” (UNICEF, 2012c, in press).

Corruption in education can often be explained by the difficult social and economic circumstances, such as the low salaries and prestige of the teaching profession. It is also the result of a value system which continues to persist in which people have to bend rules and regulations in order to survive (Plikšnys et al., 2009).

At the government level, there is a general lack of transparency in terms of data availability, in particular for financial indicators; as discussed in the previous section, for many CEE/CIS countries very little data is available on education spending.

3.5 Barriers facing children belonging to multiple OOSC risk groups

This chapter concludes with a reflection on the barriers to education faced by children belonging to multiple out of school children risk groups. It is often a combination of factors which leads to children being out of school or at risk of dropping out. Poverty in particular is often linked with other profiles of out of school children discussed in this chapter; for example, poverty levels are generally higher in Roma communities and among families with children with disabilities, and children from poor families on average have lower learning achievement than children from wealthier families. Poverty is also intrinsically linked to child labour, which is further discussed below. Whereas one factor may not lead to a child being excluded from school, when combined with one or two other factors the risk of exclusion can become much higher.

This section focuses on the Lyuli community in Kyrgyzstan, continuing the discussion from the previous chapter. The Lyuli community provides a vivid illustration of the impact of multiple barriers to education faced by children belonging to multiple out of school children risk groups. In fact, the Lyuli community faces almost every barrier to education discussed in this chapter. It is remarkable that a small percentage of children in the community manage to transcend all these barriers and make it all the way through to the end of compulsory schooling.
One of the most significant barriers to education faced by the Lyuli community is poverty. The widespread poverty among Lyuli people can partially be attributed to the vicious circle of low education leading to poor job prospects, which in turn leads to continuing poverty and continued low education participation and completion. In order to survive, Lyuli children and adults often have no other option but to take strenuous low-paid jobs such as collecting scrap metal, cleaning plastic bottles and carrying cement. Many also resort to begging. Child labour is very common and is one of the most important causes of drop-out, as from an early age many children start working in order to support their families. The inability of families to afford school supplies is another important factor causing children to not go to school.

Another cause of poverty is the discrimination the community faces from their non-Lyuli neighbours, which also prevents them from obtaining better-paid, more respectable jobs. Discrimination also prevents youth from continuing past 9th grade, as the only school in the community only goes up to 9th grade and they face discrimination and bullying in schools outside of their community.

Socio-cultural attitudes towards education are also a barrier, in particular attitudes towards girls’ education. As discussed in the previous chapter, girls are more than twice as likely to be out of school compared with boys. In addition, early marriage is common, which leads some girls to drop out prior to completing compulsory education – although not many girls make it to the last grades of compulsory education.
There are also many children of migrant parents who have migrated to the Russian Federation or elsewhere. These children live in single-parent households, stay with relatives or need to fend for themselves. The absence of parental involvement and supervision also places them at higher risk of being out of school.

More than half of the children in the community have no birth certificate, and parents’ lack of documents (such as a marriage certificate, ID card and registration documents) leads to a vicious circle where obtaining one document is complicated by the lack of other documents. The lack of documents prevents access to government benefits and makes them vulnerable to harassment and corruption, factors which make it more difficult to escape the vicious cycle of poverty.

In addition to demand-side socio-cultural and economic barriers, the community also faces significant supply-side barriers. The school in the community is so small it has capacity for only 120 children, even though there are an estimated 1,020 school-age children in the community. The school currently runs in three shifts, but even then the school would need to be three times its size to have sufficient capacity for all school-age children. Because the majority of children drop out before 9th grade, it is particularly at the lower grades where demand is starting to exceed capacity. The school is also almost devoid of facilities. The school lacks heating, which is crucial during winter time, and there is no running water. There is no library or computer lab and there are no sports facilities.

The children also face a language barrier, as instead of Kyrgyz they speak a language which resembles Tajik. The need to learn Kyrgyz at school while speaking a different language at home poses a significant challenge. Moreover, they have no books or other educational materials in their own language – neither at school nor at home.

*Children and adolescents have very few opportunities to contribute to decisions about their own education.*

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When children face multiple barriers to schooling – which is often the case, and very visibly illustrated in the case of the Lyuli community – a single- or one-dimensional approach is unlikely to have much impact. In such cases, a combination of strategies and policies are required to remove the different barriers to education. Strategies and policies for removing barriers to education are discussed in the following chapter.

### 3.6 Analytical summary

The barriers and bottlenecks leading to exclusion from education have been analyzed according to the different types – demand-side socio-cultural barriers, demand-side economic barriers, supply-side barriers, and political, governance, capacity and financial bottlenecks. In addition, they have been analyzed separately by profiles of out of school children, as children with different profiles are affected very differently by the different types of barriers and bottlenecks. Although it is not possible to generalize causes of exclusion for the entirety of the CEE/CIS region, this analysis has sought to identify and disentangle some of the key factors, linking them to the profiles of out of school children as discussed in Chapter 2, and focusing in particular on those issues which are broadly relevant across all countries in the region.

#### Demand-side barriers

Throughout the world girls are more likely to be out of school, and this is also the case – on average – in the CEE/CIS region, as discussed in Chapter 2. However, in some CEE/CIS countries boys are more likely to be out of school. The trend also changes over time – from Dimension 2 to Dimension 3 and beyond compulsory education, and within each country – sometimes varying significantly according to region and socio-economic characteristics. For example, in Tajikistan girls in wealthy families and living in urban areas are not much more likely than boys to be out of school, but are far more likely to be out of school if they are from poor families or live in rural areas. Analyzing the causes is also not straightforward. On the one hand, in some countries of the region practices and attitudes favouring men over women are on the increase following the collapse of Soviet rule, such as arranged marriages, child marriage and patrilocality. On the other hand, the gender gap in countries where girls' enrolment was much lower has narrowed in the last decade, notably in Tajikistan and Turkey. It is perhaps useful to also consider socio-cultural barriers in the context of economic barriers. Poverty rates in terms of the population living under $2 a day at PPP have declined significantly in both Tajikistan and Turkey (World Bank, 2011). With reduced financial pressures, families may decide to keep both girls and boys in school. At the same time, boys also face socio-cultural pressures to drop out from school to financially support their families. For example, in Armenia boys are more likely to work in unskilled jobs (for example, construction) whereas girls – having fewer such opportunities – have a greater incentive to stay in school.

Roma children face many different kinds of barriers. Among them are those of a socio-cultural nature, including discrimination, early marriage for girls and the language spoken at home, as well as social exclusion and poverty and related problems such as lack of birth registration. It is this combination of factors of exclusion which makes Roma children...
particularly likely to be out of school, and also makes their situation particularly difficult to address. It is a self-perpetuating cycle where social exclusion and poverty leads to exclusion from education, and low levels of education leads to further social exclusion and poverty. Poverty also drives migration for economic reasons, and frequent migration is itself a cause of social exclusion (not being part of the community) and also causes children to miss school, fall behind and ultimately drop out. All these factors are therefore closely interlinked and should not be considered as separate barriers.

Children with disabilities face widespread discrimination in the region – including from teachers, which also affects the attitudes of parents. Fear of social stigma can discourage parents from having their child assessed and make them reluctant to seek help. As discussed in the previous chapter, only 1.5 million of an estimated total of 5.1 million children with disabilities and special education needs are currently registered in the region. Socio-cultural attitudes towards disability are a crucial obstacle to overcome in registering children with disabilities and recognizing their rights and their needs. Disability also makes families more vulnerable to poverty, because of lost wages from having to take care of children with a disability as well as associated medical and other costs – such as the cost and difficulty of transportation to school.

Even if school is supposedly free, there are many indirect costs of education which can make it prohibitively expensive for families living in poverty. This includes the cost of school uniforms, textbooks and other school materials, lunch money, transportation costs and even bribes. For example, in Kyrgyzstan unofficial payments for free and compulsory education have increased since the breakup of the Soviet Union. Children of migrant families are particularly vulnerable because they often do not have the required registration documents. Poverty is closely linked to child labour, and particularly in Central Asia and the Caucasus many children from low-income families need to earn money to support their families. Children may even be the only breadwinners in some families, placing a huge burden on their shoulders. Even though working children may still attend school, their level of engagement is not likely to be the same. Work may cause them to be absent for long periods and less likely to be able to do homework. Financial pressures and long work hours can interfere with their ability to concentrate in school. All these factors increase their chances of dropping out from school. The impact varies according to the type, duration and regularity of work – and this in itself can vary significantly by area and between girls and boys. In rural areas, seasonal agricultural work is more common. It can be very intensive for a certain period of time, but not affect the rest of the year. Girls are more likely to work in the home and take care of siblings, whereas boys are more likely to be engaged in physically heavy work such as construction. These factors influence the amount of time they spend working, how stressful and draining the work activities are, and ultimately how they affect their engagement with school.

**Supply-side barriers**

Pre-primary enrolment rates are generally very low in the CEE/CIS region, as discussed in Chapter 2, and one of the key causes is the lack of pre-primary infrastructure. The infrastructure of crèches, nurseries and pre-school institutions has deteriorated, particularly in the poorer former Soviet countries such as Tajikistan, where the number of pre-primary school institutions dropped from 944 to 485 between 1991 and 2008.
Another important supply-side barrier is the lack of adequate water and sanitary facilities in schools, which particularly affects the participation of adolescent girls. Moreover, the situation has worsened in some areas since 1990. In Tajikistan, many schools – particularly in rural areas – have only simple pit latrines and lack a water-supply system. Besides the facilities themselves, privacy is also an issue. In many schools there are no separate toilets for girls and boys, and the infrastructure itself may not provide an adequate level of privacy. This particularly discourages teenage girls from going to school.

Schools and classrooms are often not accessible to children with disabilities, and more generally schools often lack the required infrastructure and resources. Unfortunately, the concept of ‘defectology’ continues to influence the design of education provision for children with disabilities – rooted in a medicalised approach in which children with disabilities are considered ‘defective’ from the norm. This has led to the mass institutionalization of children with disabilities, with many children with disabilities also confined to the home. This treatment of children is also related to prevailing discrimination and social stigma, as discussed above. Given the historical marginalization of children with disabilities, it is perhaps not surprising that there are significant supply-side barriers to inclusive education for children with disabilities in the region. Typically, schools are poorly resourced and lack specialized special education teachers and counsellors, while many countries lack a good curriculum for children with disabilities and special needs. Public transport is often not accessible to children with mobility problems.

Roma children in many countries of the region have been disproportionately segregated into special schools. This has been justified in terms of ‘socialization defects in the family’, language issues and other socio-cultural factors, which have led to the mistaken evaluation that these children are unable to follow a standard education in regular schools. Even those Roma children who attend regular schools have often ended up in Roma-majority schools, remaining segregated geographically from non-Roma children. Finally, those Roma children who did attend school with non-Roma children have often ended up in Roma-majority schools, remaining segregated geographically or within the classroom. The quality of special schools tends to be sub-standard – and in a similar way Roma-majority schools have tended to be neglected, with poor facilities and mono-cultural curricula which do not take into account Roma language and culture. Many Roma children face huge challenges because the language of instruction is not the language they speak at home. In addition, few Roma have opportunities to attend pre-school – either because none are available or due to their prohibitive cost, further reducing their opportunities to successfully continue into mainstream education.

The low quality of education is a major problem in many countries of the region. It leads to a lack of engagement in school, increasing the risk of drop-out. As discussed in the previous chapter, learning achievement tends to be much lower in rural areas compared with urban areas. This is indicative of the large inequities within countries with respect to the quality of schools, which is looked at in more detail below. Out-dated curricula and teaching practices, emphasizing rote memorization over higher-order thinking skills – are also significant obstacles to improving the quality of education. The lack of pre-primary, as discussed previously, is another important factor which especially affects the learning opportunities of socio-economically disadvantaged children. In some countries, particularly Kyrgyzstan and Tajikistan, the low salary levels and prestige of the teaching profession is a key issue. This results in a loss of qualified individuals from the teaching profession to more attractive professions, as well as to other countries.
Political, governance, capacity and financing bottlenecks

The centralized nature of the education system in some countries in the region acts as a significant barrier to reforms and the adoption of policies and strategies which could reduce exclusion from education. Local authorities do not have the power and flexibility for independent decision-making and responding to local needs. At the same time, moves towards decentralization if poorly implemented can worsen the situation of children who are excluded or at risk of exclusion. New procedures and responsibilities can lead to mismanagement of funds if not accompanied by adequate training. Moreover, decentralization initiatives which are not carefully monitored, managed and coordinated can open up opportunities for corruption. By empowering communities, they can also further widen the gap between schools in socio-economically advantaged and socio-economically disadvantaged communities.

The distribution of education financing is an important consideration in identifying uneven and unbalanced spending geographically (for example, between regions), or between...
different levels of education. For example, Moldova has a very high proportion of education expenditure going to upper secondary and a very low proportion going to the primary education level compared with other countries in the region – or indeed the world. At the same time, it has one of the highest rates of primary-age children out of school in the region. Lack of funding can also result in harsh school conditions, such as in Tajikistan where there are schools which do not have adequate heating during winter time.

In terms of vertical equity – the application of differential funding levels for recipients whose needs differ – the results for countries participating in PISA reveal glaring inequalities between socio-economically advantaged and socio-economically disadvantaged schools. Rather than providing additional or better resources to socio-economically disadvantaged schools – as is the case in countries such as Estonia, Hungary, Germany and Poland – the opposite is the case in the CEE/CIS countries examined, with the exception of Serbia. Socio-economically disadvantaged schools are in general less likely to have full-time teachers, in particular full-time teachers with a university-level degree. They also tend to have much lower levels of educational resources.

In terms of measures adopted to advance inclusive education for children with disabilities, there has been some progress. Most countries in the region are signatory to the UN Convention on the Rights of Persons with Disabilities. However, a number of countries have not yet ratified the Convention and are not legally bound to implement inclusive policies for children with disabilities. Moreover, even for those countries which are committed progress has been sporadic and inclusive education policies are generally not harmonized with general education planning. They lack budgetary support, action frameworks, indicators and implementation committees, and there is still confusion between the concepts of integration and inclusion. In addition, there is a gulf between policy and what happens in practice on the ground. Lack of resources is often cited as a barrier to change, even though evidence suggests that the provision of inclusive education is cost-effective. Moreover, beyond the policy level what is also required is a shift in attitudes, not just at the level of the government, but also within communities and schools, including the attitudes of teachers and parents.

Although this chapter has discussed different types of barriers in relation to specific profiles of out of school children, it is often a combination of barriers which lead to exclusion from education. For example, Roma children in the wealthiest quintile of Romania were found to be no more likely to be out of school than were non-Roma children. On the other hand, many Roma children are also poor, lack access to or cannot afford pre-primary education, attend poorly resourced schools, do not speak the language of instruction at home, and may be more likely to get involved in child labour. It is this combination of factors, rather than ethnicity in and of itself, which greatly increases their likelihood of being excluded from education. In the same way, other barriers such as those related to poverty, disability and gender are not necessarily a significant barrier on their own – but become significant in combination with other characteristics and corresponding barriers to education.
The global economy has become much more integrated and competitive than in the past.

Policies and strategies

Education Equity Now!
A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States
This chapter looks at specific policies and strategies that address the out of school profiles and patterns reported in Chapter 2, and overcome the exclusionary barriers and bottlenecks in education discussed in Chapter 3. It takes a look at the policies and strategies employed in Kyrgyzstan, Romania, Tajikistan and Turkey, based on country reports, from which relevant lessons can be drawn. It is not an exhaustive list, but provides an overview of some of the key policies and strategies used in these countries. The main sections of the chapter are organized around the nine profiles of out of school children presented in Chapter 2.

Prior to describing specific out of school policies and strategies, the next two sections examine the wider context and challenges, which act to both constrain and enable education policies and reforms in the CEE/CIS region.

4.1 Global context and regional challenges: The role of education

Many view education as a critical means for addressing the challenges of a globalizing, knowledge-oriented economy in the 21st century. With substantial increases in the cross-border flows of people, information, technologies, capital and ideas, the global economy has become much more integrated and competitive than in the past. These trends are further driven by massive changes in ICT. For many decision-makers, expanding access to quality education, reducing drop-out rates, improving learning outcomes, ensuring relevant skill acquisition and fostering job training are treated as necessary, though not sufficient, conditions for improving their country’s competitive advantage in the world.

However, in other ways the onset of the 21st century has underscored national vulnerabilities. Labour markets are less stable than in the past, while the profitability of many established industries has eroded. Furthermore, predicting ‘sunrise’ industries has proven difficult. Recent financial crises have exacerbated these structural problems. As a consequence, unemployment and underemployment rates have risen. Economic inequalities both within and between countries have also increased.

It is not entirely clear whether, and to what extent, educational progress can address these acute challenges. Education is certainly not an unmitigated panacea. Effective educational policy-making depends on marshalling concrete evidence for the formulation of realistic policy goals and the specification of clear implementation strategies.

For CEE/CIS countries there are additional challenges that have emerged. Most of these stem from recent historical and political transformations in the region. First and foremost is the political, economic and demographic fallout from the dissolution of the former Soviet Union and Yugoslavia. During the past two decades newly independent and newly autonomous countries in the region have struggled with weakened administrative structures, fewer and less stable financial resources and lowered governing capacity. These challenges to effective governance stem in the large part from lack of formal training in public finance or management at various administrative levels, the absence of reliable monitoring and evaluation mechanisms, the absence of community involvement in planning and policy-making, and a political culture of less-than-transparent budget allocations, susceptible to corruption (UNICEF, 2011e).
Another challenge to the region involves the migration of educated and skilled workers, who have sought more attractive employment opportunities in OECD countries and the Russian Federation (Docquier et al., 2007). The consequences of this ‘brain drain’, or outmigration of educated labour, can be mixed – in other words, there could be a ‘brain gain’ or ‘brain exchange’ (Brzozowski, 2008) – but they are especially salient in smaller countries in the region.

Concurrently, fertility rates are declining in many, but not all, CEE/CIS countries. Smaller families and fewer children have pressured authorities to close or merge local schools, steps that create a multiplicity of policy challenges (involving issues such as teacher re-assignments, student transportation and community support). Finally, ethnic identities have hardened in much of the region, unleashing deeper tensions, intolerance and violence in some areas. Regionalization processes also took hold – for example, in the Baltics and around the European Union and Eurozone – creating and reconfiguring new cultural and political identities.

4.2 Contemporary education reforms

In response to these challenges, many countries in the CEE/CIS region have advanced various educational reforms, legal initiatives and public policies. The UNICEF report *Education for some more than others? A regional study on education in Central and Eastern Europe and the Commonwealth of Independent States (CEE/CIS)* describes several stages of educational reform in the post-Soviet era (UNICEF, 2007). The first stage, which followed the collapse of communist regimes, was one of euphoria in which many countries drew upon their newly found freedom to alter educational structures and curricular contents, often influenced by external models and concepts. As the initial excitement abated, a second stage enfolded in which countries exerted greater caution and rational appraisal of new initiatives. Many countries undertook steps to develop more coherent and coordinated policy ‘frameworks’, although still externally conceived and sector-specific. Some decision-makers perceived these educational reforms as disconnected from national traditions and goals. As education systems diversified, a third stage ensued, in which educational initiatives were brought into closer alignment with national priorities and predominant values. Policy-makers sought ways to retain efficiency and quality controls over a diversifying system. During this stage considerable reform fatigue became apparent. In addition, economic reversals and administrative constraints, such as those previously mentioned, further slowed the implementation of educational reforms.

Certain CEE/CIS countries have experienced a rapid changeover of high-level education decision-makers in the post-Soviet era, with Bulgaria and Estonia each having had 10 different ministers of education serve since 1990, and Moldova and Serbia having had nine ministers of education. Frequent changes in political leadership have contributed to partial and/or uneven implementation of educational reforms and, in some cases, to sudden reversals of existing policies. By contrast, coherent and systematic reform occurred in politically stable countries like Slovenia.
Effective educational policy making depends on marshalling concrete evidence for the formulation of realistic policy goals and the specification of clear implementation strategies.
One major educational reform to have taken place across the region is the development and implementation of learning assessments, which are meant to evaluate student performance against national and international benchmarks. Before 1990 almost no CEE/CIS countries participated in international learning assessments, with the exception of the former Soviet Union and Romania. Since then, most countries have participated in at least one such assessment. In some cases – notably in Bulgaria, Romania and the Russian Federation and, to a lesser extent, Turkey – participation in international assessments has been relatively frequent. About half of the CEE/CIS countries have also conducted a national assessment of learning outcomes (Benavot and Tanner 2006). Nevertheless, there are still countries in the region that have not participated in either an international or a national learning assessment – namely, Albania, Belarus, Tajikistan and Turkmenistan

A second major reform has been the introduction of more choice in terms of school types and corresponding educational pathways, as well as choice in curricular offerings, especially at the secondary level. Increased choice, combined with greater transparency and access to information, should enable parents and students to avail themselves of quality education opportunities and to make more informed choices. However, it can also lead to disparities and inequalities when parents feel isolated from school life or if their (limited) financial means restrict their school-related choices. Furthermore, making appropriate education choices which meet the particular needs and interests of a particular child are especially difficult for families with limited knowledge of school processes and outcomes.

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107 In Kosovo, a learning assessment program is currently being introduced, funded by USAID and carried out by FHI360: http://bep-ks.org/assessment-new/ http://itac.fhi360.org/projects/teaching.shtml
A third major reform is the recognition of the right to education as a fundamental human right as enshrined in article 26 of the Universal Declaration of Human Rights (1948) and in other subsequent major international covenants and agreements. Over the past two decades, most CEE/CIS countries have become signatories to these norm-setting documents and the stipulated provisions on education listed therein. And yet, without proper follow-up and oversight the human right to quality basic education is devoid of meaning. Recognizing, exposing and opposing the violations of human rights in education remain a challenge.

4.3 Strategies and policies addressing the exclusion of pre-primary-age children

As previously discussed, low enrolment in pre-primary education in the CEE/CIS region is primarily due to a lack of pre-primary facilities – particularly in rural, remote and sparsely populated areas – as well as the inability to access existing facilities by low-income families due to high fees and other expenses. Increasing access to a year of education prior to the onset of primary schooling, especially among children from low-income or rural households, requires significant commitment and investment from governments. While such an investment may seem onerous, there is considerable and convincing evidence that the benefits generated by expanding enrolments in effective pre-primary programmes far exceed the costs. The benefits include: enhanced cognitive development, fewer repeaters in and drop-outs from basic education, increased learning levels and higher future earnings. For these and other reasons, pre-primary education is the most cost-effective period in a young person’s life in which governments can invest. It is an especially crucial policy lever for reducing achievement disparities between pupils of different socio-economic groups. Therefore, there are huge incentives for governments to ensure free or affordable, nationwide, high-quality pre-primary education.

As discussed in Chapter 1, many CEE/CIS countries start primary schooling relatively late – typically, at age seven. Many children who have had little exposure to pre-primary education, or who have their first school experience only at the age of seven, are insufficiently ‘ready to learn’ – in other words, their learning abilities are compromised by poor proficiency of a majority language, weak social skills and undiagnosed health or nutrition problems. As a result – and here the evidence is quite clear – significant learning gaps between children from different socio-economic groups already exist in grades 1 and 2, and in most schools these gaps tend to widen rather than close in subsequent grades.

In Tajikistan, the statutory entrance age to primary education will in 2020 be changed from seven to six years of age under current plans. Furthermore, some CEE/CIS countries have established, or are in the process of establishing, a compulsory year of pre-school. They include Bulgaria, Kazakhstan and Romania, as discussed in Chapter 1. The goal of this preparatory year is to enable children who have never been in pre-primary programmes to become accustomed to the school environment and acquire basic learning skills in preparation for primary school.

In Kyrgyzstan, the government recently launched shortened 100-hour and 240-hour pre-primary programmes to prepare children for schooling (UNICEF, 2012a). Pre-primary
enrolment in Kyrgyzstan is very low and these initiatives are a cost-effective way of scaling up access. While in principle this is a sound initiative, it is more of a temporary solution. Such relatively short programmes are not equivalent to full-time pre-primary enrolment in the year preceding primary school as defined in the OOSC Conceptual and Methodological Framework (UNICEF and UIS, 2011a). At least one year of full-time pre-primary education is needed to help children successfully transfer into primary education. In addition, school preparedness programmes are also needed to reach children who live in areas without access to pre-primary facilities.

Azerbaijan has undertaken serious reform of its pre-school programmes and kindergartens, with the support of the Open Society Institute (Soros Foundation). The Step-by-Step programme focuses on improving the quality of pre-school education, through child-centred pedagogy and engaging families and communities in early-childhood learning, as a means of expanding access to pre-primary education, especially among children in minority or marginalized communities (ISSA 2008).
4.4 Strategies and policies addressing the exclusion of Roma children and other ethnic minority groups

Several CEE/CIS countries have developed new policies and strategies to specifically address the exclusion of Roma children from education (UNICEF, 2012b, in press). For example, Romania has implemented a range of policies seeking to overcome socio-cultural barriers towards Roma children. As part of the policies:

- social and media campaigns have been run aimed at reducing prejudice towards and stereotyping of Roma, including the ‘Dosta! Leave Your Prejudices Behind, Get to Know the Roma!’; ‘Roma discrimination is picked up at home,’ and ‘Get to know them before you judge them’;
- Romani language classes have been established to train Romani language kindergarten and primary-school teachers;
- each county school inspectorate has an inspector for Roma matters whose job is to monitor, advise and support schools enrolling Roma students and staffing Roma/Romani language teachers;
school mediator positions have been established to interface between schools and communities, and sometimes involve mediation between the Roma community and non-Roma teachers;

- teacher professional development activities, focusing on inclusive education, intercultural education, children’s rights and Roma values, have been supported by the Ministry for Education, Research, Youth and Sports, in partnership with UNICEF; and

- non-formal and extracurricular programmes have been established to promote ethnic diversity.

Although these measures are contributing to the provision of a more welcoming school environment to Roma children, evidence suggests that they have not been fully implemented. This is undercutting fundamental change in schools, which continue to be largely mono-cultural in their outlook. For such measures to succeed a greater emphasis on multi-cultural education in teacher pre-service training is also needed.

Romania has also initiated a series of programmes which specifically target Roma children from disadvantaged communities who are at risk of dropping out (UNICEF, 2012b, in press). The ‘All in Kindergarten, All in First Grade’ programmes are aimed at children aged five to eight from 420 disadvantaged communities with substantial Roma populations. It provides educational alternatives for pre-schoolers, and also provides information and counselling on child education to parents or legal guardians of children at risk of dropping out early.

In Albania, a summer school programme was launched in 10 districts targeting economically disadvantaged, Roma and other marginalized children. It was specifically aimed at ‘invisible’ children who are not registered in the system, those who have never attended school and those not attending school regularly and at risk of dropping out. The summer programme mixed educational activities and recreational activities such as sports and excursions. Free meals were also provided. It was coordinated and funded by UNICEF, and implemented in collaboration with various partners, including the Ministry of Education and Science, NGOs and Education District Offices. This one-time programme successfully encouraged about 3,000 Roma and other marginalized children, who were previously not attending school or were at risk of dropping out, to attend school. Furthermore, many participating children continued to attend school after the summer school ended. In addition, the programme also developed the capacity of local education office staff and school staff to work together in identifying and reaching out to children not attending school or at risk of dropping out.

An innovative aspect of the Albanian summer school programme is involving Roma and other marginalized children in interesting recreational activities to demonstrate that a school can be a place to have fun and make friends and not just a place for academic learning. Such programmes present schools as more child-friendly environments, welcoming all children – regardless of gender, wealth, ethnicity or disability. By improving the image of schooling among Roma children (and their families), their willingness to attend school increases. Moreover, such programmes help to identify ‘invisible’ out of school children who do not exist in the records of government databases. Although such programmes are quite costly, they could be organized at a lower cost and smaller scale – such as a one-day recreational event organized at the start of the school year, which would be preceded by an awareness-raising campaign involving home visits. A specific focus on disadvantaged
children who are not attending school or are at risk of dropping out would be crucial. In general, non-formal educational and recreational activities such as clubs, outings and after-school events can increase children’s engagement with the formal education system and reduce drop-out rates.

A major issue facing Roma children is that many lack a valid birth certificate. This reinforces their exclusion from the education system. In large part, it reflects the fact that their parents do not possess the required documents (i.e., ID cards and/or wedding certificates) to register their children at birth. Without proper documents Roma families have difficulty applying for child support and other social benefits, which in turn increases the likelihood of their children not going to school. Resolving the legal status of unregistered Roma children requires a two-pronged government strategy: 1) expanding the provision of birth certificates and other necessary documents for those who currently do not have them; and 2) providing incentives for recent Roma parents to acquire birth certificates for their newborn children.

4.5 Strategies and policies addressing the exclusion of children with disabilities and special education needs

Changing attitudes and practices towards children with disabilities or special education needs is a major barrier to their inclusion in education and requires a multi-pronged effort. Government ministries and agencies should establish clear policies and legal regulations that foster the inclusion of all children in education. Institutionalized care and education in separate schools for special needs children should be reconsidered and reformed. The support of NGOs, civil society, the private sector and media organizations should also be mobilized to launch campaigns to combat discriminatory practices and stereotyping of children with disabilities.

Quite a few governments in the CEE/CIS region (including Armenia, Uzbekistan and others) have passed laws or legal resolutions that specifically address the issue of special education and establish procedures to support and include children with special needs. However, real changes on the ground, in local schools and communities, are partial at best (Central Asia Forum on Education, 2009).

The government of Tajikistan initiated a different approach by appearing to place the responsibility of educating children on parents, through the recently passed law on Parental Responsibility for the Education and Upbringing of Children. The law seeks to enhance parental duties and responsibilities by ensuring the education of their children, including sections pertaining to the provision of equal education opportunities for children with disabilities. However, this law has generated considerable controversy due to its perception as a state-imposed regulation of morality, behaviour and cultural norms. As the President of the Republic of Tajikistan stated to the supreme legislative body, the law is “one of the most important acts regulating behaviour and morality in the modern Tajik society”. Significantly, the law does not address the economic barriers to educational exclusion, where parents wish to send their children to school but cannot afford to do so (see the Many countries in the region have signed the UN Convention on the Rights of Persons with Disabilities, although there is a long way to go in practice
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Policies and strategies

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Secregation of children with disabilities remains the predominant practice in spite of inclusive education policies, so more attention is needed to implementation of national level policies

next section). Obligating parents to educate their children when they have limited means to do so makes little sense. The provision of free and compulsory basic education is a state responsibility, enshrined in many international covenants. Parents of children with disabilities are especially in need of support from the state, so that their children can exercise their right to education.

In Montenegro, a successful ‘Behavioural Change Campaign’ was launched by UNICEF in 2010 to change people’s attitudes and behaviours towards children with disabilities (Zec, 2012). Various strategies were employed, including the creation of billboards showing children with disabilities in a positive light, with slogans like ‘We see love’ and ‘We see friendships’. Music festivals, in which children with disabilities participated, were also held; in some, local celebrities helped promote the campaign. A survey of adults carried out after the campaign found that 82 per cent of respondents had seen the campaign, and almost one-quarter conceded that the campaign had made them change their attitudes and behaviour towards children with disabilities. Of those who changed their behaviour, over half of respondents indicated that they feel less uncomfortable when they see a child or person with a disability. In many countries children with disabilities remain invisible, living behind closed doors, which reinforces stigma and stereotyping. Clearly, much is gained by increasing the visibility of children with disabilities through such campaigns.

As discussed previously, the institutionalization of children with disabilities is a continuing problem in the region. Of the 626,000 children in the CEE/CIS region who are
institutionalized, 219,000 are regarded as children with disabilities (UNICEF, 2012e). Even worse is that between 1 million and 3.6 million children with disabilities are not officially recognized and are largely invisible. Many countries continue to rely on the ‘defectology’ model, as discussed in the chapter on barriers and bottlenecks. Early assessment is often non-compulsory, non-free, and even if it is carried out, is often not sufficiently comprehensive. Segregation of children with disabilities is still the predominant practice, in spite of the inclusive education policy being introduced in the region; there remains a wide gap between policy and practice on the ground. Comprehensive and systematic reform requires a shift in approach from medical intervention towards child-centred and family-focused services, as well as a shift in societal attitudes towards disability (UNICEF, 2010a).

Transportation costs to school, as previously discussed, are a significant barrier in the CEE/CIS region, especially for poor families and those with children with disabilities. Free or subsidized transportation in handicap-accessible vehicles is a critical step towards meeting the needs of poor families, and those whose children have disabilities. For example, in Turkey free bus services from home to school for children with disabilities started during the 2004/5 school year; by 2010/11 over 35,000 children aged three to 14 benefited from this policy.

Educational institutions also need to be made accessible to children with disabilities. In Turkey, a law was passed in 2005 requiring all public institutions and agencies – including schools – to be accessible to people with disabilities (UNICEF, 2012d, in press). However, no administrative data exists about the current status and the extent to which this has been implemented. This serves as a reminder that laws and regulations are useless if they are not being implemented, and implementation may be ineffective if it is not closely monitored.

While efforts are scattered and patchy across the region, the UNICEF CEE/CIS Regional Office has published a document that gathers best-practices and lessons-learned from the region and beyond in an effort to provide a consolidated framework for inclusive education. The document, The Right of Children with Disabilities to Education: A Rights-Based Approach to Inclusive Education, introduces the region to a human rights framework for inclusive education, based on both the Convention on the Rights of the Child and the Convention on the Rights of Persons with Disabilities (UNICEF, 2011c). The conceptual framework of the document is based on three simple principles: the right of access to education, the right to quality education, and the respect for rights within education.

4.6 Strategies and policies addressing gender discrimination

As previously shown, gender differences in the numbers of out of school children and youth vary by educational level (pre-primary, primary and secondary) and by country. In some countries, and at certain levels, girls are more likely to be out of school than boys; in other contexts, the converse is the case. As such, policy-makers must develop gender-specific strategies and policies to address existing gender disparities. At the pre-primary and upper secondary levels, where there is still considerable room to expand enrolments, policies...
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Education policies must address the high opportunity cost of girls’ education in countries where there is a gap in enrolment in favour of boys.
Education Equity Now!

Policies and strategies

should be gender-sensitive in order to minimize the creation of future gender disparities. Also, given deeply-imbedded socio-cultural norms that discourage female autonomy in some societies (for example, early marriage, dowry practices and taboos related to sexual maturation), strategies should explicitly address discriminatory practices.

A successful campaign in Turkey, known as ‘Hey Girls Let’s Go to School’ was launched in 2003 and has been very effective in increasing the enrolment of girls as well as boys in primary education (UNICEF, 2012d, in press). The campaign operates through a vast network of volunteers and public frontline workers such as midwives and teachers, who raise awareness of the value of education and persuade families to enrol girls in school. This campaign has resulted in an estimated 350,000 children enrolled in primary education, of whom around 250,000 are girls and 100,000 are boys.

The government of Tajikistan recently adopted a ‘National Strategy on the Promotion of Women’s Roles’, developed with support from the Asian Development Bank and the UNDP. This cross-sector gender strategy aims to address socio-cultural barriers to girls’ education through TV and radio programmes. Media-based initiatives seeking to sensitise local communities to the importance of girls’ education have also been supported by UNICEF and other organizations. Another initiative in Tajikistan has been the establishment of the Centre for Gender Pedagogy, which has conducted gender audits of curricula, textbooks and teacher-training programmes.

Governments in the CEE/CIS region should also consider policies that: 1) address the high opportunity costs of girls’ education, where girls are expected to perform a vast array of unpaid domestic tasks that release adult (female) labour for productive work and contribute to early female drop-out; 2) the distance of schools from marginalized communities, which affects access, with particular concerns for girls’ safety; 3) unfavourable school environments that reinforce low expectations of girls’ education, in part through the non-provision of facilities required by girls (for example, sanitation facilities, protection from abuse by peers and/or teachers, well-lit roads and transport arrangements); and 4) the lack of female teachers and gender-aware teachers, which influences classroom environments and girls’ participation (Subrahmanian 2005). Recent studies have also emphasized the potential benefits of single-sex schools for girls (UNESCO 2007). Undertaking strategies that address these issues would reduce the under-enrolment of girls as well as their early withdrawal from school.

As discussed previously, in some CEE/CIS countries boys are more likely than girls to drop out of school, particularly in Armenia and Belarus. Boys face different kinds of cultural expectations and societal pressures compared with girls, and therefore programmes and strategies aimed at boys need to be designed differently. It appears that the issue of boys’ drop-out has received far less attention in the CEE/CIS region from a policy point of view, and this is an area of concern. It may seem that policies and strategies oriented towards boys’ exclusion from education are not needed in countries where gender participation is equal or where girls are more likely to be out of school. However, this is far from the truth. Even in these countries, it is important to have gender-specific strategies and policies for both girls and boys, in order to address the specific reasons why girls and boys are out of school or drop out.
4.7 Strategies and policies addressing poor learning outcomes

As discussed in Chapter 2, an alarmingly large proportion of 15-year-olds in the CEE/CIS region are not acquiring basic literacy and numeracy skills in school, as measured by the 2009 PISA assessment. Poor learning outcomes increase the likelihood of student withdrawal from school, reduce future employment opportunities in the formal labour market and create barriers to effective and meaningful participation in society.

Having said that, there have been changes in average performance levels across PISA assessments (2000, 2003, 2006, and 2009), indicating that student performance levels are neither inevitable nor fixed. Public policies in education can make a difference. Indeed, countries have achieved significant progress in learning outcomes over relatively short periods of time. In the CEE/CIS region, there has been a marked improvement in reading literacy (since 2000) in Albania, Hungary, Latvia and Poland, while in the Czech Republic it has declined. Over shorter time spans, reading levels in Serbia and Turkey noticeably improved (from 2003), as did levels in Kyrgyzstan and Montenegro (from 2006). Slovenia, on the other hand, shows a significant decline (UNICEF 2012). In some countries – including Albania, Poland and Latvia – improvements in reading were driven by concerted country efforts to raise scores at the bottom end of the distribution, thereby improving educational equity.

Many countries in the region have initiated policies aimed at improving the quality of learning outcomes and ensuring a more equitable distribution of learning opportunities.
Other countries in the region have initiated policies aimed at improving the quality of learning outcomes as well as a more equitable distribution of learning opportunities. For example, in Kyrgyzstan a per capita funding model is currently being piloted where funding to schools is allocated according to the number of students they enrol (UNICEF, 2012a). This approach, in which schools compete for students, is intended to lead to improvements in the provision of quality education. Similarly, a ‘funding per student’ model recently introduced in Romania also aims to boost competition between schools and improve school performance (UNICEF, 2012b, in press). Evidence on whether competition improves performance is inconclusive. However, per capita funding can and should play an important role in improving equity and thereby increasing learning opportunities in socio-economically disadvantaged schools. This will only happen if per capita funding is specifically designed to reduce inequities. This is further discussed below, in the section on education financing.

Programmes and strategies aimed at improving children’s health and safety are also crucial to improving learning outcomes. Lack of nourishment and poor health strongly affect children’s ability to concentrate and learn in school. Worms can be a major cause of malnutrition in school-age children (UNICEF, 2009d). National de-worming campaigns were launched in Azerbaijan and Tajikistan, supported by UNICEF, to reduce high infestation rates. School-feeding programmes have also been shown to be a successful strategy in some parts of the region. Not only do these programmes improve their ‘readiness to learn’, nutritional levels and learning outcomes, but they also increase the participation of children from poor and marginalized families. The World Food Programme (WFP) launched a school-feeding programme in Tajikistan in 1999, which today feeds approximately 360,000 primary school children and staff in around 2,000 schools (WFP, 2010). Nevertheless, not all poor children are covered. Other important initiatives for improving children’s health and safety include vaccinations, micro-nutrient supplementation and food fortification, and improved water and sanitation facilities in schools.

4.8 Strategies and policies addressing the exclusion of poor, disadvantaged families

The previous chapter discussed several demand-side economic barriers which highlight families’ inability to send their children to school due to economic constraints. This section looks at strategies and policies which seek to overcome these barriers.

A critical, though insufficient, condition to lower the number of out of school children is the abolition of school fees. Charging parents school fees during the years of compulsory schooling is a direct violation of national and international laws. Having said that, demand-side economic policies need to go beyond the reduction of school fees and address the indirect costs of education. These include costs associated with transportation, school uniforms and books, as well as particular circumstances that lead to exclusion, such as the demand for child labour or the lack of legal restrictions.

Social protection policies also play an important role in alleviating poverty and vulnerability and overcoming economic barriers to education. Many families, particularly in low-income countries such as Kyrgyzstan and Tajikistan, cannot afford the costs of education. Their
ineligibility due to lack of documentation can impede their children’s access to educational opportunities. Corruption in education, a significant problem in some CEE/CIS countries, also adds additional unofficial costs, making it even more difficult for poor families to bear school-related expenses. The following section looks at the important role of social protection programmes in reducing economic barriers to education in Kyrgyzstan, Romania, Tajikistan and Turkey, as well as issues that limit their effectiveness.

**Kyrgyzstan**

Social protection measures currently in place in Kyrgyzstan are very limited. One of the challenges is identifying families and households in need. The current design and targeting of the cash benefits for poor families with children do not ensure the protection of the most vulnerable school-age children in the country from extreme poverty. In addition, benefits are too low to make a difference in terms of poverty, and too low to cover the informal costs related to the education of children. Increased coverage of the poorest quintiles and high-value benefits are pre-conditions to social protection measures that will contribute effectively to lowering some of the demand-side economic barriers identified for out of school children in the country. An additional categorical benefit for persons with disability, including children, is partially able to alleviate the costs associated with caring for a child with special needs, but is not linked in any way with participation into education. A database of children with disabilities is currently under development, which once completed will allow targeted support such as in the form of rehabilitation and socialization (UNICEF, 2012a).
Romania

In Romania, until 2006 a special allowance available to poor families was conditional on school attendance. A slight drop in primary and lower secondary enrolment rates followed the cancellation of its conditionality in the following school year (2007/8). The conditionality was reinstated in 2011 (UNICEF, 2012b, in press) and the government expects that this social policy will lead to an increase in the enrolment and attendance of children from poor families.

Tajikistan

As in Kyrgyzstan, Tajikistan’s budget for social protection is too low to have much impact on the plight of poor families (UNICEF, 2011c). Social assistance programmes in Tajikistan have reduced the number of households in poverty by only 0.3 per cent. The second largest social assistance programme provides cash incentives to the poorest 15 per cent of households with children aged seven to 15, but at 40 somonis per year – around $8.50 at the current exchange rate – it is insufficient to meet the costs of schooling.

The procedure for applying for social assistance in Tajikistan also creates problems, since families need to apply in person to government offices, which may be difficult to reach. There are also issues with the selection process whereby many non-poor families are benefiting from assistance whereas poor eligible families are excluded. The current selection process lacks transparency and accountability. In a nutshell, the social protection system in the country cannot be expected, in its current form and size, to make much difference to poverty and to the related determinants driving children out of school.

Turkey

An analysis of monthly social transfer payments to widows and orphans in Turkey revealed that only 2 per cent reach the poorest quintile, whereas 44.6 per cent go to the richest quintile (UNICEF, 2012d, in press). If low-income families in Turkey are not being served by current social protection policies, similar to the situation in Tajikistan, then inequalities are exacerbated. Thus, the need to resolve the inefficiency and functioning of social transfers is acute.

Conditional education assistance was initiated in Turkey in 2003 and aims to reach the poorest 6 per cent of the population. Assistance is provided on the condition that children attend school for at least 80 per cent of the school year. A large portion of conditional education assistance is distributed in the two poorest regions of the country: South Eastern Anatolia and Eastern Anatolia.

There are also various forms of social assistance in Turkey for poor families so that they can meet education expenditures such as student housing, transportation, boarding expenses and school uniforms.

Finally, poor-quality schools with poorly-trained teachers and limited learning opportunities also contribute to parental decisions to withdraw their children from school. Countries should consider supply-side strategies and policies which aim to remove disparities in the conditions and quality of schooling. Often in the poorest communities, where the
conditions of schooling are the worst, poor children are placed at a further disadvantage. In Romania, the Programme for Inclusive Early Childhood Education, financed by the World Bank and the Romanian Government, was introduced to ensure that the poorest schools in the most disadvantaged communities – including Roma communities – adhere to minimum standards to increase the provision of quality education.

4.9 Strategies and policies addressing the exclusion of working children

The demand for the labour of children and youth takes many forms – namely, work inside the family home, in fields and farms, in informal apprenticeships or in the formal labour market – and varies over time and place. The prevalence of noxious forms of child labour, especially children working under hazardous conditions and those below the age of 15, also varies considerably (Yacouba et al., 2010). In general, working children are more likely to be excluded from school, to drop out once enrolled or to attend irregularly (Blanco Allais and Hagemann 2008; Sakurai 2006).
The income earned by working children is often an important contribution to the family budget. For the poorest families, this contribution can be crucial. For example, an International Labour Organization /International Programme on the Elimination of Child Labour (ILO/IPEC) survey in Tajikistan found that more than three-quarters of working children said their earnings were “substantial”, 7.2 per cent said their earnings formed the basis of the family budget, and only 3.4 per cent said their earnings were not significant for the family budget (UNICEF, 2012c, in press). The government scheme to assist the poorest families is far too limited, in terms of both amounts and coverage, to compensate families for income lost if a child goes to school instead of working.

In the CEE/CIS region, some governments have taken steps to reduce conflicts between the seasonal demand for child labour (linked to the agricultural cycle) and school calendars. In some parts of Armenia, schools close for a period of two-to-three weeks during harvest season to allow children to support their agriculture-producing families; schools can also schedule additional school days over the weekend to enable working students to catch up on missed lessons. In some urban areas in Albania, schools offer an evening shift of classes for working youth so that they can better balance the demands of work and schooling. Historically, many of these policies were also prevalent in today’s more industrialized economies.

Government actions to combat abusive or hazardous forms of child labour, beyond setting legal age standards for work, are less prevalent.
4.10 Strategies and policies addressing children belonging to multiple OOSC risk groups

Previous chapters underscored the fact that many children grapple with several overlapping factors, including gender discrimination, poverty, rural residence, ethnic minority status and lack of legal documents, which negatively impact on their ability to attend and remain in school. To address the multiple deleterious conditions faced by these children, whose ability to exercise their right to education is severely undermined, governments must develop comprehensive and targeted policies. The implementation of such policies requires a cross-sector, multiple-stakeholder approach, involving government authorities in the social protection, health and education sectors as well as civic society and perhaps faith-based organizations. As illustrated by the example of the Lyuli community, it is imperative that governments do not relinquish their responsibility for the provision of quality basic education – including adequate school facilities – to NGOs or other providers. While partnerships may be useful in some contexts, the acute multiple conditions faced by children and their families in these communities demand strong and concerted government action.

4.11 Management, governance and finance policies and strategies

Inclusive-based, inclusive policies and strategies

Inclusive education conveys the idea that all learners, regardless of their difficulties or their differences, have the right to a quality education and should have access to neighbourhood schools. Inclusive schools recognize the diverse needs of their students and develop appropriate curricula, classroom arrangements, pedagogical strategies and learning styles in accordance with these needs. For children with disabilities and special education needs, a paradigm shift is called for: rather than concentrating on the disabling aspects of the child, it is preferable to (re)consider the disabling aspects of his/her social and physical environments (UNICEF, 2005).

In the CEE/CIS region, inclusive practices in education, often pioneered by NGOs, tend to be limited to select geographical pockets and, more often than not, have yet to be scaled up to the national level (USAID, 2010a). In most cases, a wide gap exists between official recognition of, and the need for, inclusive education and the realities on the ground – in local schools and communities. Many elements need to come together for an inclusive education strategy to work. They include the continuous monitoring of children at risk of exclusion – including children with disabilities (see below) – collaboration and coordination between ministries involved in providing services to children with disabilities, and the allocation of financial and human resources to address these tasks (UNICEF, 2011c). Equally important is an attitudinal shift at all levels of the education system.

At the school level, a strategy of inclusive education should enable teachers to teach all students with the support of trained specialists, including psychologists and special
educators. Implementing such a strategy is often hampered by the lack of funding, proper teacher preparation and the limited availability of trained specialists. Despite these adverse conditions, there are clear pathways to strengthening inclusive education. The conversion of special schools into resource centres serving mainstream schools is a cost-effective approach that supports the transition to inclusive education. Another approach involves teams of mobile specialists, who visit mainstream schools on a rotating basis and support the professional development of existing teachers. Adjusting the contents of pre-service teacher education programmes to address inclusive education issues also strengthens an inclusive education strategy. These initiatives and policies, when implemented, do not involve exorbitant expenses.

**Monitoring excluded children and children at risk of exclusion**

The continuous monitoring of excluded and at-risk children, including children with disabilities and special educational needs, is a crucial step in drop-out prevention. This entails disaggregating regional or national enrolment figures, by district or school, to identify the whereabouts of excluded children and those at risk of school withdrawal. In the absence of detailed information on children and their characteristics, it is difficult to identify and target children in need of support and to organize appropriate, early-intervention actions. Thus, a robust information management system and an on-going monitoring strategy are essential first steps in developing effective policies to reduce the numbers of out of school children and children at risk.

Several CEE/CIS countries have recently undertaken initiatives to improve the monitoring of out of school and at-risk children. For example, in Turkey an e-School Management Information System was established in 2007-2008, which can be used to identify children who are excluded from education as well as those who are at risk of exclusion (UNICEF, 2012d, in press). One of the system’s functionalities is to compare children registered in the population record who reach the compulsory age of the schooling with those actually enrolled in school. This allows authorities to identify non-enrolled children and initiate efforts to ensure their enrolment (if they reside in Turkey). Turkey’s newly developed system resulted in an enormous reduction of non-enrolled children over a very short time period: from 300,000 in December 2008 to approximately 100,000 in December 2010. However, this system is not without its limitations. These mainly revolve around the enrolment of children who are either not registered in population records or else are citizens of other countries, as well as issues concerning the quality and, thus, reliability of the data in the system.

Armenia and Romania are also moving towards the implementation of School Management Information Systems. In Armenia, a SMIS with sophisticated monitoring capabilities has been launched as a pilot project in some schools and is to be expanded to all schools throughout the country. In Romania, spreadsheets and web-based forms are gradually replacing traditional paper-based systems, and a more advanced electronic system which would enable one to track the movement of children between schools is under development.

Monitoring excluded children from primary and secondary education is an important first step. Equally important is finding ways to intervene earlier, before a child is at risk of dropping out of school. In the latter instance, children at risk need to be identified and monitored, which requires considerably more information about each child. It also necessitates greater
coordination and data-sharing agreements between different ministries and governmental departments to address the complex needs of such at-risk children. This is especially true for children with physical or learning disabilities, for which relevant data are typically collected and managed by officials in different ministries and departments, who may be reluctant to share such data. Thus, data integration becomes an important means for improving the monitoring of children at risk of exclusion (see also the next chapter).
For monitoring both children excluded from education as well as children at risk of exclusion, a SMIS has many potential advantages over paper-based systems as well as digital recording of information which is not at the school level. If data is entered at the school level through a SMIS, it enables the monitoring of children at the individual level, and also enables much more detailed analysis through disaggregated data, depending on which other information is provided by schools – including information which could enable the identification of at-risk children, such as information related to disability, school performance, school engagement, school behaviour and family background. A SMIS can also lead to much more timely data if it is entered by schools through a web-based interface which is recorded directly in a centralized system – in contrast to being submitted periodically, which may be as seldom as only once a year. This greatly improves decision-making processes where up-to-date information can be of crucial importance. A SMIS can also lead to much higher data quality, first because it is entered digitally (enabling data quality controls) and second because it is only entered once (in contrast to other systems where information may be copied, rewritten, re-entered, and transferred several times with potential errors during each step). Finally, a web-based SMIS can be much more accessible – by anyone, anytime, anywhere – enabling stakeholders at different levels (for example, national, regional and school levels) to access information relevant to their needs. These are just a few of many possible advantages through which a SMIS could greatly enhance the capacity of Ministries of Education to monitor out of school children and children at risk of dropping out, and to better act upon this information through appropriate interventions.

Education financing, decentralization and formula funding

As discussed in the previous chapter, a highly centralized education system can be a significant barrier to enacting reforms and implementing policies and mechanisms to reduce exclusion from education. A decentralized education system has numerous potential advantages, including greater transparency in decision-making, more efficient and flexible resource management, more community involvement, and greater autonomy at decentralized levels. Greater autonomy can both empower and incentivize local decision-makers to make better use of limited resources and to be more responsive to needs.

In Romania, measures to decentralize education were implemented to give schools greater financial autonomy and a greater capacity to meet the needs of at-risk students – for example, by developing specific programmes/projects or by promoting a relevant school-decided curriculum (UNICEF, 2012b, in press). In Kyrgyzstan, measures to decentralize the education system are being considered to make the government more responsive to local needs, improve public services, and reduce corruption – for example, through school supervisory committees which control the school budget (UNICEF, 2012a). In addition, the development of an Education Management Information System (EMIS) is hoped to improve horizontal and vertical coordination between the Ministry of Education, local governance bodies and educational organizations.

Although there are solid justifications for decentralizing the education system, its implementation is not without problems. It can lead to increased corruption and misuse of funds, due to issues such as inadequate auditing, controls, financial regulations, monitoring and transparency (Levacic and Downes, 2004). An example of a control mechanism is the
monitoring of funding flows from the Ministry of Education down to the school level through Public Expenditure Tracking Surveys (PETS) (Poisson 2010). This enables the calculation of possible ‘leakages’ in the flow due to corruption, and is just one of several tools which can be used to identify corrupt practices within the education sector. Decentralization also does not necessarily lead to greater transparency. Indeed, the opposite may even be the case, increasing the likelihood of fraud (Levančič and Downes, 2004; Poisson, 2010). Its implementation in practice – such as the transition to per capita-based formula funding of schools – can greatly complicate resource flows and management processes. Consequently, it needs to be accompanied by capacity development through training – for example, the training of school managers, who may otherwise lack the required financial management know-how to take on these new responsibilities, and the development of practical tools and instruments – for example, guidebooks on financial autonomy and the funding formula (Poisson, 2010). Besides capacity development, the computerization and automation of information and management systems is essential to the systematic and orderly running of the system. This also minimizes possible interference and misuse of the system by individuals.

As discussed in the previous chapter, formula funding should aim to correct imbalances, which currently tend to favour socio-economically advantaged schools, and instead provide additional funds to socio-economically disadvantaged schools to meet the needs of at-risk students. Transparency should be an explicit aim – the school funding formula should be public knowledge and avoid unnecessary complexity which makes it too difficult to understand. On the other hand, a certain degree of complexity is unavoidable to reduce inequities between socio-economically advantaged and socio-economically disadvantaged schools. Decentralization and greater autonomy at local levels carries the risk of increasing inequality, as wealthy communities are better able to support and improve their schools.
than are poor communities. In addition, per capita funding may incentivise the inflation of student numbers and reduce the incentive to report drop-outs. Such issues need to be addressed through the implementation of transparent monitoring and control mechanisms.

Financial constraints can also act as a significant barrier to the implementation of effective policies and strategies which directly or indirectly address out of school and at-risk children. In this respect, Turkey has taken an innovative approach. To address budgetary shortfalls and to meet growing needs in education, Turkey has implemented a number of innovative financing strategies (UNICEF, 2012d, in press). These include the collection of advertisement income from the Radio Television Higher Council; a 25 per cent stamp tax; taxes from games of chance; and revenue from transactions on the Istanbul Stock Exchange, which are transferred to the education budget. Another innovative measure involved the recognition of school construction donations as an income tax deduction; this contributed to almost 30,000 new classrooms being built between 2004 and 2010. The Ministry of National Education is also increasingly engaging and cooperating with both non-profit and for-profit organisations in campaigns and projects promoting education around the country.

4.12 Analytical summary

Global context, regional challenges and education reforms

Following the dissolution of the former Soviet Union and Yugoslavia, the newly independent and newly autonomous countries in the region have struggled with weakened administrative structures, fewer and less stable financial resources and lowered governing capacity. These challenges to effective governance stem in the large part from the lack of formal training in public finance or management at various administrative levels, the absence of reliable monitoring and evaluation mechanisms, the absence of community involvement in planning and policy-making, and a political culture of less-than-transparent budget allocations, susceptible to corruption. Additional policy challenges are posed by the creation and reconfiguring of new cultural and political identities, giving rise to ethnic tensions. The outmigration of educated labour or ‘brain drain’ also poses significant challenges, in particular for the smaller countries in the region.

In this context, following the collapse of communist regimes there was a period of significant reform to educational structures and curricular contents, followed by steps towards more coherent and coordinated policy ‘frameworks’ – often following external models. These initiatives have since been brought into closer alignment with national priorities. Education reforms which have taken place across the region include the development and implementation of learning assessments, the introduction of more choice and flexibility in terms of school types, corresponding educational pathways and curricular offerings, and the recognition of the right to education as a fundamental human right as enshrined in Article 26 of the Universal Declaration of Human Rights. Recognizing, exposing and opposing the violations of human rights in education remain a challenge, however. At the same time, political instability and rapid changeover of high-level education decision-makers has characterized some CEE/CIS countries, leading to uneven implementation of reform and even reversals of existing policies.
Strategies and policies addressing specific profiles of out of school children

Significant learning gaps between children from different socio-economic groups already exist in grades 1 and 2, and in most schools these gaps tend to widen rather than close in subsequent grades. The evidence is clear that pre-primary education plays a crucial role in narrowing this gap, and its effects continue throughout a child’s school and post-school life. Although enrolment in pre-school is very low throughout the region, as discussed in Chapter 2, a number of CEE/CIS countries have now introduced a compulsory preparatory year of pre-primary, or lowered the entrance age of primary by one year. Kyrgyzstan recently introduced 100-hour and 240-hour pre-primary programmes, which were seen as more a cost-effective way of scaling-up access. However, at least one year of full-time pre-primary education is needed to help children successfully transfer into primary education. Moreover, in spite of these initiatives, in practice many children remain without access to pre-primary education, and up-scaling pre-primary will take time. Introducing pre-primary is costly in the short term, but in the long term it is expensive not to invest in pre-primary, as it is the most cost-effective period in which to invest in a child’s life.

A number of innovative strategies have been adopted across the region which address the exclusion of Roma children from education. For example, Romania has implemented social and media campaigns to combat prejudice and stereotyping of Roma, established school inspectorates for monitoring and advising on issues specific to Roma, and incorporated inclusive and intercultural education as part of teacher training. Albania launched a summer school programme for disadvantaged Roma and other marginalized children in collaboration with various partners, including the Ministry of Education and Science and NGOs. It aimed to bring ‘invisible’ children who do not attend school into the system, as well as engage children at risk of dropping out, by demonstrating that school can be a welcoming and child-friendly environment. The programme included various educational activities and recreational activities, such as sports and excursions. From a legal and administrative point of view, policies and strategies are required which acknowledge the difficulties facing Roma and other children who do not have a birth certificate, and facilitate the means for children and their families to obtain them.

In reducing barriers to education for children with disabilities, a significant step has been made by many countries in the region by being signatory to the UN Convention on the Rights of Persons with Disabilities, as discussed in Chapter 3. However, not all countries have ratified the Convention, and even though laws or legal resolutions are an important first step there is a long way to go in practice. For example, educational institutions need to be made accessible to children with disabilities, and suitable transportation to school needs to be organized. Laws and regulations are useless if they are not being implemented, and implementation may be ineffective if it is not closely monitored. Changing deeply engrained attitudes and practices towards children with disabilities takes a multi-pronged effort involving the government, NGOs, civil society, the private sector and media organizations.

An example of a successful media campaign was the ‘Behavioural Change Campaign’, launched by UNICEF in Montenegro, which employed various strategies including the display of billboards showing children with disabilities in a positive light, music festivals and...
the involvement of local celebrities. Increasing the visibility of children with disabilities is in itself an important step, as in many countries children with disabilities live behind closed doors, reinforcing stigma and stereotyping. Going beyond media campaigns, it requires a paradigm shift from a ‘defectology’, medical intervention approach which emphasizes segregation, to a child-centred, family-focused, inclusive education approach.

Gender discrimination takes different forms in different countries. In some countries in the region, girls are more likely to be out of school, whereas in others the reverse is true. This also changes by level of education and by contextual factors such as poverty and location. Strategies and policies need to take into account the context-sensitive nature of gender discrimination. For example, in Tajikistan a key area of focus would be the improvement of the inadequate sanitation facilities, particularly in rural areas, which particularly discourage adolescent girls from attending school. In Armenia, boys are more likely to drop out as they face strong societal pressure to financially support their families. A media campaign targeting boys’ low participation in education would therefore need to take this into account. Campaigns may also encourage the participation of both girls and boys, such as ‘Hey Girls Let’s Go to School’, launched in Turkey, which resulted in an estimated increase in enrolment of 250,000 girls and 100,000 boys. It is important to have gender-specific strategies and policies for both girls and boys, in order to address the specific reasons why girls and boys are out of school or drop out.

There is no straightforward approach to improving the outcomes of children performing poorly in school. School factors which influence the quality of education are heavily
debated, but – as discussed in Chapter 3 – the evidence shows that teacher quality is consistently the most important single school factor affecting pupils’ learning achievement. Any strategy to improve teacher quality should consider how to improve the level of prestige of the teaching profession, to attract top-tier candidates, for example through increasing the salaries of teachers and through media campaigns. Another important strategy is the equitable distribution of resources to schools through formula funding, which should at the very least close the currently large discrepancies between socio-economically advantaged and disadvantaged schools. Pre-school, as discussed above, also plays an important role in raising learning achievement, particularly for socio-economically disadvantaged children. An important non-school-related factor is children’s health, improvements to which would reduce absenteeism, ensure healthy cognitive development and improve levels of concentration at school. Initiatives to improve children’s health include de-worming, vaccinations, school-feeding programmes, micro-nutrient supplementation and food fortification, and improved water and sanitation facilities in schools.

Many families simply cannot afford the cost of education, in particular pre-school. The abolition of fees for compulsory education is a first step to reducing economic barriers to education. But it is far from sufficient. Free pre-school – whether compulsory or not – should also be considered. In addition, the indirect costs of education can be significant, including transportation, school uniforms and education materials, as well as unofficial costs due to corruption. In Kyrgyzstan and Tajikistan, social benefits are too low to cover these costs for the poorest families. In addition, around the region there are poor children who are eligible but do not receive any or sufficient support because they do not have the required documentation, because they are unaware of their rights, or because of errors and corruption. For example, it was found that in Turkey only 2 per cent of monthly transfer payments to widows and orphans reach the poorest quintile, whereas 44.6 per cent go to the richest quintile. Social assistance needs to be carefully monitored and evaluated to identify such problems, to ensure that the funding which is available reaches those people who need it most.

Poverty, child labour and exclusion from education are closely related. The cost of schooling may not only be considered in terms of the direct and indirect costs, but also in terms of earnings lost due to the child not working. For the poorest families the contribution of child labour can be substantial – even crucial. The same policies and strategies which aim to reduce poverty are therefore also effective in reducing child labour. An innovative strategy employed in parts of Armenia which specifically targets working children is to allow for a school to close for a short period during harvest season, as a significant proportion of pupils are in any case absent during this time. The school can then schedule additional time or school days over the following weeks (for example, during weekends) to catch up, thereby ensuring that no one falls behind. In some urban areas in Albania schools offer evening classes for working youth. These are strategies which enable children to continue to work without dropping out from or falling behind in school. However, in some contexts directly preventing child labour would be more appropriate – in particular to combat abusive or hazardous forms of child labour.
Management, governance and finance policies and strategies

As discussed above, inclusive education – for all learners regardless of their difficulties or their differences – requires a paradigm shift, in particular when it comes to children with disabilities. It requires a shift from the consideration of the disabling aspects of the child, to the disabling aspects of their social and physical environments. Inclusive education entails recognizing the diverse needs of children and developing appropriate curricula, classroom arrangements, pedagogical strategies and learning styles. In practice such approaches tend to be limited to select geographic pockets and there is a significant gap between official recognition of inclusive education and its implementation. Although it requires many aspects to come together, the implementation of inclusive education does not necessarily entail huge costs. Strategies include converting special schools into resource centres serving mainstream schools, adjusting teacher-training programmes to incorporate inclusive education issues, and collaborating with NGOs and civil society to promote inclusive education in schools.

An inclusive education strategy also requires a robust information management system in order to monitor children, identify and target at-risk children, and organize appropriate, early intervention. Several CEE/CIS countries have recently undertaken initiatives to improve the monitoring of excluded children and children at risk of exclusion. In Turkey, a sophisticated e-School Management Information System was established which was successfully used to identify a large number of non-enrolled children, resulting in a reduction in the number of non-enrolled children from around 300,000 to 100,000 within just two years. In Armenia, Kyrgyzstan and Romania similar initiatives are under way. A web-based School Management Information System has numerous advantages over paper- or even non-school-based management information systems for identifying excluded and at-risk children. It enables tracking at the individual rather than at the aggregated level, enabling the recording of detailed individual characteristics to better identify at-risk children, can lead to much more timely data when it is entered by the school directly into a central system, and tends to be much more accessible – by diverse stakeholders and at different levels (for example, at national, regional and school levels).

The computerization and automation of information and management systems is also essential to the systematic and orderly running of a more decentralized education system. As discussed in Chapter 3, highly centralized education systems impede the implementation of policies and strategies which target excluded and at-risk children. There has been a tendency – both globally and in the region – to move towards more decentralized education systems. But although such systems have numerous advantages, they also have potential pitfalls. A decentralized education system can lead to greater transparency in decision-making, more efficient and flexible resource management, more community involvement, and greater autonomy at decentralized levels – empowering local decision-makers to be more responsive to needs. But on the other hand, it also opens up opportunities for corruption and misuse of funds, and can lead to mismanagement due to more complicated resource flows and management processes. For this reason, decentralization efforts need to be accompanied by capacity development (i.e. through training and the development of practical tools and instruments), controls and financial regulations, monitoring of information and financial flows to identify and prevent corrupt practices, and the computerization and automation of tasks and processes which facilitate this.
Conclusion

Education Equity Now! 
A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States
Conclusion

This report on out of school children in the CEE/CIS region reveals that many countries face common issues, including the continuing exclusion of children from poor families, ethnic minorities, Roma communities and those with disabilities. At the same time, each country also has its own set of unique challenges that require special prioritization and policy initiatives. The analysis of the data has revealed inconsistencies and imbalances in a number of countries in the region; for example, countries where enrolment is relatively high at the lower- or upper secondary education level, but still very low at the primary education level; or countries which are close to reaching 100 per cent enrolment in primary and lower secondary, but have very low learning achievement levels. Not only is educational progress in the region uneven, in several cases it is reversing itself. For example, in at least five CEE/CIS countries progress towards EFA is in retreat; in some, significant earlier gains have been lost. Enrolment levels in lower secondary education have declined in at least three CEE/CIS countries. The percentage of primary-age children out of school has more than doubled in some countries over the past decade, with particularly large increases in Montenegro, Moldova, Romania and Serbia. The overall picture for the CEE/CIS region is therefore mixed: while some countries have made significant progress, around one-third of the CEE/CIS countries have seen a decline in at least one aspect of the overall out of school children situation.

Several fluctuations and reversals are likely due to inaccurate data on out of school children and youth. An important factor undermining the accuracy and reliability of out of school figures is the relatively large numbers of emigrant families in the region. For example, in Albania preliminary 2011 census results indicate that the population has decreased by 7.7 per cent since 2001, whereas population projections from the 2001 census predicted an increasing population. When new population estimates by single years of age become available, the statistics on out of school children will surely change. Recalibrated databases and new estimates of out of school children are even more pronounced in countries with relatively small populations (for example, Latvia, Slovenia, The former Yugoslav Republic of Macedonia, Estonia and Montenegro). Given the lack of systematic country monitoring of out of school children and youth, policy-makers will need to continue to rely on population projections to estimate the numbers of out of school children. The general lack of detailed and reliable data places limits on the monitoring of out of school and at-risk children and the types of in-depth analyses that are possible (see also below).

This report has sought to identify and emphasize those policy areas where CEE/CIS countries are facing the greatest challenges in providing equitable access to quality education. It particularly focuses on the following out of school profiles: children of pre-primary age; children from ethnic minorities – in particular, Roma children; children with disabilities and special education needs; children from the poorest households; working children; children affected by gender discrimination; children performing poorly according to academic standards; children belonging to multiple out of school children risk groups; and adolescents. The remainder of this chapter examines the key out of school issues facing the CEE/CIS region, and outlines a number of recommendations for reducing the barriers and bottlenecks to exclusion from education.
5.1 Advance inclusive education

Inclusive education is an approach to education aimed at including and recognizing the needs of all children regardless of their differences. It responds to individual needs and welcomes diversity. An inclusive education system ensures that all children can participate equitably and meaningfully in education, regardless of family wealth, poverty status, ethnicity, sex, disability, age, residence and other social characteristics.

This report has focused on the following groups of children who are most likely to be excluded from education, or at risk of being excluded:

1. Children of pre-primary age.
2. Children from ethnic minorities, in particular Roma children.
3. Children with disabilities and special education needs.
4. Children from the poorest households.
5. Working children.
7. Children performing below expected academic standards.
8. Adolescents.
9. Children belonging to multiple OOSC risk groups.

Barriers to school are often complex and inter-connected. It tends to be a combination of factors which lead to children being out of school or at risk of dropping out. This requires us to look beyond simple measures such as gender, poverty and ethnic minority status, and come to a better understanding of how inter-connected risk factors lead to exclusion from education. For example, Roma children in Romania in the wealthiest quintile were found to be no more likely to be out of school than were non-Roma children; rather, it was the combination of poverty and belonging to a marginalized ethnic group that lead to exclusion.

An inclusive education system needs to take into account the multi-dimensional nature of barriers to education. It inherently requires a multi-sector approach, addressed through coordination and collaboration between various sectors including education, health and social protection. It needs to recognize that supply-side barriers to education are only a small component of the overall problem; demand-side economic and socio-cultural barriers, as well as political, governance, capacity and financing bottlenecks, also need to be addressed.

An effective strategy of inclusive education requires the following:

- The passage of legislation committing educational authorities at all levels (national, provincial and local) to inclusive education. Many countries in the region are signatory to the UN Convention on the Rights of Persons with Disabilities, but not all countries have ratified the Convention – and are not legally bound to implement inclusive policies for children with disabilities.

- Upholding the right for all children to be registered – for example, through the reduction or removal of registration fees, mobilization campaigns, simplification of registration procedures and the ending of legal requirements that force parents to present their own identity papers.
Conclusion

Education Equity Now!

- Removing the requirement of birth registration documents to register for school.
- Development of affirmative action programmes to counter discrimination.
- The use of flexible programmes, which together meet the different needs of marginalized children, children with disabilities, working children and street children.
- Ensuring that children with disabilities are recognized and receive adequate and appropriate support in schools – currently an estimated 3.6 million children with disabilities in the CEE/CIS region are still not officially recognized.
- Ensuring that children with disabilities have access to inclusive school systems without hidden forms of segregation.
- An inclusive school curriculum.
- Reform of pre-service and in-service teacher-training programmes to include instruction in inclusive education knowledge and practices.

All schools should recognize the needs of every child, respond to individual differences and welcome diversity.
A curriculum is inclusive insofar as it promotes respect for different cultures and values, and avoids stereotyping and negative representations based on select socio-demographic traits such as ethnicity, disability and gender. The teaching of Romani culture and history, for example, not only helps build a more positive Roma identity and community identification among Roma children, but it can also spread tolerance and respect for different cultures among non-Roma children.

An inclusive education strategy also provides teachers with the resources and capacity to teach an inclusive curriculum. Thus, there is a need to critically examine underlying attitudes and values in the materials employed in teacher-training programmes and ask the following questions: do they emphasize tolerance, a respect for diversity, and sensitivity to discrimination based on ethnicity, disability and gender?; how do they understand and convey Roma culture and identity?; how are teachers expected to teach in multicultural and multilingual environments?; and how are human rights discussed in the curriculum?108

5.2 Improve the monitoring of excluded and at-risk children

A robust information management system and monitoring strategy is an essential first step in reaching out to excluded children and children at risk of exclusion. School-based information management systems are now being introduced in some CEE/CIS countries. Ideally, these should help authorities identify out of school children by comparing enrolment and attendance lists with population registers, and also track individual students who are at risk of dropping out. Without detailed information of this type, it is nearly impossible to intervene and support excluded children. Implementing such a system entails overcoming at least three main barriers: (1) the absence of a unique pupil ID which is required for individual tracking; (2) children who are ‘invisible’ or ‘missing’ from government databases, including children who lack birth certificates and legal documents, in particular Roma children and children of migrants; and (3) the difficulty of tracking children whose families migrate both within, but especially between, countries.

Even with a school-based information management system in place, information may not reach those organizations or institutions which can provide support. Schools may under-report enrolment, drop-out and absenteeism figures, especially if they are linked to subsequent funding or other punitive measures. Schools may lack the capacity to enter information on a regular basis, and those responsible for data entry may misunderstand unwieldy and confusing data entry forms and systems, leading to missing or inaccurate figures. Data quality and reliability are often overlooked issues (see Chapter 2), and partly account for discrepancies between survey and administrative data. In some cases, inaccurate data can be worse than no information at all, potentially leading to incorrect analyses and inappropriate recommendations and policies. It is therefore crucial that procedures and measures are in place to minimize errors during data entry and fix data

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problems, which inevitably arise, through a process known as ‘data cleaning’. Even if accurate information is received from schools, other data-related issues can emerge which hamper efforts to support out of school children and children at risk. These include gaps in information flows, lack of coordination and data-sharing agreements between different government agencies and a lack of capacity to monitor, analyse and act upon the available information.

The lack of publicly available data is also a significant issue for some CEE/CIS countries. Administrative data is either completely missing for some indicators, or else is very much outdated. For example, for Turkmenistan almost no data on education is publicly available. In Kosovo\textsuperscript{109}, education data has recently become publicly available, which is an important step\textsuperscript{110}. However, data for standard education indicators such as gross and net enrolment rates have not yet been released. The absence of such quantitative information precludes meaningful analyses of educational progress and challenges.

In some CEE/CIS countries, administrative data can be supplemented with information gleaned from survey instruments. Survey data has certain advantages over administrative data in analysing the situation of out of school children – for example, by providing breakdowns of children in major socio-demographic groupings. However, in many CEE/CIS countries survey data can be problematic: it may not be collected regularly, or may be out-dated; sampling error leads to unreliable estimates for smaller sub-populations; and comparability between countries is compromised due to the lack of standardization in variables, definitions and methodologies. For these reasons, a major step forward would be the availability of disaggregated administrative data by, for example, region, sex, residence, ethnicity and language. There is a particularly striking lack of comprehensive and reliable data on Roma children and on children with disabilities, and what does exist is often not comparable across countries. These problems certainly weigh heavily on any attempts to carefully analyse the situation of out of school children and provide evidence-based recommendations.

Finally, it is worth noting that the lack of publicly available data does not necessarily mean that relevant data does not exist. The practice of making government data available to the public via the Internet is a relatively recent phenomenon. For various reasons, many government agencies choose to publish highly aggregated data – the ‘tip of the iceberg’, as it were – and not the more detailed information which had been collected. For example, disaggregated data by age, gender and location may be available, but not released to the public. Initiatives such as the Kenya Open Data Initiative (KODI) are important steps forward in making more data publicly accessible. Hopefully, more countries will follow the example of Kenya, the UK and other countries that have thus far made a commitment to open data and making public data easily accessible. This would ensure greater transparency and accountability and would promote evidence-based decision- and policy-making.

\footnote{UNSCR 1244.}
\footnote{See http://esk.rks.gov.net/eng/}
5.3 Engage innovative strategies to reduce social and economic barriers

Inclusive schools are insufficient in enabling every child to realize his/her right to quality education, as social obstacles (for example, discrimination, fear of violence or abuse) and economic barriers keep many children out of school.

The abolition of school fees is only a first step, as indirect costs of education such as transportation, school uniforms and education materials – and even unofficial costs due to corruption – are unaffordable for many families. Social welfare is not always sufficient, and it often does not reach those who need it most for various reasons: lack of required documentation, lack of awareness of basic rights, mismanagement and errors, and corruption.

Consequently, social assistance needs to be carefully monitored and evaluated to ensure that it reaches those people who need it most. In countries like Kyrgyzstan and Tajikistan, where financial constraints act as a significant barrier, the innovative financing strategies employed in Turkey may serve as inspiration. Here, various strategies were employed to address budgetary shortfalls, such as the collection of advertisement income from the Radio Television Higher Council, a 25 per cent stamp tax, revenue from transactions in the Istanbul Stock Exchange, recognition of school construction donations as an income tax deduction, and collaboration with both non-profit and for-profit organisations in various education campaigns and projects.

There are many examples of innovative strategies employed in the region which can be used to successfully combat stereotyping and prejudice. They include social and media campaigns in Romania to raise public awareness of and counter discrimination against Roma; summer school programmes targeting disadvantaged Roma and other marginalized children, demonstrating that school can be an inclusive, child-friendly environment – which was a successful approach in Albania; Turkey’s ‘Hey Girls Let’s Go to School’ campaign, which depended on a vast network of volunteers and public frontline workers to raise awareness of the value of education; and the ‘Behavioural Change Campaign’, launched by UNICEF in Montenegro, which employed various strategies including music festivals, the display of billboards showing children with disabilities in a positive light, and the involvement of local celebrities.

An innovative strategy specifically targeting working children in rural agricultural communities is to close the school during harvest time and schedule additional catch-up school days over the following weeks – an approach taken in parts of Armenia. However, strategies targeting child labour need to take into account the context. While sometimes alternative education options may be suitable (such as catch-up days or evening classes), preventing child labour altogether is more appropriate in other situations – in particular to combat abusive or hazardous forms of child labour.

For ethnic minority and Roma children, pre-school programmes would improve their transition to primary education, help reduce significant educational (and linguistic) disadvantages in school, and subsequently lower the rates of subsequent drop-out, which are far higher among these children than the general population. Pre-school programmes as well as compensatory classes should be designed in collaboration with the members of these communities to familiarize them with the school environment, and help build confidence, self-esteem and academic skills (UNICEF, 2011a). Active parental involvement
in their children’s education is also critical. Different strategies can be developed by the schools themselves, or through parental counselling and adult education classes.

5.4 Improve the quality of education by focusing on teachers, curricula and marginalized children

Even in the shadow of many out of school children, it is imperative that countries do not lose sight of the importance of the quality of education. As this report has shown, getting all school-age children is an enormous challenge. As progress in this goal is achieved, and more children attend school, countries must ensure that all children, while in school, acquire relevant knowledge and skills to reach their potential and to participate meaningfully in society. In countries where many out of school children remain, concurrent efforts can be made to both reduce the numbers of excluded children and improve quality education. Among the many justifications for this dual-pronged strategy are the improved learning outcomes, which increase the economic returns to schooling as much as, if not more than, higher enrolment levels (OECD, 2010b). Certainly, under conditions of financial constraints, improvements to the quality of education encompass an enormous challenge.

One crucial pathway to quality education is through recruiting, motivating and retaining effective teachers. This policy path involves creating incentives to engage talented and qualified individuals to join the teaching profession – for example, through higher wages and benefits or bonuses for working in rural and remote areas, where there are often shortages of trained and effective teachers. In addition, pre-service teacher-training programmes should be re-designed to ensure that teachers enter the classroom with a diverse toolkit of pedagogical knowledge and teaching methods to promote student learning.

Reforming the curriculum and approved textbooks, by placing greater emphasis on higher-order thinking skills rather than rote memorization, is another important means for improving the quality of education. In some subjects there is a pressing need to review the curriculum with an eye to the knowledge, competencies and skills required of school graduates once they enter the labour force. Such a process of curricular alignment enhances the employability of graduates, and increases student motivation and retention. It is also likely to improve tested learning outcomes.

Initiatives to improve children’s health – for example, through school-feeding programmes, food fortification and de-worming – also improve children’s learning opportunities. Children with adequate nutrition are stronger, more motivated, less susceptible to illness, and better able to focus on classroom lessons and activities. Thus, ensuring good nutrition among all attending children is a critical means for improving children’s cognitive development and learning processes. School-feeding programmes are also effective in increasing the participation of children from poor families.

Similarly, pre-primary education (see below) not only reduces the risk of children dropping out of school, but can also improve learning among children from marginalized backgrounds, and thereby narrow the learning gap between pupils from different socio-economic backgrounds. Closing learning gaps in the lower grades of school can help to improve both equity and quality in education.
A paradigm shift is needed from a ‘defectology’, medical intervention approach which emphasizes segregation, to a child-centred, family-focused, inclusive education approach; it has begun.

Teachers are key! Recruiting, motivating, and retaining effective teachers are crucial pathways to improving quality education.
5.5 Invest strongly in pre-primary education

The limited access to pre-primary education in the majority of CEE/CIS countries indicates the neglect of this crucial stage in children's development. The collapse of pre-primary infrastructure in the early transition years has yet to recover in some countries. In Azerbaijan, Kazakhstan, Kyrgyzstan, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey and Uzbekistan more than 40 per cent of pre-primary-age\textsuperscript{111} children are not enrolled in school. In some regions, such as the DRD region of Tajikistan, almost no children attend pre-primary programmes. The long-term cost of this neglect is high, not only in terms of cognitive benefits and future economic returns for the individuals involved, but also at the societal level in terms of greater educational efficiencies and economic productivity.

\textsuperscript{111} Children one year younger than the official primary age according to the Dimension 1 definition.
Moreover, access to pre-primary education improves equity outcomes by helping to reduce future disparities between disadvantaged and underprivileged children, on the one hand, and their wealthier peers, on the other. Mounting evidence in favour of investing in high-quality pre-primary programmes (for example, the reduced crime and welfare outlays it engenders, along with increased tax revenues on higher future incomes) underscore a simple point: rather than being expensive to invest in pre-primary education, it is expensive for governments not to invest in pre-primary education. Indeed, pre-primary education is the most cost-effective period in which to invest in a child’s life.

In some countries in the region, a free compulsory pre-primary preparatory year has recently been introduced. There are also other initiatives in the region to scale-up enrolment in pre-primary education, such as the 100-hour and 240-hour pre-primary programmes in Kyrgyzstan. However, in spite of this progress a much stronger commitment is required to make high-quality pre-primary education available – and affordable – to all families.

5.6 Implement effective decentralization reform

Highly centralized education systems are still prevalent in the region and act as a significant barrier to the adoption of policies and strategies that could reduce exclusion from education. They also hamper innovation. In centralized systems, local authorities do not have the power and flexibility for independent decision-making and responding to local needs. At the same time, moves towards decentralization have not necessarily led to improvements to the situation of excluded and at-risk children, and in some cases have made it worse. Decentralization needs to coincide with capacity development to ensure that decision-makers have the required knowledge and ability to deal with the more complicated resource flows and management processes involved. It needs to coincide with the computerization and automation of information and management systems required for the systematic and orderly running of a more decentralized education system. It needs to coincide with adequate monitoring mechanisms, financial regulations and controls to track information and finance flows to prevent corruption and misuse of funds. In addition, it needs to coincide with equitable and transparent formula funding to schools which compensates for socio-economic disadvantage, or at the very least ensures that socio-economically disadvantaged schools are at an equal level to socio-economically advantaged schools in terms of staffing, facilities and resources. And finally, it needs to engage and empower parents and civil society, while providing additional support to socio-economically disadvantaged communities. Equity in education needs to go beyond equal treatment; it involves providing equal opportunities to children according to their different characteristics and needs, and some need more support than others.
Annexes

Education Equity Now!
A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States
## Annex 1: Dimension 1 – Pre-primary-school-age children who are not enrolled in pre-primary or primary school

<table>
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<th>%</th>
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**Legend of symbols:**

- m Data are missing
- * National estimation
- ** UIS estimation

**Source:** UNESCO Institute for Statistics database, May 2012 release
### Annex 2: Dimension 2 – Primary-school-age children who are not enrolled in primary or secondary school

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<th>%</th>
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**Legend of symbols:**
- **m** Data are missing
- *National estimation
- **UIS estimation

Source: UNESCO Institute for Statistics database, May 2012 release
## Annex 3: Dimension 3 – Lower secondary-school-age children who are not enrolled in primary or secondary school

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<th>Female</th>
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<td>%</td>
<td>Number</td>
<td>%</td>
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<td>n/a</td>
<td>m</td>
<td>m</td>
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<tr>
<td><strong>Ukraine</strong></td>
<td>2010</td>
<td>92,460</td>
<td>4.2</td>
<td>49,319*</td>
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<tr>
<td><strong>Uzbekistan</strong></td>
<td>2009</td>
<td>113,951</td>
<td>3.7</td>
<td>47,428</td>
</tr>
</tbody>
</table>

**Legend of symbols:**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>m</td>
<td>Data are missing</td>
</tr>
<tr>
<td>*</td>
<td>National estimation</td>
</tr>
<tr>
<td>**</td>
<td>UIS estimation</td>
</tr>
</tbody>
</table>

**Source:** UNESCO Institute for Statistics database, May 2012 release
Annex 4: Map of UNICEF CEE/CIS programme countries in Central and Eastern Europe and
References


A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States


OECD, *PISA 2009 Results: Overcoming Social Background: Equity in Learning Opportunities and Outcomes (Volume II)*, 2010c.


A regional analysis of the situation of out of school children in Central and Eastern Europe and the Commonwealth of Independent States


UCW (Understanding Children’s Work), Inter-agency research cooperation initiative involving the ILO, UNICEF and World Bank, http://www.ucw-project.org/


