The developing world’s 1.3 billion young people ages 12–24 are its next generation of economic and social actors. Making sure that they are well prepared for their futures—as workers, entrepreneurs, parents, citizens, and community leaders—is thus enormously important to the course of poverty reduction and growth. Because human development is cumulative, missed opportunities to invest in and prepare this generation will be extremely costly to reverse, both for young people and for society.

That it is hard for children to recover from early setbacks in human development is well recognized. New circumstances, however, mean that many developing country governments now have to deal with the needs of those a little older—with next-generation issues of human capital development among youth—if they wish to consolidate and build on the gains so far. Rising primary school completion rates have put enormous pressure on higher levels of education, even in the poorest countries. Even as primary education becomes more widespread throughout the developing world, changes in technology mean that young people need more than basic skills to compete successfully in the job market. As a result of the epidemiological transition from communicable to noncommunicable diseases, along with the emergence of new diseases such as HIV/AIDS, young people are exposed to a different range of health risks than before. Finally, changes in the political landscape and the growth of civil society have altered the meaning of citizenship—and with it, what young people need to learn to engage effectively in community and society.

Even as the development needs of the young come into sharper focus, the demographic transition under way in most developing countries is creating an enormous opportunity to invest more in their human capital because of the decline in the ratio of dependents (children and elderly) to workers. This could even lead to a demographic dividend—an acceleration in the rate of growth, as witnessed by some countries in East Asia—if the right policies are in place to employ the growing labor force.

In countries where the demographic transition is yet to get under way (a handful of countries in Sub-Saharan Africa), a case can still be made for paying attention to young people because of the changing health landscape and the need to engage young people effectively as workers and citizens. At the same time service delivery will need to focus on basic education and health services for children and mothers, essential for lowering infant mortality and fertility. In countries where the demographic transition is far advanced (as in some countries in East Asia and some former transition economies), there is a strong case for investing in the young before the rising fiscal burden of a growing elderly population heightens the trade-offs between the young and the old.

How well are countries preparing this next wave of workers, entrepreneurs, parents, and citizens? The answer varies. Despite enormous progress with primary schooling in the poorest countries, many young people cannot read. In other developing countries many of the young, especially from the poorest households, stumble on the way from primary to secondary school. In still others, the main obstacle is continuing from secondary to higher education. Considering other dimensions important to reducing poverty and sustaining growth—such as improving the quality of formal schooling to provide skills relevant to the changing needs of the labor market, or the knowledge and
Young people are critical to further progress with poverty reduction and growth

Poverty in the developing world has declined significantly in the last 20 years, with the deepest reductions in East Asia (with and without China) and South Asia (with and without India). As a result, the developing world is likely to meet the Millennium Development Goal of reducing poverty. However, all regions other than East Asia and South Asia will fall short.  

What can be done to reduce poverty more widely? Past World Development Reports have articulated strategies based on the building blocks of economic growth, human capital, empowerment, and social protection. The blocks are mutually dependent, so they are like the wheels of an “all-wheel drive” vehicle, complementing each other to navigate difficult terrain.

Young people and poverty reduction

Where do young people fit into this? This Report considers young people as, broadly speaking, those in the age group 12–24 years (box 1.1). Youth is a period of intense learning, when people can acquire the status. While much research is based in developed countries, it suggests that young people in their late teens and early twenties often see themselves as not yet adult. Some argue that this prolonged period of semi-autonomy can be viewed as a new life stage in which young people experiment with adult roles but do not fully commit to them.

Laws in most countries designate ages when people can be treated as adults and are thus no longer offered the protections of childhood. One can thus change from being a child to being an adult overnight. But the age at which school attendance is no longer compulsory, and employment is legally permitted typically ranges between 11 and 16 years. Legal responsibility for crime can begin earlier, but individuals are generally not charged as adults until around 16. Political participation through voting is postponed, typically to around 18 or later. Likewise, service in the military, whether compulsory or voluntary, is often restricted until age 18. The purchase of cigarettes, in countries where there are restrictions on sales to minors, is allowed from around 15 to 18. Consumption of alcohol, where it is legally prohibited for minors, is allowed from around 18 to 21, though in some cases it is prohibited until the age of 25.

National policies on youth typically establish an age range for beneficiaries. The lower bound ranges from around 12 years (Jordan) to around 18 years (Bangladesh). In some cases it is not strictly defined, as in Hungary, where the youth secretariat deals with both 0- to 14-year-olds and 15- to 26-year-olds. The upper bound ranges from around 24 (Jamaica) to even 35 or 40 (Kenya, Pakistan).

The UN’s World Program of Action for Youth defines “youth” as people ages 15–24, while the World Health Organization (WHO) and UNICEF use the terms “adolescent” for those 10–19, “youth” for those 15–24, and “young people” for those 10–24. The wider band of 10–24 years used by these agencies recognizes that many policies directed at youth often need to influence outcomes before the age of 15.

Recognizing the diversity in perspective, this Report uses different ranges depending on the context. However, the focus, by and large, is on the age range 12–24, when important foundations are laid for learning and skills. The Report uses the terms “youth” and “young people” interchangeably.

human capital they need to move themselves and their families out of poverty (definition 1.1). Not confined to the skills needed to become an economically productive adult, learning extends to other aspects of life such as navigating health risks and becoming a responsible spouse or parent or citizen. It can happen in several ways, often through the formal school system, but also through learning from parents, peers, family, community, and work experience. Because the capacity for learning is so great relative to older ages, missed opportunities—to acquire skills in school or on the job, or good health habits, or the desire to engage in community and society—can be extremely difficult to reverse.

The high cost of remedying missed opportunities is easiest to appreciate in formal schooling. For many, youth marks the transition from primary to secondary school. Dropout rates can be very sharp at this stage, especially in countries that have made primary education universal (see figure 1 in the overview). Those who drop out at this stage typically never return—in part because few countries have programs of remedial education to ease the transition back into school, or provide formal equivalency with school degrees. The competing demands of work and, for young women, of family and children are further obstacles to returning to school. Discouragement and stigma can also play a role, and there is a question of whether cognitive development, once arrested, can be resumed, especially if the gaps are long (chapter 3). Similar arguments apply to other missed opportunities, such as learning from continuing employment (chapter 4) or civic engagement (chapter 7).

Building human capacity early is important not just for the future opportunities open to young people but also to mitigate the intergenerational transmission of poverty. More educated youth are more willing to control family size and invest in the health and well-being of their offspring. The impacts are particularly strong for women. In all developing regions the average number of children born is significantly lower for women with at least secondary education. Maternal education strongly influences child health and birth weight. Throughout the developing world, but especially in the low-income regions of South Asia and Sub-Saharan Africa, the percentage of children immunized is higher when mothers have some secondary education.

Parental schooling is also important for the cognitive development of children. Evidence from Ecuador shows that the more educated the parents, the greater the positive impacts on the cognitive development of children as young as three years—impacts that become more pronounced as children grow older. These findings hold even when controlling for the better health of children of more educated parents.

Given the importance of building human capital in youth, it comes as no surprise that this stage of life is given some prominence in the international commitment to development as reflected in the Millennium Development Goals. Seven of the eight goals relate to outcomes for young people either directly or indirectly (box 1.2).

Many aspects of human capital development among the young are, however, not covered by the Millennium Development Goals. Preparing young people to be active citizens is notably absent. Within education, the quality of education is not sufficiently emphasized, while the health goals do not take into account health risks beyond HIV/AIDS and those arising from motherhood.

**Young people and equity**

Poverty reduction is more than a reduction in absolute deprivation. Relative deprivation or inequity is also enormously important. A concern for equity leads to an emphasis on early intervention to build human capacity because inequity—or “inequality of opportunity” in the parlance of last year’s World Development Report—quickly becomes deeply entrenched. In developing countries where basic education has become widespread, many inequalities of opportunity—at least as they relate to schooling—appear in youth as poor young people drop out of school, or receive poorer quality education than the rich (chapter 3). For many young women from poor households, youth marks the entry into early marriage or early childbearing, effectively sealing off further opportunities for...
Youth, poverty reduction, and growth

Although the widespread impression is that the Millennium Development Goals are about providing basic services to children, seven of the eight goals have outcomes that relate to young people.

Education outcomes for the young are explicitly targeted both as a part of achieving universal primary education (goal 2), and promoting gender equality and empowering women (goal 3). The high risk of HIV/AIDS faced by young people, especially in Sub-Saharan Africa, is targeted through three indicators relating to how well the young are informed of risks, to infection rates among young pregnant women, and to risks facing orphans—all critical to combating the spread of HIV/AIDS (goal 6). The role of young people as stakeholders in the future of international development is recognized through an emphasis on employment opportunities for them as a part of building a global partnership for international development (goal 8).

Even where young people are not the explicit focus, their involvement can be important to achieving goals. Young women contribute 20–30 percent of total fertility in high-fertility countries and upward of 50 percent in low-fertility regimes (chapter 6). Given the well-recognized links between female schooling, fertility, and child health, the education of young women and their ongoing reproductive health needs are thus critical to meeting goal 4 on child mortality and goal 5 on improving maternal health. All in all, making sure that young people have the opportunity to build and use human capital—whether through better schooling, better health, or more productive employment—will take the world a long way toward meeting goal 1, eradicating extreme poverty and hunger.

**Seven out of the eight Millennium Development Goals target youth outcomes**

<table>
<thead>
<tr>
<th>Millennium Development Goal</th>
<th>Direct or indirect youth-specific target</th>
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<tr>
<td><strong>Goal 1. Eradicate extreme poverty and hunger</strong></td>
<td>Indirect</td>
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<tr>
<td><strong>Goal 2. Achieve universal primary education</strong></td>
<td>Target 8. Literacy rate of 15- to 24-year-olds</td>
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<td><strong>Goal 3. Promote gender equality and empower women</strong></td>
<td>Target 9. Ratio of girls to boys in primary, secondary, and tertiary education</td>
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<tr>
<td><strong>Goal 4. Reduce child mortality</strong></td>
<td>Target 10. Ratio of literate women to men, ages 15–24</td>
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<tr>
<td><strong>Goal 5. Improve maternal health</strong></td>
<td>Indirect</td>
</tr>
<tr>
<td><strong>Goal 6. Combat HIV/AIDS, malaria, and other diseases</strong></td>
<td>Target 18. HIV prevalence among pregnant women ages 15–24 years</td>
</tr>
<tr>
<td><strong>Goal 7. Ensure environmental sustainability</strong></td>
<td>Target 19. Percentage of population ages 15–24 years with comprehensive and correct knowledge of HIV/AIDS</td>
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<tr>
<td><strong>Goal 8. Develop a global partnership for development</strong></td>
<td>Target 20. Ratio of school attendance of orphans to school attendance of nonorphans ages 10–14 years</td>
</tr>
<tr>
<td><strong>Goal 9. Combat HIV/AIDS, malaria, and other diseases</strong></td>
<td>Target 45. Unemployment rate of young people ages 15–24, by sex</td>
</tr>
</tbody>
</table>

Source: Authors. For Millennium Development Goals and targets see http://unstats.un.org/unsd/mi/mi_goals.asp.

Young people and growth

Youth is an important stage of life for building the human capital that allows young people to escape poverty and lead better and more fulfilling lives. The human capital formed in youth—whether in skill levels, or health, or civic and societal engagement—is also an important determinant of long-term growth.

The most compelling evidence is on the microeconomic side. Schooling is persistently found to increase productivity, as reflected in earnings. As discussed below, average earnings for those with secondary and particularly tertiary education have risen over time because of the growing demand for higher skilled workers. The evidence extends beyond the wage sector—educated farmers are more likely to adopt new technologies, and almost all studies on agricultural productivity show that better educated farmers get higher returns on their land. Many studies have documented the importance of a large pool of educated workers—particularly if they are educated to the secondary level—for knowledge spillovers and for foreign direct investment. Lower computer penetration and productivity in Latin America and the Caribbean compared with the East Asian economies has been attributed to the lower proportion of the workforce with secondary schooling.

Macroeconomic models also suggest large potential impacts on growth and living standards. The strongest evidence relates to the impact of HIV/AIDS on growth and productivity. HIV/AIDS disproportionately affects young people ages 15–24 in high prevalence countries, where they account for more than half of new infections. In South Africa, where prevalence is over 20 percent, the unchecked spread of the epi-
**BOX 1.3 Losing a decade—what HIV/AIDS is doing to human capital accumulation and growth in Kenya**

Young people in Kenya, as in most parts of the world, confront the real choice between continuing their educations and starting to work. They also become sexually active, with all the gratifications and risks that entails, including contracting such sexually transmitted diseases as HIV/AIDS. Somewhat later, as young adults, they choose partners, have children, and take on the responsibilities of family life. To examine the impact of these decisions on human capital and long-term growth, Bell, Bruhns, and Gersbach (2006) set up an overlapping generations model in which the wellspring of growth is human capital accumulation.

In the model, the formation of human capital involves the intergenerational transmission of knowledge and abilities through both child rearing and formal education. The growth process can be derailed by the failure to expand human capital as a result of poor quality schooling or the limited expansion in schooling, or premature adult mortality from HIV/AIDS. In Kenya, the victims of AIDS are overwhelmingly young adults or those in the early prime years, most with children to raise and care for.

A parent’s death does more than destroy the victim’s human capital. It also weakens the mechanism to form human capital in the next generation and beyond. Why? Because the affected family’s lifetime income shrinks, and with it the means to finance children’s education, and because children lose the parental knowledge and guidance that complement formal education.

The model suggests that as a result of HIV/AIDS, national income in Kenya will be roughly halved by 2040 (box figure). Per capita income growth, faltering since the 1980s in Kenya, takes half a decade longer to recover to 1990 levels in the AIDS scenario than without AIDS. By 2040, per capita income is 15 percent lower than without AIDS. Note that with higher population in the no-AIDS scenario, per capita income is actually lower until 2010 than in the AIDS scenario.

The reductions in growth are driven in large part by the setback in the spread of secondary education, which both lowers the productivity of school leavers and weakens the transmission of human capital to their children. By 2040, HIV/AIDS delays human capital attainment on average by about a decade.

**HIV/AIDS can have a big impact on the growth of national and per capita income in Kenya**

<table>
<thead>
<tr>
<th>National income</th>
<th>Per capita income</th>
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<tr>
<td>1990</td>
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<td>2030</td>
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<td>2040</td>
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**Simulated trends in national income**

**Simulated trends in per capita income**

Source: Bell, Bruhns, and Gersbach (2006).

demic is estimated to reduce the growth of GDP in the range 0.8 to 1.5 percentage points a year.\(^{11}\) In Kenya, where the epidemic is hitting a peak currently, one estimate suggests it will take more than 40 years for per capita income to recover to 1990 levels (box 1.3). In Russia, with its smaller but more rapidly growing epidemic, GDP may decline by 10 percent in 2020 if no attempt is made to limit the spread of the disease.\(^{12}\)

More conventional approaches to estimating macroeconomic effects, through cross-country regression analysis, provide less clear-cut evidence.\(^{13}\) In part it is difficult to measure human capital consistently across countries, let alone that which is formed in youth, other than through fairly crude measures such as completed years of schooling. Plus weaknesses of institutions or demand mean than human capital does not consistently add to growth everywhere. However, one attempt to get beyond quantity finds a robust relationship between growth and the quality of human capital embodied in the labor force.\(^{14}\)

Young people are also an enormous resource for growth in the short run. In many developing countries, they form the largest group of job seekers. Their share in the unemployed is upward of 50 percent in most countries in the Middle East and North Africa, and upward of 40 percent in the Caribbean. Having young people sit idle is costly in forgone output. Estimates indicate that lowering youth unemployment could raise GDP by anywhere from 0.3 to 2.7 percent in a range of Caribbean countries\(^{15}\) based on forgone earnings alone.

Failing to direct young people into productive pursuits can prove costly in other ways. In many countries crime often peaks in this age group and can hurt the investment climate. In Jamaica, youth 17–29 are responsible for more than half of all prosecuted crime except arson.\(^{16}\) A 1 percent reduction in youth crime could increase tourist flows,
and raise tourism revenues by J$40 million (about $1 million), or 4 percent.17

How the challenges confronting young people have changed
Not only is human capital development in youth important to poverty reduction and growth, changing circumstances mean that many developing countries have to focus more on this stage than ever before.

Expansion in access to basic education
In many of the poorest countries, progress with providing basic education to children means that governments are now confronted with the learning needs of those who are somewhat older—youth. Despite outstanding challenges, primary completion rates have increased substantially, particularly in South Asia, Sub-Saharan Africa, and Latin America and the Caribbean. Combined with the larger number of children of graduating age, the pressure on education systems at levels above primary is enormous (figure 1.1). The only region in the world experiencing little pressure on this account is Europe and Central Asia, where falling fertility is reducing the number of primary school graduates.

Building on the gains to primary schooling requires balancing opportunities for postprimary schooling with the expansion of primary schooling. In countries where the gains to primary completion are recent, the main challenge is providing access to secondary education, especially lower secondary. In other countries that have been successful in providing access to secondary (especially lower secondary) education, the balanced expansion of access to upper secondary and tertiary education is more of an issue. But throughout the developing world, as schooling becomes more widespread, the education system also needs to recognize that students are becoming more diverse and may require more options for learning in keeping with their different interests and abilities.

Rising demand for workers with higher education
The global context is changing in other ways. Unlike 20 years ago, when earnings of workers with secondary and tertiary education were low relative to those with primary education in many developing countries, earnings have now risen substantially, particularly for workers with tertiary education but also, in some countries, for those with secondary education.18 In Latin America and the Caribbean, labor market returns to those who completed primary or secondary education have declined sharply, while the returns to those with tertiary education have increased (figure 1.2a). In Ghana there has been a marked increase in the return to university education over time, and as a result, those returns are significantly higher than returns to primary than they were in the past. In Vietnam, returns to both tertiary and upper secondary (high school) have risen relative to primary (figure 1.2b).

The rising premium on higher education reflects the growing demand for skills driven in large part by the spread of new technologies.19 Twenty years ago the expansion of trade was expected to increase the demand for unskilled workers in developing countries. However, the spread of new technologies to developing countries has sharply increased the demand for skilled workers, substantially increasing returns even as the supply of skilled workers has increased. Recent research suggests that the increase in the number of skilled workers may have in fact boosted skill-biased technological change and raised the demand for skills.20
The growing demand for skills has increased the value of further education and made it more important for growth. Indeed, in many countries building a workforce with higher order skills is an important part of improving the climate for investment, acquiring a competitive edge, and generally maintaining the engine of growth. Because much of the return to higher education—especially tertiary education—is private, rising returns are not an argument for public funding, or at least for public funding that goes beyond the need for equity of access. It does draw attention, however, to important changes in how the global market is rewarding skills.

**New health risks**

The health environment has also changed. As infant and child health has gradually improved, new diseases have emerged. As a result, sexual initiation and sexual experimentation in youth carries far greater risks than before, especially in some Sub-Saharan African countries with very high HIV-prevalence rates. Outside Sub-Saharan Africa, ongoing progress with tackling communicable diseases, both new and old, means that noncommunicable diseases and injuries have risen in prominence for young people. The greater coverage of roads and vehicular traffic is contributing to road fatalities. In Vietnam, road traffic accidents are the most important cause of death among young men. Tobacco is now marketed far more aggressively to young people in developing countries, and illicit drugs are available more readily.

**The changing nature of politics and the growth of civil society**

The number of countries in which people cannot participate freely in the political process or where there is limited freedom of expression or belief has declined significantly from 4 in 10 countries in 1975 to 1 in 4 in 2005 (figure 1.3). And the number of electoral democracies has vastly increased. Many of the gains have come since the fall of the Berlin Wall and the end of communism in Eastern Europe and the former Soviet Union. With greater democratization in the developing world there has been a tendency toward decentralizing public decision making to lower levels of government and toward more civic participation through civil society organizations, community interest groups, and other nongovernmental organizations.

This has increased the opportunities for people to participate in political activity and exercise their voice through a wide range of forums. Preparing young people for their rights and responsibilities as citizens—building their social capital for this kind of engagement—has thus become more important.

**Globalization and new technologies**

Young people are growing up in a more global world. Information flows have increased substantially because of the greater reach of global media, movies, music, and other cultural exports, though access varies significantly. Freer trade has expanded the goods and services that people are exposed to. And greater mobility—seen in rapid urbanization and the flows of people across borders—has increased awareness of consumption possibilities. New technologies, such as the Internet and mobile telephony, have a strong following among youth. New data collected for this Report show that young people are among the primary users of the Internet, accounting for 40 percent or more of Internet users in a range of developing countries. Access, however, varies from less than 1 percent of youth in Ethiopia to more than 50 percent in China (figure 1.4).
The impact of new information and communications technologies is likely to vary both across and within countries because of differences in access. At one end of the spectrum, young people in many middle-income countries, especially if urban or middle class, have easy access to information through radio or television or the Internet. At the other end, large numbers of young people, especially in low-income countries, continue to have very limited access not only to new sources of information, but even to traditional sources such as radio and television.

The effects of exposure to more information can be both positive and negative. The Internet is an important source of information for many young people on matters related to sexual and reproductive health, especially where little is provided in school or through the family. Both old and new media, however, can expose the young to unfiltered, beguiling, or confusing images of sex and violence. Both types of media can also promote exaggerated images of Western consumption and lead to frustration if opportunities are not commensurate with the expectations young people have formed.

The impact of greater exposure to media also depends on the local culture and its response to imports. In many parts of the developing world, the resurgence of religious movements has acted as a countervailing influence to the more permissive attitudes sometimes purveyed by the media. These movements have been associated with changes in the behavior and attitudes of young people toward sex and marriage (promoting virginity before marriage) and health (leading to a rejection of the use of alcohol and drugs).25

**Do numbers matter?**

**How demographic changes affect opportunities for youth**

Even as changing circumstances increase the need to focus on human capital development for youth, many developing countries are helped by favorable demographic changes that are creating a unique opportunity to invest in youth.

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**Largest numbers ever**

The current cohort of young people in developing countries is the largest the world has ever seen—around 1.3 billion.26 On current projections, the number of 12- to 24-year-olds will reach a maximum of 1.5 billion in 2035 and decline only gradually thereafter. Numbers are at a plateau because birth rates are falling. Combined with a slowdown in the increase in the number of women of childbearing age, cohorts are at or near a maximum in many countries and in the developing world as a whole (see spotlight on differing demographics following this chapter).

The plateau hides distinct regional trends (figure 1.5). At one end, the numbers of youth in East Asia (dominated by China) have peaked and are set to decline. The same is true of Europe and Central Asia. At the other end, the youth population in Sub-Saharan Africa, already more than four times its 1950 level, is projected to continue growing rapidly into the foreseeable future.27 South Asia, Latin America and the Caribbean, and the Middle East and North Africa are between the two extremes. Numbers in Latin America and the Caribbean have reached a peak, or a long plateau; those in South Asia and the Middle East and North Africa are expected to grow slowly until they peak in the next 25 years or so.
Falling relative shares—
with a few exceptions

Absolute numbers are interesting—but only to a point. It is not clear that this is a critical variable unless inputs to economic and social well-being (factors of production) are in fixed supply. Some of these factors, such as land, may indeed be relatively fixed in supply, though the supply of land has been relatively unimportant in explaining economic growth, wages, or poverty during the last 50 years of rapid population growth. Other inputs, such as physical capital (machinery and infrastructure) can be expanded.

Evidence from developed countries suggests that the size of youth cohorts relative to older workers is more important for long-term outcomes than absolute numbers. The postwar baby boom in Organisation for Economic Co-operation and Development (OECD) countries resulted in a relatively large number of young people entering the labor market in the 1970s (see the spotlight on baby booms following chapter 4). This cohort experienced lower wages and higher unemployment than preceding generations.

Studies that examine whether there were long-term effects—or scarring—from these negative early experiences are varied. Some conclude that the impact of being in a relatively large youth cohort tends to diminish over time, in some cases disappearing. Others find more persistent effects, especially among those with lower education (chapter 4). Caution is needed in deriving conclusions for developing countries, but note that the baby boom generation is broadly comparable in relative size to the large youth cohorts entering the labor market in developing countries today.

The difference is that in most developing countries, the relative size of youth cohorts is shrinking. Figure 1.6 shows countries in different stages of the demographic transition—China is far along, while Sierra Leone is lagging. Other than in Sierra Leone, the highest peak of the youth population relative to the population of older workers occurred in the 1970s or 1980s. The declines in this ratio since then have been considerable, ranging from 25 percent to 50 percent. For a small group of countries (Sierra Leone is one of them), relative sizes are still increasing. Others in this group are Afghanistan, Chad, Democratic Republic of Congo, Equatorial Guinea, Ethiopia, Guinea-Bissau, Liberia, Niger, Republic of Congo, and Somalia. Except for Afghanistan, the countries in this group are in Sub-Saharan Africa.

The fact that the relative size of youth cohorts is declining in most developing countries means that the negative effect of being part of a large cohort, strong though it may be, is declining. However, for the small group of countries where relative sizes are set to grow, the rising relative size of cohorts could well aggravate difficult employment conditions for young people—if the right macroeconomic and labor market policies are lacking.

A window of opportunity from falling dependency

The declining relative size of youth cohorts signals the decline in the ratio of dependents (children and elderly) to working population that occurs during the demographic transition. (The convention is to define children as those below 15 and the elderly as those above 65.) The trajectory of the relative size of youth cohorts mirrors the dependency ratio, diverging significantly only when the demographic transition is so far advanced that the rising burden of the elderly on the working population pushes up the dependency ratio (figure 1.6).

This decline in dependency (the rise in the ratio of working population to the nonworking population) during the demographic transition can boost economic growth. The strongest evidence comes from East Asia where between 25 and 40 percent of the rapid growth between 1965 and 1990 in Japan, Hong Kong (China), the Republic of Korea, and Singapore has been attributed to the higher growth of the working age population.

The potential for enhanced growth through a demographic dividend arises for two reasons. First, the rise in labor supply per capita, reinforced by the increase in female labor supply that often accompanies fertility decline, increases potential output per capita. Of course, this greater
labor supply would need to be productively employed. Second, higher savings and investment per capita associated with the rising share of the working age population (more likely to be in the saving phase of the life cycle than the rest of the population) could also boost growth. Countries in East Asia were particularly successful in absorbing their growing cohorts of new labor market entrants. Savings also grew, though it remains unclear whether this can be attributed to the rising share of the working age population, because the micro evidence is not consistent with a life-cycle hypothesis of saving. Other factors—such as rising life expectancy—may have contributed to rising savings.

This literature on the pathways for the demographic dividend is not conclusive, but the idea of a demographic dividend from changes in the dependency ratio has practical significance for public expenditures. Funded by taxes on income or consumption, those expenditures are likely to

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**Figure 1.6** The relative size of youth cohorts is declining in most of the developing world, as is the dependency ratio

**Source:** United Nations (2005b), medium variant.
**Note:** Dotted line represents 2005.
be affected by the ratio of the tax-paying population to the beneficiary population. Dependents are typically net beneficiaries rather than net taxpayers, depending on governments to finance primary and secondary schooling, postsecondary education (in many cases), training programs, health programs, and pensions. Early in the demographic transition, when the population of elderly is small, the main net beneficiaries are children and youth. With dependents and youth cohorts falling in size relative to the tax-paying population in many developing countries, the economic circumstances for investing public resources in children and youth are likely to improve. In a country with a 25 percent decline in the dependency ratio, every real or baht or lira or rupee collected in taxes from each working age person could pay for a 33 percent increase in spending per dependent, compared with the year of the peak ratio. This increased investment can help build the human capital of children and youth, which can have subsequent positive effects on growth.

Not every developing country has declining dependency ratios. In the countries such as Sierra Leone, mentioned earlier, the dependency ratio is still rising because the demographic transition is not yet under way. There, rising dependency ratios are steadily reducing the resources available per child and young person, possibly leading to a vicious cycle of underinvestment and low growth. Without serious efforts to lower child mortality and fertility, this situation is not going to change. For the other developing countries, circumstances have never been better. Just as a changing world is increasing the need for policy to focus on the young, demographic changes are making it easier to do so. This surely is good news.

The window of opportunity presented by declining dependency ratios will also close, however, earlier in some countries than in others. Many developing countries are set to become more like developed countries, which already face the consequences of rising dependency caused by the rising share of the elderly in the population. In China, which underwent an early and fairly rapid fertility transition, dependency ratios will start increasing as early as 2010 because of the rapid aging of the population. Other countries expected to see an increase in dependency in the next decade include Armenia, Georgia, and Thailand. The pressure to increase spending on the elderly will likely generate pressures to raise taxes, cut expenditures (including those on children and youth), or both. So there is no time like the present for investing in the young.

How prepared are youth for today’s challenges? A glass half empty

How well are countries building the human capital of their young? The overall picture is one of steady progress in averages but uneven improvement across different dimensions of human capital and different groups. Thus, much more remains to be done.

Education levels have been rising worldwide, and today’s youth cohorts have on average more years of schooling than their predecessors. On conventional measures of health, such as mortality in childhood or height-for-age, they are also the healthiest generation by far. Outside countries with a very high prevalence of HIV/AIDS and some parts of the former Soviet Union afflicted with premature male mortality, their chances of surviving to old age are higher than ever before. These are achievements to be proud of, but the averages hide enormous differences across and within countries.

At one end of the spectrum are young people in almost every developing country who have had the benefit of good secondary education. They can be expected to go on to university. Some may even pursue an advanced degree in a developed country. In a country such as Niger, many more young people go on to study in France than in tertiary education institutions at home (chapter 8). While well off youth in developing countries may have experimented with alcohol and drugs or engaged in sex while at school, their good prospects, their means to deal with poor outcomes, and

“We young women are not prepared to become mothers. I would like to continue my studies, but since I have had my daughter my options have changed, because I have many more obligations now. I hope that this will not be a barrier for me to succeed in life.”

Eylin, 19, Honduras
January 2006
possibly their greater awareness mean that this experimentation is less likely to have adverse consequences. Because they have access to better quality education, many will have developed “softer” life skills, such as working in teams or handling difficult situations with confidence. Finally, being the children of more educated and wealthier parents, many may be developing a sense of their place in community and society.

At the other end of the spectrum are a vast number of young people for whom the opportunities look very different. Many either did not attend school as children or dropped out too early to acquire even the most basic skills, leaving more than 130 million 15- to 24-year-olds illiterate. Most of them are in South Asia and Sub-Saharan Africa, more of them women than men (figure 1.7). For those who progress through school, average grade completed shows a similar pattern, with rich youngsters completing more years of school than poor youngsters (box 1.4).

For poor young people with little or no education, life’s opportunities are restricted. Young men with little or no education face enormous disadvantages in the labor market. Many may have worked as children. The International Labor Organization (ILO) estimates there were 84 million 12- to 14-year-olds working in 2000. As child laborers grow older they face very limited options for employment and earnings. For many poor young women, their limited (or nonexistent) education is associated with early marriage, which is still high in a number of countries (chapter 6). Many studies from Sub-Saharan Africa find that early marriage increases the risk of HIV/AIDS among women because of the higher frequency of sexual contact within marriage. Young women are more likely to bear children at an early age if they are from poor households (box 1.4). This combination of poverty and low education means that they are not well-placed to take care of themselves or their offspring, perpetuating poverty.

Between the two ends of the spectrum are the vast swath of today’s young people. Many of them are still in primary school, having started late and frequently repeating grades. Late starts are more common in postconflict environments: in Cambodia, 15 percent of 15- to 19-year-olds were enrolled in primary school in 2001. Others will have made it through primary school.
A youth perspective on equity and development

World Development Report 2006 made a case for focusing on inequalities in key dimensions of opportunity—such as education, health, and the capacity to participate in society—because these inequalities tend to perpetuate themselves, both across groups in societies and over time. This can result in inequality traps, which some groups or people are unable to escape. This is detrimental on both intrinsic grounds, because people cannot realize their full potential, and on instrumental grounds, because inequality traps can curtail growth and dynamism.

Many inequalities become entrenched in youth because of the vastly different opportunities confronting youngsters from different economic backgrounds. We have already discussed how differences in literacy—the most basic of skills—affect the future income-earning potential of youngsters and the economic prospects of their families.

But even among those who go to school, opportunities are vastly different (figure 1).

As might be expected, per capita income and schooling attainment among 15- to 24-year-olds are broadly correlated. In many low-income countries, though, young people from the poorest 20 percent of households cannot aspire to complete the primary cycle (six years). On the other hand, those from the richest 20 percent of households can expect to do so almost everywhere. Among those from poor households, girls are far less likely to complete primary school than boys. These differences, in addition to perpetuating poverty, are an enormous cost to society—with the poor unable to make the most of their talents.

Young people’s access to productive jobs, which allow them to build skills and experience, also varies enormously between those from rich and poor households (figure 2). Youngsters from poor households are far less likely to find paid employment outside the home than those from rich households, in some cases by a substantial margin. The contrast is particularly striking in countries such as Bolivia, Panama, and Paraguay.

For young women, puberty and adolescence often mark the divergence in opportunity with their male counterparts (see spotlight on gender following chapter 2), differences heightened by poverty. Poor young women are not only less likely than their richer sisters to complete primary schooling—they are also far more likely to bear children before the age of 15 (figure 3), which can be detrimental to their health and well-being and that of their children. The life trajectories of 15- to 24-year-old women from poor households can thus be very circumscribed.

Addressing these inequalities is an important part of addressing inequality of opportunity by allowing young people to participate more fully in their societies.

Opportunities for young people at school and work vary enormously between rich and poor

Figure 1 Completed years of schooling, 15- to 24-year-olds

Figure 2 Incidence of paid work, 15- to 24-year-olds
on time, but they may have faltered in the transition to secondary school—because of poor access to schools, a curriculum that fails to engage and instruct, and high costs (including opportunity costs), especially for the poor. Still others will be progressing through secondary school, for the most part, acquiring fewer skills for work and life than young people in developed countries. Those who are from poor families will learn even less than those from richer backgrounds (chapter 3).

The challenges young people confront go beyond acquiring skills relevant to the labor market and extend to skills to navigate health risks and engage constructively in community and society. Many young people remain far from well-informed about the consequences of excessive consumption of alcohol or drugs or engaging in unprotected sex. Knowledge of how to prevent HIV/AIDS, which is nowhere near universal, is in many cases confined to a very small proportion of young people (chapter 5). Regular consumption of tobacco is very common in many developing countries: upward of a quarter of 15- to 24-year-old men currently smoke regularly in Armenia (44 percent), Indonesia (58 percent), Mexico (29 percent), and Nepal (55 percent).39 Many developing countries provide civic instruction at school, but it is only as effective as the teaching methods, which can leave much to be desired (chapter 7). Opportunities to participate in the community—whether in school councils, community organizations, or local governments—vary substantially both across and within countries (chapters 3 and 7).

Finally, many young people cannot find work. Unemployment rates for young people, which are higher than those for adults all over the world, are five to seven times the adult unemployment rates in some developing countries (chapter 4). Unemployment is not the only problem, as many young people are stuck in low productivity jobs or are neither in work or school.

All these problems set back the human capital development of young people.

**What should policy makers focus on? The five transitions**

Much of what governments need to focus on to make young people fulfill their

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**BOX 1.4 continued**

Opportunities for young women from poor households can be restricted by early childbearing

![Figure 3 Incidence of early childbearing (before age 15), 15- to 24-year-olds](source)

Source: Figures 1 and 2: Fares, Montenegro, and Orazem (2006a). Figure 3: authors’ calculations based on recent Demographic and Health Surveys and various household income and expenditure surveys.

Note: For educational attainment and paid work, quintiles are based on per capita consumption estimates; for early childbearing, on a household durables possession index. Countries are ordered in terms of GDP per capita (PPP)
“Regarding the young gang members, it is not a matter that they cannot study. The problem is that . . . the teachers are very strict, authoritarian. During lessons, only the teachers talk, they do not discuss [things] with the students. Young people can study, but they are not motivated.”

Elvis, 21, Peru
January 2006

potential and contribute to their own well-being and that of society has already been touched on. Young people need to continue learning to build skills and acquire human capital. Skill-building needs to cover not only the skills for work, because young people need to learn to manage a range of health risks. They also need to be adequately prepared to become parents to reduce the intergenerational transmission of poverty that occurs because of the failure to plan and space births, and nurture children appropriately. They need also to learn to become actively engaged as citizens in the communities and societies in which they live.

The five dimensions—learning, going to work, staying healthy, forming families, and exercising citizenship—are referred to in the social science literature as “transitions.” The term “transition” is a little misleading because some of the dimensions, such as going to work or forming a family, have more of an element of transition than others. All, however, are critical for poverty reduction and growth because they relate to building, maintaining, using, and reproducing human capital. Recent research also highlights these five transitions, emphasizing that success in the transition to adulthood requires the development of human capital, the capability to make competent choices, and the development of a sense of well-being.40

When exactly these transitions occur varies by age, and one can think of three distinct phases when different transitions might be more evident. In the early phase, roughly ages 12–14, the focus is more likely to be on learning. In the middle phase, ages 15–18 or 15–20, learning continues but work begins to come into greater prominence. Many behaviors that endanger health increase with age and so can be more important at this stage. At the upper end of this range, young people may begin to formally exercise citizenship through voting, and for many young women this may also be a phase of childbearing. In the late phase, ages 18–24, work and childbearing assume greater importance.

How these transitions play out naturally varies by country and individual. In Haiti, a poor and largely rural economy, the early phase of ages 12–14 is dominated by primary school (figure 1.8). By age 14 more than a quarter of 12- to 24-year-olds continue to be enrolled in primary school—which formally ends at 12 years—owing to repetition and delayed or interrupted primary schooling. A smaller proportion of 12- to 24-year-olds are enrolled in secondary school. As young people progress through the teens, enrollment in secondary school declines, falling quite sharply in the late teens. Girls have uniformly lower enrollment than boys. Labor market attachment rises with age but picks up particularly after the ages of 15–16, more for boys than for girls.

Experimentation with tobacco in Haiti also rises with age but is low overall, a common finding in many low-income environments where access to tobacco products is constrained by income. Engaging in sex is more common, with 30 percent of females and 50 percent of males reporting having had sex by the age of 16. Reported differences between the sexes can be large, with women understood to under report and men to over report sexual activity. Marriage is not common for young men before age 24, but it rises quite sharply for women after age 18.

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**Box 1.5 Work and marriage for men in the Middle East and North Africa**

Countries in the Middle East and North Africa (MENA) have increased schooling among both young men and young women. In 1960, women over age 15 had less than one year of schooling on average, but in 2000 more than 4.5 years. Men’s average years of schooling rose from around 1.5 years to more than 6. As a result, the MENA region now has schooling levels around the developing country average.

MENA’s unemployment rates, however, are among the highest in the world, leaving over one in four young men and women in search of employment. In part, high unemployment reflects growth rates lower than the developing country average. The failure to find employment is also the result of schooling systems that do not impart market-relevant learning and skills. In addition, labor markets protect the rights of incumbents, making it difficult for new entrants—typically youth.

Difficulties in transitioning to work have devalued education credentials and fostered cynicism among successive cohorts of youth. Another consequence has been a delay in marriage, particularly for young men. The MENA region stands out for having one of the highest declines in the proportion of ever-married men in the 20–24 year age group since the 1970s. Qualitative studies point to a sense of frustration among young men at their inability to start forming families. However, more research is needed to establish the consequences of these trends on family and society.

By 24, nearly a quarter of young women are married and nearly 10 percent have borne children. Participation in civic or social associations outside the home rises almost uniformly from age 12 onward, slowing as young people approach their mid-twenties.

In Chile, an upper-middle-income country, the five transitions are both similar to and different from those in Haiti (figure 1.9). A good proportion of young people are still in primary school until age 14, but the proportion in secondary schools is higher. Very few young people remain in primary school after age 15 and in secondary after age 18. Labor market engagement rises with age but sharply increases after age 18, as opposed to ages 15–16 in Haiti. Engagement in civic associations rises over this age range and looks very similar to that in Haiti.

The big difference from Haiti is in health behavior and family formation. Experimentation with alcohol, tobacco, and drugs is

Source: Authors’ calculations based on Enquête sur les Conditions de Vie en Haïti (2001).
much higher among Chilean youth, with more than two-thirds of young people having tried one of these substances by age 16. Many young people also report that they engage in sex at a fairly young age—more than 20 percent of females and 40 percent of males report having had sex by age 16. These figures are comparable to those reported by youngsters in Haiti. However, Chile’s incidence of marriage among 12- to 24-year-olds is lower than Haiti’s.

The five transitions, though discussed separately, interact. Some of the interrelationships are obvious, such as longer schooling delaying labor force entry, or childbearing reducing labor market attachment (at least temporarily). Some are less obvious, such as the relationship between work and marriage for men (box 1.5). For governments that create a policy environment conducive to all the transitions, the payoffs can be enormous.