Development and the Next Generation

Edited by Gudrun Kochendörfer-Lucius and Boris Pleskovic

This volume presents papers from Berlin Workshop sessions on Development and the Next Generation, covering issues relating to demographic transitions and socioeconomic challenges; schooling; work; migration and the young; forming families; and becoming citizens.

IN THIS VOLUME:

Introduction by Gudrun Kochendörfer-Lucius and Boris Pleskovic; a welcome address by Gudrun Kochendörfer-Lucius; an opening address by Emmanuel Jimenez; a keynote address by François Bourguignon; and papers by David Lam, Wolfgang Lutz, Nicholas Barr, William M. Lyakurwa, Yasuyuki Sawada, Anjini Kochar, Christian Dustmann, Jere R. Behrman, Stephan Klasen, Jean-Philippe Platteau, Philippe C. Schmitter, and Rafael Di Tella and Robert MacCulloch.
Development and the Next Generation
Berlin Workshop Series 2007

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Edited by
Gudrun Kochendörfer-Lucius
and Boris Pleskovic

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About this Book

The World Bank and InWEnt (Capacity Building International, Germany) hold a Development Policy Forum each September in Berlin. This meeting, known as the “Berlin Workshop,” provides a forum for the European research community to contribute its perspectives to early discussions in preparation of the World Bank’s annual World Development Report. The Workshop offers new ideas and distinctive perspectives from outside the World Bank. Participants in the Workshop come from a range of academic, governmental, think-tank, and policymaking institutions in Europe, the United States, and the Russian Federation, as well as from the World Bank and the German development institutions. Conference papers are written by the participants and are reviewed by the editors. Participants’ affiliations identified in this volume are as of the time of the conference, September 12–13, 2005.

The planning and organization for the Workshop involved a joint effort. We extend our special thanks for the guidance to François Bourguignon, senior vice president, development economics and chief economist of the World Bank and Emmanuel Jimenez, director of the World Bank’s World Development Report 2007. We wish to thank Aehyung Kim, Klaus Kruger, and Joachim Müller for their advice and suggestions. We would also like to thank conference coordinators Theresa Bampoe, Marianne Donda, Irene Federwisch, and Judith Klemmer, whose excellent organizational skills kept the Workshop on track. Finally, we thank the editorial staff, especially Stuart Tucker and Dana Vorisek from the Office of the Publisher, Martha Gottron, and Grit Schmalisch, for all of their work on this volume.
The *Berlin Workshop Series 2007* presents a selection of papers from meetings held September 12–13, 2005 at the eighth annual Berlin Workshop, co-organized by InWEnt—Capacity Building International, Germany, and the World Bank in preparation for the World Bank’s *World Development Report (WDR)*. The Workshop brings broad perspectives from outside the World Bank, offering fresh ideas in the development of the WDR. Participants of the 2005 Workshop were from a range of academic, governmental, think-thank, and policy-making institutions in Europe, the United States, and developing countries.

Participants of the 2005 Berlin Workshop gathered to discuss development challenges and successes pertaining to the young generation. The 2005 Berlin Workshop discusses development challenges and successes pertaining to the young generation, while considering how economic policies can help young people during the period of most fundamental changes in their life—the transition from youth to adult status—leaving school and becoming employed, keeping healthy, starting a family, and assuming a responsible role in society.

In her welcome address, Gudrun Kochendörfer-Lucius greets the participants and expresses her appreciation for the continuing collaboration between InWEnt and the World Bank in broadening the inputs into the *World Development Report* by bringing in German and other European views as well as considering the opinions of experts from developing countries. The collaboration is part of InWEnt’s efforts for promoting sustainable economies and social development. In addition, the institute promotes greater understanding of the North-South context among the general public. Kochendörfer-Lucius reiterates the significance of the *World Development Report 2007* in terms of articulating the challenges faced by young people ages 12–24 and the potential impact posed by decisions of these young people. In this
respect, the *World Development Report 2007* seeks to determine how economic policies can help young people during the crucial transition points to adulthood. She hopes that the joint InWEnt and the World Bank workshop aims at reviewing the current status of the international community’s work on development and the next generation, with speakers presenting recent research findings, drawing lessons from successes, and debating key policy issues.

In his keynote address, François Bourguignon highlights the importance of the Berlin Workshop series as a forum for the *World Development Report*. He discusses policy implications of research by presenting his thoughts on how the *World Development Report* is part of an ongoing reflection on the determinants of development, the results of which should be kept in mind by policy makers when they design development strategies. Bourguignon notes that *World Development Report 2007* examines how policies can enlarge the feasibility set of young people to face economic and noneconomic responsibilities as they transition into adulthood. He makes a case for refocusing policies on the “second frontier” and discusses several youth-related issues that have constrained or impeded youth development in developing countries.

Bourguignon concludes by emphasizing the need to focus equity-oriented policies on children and the youth. He notes that young people are more often the victims of unemployment, underemployment, bad employment, and fertility issues. His recommendation is for policy makers to concentrate on youth development issues, including education, health, fertility, and employment.

Emmanuel Jimenez in his opening address presents the current status of young people ages 12–24. More than one in five of the world’s people are in this group and about 1.3 billion of these young people live in developing countries. As a group, they tend to be more educated and more mobile than predeceeding generations, and they have survived childhood diseases largely due to governments’ efforts to promote basic education and health care. However, if these young people are unable to find place at higher educational institutions and, subsequently, productive employment commensurate with their educational level, they could blunt the competitive edge of economies; worse, they could become frustrated and be a source of instability. On the other hand, if they are able to be productively employed and stay healthy, they could be an enormous advantage for countries, as a skilled and technologically adept labor force can be a tremendous force to economies. Thus the *World Development Report 2007* intends to investigate how policies and institutions can be designed and implemented to avoid the risks and take advantage of the tremendous opportunities offered by this generation. Its main message: investing in the human capital of this generation is critical if developing counties are to make further progress in stimulating growth and reducing poverty. Moreover, it is particularly important to safeguard and develop this human capital during youth transition.

**Session I**, on youthful transitions in a changing world, provides an overview of demographic and other socioeconomic challenges and discusses broadly the implications of these challenges on the youth population. What is the projected size of the youth cohort in various regions, both in absolute terms and relative to other cohorts? How sensitive are the results to assumptions about fertility? What are the macroeconomic implications, in terms of growth and poverty reduction, of these demographic shifts? David Lam asserts that the number of young people is currently reaching
unprecedented levels in most developing countries. At the same time, he shows that in many countries, especially in East Asia and Latin America, the youth population has reached or will soon reach its peak, with declining numbers projected over the coming decades. But Lam’s data also reveal that particularly in Africa and South Asia, the youth population will continue to grow for several decades, although this increase would not be decisive from an economic perspective, since large absolute numbers of young people may not be as economically important as the growth rate or relative size of the youth population. To that point, Lam argues that measures such as the growth rate, the percentage of youth, and the ratio of young people to the working-age population reached a peak in the 1970s or 1980s in most developing countries. Therefore, he concludes, the most severe economic pressures of youth demography may have already been reached in many countries, although significant pressure remains in Africa and South Asia. Wolfgang Lutz examines education and social development beyond the conventional analysis of demographic trends and the usual indicators used to describe these areas. He introduces new methods of capturing the demographic and education dynamics of the global youth cohort. Since all of these methods focus on the dynamics of change over time, they are particularly well-suited to describing the likely dynamics of the global youth cohort over the coming decades. Lutz also presents new approaches to probabilistic population forecasting that shows that uncertainty differs by age and that the size of the future youth cohort is more uncertain than, for example, the size of the cohorts reaching pension age. In addition, Lutz addresses the intergenerational dimension and introduces a new measure, called the cohort succession ratio (CSR) so as to capture the dynamics of changing relative cohort size, which quite relevant in assessing the job opportunities of the youth cohort. In a further step, the purely demographic perspective is broadened by including the level of educational attainment in the forecasting models through the methods of multistate population projections. Finally, Lutz discusses a new population-based social development indicator, called literate life expectancy (LLE), which is the only such indicator that can be projected into the future with some confidence.

Session II, on transition from schooling, discusses whether educational systems can cope with the demands of those who are leaving primary schools in unprecedented numbers. It examines further the implications for access to secondary and tertiary education. Nicholas Barr argues that expansion of tertiary education is both necessary and desirable. But it is costly, and faces competing imperatives for public spending, including population aging and global pressures on taxable capacity. Moreover, there is a strong case for rebalancing public finance from tertiary education towards earlier education. The returns to earlier education are higher, yet it is tertiary education that receives more public funding per student. Such a funding system is misguided, Barr argues, since tertiary education is better-suited than earlier education to partial private finance, primarily through a system of student loans. He argues that redirecting some public spending from tertiary to earlier education positively affects a person’s chances in life in ways that are equitable and which produce desirable development outcomes. The great challenge is, however, a loan design that can be implemented in countries with limited institutional capacity. William M. Lyakurwa presents schooling from an African perspective. He asserts that effective schooling in Africa must consider the home environment, family values, the
classroom, poverty, and the education of the girl-child. As children learn to know the world methodically in the classroom, home schooling should not stop when the child goes to school since it serves as an essential condition for assisting them to assess the values they are exposed to at school and in society. At the same time, Lyarkurwa argues that the success of education programs will depend on concerted measures to address issues such as poverty, family size, HIV/AIDS, and social evolution. His key recommendation is to focus poverty reduction strategies on the family to in order to enhance schooling effectiveness in Sub-Saharan Africa. He also highlights the devastating effects on education of girls resulting from the HIV/AIDS epidemic and poverty. He recommends that poverty strategies should be centered on the family to improve schooling in Sub-Saharan Africa. Yasuyuki Sawada presents several case studies related to possible explanations for the “micro-macro” paradox in education. First, he emphasizes the importance of socially productive employment opportunities for youth after schooling, by presenting a macroeconomic study on Japanese development and a microeconomic study from the Philippines. Second, he argues that the availability of skilled youth is indispensable in the formation of a socially productive sector by presenting an implication from a study conducted in Indonesia. Third, he discusses the importance of quality enhancements in schools by drawing on evidence from Latin America. Lastly, he highlights the significance of improvements in market accessibility for young people by using a case study of the Kenyan garment industry.

Session III, on the transition to work, focuses on the youth bulge in developing economies and whether or not it can be an advantage in the labor market. Anjini Kocher argues that many developing economies are currently characterized by an age pyramid that tips heavily toward the young, a consequence of high fertility rates in the 1960s and 1970s. For example, 43 percent of Africa’s population is under age 15, as is 32 percent of the population in Latin America. Many experts believe that the “youth bulge” in developing economies can be a source of tremendous economic advantage. Kocher presents the reasons for this belief with respect to the labor market and choices regarding labor force participation. For example, a young labor force is believed to add dynamism and mobility to the labor force, thereby spurring growth in labor demand. In addition, the expansion in education levels and the demographic changes that developing economies have witnessed suggest that new entrants into the labor force will further increase economic growth through their affect on the average education of the labor force, and on its flexibility. However, using data from India, Kocher argues that many of the perceived benefits of a young labor force are currently not in evidence; he suggests that this may be a consequence of the limited development of insurance and credit markets. Lack of access to credit not only reduces the demand for labor but also affects labor supply decisions, as does the limited availability of insurance. Moreover, public safety nets currently in place may also reduce labor mobility and hence the prospects for the increase in the youth labor force to significantly contribute to growth. Kocher emphasizes that policy makers need to pay attention to the development of markets for credit and insurance if the benefits of a young labor force are to be realized, and that policy makers need to evaluate safety nets from the viewpoint of their effect on labor outcomes and on household vulnerability. Kocher argues that existing public safety nets may also inhibit labor mobility and therewith the prospects for the young labor force’s significant positive impact on economic growth.
Session IV, on migration and the young, examines issues that are particularly related to immigrants and their children. Christian Dustmann looks at the children of immigrants in countries that receive immigrants. He focuses on the way forms of migration affect the performance and economic and social adaptation of immigrants, and how this may in turn be transmitted across generations. From the perspective of the receiving country, the intergenerational transmission of disadvantage is important to assess the long-term economic effects of migration on the welfare system and economic growth. From the perspective of the immigrant community, this is important as it influences the way immigrant communities may prosper across generations. Dustmann argues that the number of second-generation immigrants is steadily rising in European countries. In many countries second- and third-generation immigrants perform worse than their peers born to native parents and grandparents. Dustmann emphasizes that the roots of some of the disadvantage second-generation immigrants experience may be migration policies that do not provide firm integration and clear future opportunity to the parent generation, thus possibly leading to suboptimal investments in immigrants’ own human capital and that of their children, due to the perception that the migration is temporary, at least at initial stages of the migration history.

Session V, on forming families, considers the changes in behavior of the young regarding family formation and how these changes are likely to affect the welfare of the young both now and in the future. Jere R. Behrman points out that forming families is one major processes in the transition to adulthood in both developing and developed countries. The age of first union (marriage or cohabitation) and the age of first parenting are of considerable concern in academic and in policy communities. Both the age of first union and the age of first parenting are of substantial interest not only because of their implications for individual welfare and well-being over the life cycle, but also because they are strongly associated with fertility and work patterns that are thought to have important implications for the broader society because of fertility externalities (at least given subsidized prices for social services such as schooling and health) and societal interests in increasing productivity. Behrman summarizes what is known about recent patterns in age of first union and first parenthood and then turns to what is known about the causes of these patterns. He argues that delayed household formation should be seen as a major development problem in countries that are affected by it, as it is largely a consequence of a failed transition into employment and, as South African evidence suggests, also a cause of decreased employment prospects. This effect appears to be strengthened by the social pension program, which supports coresidence in areas with poor labor market prospects. It can increase inequality and raises poverty among those who delay household formation as well as those who support them. Behrman suggests reducing youth unemployment, since delayed household formation is closely related to youth unemployment. In addition, urban housing policies could play an important role in facilitating the transition to household formation through providing subsidized housing programs for young people in lowering the costs of household formation. Stephan Klasen also discusses increasing delays in household formation. In some Southern African and North African countries as well as most countries of the Caribbean, average marriage age is now close to 30 for women (above 30 in the Caribbean) and above 30 for men. Part of this trend is surely related to the falling importance of marriage
itself and the increasing role consensual unions that exist prior to a marriage decision. But much of it appears to be driven by young people residing longer with their parents before setting up independent households. While the trend is observable for both sexes, it appears to be an issue of particular relevance for males, who have an increasing propensity to delay the setting up of their own household (with or without a spouse). The causes and consequences of this delay in household formation have not received as much attention. Klasen highlights the issues and problems for young people and the larger developmental impacts of delayed household formation, focusing on the experience of South Africa in particular, where he has done research on this issue in the past.

Session VI, on becoming citizens, focuses on the concern of how to direct young people’s creative potential to promote productive transition to citizenship. Jean-Philippe Platteau considers whether Islam is an obstacle to modernization—or is causality running the reverse way? If the latter is true, he argues, then the rise of fundamentalist interpretations of the Islamic creed is better viewed as the result of a profound economic, social, and political crisis in Islamic countries. Platteau critically reviews the thesis advanced by Bernard Lewis, according to whom certain features of the Islamic world—the lack of separation between religion and politics—creates particular difficulties on the way to modern economic growth and political development. The view is put forward that the differences between Islam and Christianity, for example, ought not to be exaggerated and that, as often in history, it is politics that tend to run the show. Religious authorities, to the extent they exist, can be mobilized in varying directions—in particular, clerics can provide support to antagonistic political actors. Philippe C. Schmitter presents five political transitions affecting contemporary youth. Any of them would be daunting enough to require substantial attention; together, they form an unprecedented context that makes adjustment uniquely difficult. First, at no time in history have more youth lived under some form of democracy. Second, at no earlier time have the proportional differences between age cohorts been so great and had such political significance. Third, at no earlier time have the distance in political experience between successive generations been so great and had such political significance. Fourth, in no recent time has the gap between the mix of civic rights and civic obligations of youth been so large and had such political consequences. Fifth, perhaps never before has the tendency been as strong for short-term priorities to prevail in public policy at the expense of future generations.

Rafael Di Tella and Robert MacCulloch discuss the role of institutions. Given the current severe criticism against market-based reforms, the authors consider what forces shape beliefs and the evidence behind the idea that pro-market beliefs are linked with better economic growth. In particular, Di Tella and MacCulloch explore whether country risk and dependency on mineral rents affect beliefs given rising world unemployment rates and low wages among young people.
Ladies and gentlemen, dear participants! It is a great pleasure to welcome you all here in Berlin on behalf of InWEnt Capacity Building International, Germany. I am especially happy to welcome François Bourguignon, World Bank senior vice president and chief economist, and, of course, Emmanuel Jimenez, director of the World Development Report 2007, and his team, as well as my good friend and colleague Boris Pleskovic. Many thanks to all of you and your colleagues in the Bank for your wonderful and highly efficient cooperation in our joint endeavor.

In 1998, we started this joint cooperation for our Berlin Workshop Series together with Professor Joseph Stiglitz, the Bank’s former chief economist, so today we can certainly say that we are continuing a well-established tradition. Our intention is to broaden the perspectives of inputs into the WDR by adding German and other European views and considering the opinions of experts from the South.

Today is a special day of remembrance.

On this very day four years ago, the attacks on the World Trade Center and the Pentagon marked a watershed in international relations and cooperation—as the violence in Iraq reminds us everyday. Furthermore, many parts of the world are living under constant terrorist threats, as we have so recently experienced in London.

International terrorism finds a breeding ground in poverty and the huge development gaps between regions and within countries. Against this background, the work of the World Bank is even more important and international cooperation more essential than ever.

InWEnt contributes to international cooperation in the field of capacity building. We cover a wide area of topics, ranging from rural development, nutrition, and environmental concerns, through sustainable economies and social development issues, to international rules, good governance, and economic policy. InWEnt has established development-related training and information in Germany as an area of...
responsibility, designed to promote greater understanding of the North-South context among the general public and to improve acceptance for German development cooperation. The scope of international training and dialogue programs is targeted toward decision makers from industry, politics, administration, and civil society all over the world.

Ladies and gentlemen, the WDR 2007 is focusing on the youth factor—young people between the ages of 12 and 24. It is increasingly clear that the Millennium Development Goals will not be met without significant improvement in those social issues affecting adolescents and young adults. François Bourguignon rightfully pointed out that development thinking and practice over the past couple of decades has focused on younger children, while relatively less attention has been paid to young adults and teenagers. This generation makes up roughly one-fifth of the world’s population, with more than 1 billion of them, or 85 percent, living in developing countries.

They will be the largest generation ever to enter adulthood. Between now and 2010, 700 million young people will join the labor force in developing countries. To accommodate these new workers and to reduce unemployment, more than 1 billion new jobs will be needed. That is a challenge we cannot meet without continuing progress in lowering birth rates and expanding education programs.

The decisions taken by this upcoming generation on the size and spacing of their own families will determine how many people will be on our planet by 2050. It is our responsibility to ensure that capacity building enables the youth of today to fulfill their individual potential and contribute to economic development.

The WDR 2007 seeks to determine how economic policies can help young people during the crucial transition points to adulthood. These transition points include leaving school, staying healthy, entering the labor market, forming families, and becoming good citizens. Our workshop aims at reviewing the current status of the international community’s work on development and the next generation, with speakers presenting recent research findings, drawing lessons from successes, and debating key policy issues.

Our workshop will focus on the following life-changing transitions:

- Demographic change and transition to a healthy lifestyle
- Transition from school
- Transition to work
- Migration challenges
- Transition to family formation
- Transition to citizenship

Ladies and gentlemen, I am convinced that the proceedings of the workshop will provide important input for the drafting of the upcoming WDR. I would like to take this opportunity to wish all of us an inspiring meeting here in Berlin.
More than one in five of the world’s people are between the ages of 12 and 24. About 1.3 billion of these young people live in developing countries. They are not only more numerous than earlier generations; they also tend to be more educated, are more mobile and technologically adept, and have survived the childhood diseases that many others in the past did not. These welcome advances, attributable in large part to governments’ emphasis on promoting basic education and health care, have also spawned new challenges to development.

If these young people are unable to find places at secondary and tertiary educational institutions and productive employment commensurate with their education level, they could blunt the competitive edge of economies; worse, they could become frustrated and be a source of instability. If they engage in risky behavior without sufficient knowledge and preparation, they could succumb to addictions or relatively recent diseases such as HIV/AIDS.

But if they are able to be productively employed and stay healthy, they could be an enormous advantage for countries as a skilled and technologically well-connected labor force—at a time when the number of young children is declining and the number of elderly is still not that large. These falling dependency rates—the number of nonworkers to workers—can be a tremendous boon to economies. A rapid demographic transition between 1965 and 1990 in Asia (figure 1) occurred at a time when a strong educational system and trade liberalization enabled some national economies to absorb effectively this generation into the workforce. Some argue that at least 25 percent of the growth during the East Asian miracle resulted from this demographic dividend (Bloom and Canning 2004). Some countries—in Latin America, for example—that experienced an early demographic transition failed to cash in on this dividend. And other countries, such as those in Africa, only begin to experience...
these falling dependency rates (figure 1), what policies and institutions will help them take advantage of this opportunity?

The World Bank’s flagship publication, the *World Development Report 2007* (WDR), will investigate how policies and institutions can be designed and implemented so as to avoid the risks and take advantage of the tremendous opportunities offered by this generation. Since the 1980s, development analysts and practitioners have rightly emphasized that providing children with basic health and education has the highest payoffs in poverty reduction and growth. Indeed, the well-being of young people depends on what happens to them before they reach the age of 12. But the WDR will contribute to the literature by reviewing the pressures that face those in the next generation. It will draw attention to some of the market failures and externalities that are particular to this group. Its main message: investing in the human capital of this generation is critical if developing countries are to make further progress in stimulating growth and reducing poverty. Moreover, it is particularly important to safeguard and develop this human capital during youth transitions.

**A Framework: Policies to Facilitate Youth Transitions**

Every generation undergoes transitions, and managing them is critical for taking advantage of the opportunities and minimizing the risks for economic development. For youth the critical transitions are those providing society with an adequate human capital base through sustained learning and health outcomes, a stable platform for
Thus, five interrelated “transitions” in youth development are worthy of closer public attention: learning, staying healthy, working, forming families, and exercising citizenship (figure 2). The timing and sequencing of these transitions is critical. Work or family responsibilities undertaken so early that they interfere with acquiring skills can be detrimental to long-term success. At the same time not all transitions will be completed by the time people are 24. Although they are lumped together, the young are a heterogeneous group, with those at the lower end (12–15 years) facing issues different from those confronting older youth (18–24 years). Failure in any of these transitions at whatever age may well result in poverty, not only in the sense of deprivation of income but also in nonincome dimensions such as access to education, good health, and voice.

While policy recommendations will vary across types of countries and for each transition, the report will propose a common framework within each transition that embodies three principal elements:

- **Choice.** Broadening the options for young people during each transition, whether for education, health, jobs, or citizenship, so that poverty and deprivation do not necessarily close options for better lives.

- **Agency.** Enabling good decision making by building their skills and information base—and empowering young people to make decisions they are accountable for.

- **A second chance.** Reducing the need for second chances by intervening early rather than late in the transition because remediation is costly. At the same time, having policies and programs that help manage the inevitable consequences of sometimes making bad choices.

The rest of this section provides examples for each of the transitions on how this framework can be applied.
Learning

Governments in developing countries face growing numbers of students who are finishing primary school, the result both of education policies providing primary education for all and of demographic trends. But do young people continue to develop their human capital beyond primary school ages?

One challenge is to expand postprimary education opportunities to meet increasing demand. Indonesia, for example, has been able to provide access to basic education up to grade 6, although the enrollment rates drop off thereafter. This is partly due to constrained supply. As figure 3 shows, however, the drop in enrollment is more severe for certain groups. Many young people cannot gain access to learning options because they are too poor—or are female or living in remote places. Governments have intervened to redress this disadvantage through pro-poor and pro-female policies—or programs that reduce the cost of attendance.

Serious concerns remain, too, about the learning achievement of primary school graduates and about the quality and relevance of postprimary education. Thus the challenge is also to make sure young people acquire the skills needed for work and life.

Learning equips young people for their transitions to adulthood in other dimensions. More highly educated youth make better choices about their own health. In the United States, information about the hazards of smoking has had more impact...
on the behavior of men and women with college education than on others (de Walque 2004; Currie and Moretti 2003). More highly educated youth become more responsible parents, more willing to control family size, and more willing to invest in their own children’s schooling and good health (Behrman and Wolfe 1987). Whether in Africa, Asia, or Latin America, the average number of children for women with secondary education is significantly lower than that for women with fewer years of schooling (Schultz 1997).

Outside the home, education beyond the basic level equips young people to ride the global wave of economic and technological change that is demanding more from workers than rudimentary skills. For example, the pressure for Latin American firms to compete in international markets has increased demand for secondary and tertiary education, evidenced by rising wages even in the face of rising supply. In some countries, the return to tertiary education is close to 20 percent.

As the young consider learning choices beyond primary school, governments can improve the chances of successful transition to being productive workers, parents, and citizens by:

- Ensuring an attractive range of learning options that include secondary and tertiary education, vocational and technical education, and nonformal schooling.
- Helping youth make the “right” education choices through better information about their learning options and about the returns to those options, appropriate incentives, and the development of skills needed to make these choices.
- Developing a system of second chances, such as remediation and equivalency programs, so that early failures or mistakes do not lead to lives of poverty and malcontent.

**Working**

Having a cohort of entering workers who are generally more educated, healthy, and mobile can complement foreign and domestic capital investments for new and expanding sectors of the economy. Moreover, a large cohort of such people, if productively employed, could provide a huge impetus to growth in countries with low dependency ratios. In addition, the effect on growth becomes even more pronounced if, simultaneously, barriers that prevent young women from entering the workforce are removed. Conversely, if young labor market entrants experience difficulties in transitioning from school to work, they can become locked into unproductive jobs or stagnating sectors of the economy, posing additional risks for poverty alleviation efforts and national stability.

After leaving school, youth typically enter a period when they experience spells of unemployment, unstable jobs, and frequent job changes before finally taking a stable job. According to the International Labour Organization, youth unemployment in 2003 reached an estimated 14.4 percent, leaving 88 million youth unemployed, with
wide variation across regions—from a low of 7 percent in East Asia to a high of 25 percent in the Middle East and North Africa (figure 4). In addition, youth employment rates fail to take into account women who do not enter the workforce, and they may vary also by gender. Everywhere, youth are more likely than adults to be unemployed, but the ratio of unemployed youth to adults varies significantly, reaching almost 6:1 in South Asia.

The ingredients for successfully integrating youth into the labor market include:

• Setting labor market and macroeconomic policies that will support job creation and economic growth. Policies must be sufficiently flexible that young workers can adapt their skills to local needs or move to where those skills are needed.
• Improving skill development to increase young people’s ability to make better choices when entering the labor market.
• Offering second-chance opportunities—well-targeted social protection policies to give young people access to safety nets, and second-chance programs to help them acquire needed skills and find appropriate jobs when initial opportunities are missed.
Developing Healthy Lifestyles

As young people grow they begin to have more control over their bodies and their behaviors. This is a necessary step toward maturation and responsibility. But some behaviors that youth engage in can put their health at risk, such as unprotected sex and sex with multiple partners, poor nutrition and lack of physical exercise, excessive use of tobacco and alcohol, and drug abuse. Regardless of HIV prevalence rates, a very high percentage of young men engage in high-risk sex (sex with noncohabiting, nonmarital partners, a proxy used by UNAIDS to measure nonmonogamous, high-risk sexual behavior), and not all of them use condoms (figure 5). Traffic accidents are also an emerging health concern for youth in many developing countries.

Based on an analysis of evidence on risky health behaviors among youth, the WDR will discuss interventions that are likely to be effective. The main policy messages are likely to be:

- The benefits to investing in youth health are enormous: the costs of preventing risky health behaviors are far lower than the costs of treating the terrible outcomes that could result from the risky behavior, such as the growing incidence of HIV infections among young people.

**FIGURE 5. The Percentage of Young Men Engaging in Risky Sexual Behavior Is Virtually the Same Regardless of HIV Prevalence**

![Bar chart showing the percentage of young men engaging in high-risk sex and condom use at last high-risk sex in Burkina Faso, Kenya, and Zambia with low, medium, and high HIV prevalence rates.](image-url)
• Policies that promote a broader range of opportunities for young people to reduce risky health behavior and stay healthy must target young people because it is difficult and costly to improve behavior as people get older. This is true not only for health interventions but also for interventions that encourage school completion and more productive livelihoods.

• Another important objective is to help young people choose healthy behavior by strengthening their agency—giving them the right information, helping them understand the long-term consequences of their actions, and giving them more say in decisions that affect their health.

• Despite the best prevention efforts, some young people will engage in or be exposed to risky health behaviors. Policies and interventions must help them cope with the adverse consequences. These interventions include treating poor health and encouraging cessation and rehabilitation.

Forming Families

Getting married. Having children. Leaving home. Across the world, there are rich variations in the sequencing of these steps toward adulthood and even in the types of families formed. The age at which youth experience these events and the ease with which they are able to negotiate the demands of first marriage and parenthood have important consequences for their lives and for growth and poverty reduction.

Age at first marriage or childbearing is tied to a range of individual, family, and community factors. Development policy has been rightly concerned about the incidence of early marriage and childbearing, particularly for girls. Limited economic opportunities; poor access to services; and social and cultural norms surrounding sexual behavior, marriage, and parenthood may encourage marriage or childbearing at very young ages and also lead to a host of adverse outcomes for young girls. For all young people, the ability to manage the responsibilities of marriage and parenthood (before or after marriage) is affected by their economic and educational status as well as their access to health services.

The main messages of the chapter on forming families are likely to be:

• Policies must provide options for young people (and their parents) to delay marriage and parenthood to an age when these transitions can be made without affecting their health or further schooling. These policies include improving access to health services, learning and skill-building, and encouraging school completion and employment.

• Complementary policies are also needed to strengthen young people’s power to make beneficial choices about when to form families. These include information and communication efforts and interventions that provide resources to young people. Because individual attributes valued in the marriage market and cultural
norms about children’s obligations to look after parents differ between girls and boys, policies must also address gender-specific issues.

- Policies to support young newlyweds, first-time parents, and unmarried mothers will minimize the many difficulties they face. Young couples’ access to family planning and reproductive and child health programs is critical to the safe initiation and spacing of births.

**Exercising Citizenship**

Although children are formally citizens of nation-states and enjoy certain rights, youth is the period when individuals complete the transition to citizenship. In other words, by the time individuals are in their mid-20s, they are usually subject to nearly the full set of citizenship rights and obligations (they pay taxes, serve in the military, and enjoy civil, political, and social rights to the extent their state allows). And they are participating in civil society organizations. This transition involves a significant development in the identity of youth. Becoming a member of a wider society requires young people to synthesize their understanding of the people they have identified with in their lives in a way that establishes an identity that is personal, unique, and consonant with the roles and competences valued in that larger society (Erikson 1968). Supporting this transition is important because community membership and participation during youth influences civic dispositions, civic participation, and political participation throughout life (McAdam 1990; Jennings 1987).

Because citizenship is crucial for micro- and macro-level development outcomes, and because dispositions toward citizenship are established in youth, governments should help young people become full members of the nation and society. The transition to full citizenship involves a sense of belonging and a commitment to society and is related to the development of an identity. Identity formation is a process of enormous energy and opportunity, and young people around the world have channeled their energies toward creative political projects. Many young people, however, grow up in environments that give them little if any social recognition. Such recognition is a crucial element in identity; without it, youth might become alienated and engage in irreversibly destructive activities. The chapter on citizenship recommends that governments:

- Broaden opportunities for youth to participate in political and civic organizations.
- Strengthen the capacity or capability (agency) of young people to find their own niche in a way that concords with the roles available in wider society.
- Facilitate procedures through which circumstances or society do not commit youth to failure without a second chance. Particular attention needs to be paid to young women hampered by low literacy, inadequate health care, and poverty in early stages of their life.
Across Transitions and Across Borders

There are strong synergies across the various dimensions of youth transition—learning, staying healthy, working, forming families, and exercising citizenship (recall that in figure 2, these dimensions were represented as overlapping). The WDR will summarize and review the enormous potential of these synergies, as well as some of the risks. It will discuss the challenge of taking advantage of them, since they often imply multisector policies that are difficult to implement, even in well-prepared institutional settings.

The youth transitions outlined above are taking place in an increasingly integrated world, characterized by faster movements of goods, capital, information, technology, ideas, and people across borders. While all of these factor movements affect youth outcomes, the actions of young people help shape the global economy. The WDR will focus on two global movements in which youth play a predominant role: international migration and the movement of information and ideas through the use of global mass media and information and communication technologies. Affecting youth transitions and broader development outcomes, these movements require that policies to facilitate youth transitions consider cross-border effects.

References


Let me welcome you to this workshop in preparation for the World Development Report 2007: Development and the Next Generation. Traditionally this workshop has been a kind of intellectual launch of the huge work leading up to the publication of the WDR a year later. It is for us an occasion to expose our initial views on the WDR topic to the science and wisdom of world-class academics before getting into real work. This has worked extremely well over the last eight years, and I know it will be the case again this year. I would like to thank our partner and host, InWEnt, for this enduring and successful collaboration, as well as all the participants at this seminar here in Berlin.

Last night, Emmanuel Jimenez presented an outline of next year’s WDR on youth. I will not repeat what he said, but will instead offer a slightly different perspective, explaining what the World Bank sponsors of this WDR—the Development Economics and the Human Development Vice Presidencies—expect from this exercise and the way in which the Bank tends to approach the issue of “youth and development.”

As the Chief Economist of the World Bank, my role essentially is to serve as a liaison between the research and policy sides of the institution, and, more precisely, to make sure that policy recommendations made by the World Bank to our partner countries are guided by knowledge. I am not sure I am always successful, but I try to insist on policy implications when I talk to researchers, and to insist on research results when I talk to policy makers. I will follow the same pattern here. First, I will try to show how this particular WDR on youth and development is part of an ongoing reflection on the determinants of development, the results of which should be in the minds of policy makers when designing development strategies. Second, I would like to list several youth-related issues policy makers in the developing world often mention as the source of major difficulties or impediments to development in their own countries.
Youth as a Major Dimension of Equity and Development

There is a very close relationship between this WDR on the next generation and the previous one—to be launched now in less than two weeks—on equity and development (WDR 2006). The message of WDR 2006 is quite simple. When equity is defined as the equality of opportunities within the population, one finds long-run complementarities between equity, economic efficiency, and growth. The general reason for those complementarities is easily understood. Without equity, a large part of the population does not have the opportunity to realize its economic potential. Lack of opportunity occurs through numerous channels: People cannot access basic facilities such as education, credit, health care, or basic infrastructure; they are discriminated against in the labor market; they lack voice in public decision making about national or local public goods of direct interest to them; they cannot go to court to oppose predatory behavior by elites, and so on. As a consequence, the talents, ideas, and efforts of part of the population are simply wasted. Some valuable investment projects are left unexploited because of this lack of opportunities, whereas some mediocre projects are undertaken in that part of the population where those constraints are not binding.

It follows from this analysis that equity-enhancing policies are favorable to long-term economic development and economic growth, even though they may have some cost in the short run, such as investments in public education, health care, or microfinance.

The implications for WDR 2007 are rather obvious. Most of the economic opportunities open to individuals during their lifetime are set early in life, including during childhood and youth. In effect, life choices, or the “opportunity set,” of most individuals seem to be almost fully determined before they reach age 20 and often very much earlier in many developing countries. On top of the need for adequate macroeconomic policies, enhancing the development potential of a country therefore requires childhood- and youth-oriented policies that will maximize the opportunity set within which young people will be able to choose how they want to live their economic lives.

Key opportunities, or the lack thereof, exist in the earliest part of the life cycle and affect future economic achievements, with each dimension calling for different types of policies. The following taxonomy may be helpful in understanding the nature of the policies necessary to equalize opportunities.

1. **Assets**, including parental and social background, expected wealth (inheritance), health, voice in public decision making. Equity policies in these areas essentially consist of trying to minimize the role that initial assets play in the selection of individuals into activities such as education, type of early labor-market experience, entrepreneurship, or citizen life.

2. **Liabilities and “commitments,”** including (depending on age and gender) diseases (such as HIV/AIDS), early or forced marriage, early childbearing, social stigma (criminal record). Liabilities are the opposite of assets. Commitments have more to do with social habits, which are sometimes inimical to good economic judgment
or restrict access to normal economic interactions. Policies in this area present complex trade-offs.

3. “Preferences” and attitudes. Usually considered exogenous by economists, preferences and attitudes are clearly endogenous when referring to the earlier part of the life-cycle, and they play a fundamental role in shaping the future of children and young people and therefore of the whole society. At the societal level, this is a field beyond the policy space. In some cases, however, when preferences are shaped by particular circumstances (criminal environment, weak collective infrastructure), there may be some space for policy to have effect.

In sum, the basic question the WDR 2007 on youth asks is how policies can enlarge the feasibility set of young people about to enter adulthood as they face all the economic and noneconomic responsibilities that come with the shift from adolescence to adulthood. The WDR 2007 will also explore how to reduce the negative impact of adverse contingencies and bad starts, or, in other words how to make the consequences of such accidents reversible ("second-chance" policies).

Part of the first question gets to the core of reflections on childhood development policies regarding health and education—factors that have always been prominent in development strategies and that are explicit goals enshrined in the Millennium Development Goals. Progress toward attaining the child health and education goals has been huge, marking advances that may be considered as the “first frontier” of human development.

The WDR 2007 should be about the second frontier, which occurs after primary school, or between when children become adolescents and before they step into adulthood—say, youth between the ages of 12 and 25, the definition used for “youth” in the WDR 2006. This second frontier is a topic that, strangely enough, has been largely ignored in the development literature. As long as so much work remained to be done on the first frontier, that of childhood, such neglect was understandable. Now that the proportion of children passing the first frontier is close to 100 percent in many countries and fast increasing in others, it is the time to think about and invest more deeply in the next frontier—that of youth.

**Major Policy Issues about Youth**

This is a first entry point into the WDR 2007 on development and the next generation. But there is another, more pragmatic aspect to explore. It is based on questions repeatedly asked by policy makers in a number of developing countries as well as by our colleagues from the World Bank and other development agencies that focus even though not always explicitly, on youth. I would like to list some of these questions.

**Unemployment and underemployment**

In many countries demographic factors have produced—or are about to produce—a youth bulge. Combined with changing labor supply behavior, in particular among young women, this youth bulge is often accompanied by a surge in unemployment
or, more frequently, underemployment or “bad” employment (that is, jobs with low productivity and low earnings). This phenomenon affects young workers more frequently than it does older workers, even in cases where young workers are well educated. This exclusion of the younger cohorts of workers is a source of concern for policy makers and politicians. It has short-run economic and social costs as well as long-run implications, since the first years of work help determine the path of the rest of an individual’s career over his or her lifetime. What policies are best able to deal with this problem? Should they be explicitly aimed at young people, or should they target employment in general?

**Schooling**

In many developing countries, basic schooling has become, or is close to becoming, universal. In others, considerable progress has been made, and the primary completion rate is rising fast. This evolution implies an increasing demand for secondary schooling. The issue is how to meet that demand while ensuring quality and therefore returns to schooling above some minimum level. That requires dealing with the financing of secondary schooling, as well as with the supply side of that sector, in particular the nature of providers (public versus private) and of the curricula. Middle-income countries are probably better equipped to deal with these issues, because they have more resources at their disposal. Yet poorer countries need to invest more in secondary and tertiary education too, and failure to do so might substantially reduce the overall returns expected from primary schooling.

**Fertility**

This topic seems to have lost importance in development economics over the recent past. Family planning and reproductive health are not dealt with using the same sense of urgency as they were 10 or 20 years ago, perhaps because of slower population growth in the world. Yet, they are persistent concerns in many countries, particularly in Sub-Saharan Africa. Here, too, young people, and of course young women, are directly concerned. Age at first intercourse, age at marriage, age at first pregnancy, unwanted pregnancies, rape—are all issues with fundamental importance for girls or young women since such events can determine the course of their entire life and, through intergenerational transmission of culture, that of their daughters. Should development-oriented policy makers be passive in the face of these issues, or should they be proactive? If the latter, should policies be direct, as with family planning or sex education, or indirect, for instance through developing economic opportunities for women, especially young women?

HIV/AIDS is a related issue. The World Bank has played a pioneering role in this area with a Policy Research Report a few years ago on controlling risk-taking behavior and focusing on high-risk groups. Since then the cost of treatment has dropped considerably. Yet prevention remains a major problem at the same time that risk groups have changed. Young women now have among the highest prevalence of the disease of any population group in Sub-Saharan Africa, which in turns puts their
children at high risk. What are the policies most able to stop and then reverse this dramatic evolution? What do they have in common with policies aimed at addressing reproductive health and fertility issues?

**Role of Young People in Society**

It is sometimes held that the baby boomers in industrial countries—the generation born between 1946 and 1964—have affected in some major way the behavior of the whole society. There is a considerable ambiguity around this hypothesis. However, it may be the case that the combination of demographic factors—a youth bulge—and particular circumstances, such as the end of a conflict, confer on youth a degree of influence on societal evolution. Many politicians in postconflict countries are concerned with the disastrous and possibly irreversible effects of conflicts on young people. Is it possible to design policies that can successfully deal with this situation? On the positive side, and from a more general point of view, to what extent can young people be agents of change in a country, and what is the role of education in this respect?

I will close these remarks simply by noting the convergence of many different basic development issues that directly concern young people. The need to focus equity-oriented policies primarily on children and then on young people is fairly obvious and seems, per se, to offer sufficient justification for development policies to address the issues of youth. Unemployment, underemployment, or bad employment may seem to affect the population at large, but young people are the cohort most affected by it. Moreover, if a scarcity of good jobs is related to a lack of education and training in the labor force, then young people should be the main concern of policy makers. Excessive fertility may be a problem throughout the reproductive lifetime of all women. Yet, we know that the main source of the problem is found at the younger ages.

I don’t want to say that “youth” is the essential problem of development. That would be a meaningless statement. My main point is that youth is a direct concern for many important development issues: education, health, fertility, employment, and so on. Those issues may be, and often are, tackled individually. However, the fact that they refer predominantly to the same age group provides a strong rationale for considering them jointly. The WDR 2007 will offer such a joint approach to development policies through the lens of youth.

Let me close by thanking all of you for helping us in this endeavor.
Part I: Youthful Transitions in a Changing World—Demographic and Other Socioeconomic Challenges
Youth in developing countries find themselves in the midst of rapid social and economic change. As documented in the recent U.S. National Academy of Sciences report on transitions to adulthood in developing countries (Lloyd 2005), young people face both new challenges and new opportunities created by cultural and economic globalization. To fully understand the situation of young people in developing countries today, it is important to understand the rapid demographic changes that produced the historically unprecedented numbers of young people in the world today. These demographic changes potentially have important implications for labor market opportunities, access to public resources, and access to family resources for youth.

The Peak in Youth Population

According to the population projections of the United Nations Population Division (2005), the number of young people in the world is close to reaching its historical peak, a peak that will arguably be the largest number of young people the world will ever see. Figure 1 shows projections to 2050 of the number of 12- to 24-year-olds in the world and in three major developing regions—Asia, Africa, and Latin America—according to the UN’s medium variant projections. The population numbers have been normalized to an index where 1950 = 100 for all regions to simplify comparisons across regions. Although projections to 2050 must be viewed with caution, projections over the next two decades are relatively straightforward. The projections to 2050 are shown because they give a picture of one reasonable scenario for the trends that will be experienced in the coming decades. As figure 1 suggests, there is
little question that current youth cohorts are the largest that the world has ever seen, and that a period of rapid growth in the size of these cohorts is coming to an end. While the world’s youth population more than doubled in the thirty-five years between 1950 and 1985, a historically unprecedented rate of growth, that population is projected to decline in the thirty-five years after 2010.

As figure 1 shows, the pattern for the world as a whole reflects wide diversity across regions. Because Asia accounts for almost two-thirds of the world population, its pattern is very similar to the pattern for the world as a whole. The rapid approach of the peak in the youth population is most clearly evident in Asia, with a projected peak around 2010. Latin America and the Caribbean are also approaching a peak, with a broad leveling off that begins around 2010. The pattern for Africa is substantially different, however. The youth population in Africa, which is already more than four times its 1950 level, is projected to continue growing past 2050, with the 2050 level being eight times the level of 1950.

These trends in the size of the youth population are driven by complex changes in fertility, mortality, and population momentum that are discussed below. Because these underlying demographic trends have followed similar patterns in many countries, it is possible to characterize four major patterns describing the timing of the peak in the youth population. As illustrated by the example of Latin America in figure 1, this peak is often not sharp and may be more aptly characterized as a slow leveling off. Figure 2 shows the size of the youth population for four countries that represent these four patterns.

China is one of a small group of developing countries where the youth population peaked before 2000. As figure 2 shows, this peak, which occurred in the mid-1980s,
was 2.4 times its 1950 level. The other major developing country in this group is Thailand, which, like China, had a rapid fertility decline in the 1970s and 1980s. Brazil is one of a large group of countries experiencing a relatively flat peak in the youth population between 2000 and 2010. The projections show that Brazil’s youth population begins to fall around 2005, but then increases slightly to a second peak around 2020. This pattern of slow change around a flat peak is typical of countries in this group, reflecting the complex population dynamics caused by offsetting forces of falling fertility and population momentum. Other countries in this group include Indonesia, Mexico, and Vietnam.

India represents a large group of countries with a peak in the youth population between 2010 and 2030. Other large countries in this group include Bangladesh and the Philippines. Most of these countries are projected to experience 20 to 30 years of relatively constant youth populations after they reach their peak. The fourth country shown in figure 2 is Kenya, representing the group of countries whose youth population will continue to grow after 2030. Kenya’s youth population grows to numbers that are so much greater than those seen for the other countries that the numbers are plotted on a different axis. Kenya’s youth population in 2010 is projected to be over seven times its 1950 level. This compares with a peak youth population in the other groups that is only slightly more than three times their 1950 level. Kenya’s group includes Pakistan and Nigeria, along with a large group of countries in sub-Saharan Africa. As suggested by figure 1, Asian and Latin American countries are mostly found in the first and second groups while African countries dominate the third and fourth groups.
Youth Cohorts and the Demographic Transition

To understand the economic implications of the current “youth bulge,” it is important to understand the demographic reasons for this bulge and the reasons why many countries are close to their peak youth population. The demographic explanations for these trends are important because the underlying processes of demographic change help put this bulge in perspective. They also help us understand some important features of today’s youth cohorts, such as the paradoxical fact that they were born into much smaller families than those of their parents.

The “demographic transition” describes the pattern of changes in fertility, mortality, and population growth that have been observed with a high degree of regularity around the world. The stylized description of the demographic transition starts with a regime in which both death rates and birth rates are high and roughly equal, implying low rates of population growth. A decline in death rates, potentially driven by a variety of factors, initiates the demographic transition. With death rates falling, birth rates typically remain high for some period of time, generating population growth. Eventually birth rates decline, slowing the rate of population growth. The transition ends when birth rates and death rates both stabilize at a new low level, implying a return to low (or zero) population growth. The pace at which mortality and fertility decline and the length of time between mortality decline and fertility decline determine the rate of population growth that will be observed during the demographic transition.

High-income countries, which went through the demographic transition in the 1800s or early 1900s, typically experienced a long and relatively slow mortality decline. The gap between birth rates and death rates was never very large, and population growth rates rarely exceeded 1 percent a year. The demographic transition that took place in developing countries was quantitatively quite different. Death rates declined very rapidly, generating population growth rates that exceeded 4 percent a year in some countries, implying a doubling of the population in fewer than twenty years.

Figure 3 shows the demographic transition in Brazil, based on the UN estimates of birth rates, death rates, and population growth rates from 1950–55 to 2000–05.¹ The declines in mortality and fertility in Brazil are fairly typical of countries that have now progressed quite far through the demographic transition. The figure shows that the demographic transition was already well under way in Brazil by 1950, with the crude death rate having fallen to 15 per 1,000, while the crude birth rate was almost 45 per 1,000. The rate of population growth was about 28 per 1,000, or 2.8 percent a year, in the 1950s, a rate much higher than was ever experienced by currently high-income countries when they went through the demographic transition. Although Brazil’s crude birth rate was falling in the 1950s, death rates were falling faster, causing a peak population growth rate of 3.0 percent in the 1960–65 period. This was also the period in which world population growth rates reached their historic peak, at around 2 percent a year (Lam 2005b). The rapid population growth of the 1960s was the origin of today’s large youth cohorts. If we consider the children born in developing countries in the 1960s to be the children of the population explosion, today’s
youth cohorts are the grandchildren of the population explosion, the children of those earlier large cohorts. This is a fundamental feature of today’s youth cohorts.

The size of the surviving birth cohorts during the demographic transition is influenced by a complex interaction of fertility, mortality, and population momentum. Population momentum refers to the inertia inherent in population dynamics because childbearing takes place two to three decades after birth. The rapid growth of birth cohorts in the 1950s and 1960s produced a rapid growth of the childbearing-age population in the 1970s, 1980s, and beyond. This growth competed with the decline in fertility rates to determine the size of birth cohorts. These birth cohorts, in turn, produce the size of the youth cohorts shown in figures 1 and 2.

**Trends in Growth Rates and Relative Cohort Size**

For many economic issues, such as pressure of youth on the labor market or the tax burden of supporting schools, the growth rate of the youth population, or its size relative to other age groups, may be more important than the absolute size of youth cohorts. As figures 1 and 2 show, the growth rates of youth populations in most countries are lower today than they were in previous decades. Indeed, it is virtually a mathematical necessity that the growth rates must be declining if the total size of
the youth population is near its peak, given the smoothness inherent in most population dynamics. Figure 4 shows the annual growth rate of the youth population in the same set of countries shown in figure 2. The growth rate shown is the average annual rate of growth between two of the five-year population totals shown in figure 2 (for example, the first point is placed at 1952.5 and represents the average annual growth rate between 1950 and 1955).

A noteworthy feature of the figure is that the peak in the growth rate of the youth population occurs around the 1965–70 period in all four countries, despite the large differences in the timing of the projected peaks in the youth population (shown in figure 2). Overall the growth rate of the youth population peaked in the 1960–75 period in a very large set of countries (Lam 2005a). The major differences across countries are less in the timing and magnitude of the peak growth rate than in the speed at which the growth rate declined in the 1980s and 1990s. Most developing countries experienced similar levels of rapid population growth in the 1960s. The subsequent rate of decline in fertility rates differed substantially across countries, however, and it is these differences that drive the differences in the rate of decline in the growth rate of the youth population during the 1980s and 1990s.

For some economic and social questions, the percentage of the population in youth age groups or the size of the youth population relative to the working-age population may be most important. Trends in these measures have several similarities to
the trends in the growth rates shown in figure 4 (Lam 2005a). Using any of these relative cohort size measures, most developing countries experienced the most dramatic relative numbers of youth several decades ago. With the exception of the group of countries that will not experience their peak youth cohort until after 2030, most countries experienced the largest peak of the youth population relative to the working-age population in the 1970s or 1980s. Even in the countries in Africa and South Asia where the youth population will still be growing in 2030, the ratio of the youth population to the working-age population has in most cases already begun to decline. To the extent that this ratio is a critical measure of the pressure the youth population places on resources or labor markets, it is important to recognize that the pressure has already begun to diminish in most countries.

Family Size versus Cohort Size

One of the important, if somewhat paradoxical, features of population dynamics during a demographic transition is that the size of birth cohorts can move in the opposite direction from the size of families. This is another consequence of population momentum, which creates a gap between the decline in fertility and the decline in the size of birth cohorts. Lam and Marteleto (2005) analyze the case of Brazil, using detailed census and survey data back to 1960. They show that there was roughly a fifteen-year delay in Brazil between the onset of fertility decline, which began in the late 1960s, and the birth of the largest birth cohort in 1982. This means there was a period in which family size was decreasing while cohort size was increasing, with offsetting effects in terms of resources available to children and youth.

Using the microdata from the Brazilian censuses of 1960, 1970, 1980, 1991, and 2000, Lam and Marteleto analyze the number of siblings born to different cohorts of young people. Figure 5 shows the average number of siblings born and of siblings still surviving at the time of the census for youth ages 12–14 in each of these Brazilian censuses. Note that the surviving number of siblings increases slightly between 1960 and 1970, even though the number of siblings born declines. This represents the effect of rapidly falling infant and child mortality, which more than offset the decline in fertility that had already begun. Between the 1970 and 1980 censuses, the impact of falling fertility more than offset the impact of declines in infant and child mortality, with young people in 1980 having fewer surviving siblings than their counterparts in 1970. The number of surviving siblings fell by almost one child between the 1980 and 1991 censuses and again between the 1991 and 2000 censuses. The cumulative decline between 1960 and 2000 was 2.3 siblings, a 44 percent decline.

As Lam and Marteleto show, a decline in the prevalence of large families was the main driver of the decline in the number of surviving siblings. As a result, competition for resources within families declined significantly—a potentially important factor affecting their health and schooling. At the same time, most of these young people were born at a time when cohort size was increasing, implying increased competition for resources at the macro level. The pattern observed in Brazil is similar to that in most developing countries. Many of today’s young people grew up in a period in which
cohort size was increasing but family size was decreasing, implying that they were competing with rising numbers of children from other families in getting access to school or health care, at the same time that they were competing with fewer siblings in their own families.

Economic Implications of Youth Demography

The demographic patterns documented here have potentially important economic implications. Some of the most obvious areas in which youth demography may make a significant economic impact are labor markets, savings rates, and public expenditures.

A large literature in labor economics and economic demography analyzes the impact of cohort size on the labor market in the United States and Europe. Research on the United States, such as that conducted by Freeman (1979), Welch (1979), and Berger (1985, 1989), looked at the initial earnings and subsequent earnings growth of the large baby boom cohort that entered the labor market in the 1970s. Many European countries also experienced declines in the size of youth cohorts entering the labor market in the 1980s. Korenman and Neumark (2000) provide a useful review of the research on the impact of cohort size on labor markets in Europe.

A broad consensus from this research is that the larger the youth cohort the more limited are the wage and employment opportunities for young people. Most studies that examine the longer-term experience of cohorts find that the negative impact of
being in a large youth cohort tends to diminish over time, with some studies finding that the disadvantage almost completely disappears over time. Other studies find more persistent effects. Using cross-national data from Organisation for Economic Co-operation and Development (OECD) countries from 1970 to 1994, Korenman and Neumark (2000) estimate an elasticity of youth unemployment to relative cohort size of around 0.5. They conclude that the impact of relative cohort size on youth unemployment is easily swamped by other macroeconomic and labor market conditions and argue that cohort size per se is unlikely to have a major impact on unemployment rates in OECD countries.

Although it is potentially misleading to apply this research to developing countries, several points are worth noting. As shown in Lam (2005a), the fluctuations in relative cohort size in OECD countries are similar in magnitude to the changes experienced by developing countries. It therefore may be reasonable to draw inferences based on the OECD experience, with the literature suggesting that larger relative cohort size has a negative but modest impact on youth employment prospects. A second point is that the relative size of youth cohorts—the measure that is the focus of study in most of this research—peaked in the 1970s and 1980s in many developing countries, and is beginning to decline even in the countries with the latest fertility decline. Combining the empirical evidence on the impact of cohort size with the demographic patterns, there would seem to be little reason to expect that developing countries will be experiencing a youth labor market crisis in the coming decades, at least as far as demographic pressure alone is concerned. On the contrary, most countries are already past the period of most rapid pressure on youth wages and employment.

Another area of research on the economic implications of relative cohort size involves dependency burden and savings rates. Bloom and Williamson (1998) argue that a rapid rise in the ratio of the working population to the nonworking population (including both children and the elderly) in East Asia between 1965 and 1990 played an important role in driving the East Asian “economic miracle.” Part of this effect resulted from the faster growth of the labor force; the concentration of the population in productive ages led to increased output per capita. In addition, however, Bloom and Williamson argue that dependency rates have an effect on savings and capital accumulation. The impact of dependency rates on aggregate savings derives in part from life-cycle savings patterns, with older adults saving more than young adults.

The idea that countries experience a “demographic bonus” when the working-age population begins to grow faster than the pre-working-age population has been explored in papers such as Bloom, Canning, and Malaney (2000). While Deaton and Paxson (1997) find limited support in micro-level data for the hypothesized link between age structure, savings, and economic growth, the idea of a demographic bonus has intuitive appeal in a number of dimensions. Some of these effects may be particularly relevant for youth. As Lee (1994) observed, public expenditures, especially when they are funded by taxes on income or consumption, will be affected by the ratio of the taxpaying population to the beneficiary population. Youth will typically be net beneficiaries, depending on the state to provide schooling, training
programs, and health programs. The relevant demographic variable will be the ratio of the youth population to the working-age population, although the growth rate of the youth population may also play a role to the extent that public expenditures are slow to respond to changing demand (as in the case of schools, for example, where physical facilities and the training of teachers can create inertia, even aside from funding issues).

As emphasized above, although the youth population is the largest it has ever been in most developing countries, the size of the youth population relative to the working-age population is lower in most countries than it was twenty years ago. In many countries the ratio has declined by 25 to 50 percent between its historic peak and the levels observed in 2005. Taken literally, a 25 percent decline in this ratio, a decline that is quite common across developing countries, implies that a given dollar collected in taxes for secondary schooling from each working-age person could pay for a 33 percent increase in school funding per youth in 2005, compared with the year of the peak ratio. These ratios are on the decline in almost every developing country, implying that from this perspective the economic circumstances for investing in youth are steadily improving.

Conclusions

Using the medium variant projections of the United Nations Population Division, it is clear that the youth population—the population ages 12–24—in most developing countries is the largest it has ever been. In many countries, especially those in East Asia and Latin America, the youth population has reached or is close to reaching its peak, with declining numbers projected over the next several decades. In other countries, especially those in Africa and South Asia, the youth population will continue to grow for several decades.

As illustrated with the case of Brazil, the explanation for today’s large youth cohorts and the timing of the peak in youth populations is directly linked to the rapid changes in mortality and fertility that produced the demographic transition. Today’s youth cohorts are, broadly speaking, the children of the large cohorts born during the population explosion that peaked in the 1960s. Paradoxically, they were born during a period of rapidly falling fertility, with the large size of their cohorts driven by population momentum rather than high fertility. Because of this, today’s youth were typically born into much smaller families than were their parents. They grew up with increasing competition for resources among the members of their large cohorts, while competing with smaller numbers of siblings for family resources.

The population dynamics of the demographic transition lead to a number of important features of today’s youth demography. Although the absolute size of the cohorts is historically unprecedented, the growth rate of the youth population reached a peak in most developing countries around 1970. Today’s youth population is growing at a rate well below the peak growth rates of the 1960s and 1970s, and that rate is continuing to decline in most developing countries. This is true even in
the group of poor countries with the slowest fertility decline. Similar patterns are observed for the percentage of the population aged 12–24 compared with total population. and for the ratio of the youth population to the working-age population. This ratio peaked in most countries in the 1970s or 1980s and is at or near its peak even in most of the countries with the highest fertility.

These trends in youth demography have potentially important economic implications. Literature on the impact of cohort size on labor markets in the United States and Europe suggests that large youth cohorts relative to the working-age population could have moderate negative effects on youth wages and employment. Research on the impact of age structure on economic growth in developing countries suggests that a large youth population relative to the working-age population can also have negative effects on savings and economic growth.

While this evidence suggests that large youth populations may have negative economic effects, it is important to recognize that most developing countries have already experienced the peak in their youth population relative to the working-age population. This ratio has declined considerably since its peak in most countries, and will continue to decline in the coming decades. Countries where the youth population will continue to grow beyond 2030 have the highest ratios of youth population to the working-age population, and many are just beginning to see the ratio decline. These countries face substantial challenges in providing youth employment and providing health and education services to these large youth cohorts. The ratio of youth to the working-age population is projected to decline in most of these countries over the coming decades, however, providing some relief as they try to meet the needs of their youth populations.

Endnote

1. The crude birth rate is the number of births a year divided by the total midyear population, expressed as a ratio of births per 1,000 population. The crude death rate is the number of deaths a year per 1,000 population. The rate of natural increase is simply the difference between the crude birth rate and the crude death rate. The rates shown are estimates of the average annual rates in each five-year period.

References


This paper goes beyond the conventional analysis of demographic trends and the usual indicators used to describe education and social development. It describes innovations along four lines that were recently introduced by the World Population Program of the International Institute for Applied Systems Analysis (IIASA). These innovations extend traditional demographic tools by widening the scope to include educational attainment and other relevant population characteristics as well as by dealing quantitatively with uncertainty in future trends. Since all of these methods focus on the dynamics of change over time, they are particularly well suited to describing the likely dynamics of the global youth cohort over the coming decades.

I first address new approaches to probabilistic population forecasting that clearly show that the degree of uncertainty differs by age and that the size of the future youth cohort is more uncertain than, say, the size of the cohorts reaching pension age. Next, I address the intergenerational dimension and introduce a new measure called the cohort succession ratio (CSR), which captures the dynamics of changing relative cohort size and is highly relevant in assessing the job opportunities of the youth cohort. In the third section, I broaden the purely demographic perspective and explicitly include the level of educational attainment in the forecasting models through the methods of multistate population projections. Finally, I discuss “literate life expectancy” (LLE), a new population-based, social development indicator that is the only such indicator that can be projected into the future with some confidence. In all four cases the paper introduces and illustrates the new methodologies only briefly, with references to more in-depth discussions.

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Capturing the Uncertainty in the Size of the Future Youth Cohorts

The future trends of all three components of demographic change—fertility, mortality, and migration—are uncertain, but few population projections adequately reflect this uncertainty. The most frequently used medium variant projection is based on specific assumptions about what is most likely from today’s perspective. But we already know that there is a high probability that the actual future trends will be either above or below the medium assumption. (Actually, the probability of exactly reaching the forecasted number is close to zero.) How should one deal with this significant uncertainty in population forecasting? This same question is asked in the title of a recent special issue of the *International Statistical Review* (Lutz and Goldstein 2004). The state-of-the-art report shows that the field of population forecasting is currently seeing a paradigm change, moving from scenarios to probabilistic forecasting.

Scenarios, as used in many fields of forecasting, are descriptions of possible future paths without any statement of their likelihood. Particularly in the cases of deep uncertainty, that is, when not only the parameters are uncertain but the entire model is uncertain, scenarios have become a standard tool for thinking about the future. In contrast to such deep uncertainty in population forecasting, the model as described by the cohort component model of population projections is known, and only the parameters (fertility, mortality, and migration) are uncertain. For this reason, it was recently possible to go beyond scenario analysis and move to fully probabilistic population projections.

Probabilistic, or stochastic, projections are an important methodological advance compared with the traditional “variants” approach used by forecasting agencies around the world for some decades, following the example of the United Nations Population Division. This traditional approach produces high and low variants in addition to the medium variant. The high-low range is supposed to indicate a “plausible range” of future population trends but can be defined only in terms of one of the three components of change. Hence, most high and low variants are based only on alternative fertility assumptions, while uncertainty in mortality and migration is disregarded. Such variants do not give the user any quantitative information as to the range the high-low interval is supposed to cover, that is, whether it covers 100 percent, 90 percent, or only 50 percent of possible future paths. Without such information, the user cannot know what to make of the high-low range. Other statistical agencies (including Eurostat) produce a larger number of scenarios based on alternative paths for all three components. Although more comprehensive than the high-medium-low fertility approach, it falls short of providing a clear sense of what outcomes are considered more likely than others. Only fully probabilistic population projections can provide information on relative likelihoods and consider the uncertainty in all three components of change.

The projections presented here are based on a synthesis framework combining expert views with models of time series analysis (Lutz, Sanderson, and Scherbov 2001). Their key finding is that there is a high probability (above 80 percent) that the world population will peak over the course of this century and then start to decline. The findings also show that significant population aging will occur in all parts of the world during
the 21st century. In short, where the 20th century was the century of population growth, with the world growing from 1.6 billion to 6.1 billion people, the 21st century will be the century of population aging, with the global proportion above age 60 increasing from 10 percent to between 24 and 44 percent (80 percent uncertainty interval, that is, covering 80 percent of the range considered possible). Even more significant, the proportion of the world population above age 80 will increase from 1 percent to between 4 and 20 percent, depending largely on the future course of life expectancy.

Such probabilistic projections have been produced by IIASA for 13 major world regions as well as a number of individual countries. As an illustration, figure 1 shows a probabilistic age pyramid for the year 2030 for Austria. The gray area represents the 95 percent uncertainty interval and clearly shows that the sizes of the different age groups are affected by very different uncertainties. The picture is dominated by the aging of the baby boom cohort with very little uncertainty. The original size of the cohort is known and its members are already beyond the mean ages of migration uncertainty, but they have not yet been affected by the significant uncertainty about the future trends in old age mortality. The figure also shows that the greatest uncertainty.

**FIGURE 1. Probabilistic Age Pyramid for Austria, 2030**

Source: Author's calculations.

Note: The shaded areas refer to 95 percent, 60 percent, and 20 percent uncertainty intervals.
by far concerns the size of the future youth cohorts, which depends on the highly uncertain future trend in fertility and the still uncertain number of future potential mothers. Figure 2 shows a long-term, stochastic projection of the population of China. It also reflects the current uncertainty about the size of the population in the youngest age groups as registered by the population census of 2000. All experts agree that the census undercounted children, but they are uncertain about the extent of the undercount. Recent probabilistic projections by Lutz and others (2005) include an uncertainty distribution about the current size of the youngest age groups in the projection model. The results show very clearly that given the history of the recent, very rapid fertility decline, the proportion of the Chinese population under age 15 will dramatically decline from almost a quarter of the population to somewhere between 10 and 15 percent after 2035. The uncertainty range mostly reflects the uncertainty about the future course of Chinese fertility. It clearly shows that a significant decline in the proportion of children is a near certainty in China.

Age-Specific Growth Rates, Cohort Succession Ratios, and the Global Youth Cohort

In a contribution to a recent book entitled Riding the Age Waves, Lutz and Sanderson (2005) give a systematic review of different approaches to dealing with the analysis of age-specific growth rates. In this context, they introduce the notion of cohort
succession ratios. In describing the analytical approaches to capturing age-
distribution changes over time, they refer to the fairly simultaneous, but indepen-
dent works by Samuel H. Preston (Preston and Coale 1982; Horiuchi and Preston
1988) and Nathan Keyfitz (1987, 1990). Following earlier works by Ansley Coale
on a generalization of the stable population model to deal with variable growth
rates, Horiuchi and Preston (1988) demonstrated how the widely available, but rarely
used, sets of age-specific growth rates in a population can be used to reconstruct all
of the pertinent features of a population’s demographic history that are required to
relate major demographic functions for a particular period to one another. They
derive a formula,

$$\ln \frac{N(a, t)}{n(a, t)} = -\int_{0}^{a} r(x, t) \, dx,$$

which implies that the current age distribution $N(a, t)$ can be obtained by deriving
the underlying stationary distribution $n(a, t)$ and converting it into the actual distri-
bution by using age-specific growth rates, $r(x, t)$, at age $x$ and time $t$.

The density function of the stationary population is derived from current births
and mortality schedules as given by $n(a, t) = B(t)p(a, t)$, where $n(a, t)$ is the size that
the cohort age $a$ at time $t$ would attain if the cohort had the size $B(t)$ at birth and had
mortality experiences as observed at time $t$.

This concept has been used mainly to make estimates from incomplete data. But
age-specific growth rates also provide useful information about the history of a
population for periods during which vital rates were not recorded. Whether and how
this approach can be used in addressing future population-related challenges needs
further exploration.

Nathan Keyfitz’s work on the issue essentially grew out of his empirical work in
advising the Indonesian government on population-related challenges and the analysis
of past and likely future world population trends. It may be best known under the
keywords “international youth cohort” (Keyfitz 1990). This work focused both on
the reconstruction of the onset of the population growth following World War II and
on the possible consequences of age-structural discontinuities. In a 1987 paper, he
reconstructed the onset of the “population explosion” through the analysis of inter-
cohort increases as given in more recent censuses. As an analytical tool, Keyfitz
(1990) mainly uses difference analysis. By describing the first and second differences
between the sizes of subsequent cohorts in an often graphic manner, the demographic
discontinuities become readily visible.

Although much of Keyfitz’s work in this field is being used for the same purpose
as that of Preston and others described above, namely, the reconstruction and decom-
position of past trends, Keyfitz also extended his work into the future and made
projections of likely future discontinuities as embedded in the pattern of cohorts
already born. Occasionally, he drew inferences beyond the limits of demography by, for
example, predicting that during the mid-1990s Indonesia might see some major polit-
ical shake-up caused by the numerous, rather well-educated youth cohort entering the
labor market (Keyfitz 1988). This bold forecast turned out to be quite accurate.
In studying intercohort changes, whether it is done through age-specific growth rates or differences between cohort sizes, both Preston and Keyfitz limit their focus to the comparison of adjacent cohorts. In the broader context of studying the implications of population aging and issues of intergenerational equity, it is useful to apply a more general scheme that describes the relationship between any two cohorts at a given time. To do this, Lutz and Sanderson (2005) introduced the notion of cohort succession ratios.

A cohort succession ratio can be defined as follows: \( CSR(a, x, t) = \frac{N(a, t)}{N(a + x, t)} \), with \( N \) standing for total population (of both sexes) and the indexes \( a \) for age (indicating either one- or five-year age groups), \( t \) for time, and \( x \) for the age difference in years for the cohorts to be compared.

In the case of \( x = 1 \) (or 5 in the case of five-year age groups), the pattern of CSRs should be very similar to that of age-specific growth rates and first difference because all compare adjacent cohorts, with only the metric being different.

Figures 3, 4, and 5 give empirical illustrations of the patterns of the different measures discussed over age and time for China. The data are five-year age groups from 1950 to 2050 as given by the UN (1999) estimates and projections. Figure 3 shows

FIGURE 3. A 3-D Plot of the Total Population of China (without Hong Kong) for Men and Women Combined, by Five-Year Age Groups and Five-Year Time Steps, 1950–2050
a 3-D plot of the total population of China (without Hong Kong) for men and women combined. It shows that in 1950, China had a very young age distribution with some scars of history. Up to the 1970s, the population in all age groups (interrupted by the turmoil of the 1960s) grew sharply, with the movement along cohort lines clearly visible as ridges on the graph. Mortality improvements are shown by the fact that the ridges become more horizontal over time, that is, there is less attrition of cohorts over time. After the 1970s low fertility results in declining initial sizes of birth cohorts with strong echo effects from the adult age distribution.

Figure 4 shows the cohort succession ratios as defined above for subsequent cohorts in China. This indicator shows a picture very similar to that of age-specific growth rates (not shown here). Since both measures operate on a relative scale and are more sensitive to data problems, especially in the older age groups with few members, this graph is restricted to the population below age 50. One thing is very clear
from the comparison of these figures. The strong fluctuations in Chinese fertility during the past decades are likely to produce strong waves of echoes, even in the case of almost constant future fertility as assumed by the United Nations.

One strength of the CSRs, compared with the other measures, is the possibility of comparing nonadjacent cohorts. Figures 5 to 7 present such indicators for China, Thailand, and Singapore. One ratio compares the youngest cohort (ages 0–4) to the cohort ages 25–29. Since this 25-year difference is close to the mean age of childbearing, the ratios can be roughly interpreted as a gross reproduction rate that to some degree adjusts for infant and child mortality, or a net reproduction rate not considering the mortality of ages 5–24. Before 1970 this ratio tends to be above two in all three countries, indicating that the size of the youngest age group was more than twice that of the age group ages 25–29. In all three countries fertility decline brings down the ratio thereafter. In Singapore, a level below 1.0 was reached in 1980. Singapore is special in the sense that immigration of young adults has a great influence on these ratios.

The other ratio plotted in figures 5 to 7 is of those ages 20–24 (a typical age for entering the formal labor market) and those ages 60–64 (a typical age for retiring, at least in industrialized countries). Hence, as a rough approximation, this ratio could possibly describe labor force replacement (those entering divided by those leaving). If this ratio is above 1.0, the labor force is growing. In all three countries, the labor force grew strongly between 1950 and the present. As to the future, the labor force replacement ratio will fall below 1.0 in Singapore around 2020. That is not likely to happen in China and Thailand until around 2030.

Source: Lutz and Sanderson (2005).

Source: Lutz and Sanderson (2005).


Source: Lutz and Sanderson (2005).
While such cohort and labor force replacement rates are likely to have significant consequences for labor markets and job opportunities for the younger generation, the macroeconomic consequences of such changes will depend not only on the number of persons in each cohort, but also on the human capital, that is, the level of education of the members of the respective cohorts. In part, one can expect that higher human capital may compensate for smaller cohort size. New methods for dealing with the forecasting of human capital are presented in the following section.

**Modeling the Education Dynamics of the Global Youth Cohort**

Over the past decades IIASA has developed so-called multistate population projection methods that can capture the dynamics of change for heterogeneous populations in which the subgroups interact with each other. These methods are particularly appropriate for capturing the dynamics of growth in human capital and for demonstrating how near-term investments in expanding educational enrollment, for example, will take decades to significantly improve the educational attainment of the adult population because education mostly takes place at a young age. Lutz and Goujon (2001) produced the first global projections of human capital at the level of major world regions. They show clearly that great population size combined with huge improvements in education over the past years will make China the human capital giant of the future. In this section I focus on the other population giant, India, and demonstrate the potential of comparing alternative education scenarios. In this context I also discuss the extent to which India may be able to use its current “demographic bonus” for further investments in education.

India will soon surpass China as the world’s most populous country. IIASA’s population projections suggest that India’s population will rise from today’s 1.0 billion to around 1.4 billion by 2050. The size of this expected increase is more than the entire population of the United States today or that of the European Union before its recent expansion. This significant growth is forecast even with declining fertility rates in India. In the 1960s, Indian women had almost six children on average; today this rate has fallen to three children, and further decline is expected. However, India has such a young age structure, with large numbers of women entering reproductive age, that its population will continue to climb. Along with this rapid growth, India will also experience rapid population aging. Increasing life expectancy and falling fertility will result in an almost threefold increase in the proportion of Indians above age 65 by the middle of the century. But between now and about 2025 there is still a window in which the proportion of children (below age 15) will fall from today’s 34 percent to 23 percent and the proportion of elderly (above age 65) will increase only moderately, from 5 percent currently to 7 percent. This temporary decline in the total dependency ratio, which presents a great opportunity for economic growth, has been labeled the “demographic bonus” or the “demographic window of opportunity,” which all countries undergoing demographic modernization experience for a limited number of years. It has been shown that this demographic bonus contributed significantly to the unusually high economic growth of the Asian tiger economies and is also behind the current phenomenal growth in China.
Whether India reaps all the benefits from this demographic bonus depends on the country’s investments in human capital formation. Human capital is defined here as the population (by age and sex) weighted by its health status and in particular by its level of educational attainment. In terms of education of the general population, India today lags well behind China. The first pyramid of figure 8 shows that large segments of India’s adult population lack any formal education. This is true for about half the working-age

FIGURE 8. Age and Education Pyramids for India under Different Scenarios

Note: The first pyramid shows distribution of education in 2000 by age and sex. The second shows education levels in 2030 if enrollment rates remain at today’s levels. The third shows education levels in 2030 if school enrollment rates reach those of the United States today.

population, with many more women than men without education. The pyramid also reveals, however, that recent education efforts have resulted in higher education levels for younger cohorts and a gradual shrinking of the gender gap. The population pyramid further illustrates that the group of highly educated Indians so visible in the field of information technology is only a tiny minority of the total population. However, this group is still large in absolute numbers because of the huge size of India’s population.

The next two decades of demographic bonus will give India the opportunity to make additional investments in the education and health of all segments of its population, and these investments will greatly affect the future human capital of the country. Pyramids 2 and 3 in figure 8 give two alternative population projections by level of education in 2030. In the first scenario, educational enrollment rates at all levels of education are kept constant at their current levels. As a result of the replacement over time of less-educated older cohorts by better-educated younger cohorts, the average educational attainment of the adult population will still increase substantially compared with today’s level. Despite these improvements, India’s human capital will fall significantly behind that of China and other developing nations that continue to invest heavily in education.

Pyramid 3 illustrates the consequences of another, extremely optimistic, scenario in which school enrollment rates by 2030 reach those of the United States today. Here, the gender gap completely disappears for the youngest cohorts, and universal primary and very high levels of secondary and tertiary education are achieved for the population below age 30 by 2030. These huge educational investments will not have much direct effect on the human capital of the older segments of the population, particularly those above age 50. Nonetheless, these people are still expected to benefit from the generally positive societal consequences of such developments. This scenario describes a future with high levels of social development, as well as a workforce that is highly competitive internationally. With the right macroeconomic policies in place, this scenario could result in spectacular economic growth over the coming decades.

Strong investments in education, particularly for women, are likely to slow India’s population growth. Women with higher levels of education have lower fertility rates than less-educated women. In India today, women without formal education have on average 3.8 children, while women with some tertiary education have fewer than 2.0. Although fertility is likely to decline for all educational groups, the differential by level of education is also likely to continue in the future. Hence, the uncertainty about the future educational composition of the population, which depends on future education policies, directly translates into uncertainty concerning future average fertility levels and, consequently, the future population size and, in particular, the future size of the youth cohort.

Literate Life Expectancy: A New Social Development Indicator Referring to Life Chances of the Young

In this final section, I introduce, describe, and illustrate an indicator that uses life table methods to combine age-specific survival rates with age-specific literacy in a form that has a clear interpretation as the number of years a person can expect to be alive and be able to read and write under current conditions.
Literate life expectancy (LLE) was first developed in 1995 as an indicator of social development and quality of life combining the two major dimensions survival and empowerment through literacy (Lutz 1994/95). This composite indicator has several advantages compared with other indicators, such as the widely used Human Development Index (HDI). Moreover, LLE is probably the only social development indicator that can be projected into the future on the basis of other already accepted forecasts. LLE has been applied as a descriptive indicator to many settings, ranging from a comparative analysis of Mexican provinces (Medina 1996) to a comparison of major world regions. Lutz and Goujon (2004) applied LLE to consistent global-level projections for the first time (see table 1).

LLE has several key advantages over other indicators of social development. First, it has a clear interpretation, which is an analogy to the individual life cycle. LLE may be directly interpreted as the average number of years a person lives in the literate state, that is, is able to read and write under current mortality and literacy conditions. It is not an abstract index on a relative scale but rather is expressed in terms of individual years of life, which is suggestive of real life experiences (just as GDP per capita is of real money). Also, unlike GDP per capita, LLE can be measured for men and women separately, which makes it very appropriate for gender-specific analysis. It can also be measured for other subgroups of the population.

Second, LLE can stand in its absolute value and does not require the more or less arbitrary assumption of an upper limit that changes over time (as HDI does). This is important for allowing comparisons over longer time horizons that include

### TABLE 1. Literate Life Expectancy at Age 15 for 13 World Regions, 2000–30, According to the “Constant” and “ICPD” Scenarios

<table>
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</thead>
<tbody>
<tr>
<td>North Africa</td>
<td>31.9</td>
<td>21.5</td>
<td>46.7</td>
<td>35.9</td>
<td>47.3</td>
<td>38.5</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>27.8</td>
<td>19.3</td>
<td>36.5</td>
<td>29.7</td>
<td>37.9</td>
<td>32.8</td>
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<td>North America</td>
<td>59.7</td>
<td>65.8</td>
<td>64.2</td>
<td>70.5</td>
<td>64.2</td>
<td>70.5</td>
</tr>
<tr>
<td>Latin America</td>
<td>46.5</td>
<td>47.8</td>
<td>56.1</td>
<td>60.2</td>
<td>56.1</td>
<td>60.2</td>
</tr>
<tr>
<td>Central Asia</td>
<td>52.2</td>
<td>55.4</td>
<td>57.0</td>
<td>62.5</td>
<td>57.0</td>
<td>62.5</td>
</tr>
<tr>
<td>Middle East</td>
<td>41.3</td>
<td>31.8</td>
<td>52.9</td>
<td>44.5</td>
<td>53.5</td>
<td>47.1</td>
</tr>
<tr>
<td>South Asia</td>
<td>29.0</td>
<td>16.1</td>
<td>44.0</td>
<td>31.2</td>
<td>44.2</td>
<td>34.2</td>
</tr>
<tr>
<td>China Region</td>
<td>48.6</td>
<td>39.8</td>
<td>57.2</td>
<td>57.9</td>
<td>57.2</td>
<td>57.8</td>
</tr>
<tr>
<td>Pacific Asia</td>
<td>39.4</td>
<td>35.5</td>
<td>50.8</td>
<td>50.0</td>
<td>51.0</td>
<td>50.6</td>
</tr>
<tr>
<td>Pacific OECDa</td>
<td>62.8</td>
<td>68.7</td>
<td>67.5</td>
<td>73.5</td>
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<tr>
<td>Western Europe</td>
<td>57.7</td>
<td>60.7</td>
<td>64.1</td>
<td>68.5</td>
<td>64.1</td>
<td>68.5</td>
</tr>
<tr>
<td>Eastern Europe</td>
<td>55.0</td>
<td>60.1</td>
<td>59.8</td>
<td>66.6</td>
<td>59.8</td>
<td>66.6</td>
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<tr>
<td>FSU Europeb</td>
<td>52.1</td>
<td>59.8</td>
<td>56.0</td>
<td>64.5</td>
<td>56.0</td>
<td>64.5</td>
</tr>
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a. Organisation for Economic Co-operation and Development members in the Pacific region.
b. European part of the former Soviet Union.
periods of major structural changes. In particular, no upper limit for life expectancy needs to be assumed.

Third, LLE can accommodate the fact that not all years gained at very high ages are high-quality years of life. There is increasing concern in industrial countries that certain parts of the additional years of life gained through increasing life expectancy are years of disability. In analogy to the concept of disability-free (or healthy) life expectancy, functional disabilities at the very high ages can be reflected in lower literacy rates at those ages, a feature that makes LLE particularly relevant for industrial countries. As a matter of fact, the question whether an elderly person is still able to read and write may be an even more useful disability indicator in terms of individual empowerment and mental quality of life than other commonly used indicators, such as the ability to climb stairs. The attempt to measure declining literacy with age will be left to future studies, however.

Finally, LLE is entirely based on clearly observable individual characteristics. In this respect, the fact that measures of income (through concepts of national accounting) are not reflected in LLE can be seen as a benefit in terms of purity rather than as a deficiency. Finding the right level of mortality and literacy is largely an empirical issue, once an operational definition of literacy is applied. In contrast, few of the usual measures of material wealth can be directly measured with people. They are, to a much higher degree, dependent on the specific accounting framework applied, whether only the formal economy is considered, whether the depletion of natural capital is taken into account, and whether real purchasing power or distributional aspects are considered. In the case of the HDI, the income component is greatly “massaged” in terms of purchasing power and other nonlinear transformations that the average user finds hard to follow. Moreover, average life expectancy and average literacy in themselves tend to be much less distorted by high extremes than is average income, because the possible range is much more limited. It may be wiser not to mix these two very different kinds of indicators, one based on individual characteristics, the other on an abstract economic accounting framework and certain specific transformations.

The calculation of LLE requires empirical data on age-specific mortality rates and the proportions that are literate within each age group. Age-specific mortality information is readily available in time series form for men and women for all countries in the world (for example, in the UN assessments, although partly based on model life tables) and in further breakdowns for a large number of countries. On the educational side, the Human Development Index requires data on total literacy and mean years of education, while LLE requires age-specific proportions literate. Empirical information on literacy is based on censuses or surveys. In both cases the information is usually collected in age-specific form, typically in five-year age groups. Hence, wherever total literacy is available, age-specific literacy also tends to be available. The UN Educational, Scientific and Cultural Organization (UNESCO) collects and publishes age-specific proportions literate for most countries, sometimes disaggregated by place of residence.

The calculation of LLE follows the regular life table method that is used to calculate the mortality-based life expectancy, adding only that the number of person-years
at each age is weighted with the age-specific proportion literate. This is in direct analogy to the well-established method of calculating tables of working life in which the \( L_x \) column (giving the person years lived at age \( X \)) is multiplied by age-specific proportions in the labor force. Literate life expectancy is always somewhat lower than regular life expectancy because early childhood is always an illiterate state. A potential problem lies in the fact that different data sources define the literacy status of children differently, that is, they assume that children become literate at different ages. In their estimates Lutz and Goujon (2004) standardized for these effects and thus made the data directly comparable. An alternative strategy is to simply leave out childhood literacy and compare the data on LLE at age 15. This indicator is presented in table 1. It gives the mean years a 15-year-old boy or girl can expect to still be alive and be able to read and write under current mortality and literacy conditions.

Past trends in LLE have been reconstructed for a substantial number of individual countries and estimated at the subnational level. Table 1 provides estimates and projections for all major world regions for the period 2000–05, for men and women separately, as taken from Lutz and Goujon (2004). It clearly shows that in developing countries, LLE at the age of 15 is generally higher for men than for women even though women usually live longer than men. The difference, therefore, is that women are less likely to be literate. In industrial countries, where nearly everybody is literate, longer female life expectancy dominates the picture.

As to the future, the results of two different scenarios are listed in table 1. The “constant” scenario keeps current school enrollment rates constant (reflecting assumed constant transitions to the literate state), whereas the “ICPD” scenario refers to the goals of the International Conference on Population and Development, held in Cairo in 1994, which are essentially the same universal primary education goals restated later as part of the United Nations Millennium Development Goals. Comparing the two scenarios shows two extremes: no further progress in enrollment and quick achievement of universal primary education. While there is no difference between the two scenarios for industrial regions, the difference can be several years for developing regions, particularly in Africa. It may be astonishing for some to see how much improvement in LLE happens between 2000–05 and 2025–30 even in the case of constant enrollment. In North Africa, for instance, male LLE at age 15 increases from 38.7 to 54.0 years. This is a consequence of the past improvements in literacy, which have made young men in North Africa much better educated than older men. This is another example of the great momentum in educational change. These data show that the choice between the two extreme scenarios makes less difference than the simple passage of time—in other words, the illiterate elderly die while the younger, better educated move up the age scale. This is a reason for some optimism.

In conclusion, this indicator of literate life expectancy summarizes two key dimensions of social development at a certain point in time. Actually, the young cohorts will be able to count on better conditions than what is currently seen as average conditions around them. While future improvement in the educational structure of the population is a near certainty in most countries (already preprogrammed in the current age structure of education), and life expectancy is very likely to continue growing in
most parts of the world, the global youth cohort in these two fundamental dimensions faces a brighter future than any other generation before them, even though many new challenges await them.

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Part II: The Transition from Schooling
Education and training matter. At the aggregate level they contribute to economic growth and transmit core values. At the individual level they greatly affect a person's life chances.

Specific objectives for tertiary education include improving the quality of education and training, widening access to reduce the effect of socioeconomic status on participation, and increasing the efficiency with which educational resources are used. Although these objectives have not changed substantially over the years, their operation has been affected by three drivers of change.

- Technological advance implies a need for more, more varied, and more frequent education and training.
- Demographic change implies a need to invest more in physical and human capital.
- However, increasing international competitive pressures exert downward pressure on fiscal capacity, a pressure exacerbated by other demands, notably population aging and increased spending on health care.

Thus there is a head-on collision between the need for more, and more diverse, tertiary education on the one hand, and fiscal constraints on the other.

This paper argues that there is a strong case for rebalancing public funding from tertiary education toward primary and secondary education. One part of the argument is that tertiary education is well suited to partial private finance, the other that rebalancing affects a person's life chances in ways that are equitable and that assist development outcomes. Both sets of arguments are developed in the next two sections.
Notwithstanding major measurement problems, there is strong evidence that resources are misallocated. Carneiro and Heckman (2002), for example, find that rates of return to human capital decline monotonically across nursery, primary, secondary, and tertiary education. The implication is that taxpayer subsidies should broadly follow this pattern. Yet in most countries public education spending per recipient rises across the education spectrum, being lowest for nursery education and highest for universities (for the case of the United Kingdom, see figure 1 in Alakeson 2005).

Lessons from Economic Theory

The next section sets out a strategy designed to ameliorate the situation. First, however, it is helpful to consider three strong lessons from economic theory: the days of central planning have gone; graduates should contribute to the cost of their qualifications; and well-designed student loans have core features.

The Days of Central Planning Have Gone

Students in tertiary education are potentially well-informed consumers and hence better able than planners to make choices that conform with their interests and those of the economy. Though that proposition is robust, there is an important exception: people from poorer backgrounds might not be fully informed, a fact that emphasizes the need for action to promote access, discussed in the next section.

On the supply side, central planning, whether or not it was ever desirable, is no longer feasible. In response to technological change, there are more tertiary institutions, more students, and vastly greater diversity of subject matter. Thus the myth that all institutions are identical and therefore should be funded equally is no longer sustainable. In principle, differential funding could be implemented by an all-knowing central planner, but the problem is too complex for that to be the only mechanism: mass tertiary education requires a funding system where institutions can charge different prices to reflect their different costs and missions.

Note that the same analytical approach leads to very different conclusions for primary and secondary school education, where the model of the well-informed consumer is less plausible and the case for a more standardized product stronger. The argument for regulated market forces in tertiary education is not primarily ideological, but rooted in the economics of information.

Graduates Should Contribute to the Cost of Their Qualification

Tertiary education creates benefits beyond those to the individual—benefits in terms of growth, social cohesion, and the transmission of values. Thus taxpayer subsidies are rightly part of the landscape. However, graduates also receive significant—often substantial—private benefits. Thus it is both efficient and fair that graduates (not students) should bear some of the costs.
The point bears emphasis. Many people argue that tertiary education is a basic right and should therefore be financed out of taxation. There is a range of counter-arguments. First, the fact that something is regarded as a right does not mean that it should be tax-financed. Access to nutrition is a basic right, yet nobody argues that it is wrong to charge for food. The moral imperative is not about instruments (such as prices) but about outcomes, that is, a bright person should be able to go to the best school or university irrespective of his or her financial circumstances. Second, the worldwide collision between expanding tertiary education and fiscal pressures means that exclusive reliance on tax finance creates downward pressure on quality. Third, the historical record in many countries shows that tax finance has done little to widen access. Finally, as noted, tax finance is deeply regressive. If it is unfair to ask graduates to pay more of the cost of tertiary education, it is even more unfair to ask nongraduate taxpayers to do so.

However, most students cannot afford to pay for tertiary education, a fact that leads to the third set of lessons from economic theory—about the design of student loans.

Well-Designed Student Loans Have Core Features

An essential feature of well-designed student loans is income-contingent repayments—repayments calculated as X percent of the borrower’s subsequent earnings, collected alongside income tax or social security contributions, and continuing until the person has repaid what he or she borrowed. Such payments improve efficiency by protecting borrowers and lenders from the uncertainty of a loan that is not secured by any physical collateral: borrowers are protected because each person’s monthly repayments are calibrated to his or her subsequent earnings, and lenders are protected from the risk of making an unsecured loan, not least because repayments are collected alongside income tax. Repayments contingent on income also protect access because the loan has built-in insurance against inability to repay. Such repayments have a profound effect that is insufficiently understood (for a fuller discussion, see Barr, 2001, ch. 12).

Second, loans should be large enough to cover fees and, at least in richer countries, also realistic living costs, resolving student poverty and promoting access by making tertiary education free at the point of use.

Finally, loans should attract an interest rate broadly equal to the government’s cost of borrowing. The question of interest rates bears examination. Many countries, including Australia and the United Kingdom, offer loans at a zero real interest rate, that is, there is a blanket interest subsidy. This policy achieves not a single desirable objective. The subsidy is enormously expensive in fiscal terms. Because of the resulting fiscal pressures, loans are too small, harming access. The subsidies also crowd out university income, harming quality. Finally, the subsidies are deeply regressive.

The regressivity point merits close attention.

• The subsidies do not help students (graduates make repayments, not students).
• They give relatively little help to low-earning graduates, since unpaid debt is eventually forgiven.
• They do not help high-earning graduates early in their careers—with income-contingent loans, monthly repayments depend only on earnings; thus interest rates have no effect on monthly repayments, but only on the duration of the loan.

• Thus the major beneficiaries are successful professionals in mid-career, whose loan repayments are switched off earlier because of the subsidy than would otherwise be the case. This is not the target group that policy makers had in mind.

In contrast, as discussed below, targeted interest subsidies have much to commend them.

The Strategy

The theory discussed in the previous section suggests a strategy with three elements: variable fees to assist the efficient allocation of resources; well-designed loans to provide consumption smoothing; and measures promoting access to improve equity.

Element 1: Variable Fees

Efficiency Arguments. In this approach, tertiary institutions are financed from a mix of taxation and tuition fees. Each institution sets its fees, which for each student are covered by his or her loan entitlement. Variable tuition fees are controversial in Europe but less so in Central and Eastern Europe, and they are taken for granted in the United States and many countries in Asia. Fees give institutions more resources to improve quality and, through competition, help to improve the efficiency with which those resources are used, thus improving quality and diversity and assisting choice. As discussed earlier, the argument for competition is rooted in the idea that students in tertiary education are broadly well informed and that their information can be further improved. Thus the argument is not for law-of-the-jungle competition but for regulated markets.

Equity Arguments. Perhaps counterintuitively, variable tuition fees are also fairer than other approaches, notably by facilitating redistribution from better-off to worse-off. One of my earliest newspaper articles criticized the 1974 Labour government in the United Kingdom for restoring universal milk subsidies. The aim was to help the poor, but the subsidy was worth more to the middle class because they drank more milk. It would have been much more progressive to have charged an unsubsidized price for milk, and used the resulting savings to increase benefits designed more explicitly for poverty relief.

Variable fees replace the less progressive strategy, price subsidies, with a more progressive approach—income transfers targeted at particular people. This strategy has two elements. First, variable fees introduce higher charges for those who can afford them (note that with income-contingent loans, “can afford” refers to earnings as a graduate, not to family circumstances while a student). Second, redistributive policies help poor people to pay those charges.
To an economist, these elements are staggeringly familiar: the first, a price increase, represents a movement along the demand curve. Taken alone, this element would harm access. However, the fees are deferred (Element 2, below), and there are targeted transfers to groups for whom access is fragile (Element 3). This moves their demand curve outward.

Thus the strategy is deeply progressive. It shifts resources from today’s best-off (who lose some of their fee subsidies) to today’s worst-off (who receive financial support) and tomorrow’s worst-off (who, with income-contingent repayments, do not repay their loan in full).

The obvious argument against fees is that they deter students from poor backgrounds. That is true of up-front fees, but not where students go to university or other tertiary education free and make a contribution only after they have graduated. This brings us to the second part of the strategy.

**Element 2: A Well-Designed Loan Scheme**

Student support is through loans with income-contingent repayments. The loan entitlement should be large enough to cover fees and, in richer countries, also living costs, and should carry an interest rate broadly equal to the government’s cost of borrowing.

Some amplification is needed about interest rates. The default rate should be related to the government’s cost of borrowing. However, if someone has extended spells out of the labor force, her loan can spiral upward. In terms of strict rationality that should not matter, since repayments will never exceed X percent of monthly earnings, and in a well-designed scheme the loan is eventually forgiven. But in practice, large nominal debts worry people. Thus, although there is a strong case against blanket interest subsidies, there are good arguments for targeted interest subsidies, discussed shortly, for people with low earnings or out of the labor force.

If loans are large enough to cover fees, the package closely resembles “free” tertiary education financed through taxation. Students pay nothing at the time they go to university. Part of the cost is paid through taxation and part through their subsequent income-contingent repayments. From the viewpoint of the graduate, the repayments are different from tax in only two ways: they are paid only by people who have been to university and benefited financially, and they do not go on forever. Thus income-contingent loans are logically equivalent to free tertiary education financed by an income-related graduate contribution.

The viewpoint from a country’s Ministry of Finance is somewhat different. Though loans bring in private resources in the longer term, a loan scheme, by definition, has up-front costs because it lends the money first and receives repayments later. Thus there are major advantages if students can borrow from private sources, but—particularly in a developing country—private lenders will charge a substantial risk premium unless there is a government guarantee; and if there is a government guarantee, the loans will be classified as public spending. Potential solutions exist in this highly technical area but require considerable care in design.
Element 3: Action to Promote Access

The Roots of Exclusion. It can be argued that there are three roots to exclusion:

- Shortage of money, that is, the student comes from a low-income family
- Shortage of information, that is, the student is badly informed about the benefits of education and training; information in this context includes aspirations
- Shortage of education, that is, attending a failing school

Thus a person might not participate in tertiary education because he or she left school at the minimum leaving age because of any combination of these three shortages; never considered staying on, not least because of a shortage of information; thought about staying on but thought, wrongly, that he or she did not have the capacity to succeed; or was debt averse.

Debt Aversion. It can be argued that income-contingent loans have built-in insurance against inability to repay and, to that extent, are a no-lose bet. Provided loans are large enough to make tertiary education free at the point of use, the argument continues, such loans are all that is needed.

If all students are well-informed, that argument is strong, and consumption smoothing through income-contingent loans is, for the most part, all that is necessary. But not all potential students are well informed. In particular, they might underestimate the benefits of tertiary education or overestimate the costs, or both. There is empirical support for this conjecture. Usher (2005) finds that the average Canadian underestimates the benefit of university education by a factor of five. In those circumstances, given what they know, it is rational for people to be unwilling to take out a loan, even one that is income contingent. This is the origin of so-called debt aversion. For groups to whom the analysis applies, loans alone are not enough, hence the third element in the strategy—measures designed to promote access directly.

Policies Must Address All Three Roots of Exclusion. Measures to address financial poverty should be wide-ranging. For example, an income-tested grant for children above the minimum school-leaving age would encourage them to complete school. An income-tested grant or scholarship could cover some or all costs at university or college. There are advantages in offering full scholarships to first-year students from poor backgrounds, who may not be well informed about whether they are well suited to university. By the end of their first year they are no longer badly informed and, if doing well, are more prepared to finance the rest of their degree, at least in part, through a loan. Such policies could be supported by financial incentives to tertiary institutions to widen participation, and by extra resources to provide additional intellectual support at tertiary institutions for students from disadvantaged backgrounds.

A second set of money measures supports access by offering assistance for people with low incomes after graduation. Targeted interest subsidies could freeze the real
value of debt of people with low earnings, including people who are unemployed. People with low lifetime earnings could be protected by writing off any loan not repaid after (say) 25 years. The loans of workers in the public sector could be progressively written off. People caring for young children or elderly dependents could be granted loan remission.

Information poverty, the second strategic impediment to access, is inadequately emphasized. Action to inform schoolchildren and raise their aspirations is therefore critical. The saddest impediment to access is someone who has never even thought of going to university.

Finally, problems of access to postsecondary education cannot be solved entirely within the tertiary education sector. More resources are needed earlier in the system, not least because of the growing evidence that the roots of exclusion lie in early childhood (Feinstein 2003).

Concluding Thoughts

Tertiary education should be seen in the broader context of education over a person’s life course. There is growing evidence of the complementarity between different levels of education: tertiary education is more productive if it rests on a solid foundation of high-quality early education; and early education is more productive if it is reinforced by secondary and tertiary education. Thus, the challenge is to finance tertiary education in ways that promote quality and that avoid crowding out primary and secondary education.

In developing countries a challenge that haunts commentators is how to design a loan that mimics income-contingent repayments when there is a large informal sector and only a limited capacity to collect income tax. This is, perhaps, the greatest challenge of all.

If the necessary prerequisites are not in place, the wrong option is to instigate a large-scale loan scheme and assume that things will somehow turn out right. What other options might be available?

- One approach is to finance tertiary education out of taxation on a small scale, if only to provide good quality education for a few students.

- Another is to rely on private finance, accepting that this will restrict access to students whose families can afford to pay and, perhaps, a small number on scholarships.

- Another option is to combine the first two approaches, using taxpayer resources to pay for (say) two years of tertiary education, leaving the rest to private finance.

- Finally, a country could introduce a small-scale loan scheme, accepting that it will have a high default rate and high administrative costs.

The disadvantages of private finance or a premature loan scheme are clear. It may be that targeted taxpayer resources offer the best short-run use of limited public
finance and, by avoiding a loan scheme that becomes discredited, leave open the
option of introducing loans when institutional capacity allows.

That said, a loan design that makes possible the collection of repayments even in
countries with limited institutional capacity would be an enormous advance. Exploring
options for such a scheme should be an urgent agenda item for policy makers.

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Schooling: An African Perspective

WILLIAM M. LYAKURWA

The premise of this essay is that schooling is more than academics: it involves traditions, culture, socialization, and values. Oral literature, particularly as conveyed when grandchildren sit around their grandmother or grandfather in a story-telling fashion, has played a major role in the education and upbringing of young children in traditional societies. It is therefore critical that a perspective on the influences on schooling—especially in sub-Saharan Africa—go beyond what is happening in the classroom.

I begin with a look at some of the ideal attributes of schooling and the way schooling influences and is influenced by a changing social environment. The presentation then broadens to incorporate the less-than-ideal situation that confronts schooling and education in the real world, with attention to sub-Saharan Africa, and considers some of the steps that can be taken to improve the situation. The discussion concludes with a specific focus on the contribution of the African Economic Research Consortium.

In an Ideal World

Like charity, schooling begins at home. The traditional role of the family has always been to instill in children the values, traditions, and culture of the society in which they live, as well as to train them in the skills required to help the society flourish. The family is thus the first stage in the socialization and acculturation of society members. In an ideal world, home is where children begin to learn acceptable behaviors; gender roles; concepts of justice and fairness; attitudes toward work, education, and other people; and trust and self-confidence. At home, in the family, children are schooled in the fundamentals they need to function successfully and responsibly so that they can take their place in society (UNFPA 2004a).

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As a general rule, school itself—the classroom—represents a child’s first actual exposure to “the world.” Even here, academics are only part of the story. The intention of classroom schooling is preparation—for life in the wider society, for a role in the workforce. Formal schooling thus continues the foundation of values and socialization that started at home and is or perhaps should be vocational as well as academic.

Education of this more formal sort has long been a primary objective of governments, religions, and other institutions because it builds and shapes a capable citizenry and workforce and generates like-minded citizens. It also has substantial direct and indirect effects on productivity, health, and other components of development. Education at least through the primary level has thus been a key element of many international agreements, from the Addis Ababa Declaration in 1962 to the African Charter on the Rights of the Child and the Millennium Development Goals (MDGs) to eradicate extreme poverty and hunger.

Home schooling should not stop when the child goes to school, however. Throughout children’s growing years, home learning should play a continuing role in the process of acculturation. Not least, home schooling serves as a kind of sounding board and reality check, assisting children to assess the values they are exposed to at school and in the world and to place school learning in a personal context. From the other direction, home schooling is an important key to the cultural transition African societies are going through because of its contribution to the formal education of the children. Readiness for school learning begins at home, and the home environment has long been shown to have a major influence on children’s success in school. Parents who read, for example, and who create a reading culture in the home positively affect their children’s reading habits (Machakanja 1999: 13). Similar supportive attitudes also contribute positively to children’s interest and success in mathematics (Ndhlovu 1999: 204). In a wider sense, the current state of well-being of any individual will very likely influence the future state of their children.

**Reality**

Reality also begins at home. One of the more unpleasant aspects of reality is persistent gender bias. It is not news that societal attitudes toward the education of girls and women are reflected and reinforced within the family: girls’ education is simply not a consideration for far too many families in sub-Saharan Africa; many others are too poor to send all of their children to school and if the choice must be made, the sons are favored over the daughters. Where girls are allowed to start school, their retention is often uncertain for a variety of reasons. Schools may be too far away for girls to trek safely. Home workloads—including fetching firewood and water and tending younger siblings—may prevent a girl-child from doing her schoolwork. Other reasons are early pregnancy and forced early marriage, gender violence at school, and low expectations of girls’ academic performance. Many schools, especially in rural areas, lack the water and sanitation facilities that would allow girls to manage
their menses properly and they simply stay home—effectively missing up to a week of school every month (UNFPA 2004b). With this added to the stereotyping and harassment they experience, and in the absence of effective role models, they become discouraged and drop out (UNFPA 2004a).

Attitudes that sideline girls persist in the face of substantial evidence of the real economic payoff that comes from educating girls and women. The failure to educate girls and women has cost Africa dearly—studies indicate that average growth rates in the region over the last 30 years would have doubled in the absence of gender inequalities in education (GRE Consult 2003). Women who are educated beyond primary school level are more apt to work in wage employment (Sackey 2005). Moreover, workers whose mothers have been educated beyond primary level earn about 19 percent more, on average, than those whose mothers are less well educated (GRE Consult 2003). Demographic and health surveys in a number of African countries show that a 10 percent increase in female literacy rates reduces child mortality by 10 percent, but changes in male literacy have little effect (UNFPA 2004b). Kenya’s most recent Demographic and Health Survey (2003; NCPD 2004) added to the conventional wisdom indicating that educated mothers have healthier children: mothers with primary schooling had fewer children, were more likely to seek pre- and postnatal care and to have their children immunized, and were generally better informed and able to take better care of their children. Educated mothers are also known to be more likely to send their children to school (DSA/AUC 2005).

But what of the boys? Schooling—and formal education—cannot be one-sided in either direction. Many traditional cultures see little value in educating either boys or girls. Children are the family labor force, and their contribution often makes the difference to a family’s survival. Pastoralist societies may withdraw their boys from school (assuming they are enrolled) to tend cattle. Rural children may miss long periods of school during times of peak farming activity. And given the patriarchal leaning of many cultures, single mothers may have an extremely difficult time controlling their sons once the boys have come of age in the society. It should go without saying that benefits of education are important for boys as well—in terms of family cohesion, capacity to participate in the workforce, and in general the ability to contribute to social and economic development. Moreover, a study in Ghana found that a husband’s schooling had a significant negative impact on family size. Like their better-educated wives, husbands with postprimary education are more likely to prefer smaller families (Sackey 2005).

Many countries in sub-Saharan Africa had made impressive gains in universal primary education by the late 1980s and early 1990s, with about equal ratios of girls to boys enrolled in school, at least in the early grades. During the 1990s, however, as a result of the combined impact of structural adjustment, population pressures, and escalating poverty levels, many of those gains were lost. In 2001 the ratio of boys to girls at the primary school level was 1:0.8 in most African countries. The proportion slipped to 1:0.6 at the secondary school level, and plummeted at the tertiary level, where only one student in three is a woman. Thus the first deadline for the third MDG (gender parity in primary and secondary education by 2005, and at all levels
by 2015) has been missed and the second is threatened. But parity is only part of the story. Despite the good progress toward universal primary education in some countries, only 18 countries in Africa report that they would likely meet, would probably meet, or have the potential to meet the second MDG target of universal primary education by 2015 (DSA/AUC 2005). Across the continent total enrollment rates are still extremely low, averaging only 57 percent, and barely one child in three will finish primary school (DSA/AUC 2005).

Clearly the success of universal primary education does itself present a major challenge to schooling in Africa. Ugandan educators were astonished at the number of children who appeared at their schools when the government mandated universal primary education in that country. “We had children coming out of the forest in numbers we had never anticipated,” one diocesan school leader in Western Uganda said back in 2000. His concern even then was how the education system was going to cope when all those children reached secondary level. Kenya, too, reeled under the enrollment influx when universal primary education was introduced in 2003. “Children” of all ages, including grandparents, turned up to take advantage of the chance to learn, increasing the population in school by well over a million and upsetting already tenuous pupil-teacher ratios.

If primary the education is at a crossroads, secondary levels are even more so. The quality of primary education is questionable, as too few children pass the comprehensive national examination that enables them to continue (in Tanzania, for example, the primary school pass rate is about 20 percent, according to Mushi, Malekela, and Bhalalusesa 2002: 2). Thus children are not well prepared for secondary education. Moreover, places in secondary schools are too few for the ever-growing numbers of children completing primary school (in Kenya, barely half of primary school leavers find a place in public secondary schools). Furthermore, with the privatization of education and the introduction of cost-sharing measures, access to secondary education has become even more difficult, particularly for the very poor in society. Parents may not see a need for sending their children, especially girls, who are disadvantaged from the beginning, beyond primary school.

At either the primary or secondary level, the curriculum has often tended to be too academic and does not prepare children for vocational training. This has led to a huge influx of rural school leavers and dropouts to urban centers, with grave consequences. Many of the children wind up on the streets, where they have no protection or shelter and are thus exposed to violence and disease. And away from the sanctions of family restrictions, they also have no real moral guidance. Back home in their rural areas, there is a serious shortage of labor, with the consequent effects on productivity and very low output of both food and cash crops. Finally, the already high unemployment rates in urban centers go higher, with all the accompanying social consequences—crime, prostitution, drug peddling, and the like.

All these out-of-school children also require attention and further schooling. Without the structure of formal education, it is difficult to provide them with the information they need to function effectively in society. Many nongovernmental organizations have identified this group as an important target for reproductive health and
HIV/AIDS awareness programs in particular. There is also a wide array of nonformal education programs—with a similarly wide range of effectiveness—that focus on young people who are unable to attend school for whatever reason (Mushi, Malekela, and Bhalalusesa 2002). Clearly more needs to be done to reach these marginalized children.

**Threats to Schooling (and Education) in Sub-Saharan Africa**

Arguably the four biggest threats to schooling are poverty, the size of the school-age population, the HIV/AIDS epidemic, and social evolution, and not always or necessarily in that order. Poverty conditions on the continent are well known and will not be explored further here, except to note that poverty affects women and children directly and thus has a major impact on the functioning of the family, which is the basic unit of schooling. For example, poor nutrition in a child’s early life—a frequent direct result of poverty (and their caregivers’ ignorance)—leads to stunting and often persistent health effects and lower educational performance and cognitive ability. Besides, poverty reinforces the instinct for survival and affects time allocation between schooling and paid labor.

In fact, the problem of poverty in Africa runs through all other variables that affect access to and quality of schooling because it affects the capacity to seek schooling and to deliver education, whether at the family or the formal level. Families are too busy fighting to survive and no longer have time to sharpen their own knowledge and skills, let alone impart them to children. Even where governments declare free primary education, the burden of other school necessities overrides the ability of parents to keep the children in school with good performance. In the wider societal and national sense, at the formal level, poverty means that low-income countries may not have the resources available to provide quality education for all their children. Where choices have to be made, they are often based on political expediency. This despite the long history of commitment by African governments to education.

**Too Many Children**

Africa is a young continent—more than half the population is under the age of 25 and a third is of school age. Fertility rates and population growth rates are the highest in the world. Childbearing—though occurring at increasingly older ages—generally begins early, and three-quarters of African girls are pregnant or mothers by the time they are 19 years old (UNFPA 2004b). Africa’s high infant and child mortality rates, moreover—the risk that children will not survive beyond a certain age—contribute to the high fertility rates. Even in countries that have managed to lower their fertility and population growth rates, the phenomenon of population momentum will keep the proportion of the young in the population quite large for years to come.

The impact on schooling and education is obvious. More children require more teachers, more schools, more learning materials, more placements in higher levels of
education, and ultimately more jobs. All of these are currently beyond the capacity of most African countries, especially in sub-Saharan Africa. At the family level, particularly in this era of the decline of the traditional extended family and the seemingly inexorable expansion of poverty, more children strain family resources and divert attention from schooling to survival.

In the Machakanja (1999) study, for example, rural parents were much less likely than urban parents to provide learning resources for their children. Poverty is one reason, but it is likely exacerbated by the larger families reported in the rural area.

**HIV/AIDS**

The HIV/AIDS epidemic is devastating families and education systems alike. According to UNFPA (2004a: 15), “What distinguishes Africa from other parts of the world is that the family is the centre of the transmission [of HIV]. The disease takes an unusually heavy toll on members of the same family and household.” Children, especially girls (who are themselves more likely to be infected than boys their age), must often assume the role of caregivers for ailing parents and other family members, thereby being forced to abandon schooling even where free education is provided. Estimates of the number of AIDS orphans in sub-Saharan Africa range from 11 million upward; one projection predicts that by 2010 as many as a quarter of African children will be orphaned (UNFPA 2004b). These are children who have lost their family anchors and probably will not remain in school. They will reach adulthood while perhaps not reaching maturity because they have been emotionally traumatized and educationally and financially deprived. With the resources and capacities of extended families stretched beyond endurance, traditional concepts of the home as the foundation of schooling do not apply. Children in such a situation grow up without the necessary grounding in values that enables them to function effectively as well-adjusted, productive adults.

For reasons that are not altogether clear, education systems are particularly vulnerable to the impact of the epidemic. Teacher mortality in Zambia is estimated to be 70 percent higher than in the general population. Some countries report a 2–3 percent loss of teachers to AIDS, as much as half of those trained each year (UNFPA 2004b). Kenya, for example, is losing over 2,000 teachers a year to AIDS-related illnesses, about 1 percent of the teaching force. Training and replacement of teachers cannot keep up with such losses. Tens of millions of children have had their education disrupted by the loss of teachers to AIDS.

**Social Evolution**

There can be no doubt that the family as an institution is changing rapidly in Africa and the rest of the world. The shape and functions of families are affected by both internal and external influences as well as the need to respond to the realities of the
environment. Not all of these influences are positive. The role and capacity of Africa’s extended family are eroded by the stress of the AIDS epidemic and the increasing tendency toward more nuclear units. Migration in search of better job opportunities, whether across the country or across national borders, may provide a better financial income, but it separates spouses from each other and children from the absent parent. Frequent results are the breakdown of marriage bonds and the alienation of the children. Conflict and violence, so common in Africa, with their consequent displacement of populations, do literally destroy families and leave vulnerable children to grow up (if at all) without a firm grounding in family values. Globalization and mass media present profound challenges to traditional family value systems, especially for the youth.

With the impact of migration, conflict, and the disintegration of traditional cultures, often multiplied by poverty, women who are left in the position of de facto (if not de jure) household heads must contend with the full burden of maintaining their homes and children single-handedly. As families are stressed, and as traditional norms erode, many aspects of schooling such as fundamental values are similarly being lost. Lacking education, African women do not have the capacity for full participation in the labor market, condemning them and their children to a vicious circle of poverty. Where they do participate, their wages are lower than those of men (but that is generally true even for educated women and can be seen around the globe, not just in Africa). Children, of course, are the biggest casualties of these changes.

Social evolution has also brought an array of attitudes toward education that have both positive and negative effects. These attitudes sometimes contradict each other and may threaten the quality of schooling and hence the value of schooling to the individual and the nation.

That education is highly valued in Africa is not disputed. Parents, often themselves uneducated, make sometimes extreme sacrifices to educate their children, if necessary sending them off to relatives to improve access to schooling. Families who can afford to do so send their children to boarding schools from early primary levels—sometimes this is to ensure a better education, but it may also be just to get the children out of the way of the parents’ career progression or other pursuits. Even when well intended, this separation from the parents for long periods interferes with the fundamental schooling role of the family as it cuts children off from exposure to the parents’ and family’s values. At the same time, parents too often conclude that their own role in the child’s schooling ends when the child goes off to school. They regard anything to do with education as the teacher’s responsibility and may not feel competent to assist their children or even question their progress (Machakanja 1999, among others).

Again, education is considered so important that children spend long hours in school and doing homework, thus reducing opportunities for other aspects of schooling that are critical to their development. National tests literally make or break a child’s future and must be passed at all costs, including even cheating. Moreover, cram reviews during school holidays deprive children of much needed rest and time at home.
One of the more insidious attitudes is that once educated, a person should not have to work in anything other than a white-collar position. Any job that involves physical labor is shunned. In the face of massive unemployment, many countries in sub-Saharan Africa experience severe shortages of farm labor because young people are not interested in such work (Olomola 2005).

What This Portends for Africa

“Education is an investment with a big payoff,” according to Lungwangwa (1999: 128), who points to the contribution of formal education to national development and technological achievements. Moreover, education can lessen gender and ethnic or racial inequalities (Gordon, 1995, cited in Assani, 1999).

If the biggest threats to schooling in Africa are poverty, HIV/AIDS, social evolution, and the sheer numbers of children of school age, it stands to reason that improving schooling necessitates measures for addressing all of these factors. In many cases this will require a direct focus on the family, which continues to be a viable social institution and the first force in building a cohesive society. African family ties generally remain strong, and family concerns exert an important influence on individual decisions. Despite its inherent strength, however, the family in Africa—indeed in the world—is being altered dramatically and probably irrevocably and requires considerable policy support to enable it to function effectively.

UNFPA (2004a), in its report on the African family, makes a number of recommendations that are relevant to this perspective on schooling:

- Center poverty reduction strategies on the family. The promotion of smaller families, with healthier, better-educated children who are better equipped to earn a living, must constitute an integral element of such strategies.

- Approach poverty alleviation as a continuous, interactive process of interventions, essentially by improving the quality of life of poor people in general and women in particular.

- Ensure that policies aimed at restructuring the African economy, which is based largely on family-run agricultural units and other microenterprises, take full account of the nature of the underlying family system.

- Reform education systems and institutions to provide life-long functional literacy for young people, and make them employable in the highly competitive, knowledge-based and rapidly globalizing labor market.

Stronger families would be able to play their formative role more effectively and thus the quality of schooling provided in the home would improve. At home or at school, education improves access to knowledge, information, and ideas, as well as the ability to use these to best advantage. I have already noted the impact of women’s education on the health and well-being of children. The World Bank has said that eliminating gender disparities in education is one of the most effective development
measures a country can take. Returns to investment on women’s education and health are significantly greater than those for men because of the strong relationships between women’s schooling, health, nutritional status, and fertility, on one hand, and the synergetic effect of this combination of factors on Africa’s future education, health, and productivity, on the other (UNFPA 2004b).

But I stress again that schooling should not be limited to academics. Young people, girls as well as boys, must be given information on life skills, reproductive health, sexuality—and the consequences of decisions. They require training in communication, negotiation, and creative thinking. All this should be provided in an atmosphere that builds and supports self-confidence and self-awareness, compassion for others, and commitment to the wider good.

Where AERC Comes In

How, one may well ask, does this concept of schooling relate to AERC, the institution I serve as executive director? AERC’s business is to build capacity for policy-relevant economics research. It does this in two ways, through learning by doing research and through collaborative training programs at master’s and PhD levels.

Thus we approach the issue of schooling from several directions. One is through our mandate to contribute to economic development in sub-Saharan Africa by producing highly skilled members of the economics profession. Our intention is that these individuals and the work they do will ultimately have a positive impact on the policy environment on the continent and the extent and quality of schooling available to Africa’s young people. Another stems from our insistence on high quality in the candidates for our programs. We thus have a vested interest in shoring up the quality of educational systems. We are particularly concerned about the scarcity of women in the field of economics in Africa and trace that lack all the way back to primary school levels and the disadvantages girls face in getting into and staying in school. If only one of three students at tertiary levels is female, and she has all along had to cope with stereotypes that discouraged her from studying math and abstract technical subjects, the chances are extremely slim that she will be enrolled in an economics curriculum. We would like to see that change.

Our strategic plan for the period 2005 to 2010, therefore, calls for an in-depth study of the status of women in economics research and training. We hope to identify the constraints confronting women’s participation in economics and formulate recommendations for addressing them. We have also reorganized the themes of our capacity building research mode to incorporate issues intended to have greater appeal to women and other marginalized groups.

Moreover, for a number of years AERC has been deeply involved in studying both the multiple roots of poverty and the contributions to economic growth in sub-Saharan Africa. These are directly relevant to the first of the Millennium Development Goals (cutting poverty in half by 2015), as well as to all the other variables that affect access and quality of schooling—at home and at school—because they affect
the capacity to seek schooling and deliver education. Because growth is essential but not sufficient for poverty alleviation, we have been particularly interested in how to target policies to ensure that economic growth directly benefits the poor. Members of the AERC network have contributed significantly to the development of poverty policies and poverty reduction strategy papers in their respective countries. In many respects it seems like a race against time. The destructive forces of poverty threaten the basic values and institutions of societies as people struggle simply to survive. We must therefore ensure that economics goes beyond the theoretical confines of esoteric econometric models. The African emphasis in our programs intends to make the results real and usable in an African context. We can no longer remain gender blind and assume that models that apply in other economies necessarily fit Africa’s complex approaches to the division of labor, access to land, decision-making powers, and other elements of economic activity.

Mwalimu Julius Nyerere, Tanzania’s first president, is famously quoted as saying that “a person does not walk very far or very fast on one leg. How can we expect half the people to be able to develop a nation?” His observation was prescient—predating the gender equality MDG by some 30 years. Development requires opportunities for all to contribute to the best of their ability, regardless of their gender. AERC has embarked on a policy of requiring the systematic collection of gender disaggregated data in the research projects we support so that we can begin to know more precisely the roles of women in the economies of sub-Saharan Africa. With that background we hope to provide policy makers with evidence-based results that enable them to target poverty-reducing and growth-enhancing policies more specifically at measures that will directly affect women and children. Improving the lot of families will go a long way toward improving schooling—in all its nuances—in sub-Saharan Africa.

References


The revival of the theory that economic growth is dependent on the growth of human capital in the 1990s has renewed interest in the nexus of human capital investment and growth (Barro and Sala-I-Martin 2004). Human capital is accumulated through a complicated decision-making process, in which the current outcome depends not only on the current decision but also on past decisions. Human capital is typically represented by years of completed schooling, which is a stock rather than a flow variable. Hence, an examination of the dynamic and sequential aspects of schooling decisions provides new and important insights into transition issues faced by the youth within and from schools.

Using field survey data from 14 Pakistani villages, Sawada and Lokshin (2001) conducted a detailed examination of the school progression rates at different educational stages. They used a framework of estimating the conditional survival function, or school continuation probabilities, summarized in table 1.

As this table shows, the survival rate at the first entry—that is, the probability of ever entering school—is low for both boys (64 percent) and girls (24 percent). It is also evident that the probability of girls starting primary school is less than half that for boys. Once they start school, however, a majority of the children continue and do not drop out. The conditional primary school graduation rates are 82 percent for boys and 69 percent for girls. Another interesting finding is that while the conditional schooling probability is lower for girls than for boys at primary school entry and graduation as well as at secondary school entry, the probabilities after secondary school entry are consistently higher for females. The gender gap in education appears to disappear at the higher stages of education. This finding indicates an important transition dynamic of education as well as of the gender gap in education.
What is the role of education in the process of economic development? In this regard, one can examine the influential studies by Pritchett (2001), Easterly (2001), and Bils and Klenow (2000) that challenged the seemingly established role of education in economic development. Notably, by analyzing cross-national data, Pritchett (2001) found that there is no robust association between an increase in the educational attainment of the labor force and the growth rate of output per worker. This is a puzzling finding because numerous microeconomic studies on the Mincerian wage equation reveal that individual-level returns to education are significantly positive. Do these conflicting findings mean that there is a “micro-macro” paradox in returns to education?

Pritchett (2001) himself provided two possible explanations for this paradox. First, it is possible that the newly created education capital is directed to individually remunerative yet socially wasteful or counterproductive activities, such as directly unproductive rent-seeking activities. Second, the schooling quality may be so low that it does not raise the cognitive skills or productivity of students. Yet education plays a role as a signal of personal capabilities, thereby creating private returns.

In this regard, I present several case studies that are related to possible explanations for the micro-macro paradox in education (figure 1). First, I highlight the importance of socially productive employment opportunities for youth after schooling. I briefly discuss a macroeconomic study on Japanese development and a microeconomic study from the Philippines. Second, I argue that the availability of skilled youth is indispensable in the formation of a socially productive sector. With regard to this point, I present an implication from a study conducted in Indonesia. Third, I discuss the importance of quality enhancements in schools so that appropriate

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**TABLE 1. Transition within Schools**

<table>
<thead>
<tr>
<th>Probability</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary school entry</td>
<td>0.64</td>
<td>0.24</td>
</tr>
<tr>
<td>Primary school graduate</td>
<td>0.82</td>
<td>0.69</td>
</tr>
<tr>
<td>Secondary school entry</td>
<td>0.93</td>
<td>0.53</td>
</tr>
<tr>
<td>Secondary school graduate</td>
<td>0.59</td>
<td>0.71</td>
</tr>
<tr>
<td>Postsecondary school entry</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
<td>Total number in sample</td>
<td>978</td>
<td>872</td>
</tr>
</tbody>
</table>

education and skills can be taught and learned; for this I draw on evidence from Latin America. Finally, I discuss the importance of improvements in market accessibility for youth by using a case study of the garment industry in Kenya.

**Importance of Quality Education and Skilled Youth in Development: Japan**

Godo and Hayami (2002) compared the progress of education between Japan and the United States in the period from 1890 to 1990 (figure 2). They found that while Japan caught up to the United States in terms of education in the pre-World War II period, those improvements in education did not translate into a commensurate improvement in Japan’s economic performance. In the postwar period, in contrast, Japan’s per capita GDP rapidly caught up with that in the United States without a remarkable increase in schooling. In fact, a significant portion of the schooling investments made before 1940 can be explained by a sharp increase in Japanese vocational education, which followed the German model of *Technische Hochschulen*. It can be hypothesized that the workers who obtained vocational education before World War II played a major role in the high growth era of the 1950s and 1960s. (Ongoing studies by Godo and Hayami find a similar pattern for Korea and Thailand.) This conjecture also suggests the importance of socially productive

**FIGURE 2. Comparative Ratios in Average Schooling, Per Capita GDP, and Capital-Labor Ratio for Japan and the United States**

![Graph showing comparative ratios](image)

Source: Godo and Hayami (2002, figure 2).

Note: The United States is set to 100.
employment opportunities that must be made available to the youth in the process of economic development.

**Importance of Productive Employment for Youth after Schooling: The Philippines**

Estudillo, Sawada, and Hossain (2005) employed a 16-year panel data set in 1985, 1993, 1997, and 2001 from three villages in the Philippines to examine the long-term changes in household income structure and decline in poverty. According to their findings, the cumulative distribution function (CDF) of income continued to shift to the right (figure 3). Poverty head count ratios can be seen as the levels of cumulative density of each CDF at the poverty line in figure 3. It is apparent that there was a significant decline in poverty in these three villages during this period (figure 3).

By decomposing per capita income growth into two parts—resource accumulation and return enhancement—Estudillo, Sawada, and Otsuka (2005) found a shift in the household income structure from farm to nonfarm sources, accompanied by a marked decline in poverty. According to the decomposition result, the major portion of income growth can be explained primarily by the enhanced returns to quantity and quality of human capital measured by age composition and proportion of household members who have completed secondary schooling.

![Figure 3. Cumulative Distribution Function of Logged Per Capita Real Income in the Study Villages in the Philippines, 1985–97](image-url)

Source: Estudillo, Sawada, and Hossain (2005, figure 1).
**Importance of Skilled Youth in Forming a New Productive Sector: Indonesia**

Miyata and Sawada (2005) examined the factors that influenced poor Indonesian farmers to invest in floating net aquaculture after being relocated in the face of the Saguling dam reservoir construction project. To compare three primary decision factors—credit accessibility, risk attitudes, and social learning, that is, learning effects from others’ experiences—they analyzed 15 years of retrospective household panel data collected in the field exclusively for the study. Their analysis reveals that credit accessibility and risk attitudes were the most important factors influencing the rate of aquaculture investment. Social learning also significantly influences the investment decisions. More important, relatively younger household heads actively invested in floating net aquaculture and obtained large returns. This suggests the importance of the skilled youth in the formation of a new productive sector.

**Importance of Quality Enhancements in Schools for Providing Appropriate Education: Latin America**

In reviewing 96 studies on the effects of five “tangible” core educational inputs on student performance in developing countries, Hanushek (1995) concluded that there were no clear and robust technical relationships between key school inputs such as number of teachers per pupil, education and experience of teachers, salaries of teachers, and school expenditures and student performance. A growing number of studies reveal that effective quality of teachers in classrooms plays a key role in what, how, and how much students learn. There is an emerging empirical consensus on the impact of education reforms that alter teacher incentives with regard to teaching quality and student learning, particularly in the context of Latin America (Vegas 2005; Vegas and Umansky 2005). For example, Jimenez and Sawada (1999, 2001) analyzed the effect of teaching quality and student learning on El Salvador’s community-managed schools program, known as the EDUCO program. They found that, through enhanced community involvement, the EDUCO program accomplished three goals. First, it positively affected student achievement in language skills. Second, student attendance drastically improved, which could have longer-term effects on achievement. Third, it created positive and robust school continuation effects for students.

**Importance of Improvements in Market Accessibility to Youth: Kenya**

Inaccessibility to credit is considered to be one of the most critical constraints faced by microeconomic and small enterprises (MSEs) in developing countries. Using a unique data set on 225 MSEs clustered in three garment markets in Nairobi, a study conducted by Akoten, Sawada, and Otsuka (2006) explored the determinants of
profits and investments of MSEs, as well as their source of credit for financing investments. The study found that binding credit constraints significantly lower firm profitability and growth. With regard to the determinants of credit, they obtained two major findings. First, young firms operated by younger managers (those between 21 and 35 years) mostly had to rely on credit from friends and relatives. Being young and inexperienced indicates that these managers may have fewer social interactions with other economic agents and therefore may have little social capital. Therefore, these managers are likely to be excluded from rotating savings and credit associations (ROSCAs) or other microfinance programs, which require high levels of social capital (acquired through social interactions and connectivity) as a prerequisite for lending. Second, as young managers accumulate social capital over time, they increase their chances of joining and obtaining credit from ROSCAs or other microfinance programs. As a business grows, so does its credit demand; thus managers need to seek larger loans from credit sources other than friends and relatives. Finally, experienced firms and relatively large firms are more likely to borrow from commercial banks. Educated producers tend to obtain loans from banks; in fact, banks use education as a screening device for loan disbursement in Kenya. These findings pertaining to Kenya highlight the importance of active improvements in (credit) market accessibility for youth who, while they have a potential to contribute to the development of socially productive sectors, nonetheless face credit constraints.

References


Part III: The Transition to Work
The “Youth Bulge” in Developing Economies: Can This Be an Advantage in the Labor Market?

ANJINI KOCHAR

Many developing economies are currently characterized by an age pyramid that tips heavily toward the young, a consequence of high fertility rates in the 1960s and 1970s. Forty-three percent of Africa’s population is under age 15, as is 32 percent of the population in Latin America. In contrast, persons under age 15 account for only 18 percent of the total population of developed countries, with the median age of the population as of 2000 exceeding 40 in countries such as Germany, Italy, Japan, and Switzerland.

Many believe that the “youth bulge” in developing economies can be a source of tremendous economic advantage. This brief paper discusses the reasons for this belief with respect to the labor market and choices regarding labor force participation. Using data from India, the paper argues that many of the perceived benefits of a young labor force are currently not in evidence and suggests that this may be a consequence of the limited development of insurance and credit markets. Lack of access to credit not only reduces the demand for labor but also affects labor supply decisions, as does the limited availability of insurance. Moreover, public safety nets currently in place may also reduce labor mobility and hence the prospects for the increase in the youth labor force to significantly contribute to growth.

Advantages of a Young Labor Force

It is widely believed that a “young” labor force can be an advantage to an economy, primarily because of the greater flexibility young workers display in the labor market, reflected in the higher elasticity of their labor supply. The young generally exhibit far greater job turnover rates than older workers, perhaps because they have not yet built
up job-specific skills or because they have not yet found the best “match” with a firm. And the young also exhibit greater mobility in that their job-related migration rates are generally higher than those of older workers.

Greater geographic mobility can increase the economic efficiency of an economy, because increases in demand in a particular area will generate less of an increase in wage, if labor supply is more elastic. Similarly, willingness to continue searching for the best match, reflected in high job-turnover rates, can also increase the economy’s efficiency. It can also generate spillover effects in the form of job creation. For example, Shimer (2001) argues that a younger labor force implies a more flexible labor market, with a larger proportion of the labor force willing to accept a new job. This, in turn, suggests that firms will find areas with greater concentrations of younger workers more conducive to the opening of new firms and hence will focus in these areas, generating additional jobs and reducing unemployment rates for both young and older workers. Based on an analysis of U.S. data, Shimer finds that U.S. states with a younger population have lower unemployment rates. His results suggest that a 1 percent increase in the youth share of the working-age population raises the wage of many groups of workers by 1 or 2 percent, after a 10-year lag.

The greater flexibility of the young, in turn, is generally attributed to their higher reservation wage, the value to them of time spent out of the labor force. One reason for a relatively high reservation wage reflects the opportunities available to them out of the labor force—the young are more likely to be choosing between school and work, and unsatisfactory job opportunities will be turned down in favor of additional schooling. Second, the young are less likely to be married and have children than are prime age adults. Their consequently lower consumption requirements correspondingly increase the value of time spent out of the labor force.

Much of the available evidence on the elasticity of labor supply and rates of job turnover comes from data on developed economies; far less is known about the labor outcomes of youth in developing economies. Traditionally, one might have expected that the elasticity of labor supply of the young in developing economies would be less than that observed in developed economies because of differences in education rates and in demographic factors. At low levels of education, schooling is typically completed at relatively young ages, so workers between the ages of 20 and 25 would not have the option of returning to school. Many of them might have been working since the age of 15 and would already have built up significant job-specific capital. Moreover, a relatively young marriage age would also suggest a less elastic labor supply.

However, many developing economies have witnessed considerable changes in schooling and in demographic factors in the last decade. For example, the magnitude of this change in the Indian economy is evident from the National Sample Surveys, spanning the years 1983 to 1999. Figure 1 graphs the proportion of urban and rural males and females between the ages of 15 and 25 who have completed eight years of schooling. The data clearly reveal the tremendous education expansion that the Indian economy has witnessed. For example, the proportion of young rural males who had completed eight years of schooling increased from 12 percent in 1983 to approximately 30 percent in 1999.
Figure 2 reveals that the increase in education has also been accompanied by changes in age of marriage. For males and females, in urban and in rural areas, there has been a sharp reduction in the proportion of 15-to-25-year-olds who are married. In contrast to older cohorts, today’s entrants in the labor market are more educated, and, because of a later marriage age, more likely to be mobile.

As a consequence of these sharp demographic changes, one would expect the labor market behavior of today’s youth to be quite different from that of older cohorts, when they first entered the market. Moreover, these improvements in education suggest an additional advantage of a young labor force in a developing economy. Because their levels of schooling exceed those of older cohorts, a relatively large “young” cohort can significantly increase the average education of the aggregate workforce and hence its

Source: Author’s calculations, based on NSS Employment Surveys.
productivity. Moreover, the increase in education can also generate spillover effects on labor demand, as argued by Acemoglu (1996): firms, reacting to an anticipated increase in the skilled labor force, will increase their investment in physical capital, thereby increasing the demand for labor of all ages and of all skill levels.

Labor Market Outcomes for Youth in India

Do the data bear out these hypotheses regarding the labor outcomes of younger cohorts? For this purpose, I use data on employment from the Government of India’s National Sample Surveys (NSS), which provide information on employment over four survey rounds, spanning the years 1983 to 1999.

Source: Author’s calculations, based on NSS Employment Surveys.
TABLE 1. Percentage of Male Workers Who Have Changed the Nature of Their Work during the Previous Two Years, 1999, Rural and Urban India

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<tbody>
<tr>
<td>Percent of urban male workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>who have changed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Usual status</td>
<td>1.24</td>
<td>1.07</td>
<td>0.61</td>
<td>0.35</td>
</tr>
<tr>
<td>Industry</td>
<td>1.84</td>
<td>1.59</td>
<td>0.90</td>
<td>0.54</td>
</tr>
<tr>
<td>Occupation</td>
<td>1.58</td>
<td>1.40</td>
<td>0.84</td>
<td>0.63</td>
</tr>
<tr>
<td>Establishment</td>
<td>6.22</td>
<td>5.26</td>
<td>3.45</td>
<td>2.34</td>
</tr>
<tr>
<td>Percent of rural male workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>who have changed</td>
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<td></td>
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<tr>
<td>Usual status</td>
<td>0.78</td>
<td>0.75</td>
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<td>Industry</td>
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<tr>
<td>Establishment</td>
<td>5.61</td>
<td>5.52</td>
<td>4.51</td>
<td>3.85</td>
</tr>
</tbody>
</table>

Source: Author’s calculations, based on NSS Employment Surveys.

Table 1 documents data on the percentage of workers who have changed the nature of their work over a two-year period, using data from the 1999–2000 Employment Survey (NSS 55th round). The survey provides information on those who have changed their “usual status” (such as self-employed, casual worker, salaried worker), as well as those who have changed industry, occupation, or the establishment in which they work. All age groups display remarkably low mobility. Thus, on average, only 1 percent of urban male workers have changed their usual status over the past two years. There is more movement across establishments. However, in this type of job move, and in movements across other dimensions (usual status, industry, and occupation), the behavior of males, between the ages of 15 and 25, is not significantly different from the behavior of those between the ages of 25 and 35. Thus, while 6 percent of both urban and rural males ages 15 to 25 report changing their work establishment over the past two years, the corresponding figure for 25-to-35-year-old males is 6 percent for rural males and 5 percent for urban males.

Figures 3 and 4 document occupational profiles by age for different age cohorts. I use data from the four available employment surveys (1983, 1987, 1993, and 1999) to construct five-year age cohorts and then to follow these cohorts over the different surveys. For example, I follow the occupational choices of those who were 15 in 1983 over a 15-year period, documenting changes between the ages of 15 and 31. Figure 3 provides data on the proportion of urban male workers employed in salaried positions, while figure 4 documents the percentage of rural male workers employed in the household sector.

All three graphs provide evidence of an “occupational” life cycle. For example, the probability of a young urban worker being employed in the salaried sector is low but increases with age, peaking at around age 45. Conversely, the proportion of rural males employed in the household sector starts off relatively high, falls to a low at around ages 30–35, and then rises again.
What is noteworthy in all three graphs, however, is the absence of strong cohort effects. Given the tremendous improvement in education and the considerable change in marital patterns, one would expect considerable differences in the labor market behavior of the current young, compared with the choices made by older cohorts.
when they first entered the market. Cohort differences show up as vertical differences across the points at specific ages. For example, the three data points at age 15 provide information on the labor market behavior of three different cohorts when each was age 15 (the cohort that was 15 in 1999, a second cohort age 20 in 1999, and a third cohort age 25 in 1999). Across all three graphs, there is no significant difference in the behavior of those who were 15–20 years old in 1999, relative to that of older cohorts when they were this same age.

Cohort differences are even smaller for women. Figure 5 follows the labor force participation rates of different age cohorts of urban women. As before, there is a clear life-cycle pattern, with participation rates starting off very low (10 percent). Labor force participation peaks around age 40, but still remains very low (averaging around 25 percent).

Strikingly, there is no significant difference in the labor force participation rates of the youngest cohort of urban women, despite their significantly higher levels of schooling. Low participation rates of the youngest age cohort (15–20) could, of course, be a reflection of an increase in schooling—those who are currently in this age bracket could be enrolled in educational institutions. If the reason for their lack of participation in the labor market differs from that of older cohorts, that could be reflected in a significant difference in labor market participation rates in later years, with current investments in schooling generating higher participation rates in the future.

No additional data points are available for those who were 15–20 years old in 1999. However, it is possible to compare the time trend in labor force participation for those ages 15–20 in 1993 with those of older cohorts. Even though education levels of cohorts entering the labor force in 1993 were significantly higher than those of

Source: Author’s calculations, based on NSS Employment Surveys.
older cohorts, figure 6 reveals that their labor force participation rates over time did not significantly differ from those of older cohorts.

In countries such as India, the low labor force participation rate of women is traditionally believed to be a consequence of marriage. Marriage in this economy is closely followed by the onset of childbearing. This, in turn, sharply increases the value of a woman in home production relative to participation in the labor market. Table 2 provides data on labor force participation rates of urban Indian women, ages 15–20 and 20–25, from the various rounds of the National Sample Survey employment surveys, for married and single women. It confirms the very low labor force participation rates of married women, rates that have continued to be low despite the increase in schooling. Thus, of married women between the ages of 20 and 25 in 1983, only 11 percent reported participation in the labor market. More than 15 years later, in 1999, despite the significant increase in schooling, labor force participation rates were only 1 percentage point higher, at 12 percent.

More strikingly, the increase in schooling also appears to have had only a marginal effect on the relative valuation of market time versus time devoted to the household for single women. In 1983, of single urban women ages 15–20 who were not studying, only 20 percent reported working in the marketplace. By 1993 this percentage had increased to only 24 percent. Similarly, of single urban women ages 20–25, the percentage of women working in the marketplace, out of those not currently enrolled in an educational institution, increased from 25 percent in 1983 to only 31 percent in 1999. Despite the increase in schooling, the majority of urban women out of school and not yet married chose not to participate in the labor market.
Finally, I consider evidence of geographic mobility of the young. Since data, particularly on short-term migration, are scant, I draw inferences on migration from an examination of wage data. With significant geographical mobility, there should be little difference in wages across geographically segregated markets. I therefore look for evidence of convergence in wages, examining the change in wage rates between 1983 and 1999 across different markets as a function of the 1983 wage. I consider both short- and long-distance migration. Short-distance migration is taken to be rural to urban migration within the same state. Long-distance migration is interstate migration, and I separately consider migration from urban areas of one state to urban areas of another, and rural-rural interstate migration.

If short-distance mobility is high, regions with a high urban-rural wage gap in 1983 should have witnessed significant in-migration and a consequent narrowing of the wage gap. High labor mobility should thus translate into a negative relationship between the change in the urban-rural wage ratio and the initial (1983) urban-rural wage ratio. I conduct this exercise separately for skilled and unskilled workers, defining skilled workers as those with more than eight years of schooling. The regression results are plotted in figure 6 and suggest that short-distance labor mobility (across rural and urban areas of the same state) is relatively high for both skilled and unskilled male workers.

I repeat this exercise to examine longer-distance migration, now considering wage changes across states, distinguishing between urban-to-urban interstate changes and rural-to-rural changes. That is, I examine the change in urban wages in any given state in the 1983–99 time period, as a function of the 1983 urban wage, and repeat this exercise on rural wages (figure 7). As before, states with relatively high wages in 1983 should have witnessed significant in-migration. Consequently, the growth in

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban women, ages 15–20</th>
<th>Urban women ages 20–25</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Married</td>
<td>Single</td>
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<td></td>
<td>Studying</td>
<td>2.31</td>
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<td>1987</td>
<td>Working</td>
<td>11.83</td>
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<td>1993</td>
<td>Working</td>
<td>10.03</td>
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<tr>
<td></td>
<td>Studying</td>
<td>4.87</td>
</tr>
<tr>
<td>1999</td>
<td>Working</td>
<td>13.62</td>
</tr>
<tr>
<td></td>
<td>Studying</td>
<td>4.21</td>
</tr>
</tbody>
</table>

Note: Figures in brackets are percentage of those working, out of those not studying.
Source: Author’s calculations, based on NSS Employment Surveys.
wage rates should have been lower in such states, generating a negative relationship between the growth in wage rates and the initial wage. Long-distance labor mobility among skilled workers appears to be high. In contrast to the evidence for short-distance mobility, however, the data suggest that long-distance mobility for the unskilled is limited.
Explanations: Labor and Credit Outcomes Are Closely Linked

The data presented in the previous section suggest that there has been little change in the labor market outcomes of the young over the years, despite the significant change in their levels of schooling and in other demographic characteristics, particularly those related to marriage. The informal or household sector continues to be an important source of employment. Conversely, employment in the formal, salaried market remains low, despite the growth in schooling.

This suggests that the change in the demographic and economic characteristics of the workforce, generated by the addition of a relatively large youth cohort with significantly higher levels of schooling, did not generate the increase in labor demand that research suggests should have followed (Shimer 2001; Acemoglu 1996). One potential explanation for this is lack of access to credit for productive investments. This could limit firms’ ability to expand in response to changes in the nature of the labor force, thereby explaining the lack of change in the demand for labor.

Weakly developed insurance markets and the lack of formal institutions that facilitate saving over the life cycle may also explain the limited change observed on the labor supply side. Despite growth in the formal credit market, informal arrangements for credit and insurance continue to dominate. These arrangements take the form of relational contracts, frequently among family members or between parties well known to each other. These contracts may be difficult to sustain if one party migrates. Thus the availability of credit and insurance from family members and other members of the community may act as a deterrent to migration (Banerjee and Newman 1998).

Insurance needs may also directly affect occupational and labor market choices. Kochar (1995, 1999) shows, for example, that households mitigate the consequences of crop shocks through changes in hours of work, rather than through credit transactions. Moreover, the vulnerability of a household to shocks such as the ill-health of male members depends on the demographic composition of the household; nuclear households, with just one prime-age male are far more vulnerable to illness shocks than are intergenerational households with several generations of co-resident males (Kochar 2004). This finding suggests that exposure to shock is likely to shape the living arrangements of households and hence their labor market outcomes.

Lack of credit for smoothing consumption over the long term may have a similar effect. In India, while there have been changes in many socioeconomic outcomes, the dependence on the family unit for credit and insurance needs remains unchanged. In 1996, 44 percent of the elderly (age 60 and above) in urban India and 46 percent of those in rural India stated that they were financially dependent on a son. Moreover, 85 percent of the urban elderly and 84 percent of the rural elderly resided with their adult children.¹

When the extended household constitutes the fundamental decision-making unit, the labor market outcomes of the young may be dictated by the consumption and insurance needs of the elderly. For example, Kochar (2000) provides evidence that the hours of work of young male members of rural households are determined by the
need to finance investments in household public goods, including ceremonial expenditures.

Government programs that offer safety nets do exist, but the nature of these safety nets may affect labor market outcomes, particularly migration. In India the operation of many of the public safety net programs is decentralized, so that they essentially serve as a local insurance market, whose benefits cannot be obtained on migration to other markets. For example, one of the most important sources of consumption security is the public distribution system, which provides grains and other items at subsidized prices to households. Access to the system, however, requires a ration card that certifies the eligibility of the household to supplies at prices reserved for below-poverty-line households. In rural areas, the local village government certifies eligibility. Villagers who migrate to other villages can reapply for a ration card. But the government at the new village of location now has to certify the eligibility of the household to subsidized food grains. In addition to administrative delays, there may also be additional delays as a consequence of the time required for village residents to gain information on the economic status of migrant households.

In other cases, the link between welfare programs and labor market outcomes may be even more direct. The state government of Kerala, for example, provides several safety net programs for workers in the informal sector through a system of worker welfare boards. These boards, however, are set up at the level of individual industries—there is a worker board for agricultural laborers, one for construction workers, another for motor transport workers, and so forth. Welfare payments are financed through contributions by the employer, the employee, and the government. However, employee payments toward insurance under one welfare board cannot be transferred to insurance programs of another board; this nontransferability implicitly constitutes a tax on occupational change.

Indeed, labor laws may also directly inhibit migration and occupational change. In Kerala, all employers are required to submit a statement documenting their hiring of agricultural labor, and the Kerala Agricultural Workers Act of 1974 states that “the landowner shall not employ any agricultural worker other than an agricultural worker who has worked in the same land during the previous season.” This essentially amounts to a long-term labor contract and is likely to severely restrict the demand for labor.

**Conclusion**

It is widely believed that a relatively large youth cohort can significantly enhance the growth prospects of an economy, through its effect on the labor market as well as on other spheres of economic activity. A young labor force is believed to add dynamism and mobility to the labor force, thereby spurring growth in labor demand. Moreover, the expansion in educational levels and the demographic changes that developing economies have witnessed suggest that new entrants into the labor force will further increase economic growth through their effect on the average education of the labor force and on its flexibility.
However, data from India suggest that young entrants into the labor force appear to follow patterns established by older cohorts—there is little evidence of a change in labor force outcomes over the years, despite the considerable difference in the socio-economic and demographic characteristics of the youth cohort relative to older cohorts.

This paper suggests that one reason for this is a lack of commensurate development of credit markets. In the absence of such development, labor outcomes continue to be shaped by the credit requirements of individuals and households. Further, the operation of government safety nets and state labor laws also affect labor outcomes, frequently restricting mobility.

If the benefits of a young labor force are to be realized, then policy makers need to pay attention to the development of markets for credit and insurance. Moreover, they need to evaluate programs that provide safety nets from the viewpoint of their effect on labor outcomes, as well as their effects on household vulnerability.

Endnote

1. These data are from the 52nd round of the National Sample Survey.

References


Part IV: Migration and the Youth
This brief note discusses some issues that are particularly related to immigrants and their children. The focus is on the children of immigrants in countries that receive immigrants, not in countries that send immigrants. The paper looks in particular at the way forms of migration affect the economic and social adaptation of immigrants, and how this performance may in turn be transmitted across generations. From the perspective of the receiving country, the intergenerational transmission of disadvantage is important for being able to assess the long-term economic effects of migration on the welfare system and economic growth. From the perspective of the immigrant community, intergenerational transmission is important because it influences the way immigrant communities may prosper across generations.

**Forms of Migration**

Migration can have different causes. One simple classification is to distinguish between two causes for the movement of people. The first is movements caused by natural disaster or persecution. Here movement is not induced by choice but is a consequence of particular and often unforeseen events. The second reason for migrating is for economic motives. Here an individual decides to relocate to another geographical area on the basis of economic considerations. This brief discussion concentrates on migrations that are made by choice and based on economic considerations.

Migrations motivated by economic considerations may have different forms. Although migrations are often thought of as permanent, many—if not most—are temporary (I define permanence from the viewpoint of the receiving country and as staying until retirement age; of course, other definitions are possible). Nonpermanent
migrations may in turn take various forms. Take, for example, an individual who migrates from A to B and, after some years, returns to A. The return to A may be by choice or because the migration was restricted in duration, for instance, by temporary residence permits. Migrations may be circulatory, where individuals remain for a limited period in the destination country, then return, and then migrate again. Agricultural or seasonal migrations are of this type. Migrations may also be transient, in the sense that immigrants migrate through various countries, staying only temporarily in each, until perhaps a final destination is reached. Figure 1 characterizes some forms of migration.

**Forms of Migration and Economic Behavior**

Forms of migration are intrinsically linked to the behavior of the migrant. To make the point, let us consider a temporary migrant who relocates from country A to country B for a certain period of time and then remigrates from B to A permanently. I distinguish two types of temporary migrations: contract migrations, where the migrant cannot choose the period of migration, and return migrations, where the return is optimally chosen.

First consider a contract migration. Under this migration scheme, immigrants migrate from A to B for a certain number of years or periods and then return permanently to A, without being able to choose the optimal return time. Contrast such a migration against a permanent migration, and consider, to make the case, two individuals who are identical upon entry to the host country, with the sole difference being that one immigrant remains permanently, the other only temporarily. How will these two immigrants differ in their economic behavior? Assume also that the two migrants come from the same country and that the wage they can expect back in their home country is lower than the wage in the host economy. First consider the
permanent migrant and consider two decisions: investment in human capital in the host country, and labor supply. In a world of complete certainty, both decisions will be based, among other things, on current and future wages in the host economy and on the return to human capital investment in the host country.

Now consider the temporary migrant. As she will not spend her entire working life in the host country, she will over a period of her working life face a high wage rate (while being abroad), and over a further period of her working life wages that are lower than in the host country (after return back home). Therefore, her labor supply decisions will take into consideration that the wage she obtains after return is lower than the wage she obtains while being abroad; as a consequence she will tend to substitute demand for leisure now for demand for leisure in the future. As a consequence we can expect her to work more hours than the permanent migrant. Further, as the return to human capital acquired in the host country is likely to have lower returns back home, she may also have a lower incentive for human capital investment. As a consequence the temporary migrant may find it optimal to work more hours. Therefore, although both migrants are identical, they will exhibit different labor supply behavior as well as different human capital investment and therefore different earnings and earnings growth—only because they differ in the form of intended migration.

Notice that what matters for these decisions is not the form of migration that is realized but the form of migration that is intended at the point of decision making. In the simple exposition above, the two do not differ because I have assumed a world of perfect foresight and certainty; in reality, the two may be very different, and intended temporary migrations may well turn into permanent migrations. In this case, the decisions taken at the time when the migration is considered temporary are different from the decisions that would have been taken had the migration been thought to be permanent.

No assumption has been made about the form of temporary migration. If the return time of the temporary migrant is optimally chosen, then the length of migration is determined along with decisions about human capital investment and labor supply. However, the basic considerations, namely, that the behavior of immigrants will be affected by forms of migration, will still be true. (See Dustmann 1999 for a discussion of the decision problem.)

**Forms of Migration and Children**

The argument above suggests that the extent to which an immigrant invests in human capital while being in the host country is related to the intended duration in the host country. Does this have consequences for the children of immigrants? If one assumes that parents who have children attach a positive probability to their offspring's intent to return home if the parent intends to return home, a similar argument can be made for the child: if human capital that children receive in the host country is less valuable at home, then parents who intend to return may find it optimal to invest less in their children than they would do if migration was intended to be permanent. See
Dustmann (2005b) for a formal model and tests of this hypothesis. In turn, considerations about the child’s future may affect the return plans of parents. For example, if parents are altruistic, and believe that their children who are born in the immigration country have a better future in the home or host country, then this may affect their return plans. Dustmann (2005a) finds evidence for this, using gender differences in such expectations about children’s future to test this hypothesis.

A further way parental intentions about temporary migrations may affect their children is through exposure of children to language. If parents invest less into language capital because their migration intentions are temporary, then their children may be exposed to an environment where the language of the host country is not spoken, which in turn may affect their own language proficiency as well as their educational outcomes. Some evidence for this is provided in Casey and Dustmann (2005). Language deficiencies of second-generation immigrants are significantly correlated with language deficiencies of their children; children’s language deficiencies reduce their wages, participation, and employment, especially for females.

**Discussion and Conclusion**

The number of second-generation immigrants is steadily rising in European countries. In many countries second- and third-generation immigrants perform worse in terms of educational achievements and labor market outcomes than their peers born to native parents and grandparents. This short paper illustrates that the roots for some of the disadvantage that second-generation immigrants experience may be migration policies that do not provide a clear path for integration and clear future opportunity to the parent generation. Thus policies that lead to the perception that the migration is temporary, at least at initial stages of the migration history, may contribute to suboptimal investments in immigrants’ own human capital and that of their children.

**References**


Part V: Forming Families
Forming families is one major process in the transition to adulthood in both developing and developed countries. Forming families is used here to mean both entering into marriage (or, more generally, unions whether or not they are sanctioned by the state or religious institutions) and initiating parenthood. The age of first union (marriage or cohabitation) and the age of first parenting are of considerable concern both in academic and in policy communities. Indeed, these are two of the major indicators of transitions from adolescence to adulthood emphasized, for example, in the recently published United States National Research Council/Institute of Medicine panel report on transitions to adulthood in developing countries (NRC/IOM 2005). Both the age of first union and the age of first parenting are of substantial interest because of their implications for individual welfare and well-being over the life cycle. Age of first union and age of first parenting also are strongly associated with fertility and work patterns that are thought to have important implications for the broader society because of fertility externalities (at least given subsidized prices for social services such as schooling and health) and societal interests in increasing productivity.

One major concern in the literature has been that cohabiting and parenting when too young (say, before age 18) limit too much the options of adolescents and human resource investments in adolescents, particularly women, over their subsequent life cycles and further limit too much the options of their children. While the proportions of those who are in unions at young ages have tended to shrink in most of the developing world, substantial proportions of women still cohabit and begin parenting before they are 18. For this reason there has been significant interest in the possibilities of delaying the formation of such unions as well as parenthood.
This paper very briefly summarizes what is known about recent patterns in age of first union and first parenthood and then turns to what is known about the causes of these patterns.

**Recent Patterns in Age of First Union and First Parenthood**

The recent NRC/IOM panel report on transitions to adulthood in developing countries has summarized the state of knowledge on patterns in and determinants of ages of first union and first parenting. The major points that this report emphasizes are summarized here.

**Transition into First Union**

Compared with previous generations, smaller proportions of young women and men are in unions in most regions. First sex is increasingly likely to occur before marriage. Men still form unions at older ages than women. While only one-third of men in the developing world are in unions by ages 20–24, nearly two-thirds of women in this age group are.

The minimum legal age of marriage for both men and women has risen in many countries in the last decade, and women are less likely to be married during their teenage years than previously (table 1). However, child marriage, defined as marriage before age 18, is still widespread and viewed by some as a major violation of human rights. Based on survey data representing 60 percent of the population of the developing world, 38 percent of young women ages 20–24 married before age 18 (down from 52 percent in the 1980s), with the highest rates of child marriage currently occurring in West Africa and South Asia (figure 1). Young women who marry as minors are more likely to come from poor households and rural areas and to have relatively few grades of schooling attainment.

With the rising age of marriage there also has been an increase in the prevalence of premarital sex by age 18 for women, but there has been little change in reports of having sex by age 18 (see table 1). Apparently there has been a shift from marital to premarital sex for women by age 18 as smaller proportions have become married by that age. Delayed marriage has not tended to delay sexual initiation.

Large differentials in age of marriage by schooling, wealth, and residence persist. Ages of first union tend to be higher for individuals from higher-income families and

| TABLE 1. Percent Distribution of Countries by Type of Change: Comparison of Women Ages 20–24 and 40–44 |
|---------------------------------|----------------|----------------|----------------|
| Marrying by 18                  | 2.4            | 22.0           | 75.6           |
| Having premarital sex by 18     | 58.5           | 39.0           | 2.4            |
| Having sex by 18                | 22.0           | 46.3           | 31.7           |

Note: Based on 41 Demographic Health Survey (DHS) countries as processed for NRC/IOM (2005).
Schooling attainment is positively associated with formation of first union, but typically there is a distinct gap between the age of schooling leaving and first union formation (figure 2). The age gap between spouses—often thought of as one measure of the degree of inequality in marriage—appears to be narrowing, especially in sub-Saharan Africa and South and Southeast Asia. There is also some evidence that young women have more say in choosing marriage partners, suggesting that the nature of marriage itself is changing.

**Transition to First Parenthood**

Entry into unions, particularly marriage, continues to be (as in the past) strongly associated with entry into parenthood, suggesting that the timing of marriage is typically seen by the couple themselves or by their families as coinciding with readiness for parenthood. With delays in the age of marriage, this gap in timing between the age at marriage and the age at first birth has narrowed, falling from 22 months to 16 months, on average, over the past 20 years among the overwhelming majority of women whose first birth occurs after marriage.

More than 90 percent of first births occur within marriage, a percentage that has changed only minimally over the past 20 years. With rising ages of marriage, the ages of parenthood are also rising, allowing young people more time to prepare for this important adult role and providing an increasing number of young women with the opportunity to participate in the labor force before becoming mothers. Because of a lack of
data and research, less is known about the timing and experience of first parenthood for young men, but apparently they tend to become parents when older than young women and thus have more time to prepare for this role and to explore other roles.

Rates of early childbearing remain high in many parts of the developing world because of high rates of early marriage, noted above. Based on survey data representing 60 percent of the population of the developing world, 23 percent of young people ages 20–24 became parents before the age of 18 (down from 30 percent 20 years ago). The pace of decline in early parenthood has been most rapid in those regions where rates of early marriage and parenthood were historically high.

Associated with these declines in early marriage and early childbearing, there has been a slight rise in the percentage of births to young women who are not in unions.
The level of premarital childbearing varies substantially across regions, from 14 percent having a premarital birth by the age of 20 in East and Southern Africa to less than 1 percent in Asia and the Middle East. While East and Southern Africa and South America have seen recent small increases in the rates of premarital childbearing, the rates in other regions appear very low.

Although evidence is plentiful that early childbearing is correlated with various negative outcomes, rigorous research confirming a causal role for age at birth in producing these outcomes does not exist. Major global changes such as increasing school enrollment during late adolescence, rising rates of labor force participation among young women, and rising HIV/AIDS prevalence among young women in Africa are likely to have important implications for the transition to parenthood, but little is yet known about the implications of these trends for first parenthood.

State of Knowledge Regarding Causes of Age of First Union and First Parenthood

Forming unions and parenting when young are negatively associated with health, education, labor force experience, and thus productivity of youth over their adult lives. They are positively associated with the quantity of youth’s children (and thus service demand) but negatively associated with the quality of youth’s children (and thus the productivity of the next generation). The prevalence of union formation and parenthood for young women relative to men is perceived to be associated with disadvantages for females. Because of these associations, there seems to be some potential for better attaining development productivity and distributional goals through lessening union formation and parenthood when young, particularly for women. In a related vein, a large literature presents positive associations between schooling and age of first union and age of first parenting in many societies. Because of these associations, many have been tempted to conclude that one important reason for increasing schooling is to reduce the prevalence of entering into unions and parenthood when young.

That such associations are common, however, does not demonstrate that there are causal effects. Individuals who have greater ability and motivation and who come from families with better connections, for example, may have more schooling and better labor market options and less preference for early marriage and parenthood all because of their greater ability and motivation and connections. Associations between schooling attainment and ages of first union and of first parenthood—or between ages of first union and first parenthood and subsequent labor market and household productivity—may reflect, perhaps in large part, the impact of the underlying abilities and motivations and connections and not only the causal impact of schooling or of ages of first marriage and first parenthood. To establish causal effects, the estimates must control for the behavioral choices that underlie the right-side schooling (or ages of first union and first parenthood) variables.

The quantitative evidence that substantiates such causal linkages, however, is almost nonexistent. Many studies present associations related to these issues, but
there is almost no systematic evidence of causality directly on these transitions. A few studies do suggest that it is important to control for choices in assessing, for example, the impact of schooling on these transitions. Boulier and Rosenzweig (1984), for example, present estimates for the Philippines that suggest that controlling for endogenous schooling choices substantially changes the estimated impact of schooling on ages of marriage and of first parenting. However, while their estimates are suggestive that controlling for the behavior determinants of schooling attainment affects the estimated impact of schooling, they need to be qualified because they assume that father’s occupation affects only women’s schooling attainment and does not have effects through other channels that might affect ages of first union and first parenthood and marital matches.

Recent preliminary estimates by Behrman and others (2005) also suggest that the estimated causal impact of schooling and possibly other human resources on ages of first union and first parenthood may differ importantly depending on whether schooling and other human resources are treated as behaviorally determined. This study investigates the impact of schooling attainment on ages of first union and first parenting using unusually rich data collected over 35 years in Guatemala. It attempts to advance beyond the previous literature by treating schooling as behaviorally determined, by including other aspects of individuals’ human capital and parental family background, and by including outcomes, in addition to ages of first union and first parenting, such as union partner’s human capital and union partner’s family’s social and economic status. The characteristics of the partner and the partner’s parents can be changed because different schooling tends to change who the partner is and what the characteristics of the partner and the partner’s family are. The results can be summarized with respect to each of these three points.

First, treating schooling attainment as behaviorally determined within a dynamic life cycle substantially affects some of the estimates of the impact of increasing schooling on the outcomes being considered. The preferred estimates that incorporate that schooling is determined by behavioral choices indicate that women’s schooling reduces more than is implied in the standard estimates: (1) the probability of ever having been in an union, (2) whether their first union or their first parenting was when they were younger than 18 years of age, and (3) their partner’s body mass index (BMI). The preferred estimates also indicate that women’s schooling increases more than is implied in the standard estimates: (1) the age of first union, (2) the age of first parenting, and (3) the partner’s and the partner’s parents’ schooling attainment. Such patterns suggest that, for example, there are unobserved factors (such as preferences for independence) that directly reduce the probability of being in a union and that are positively correlated with schooling attainment, so that when these factors are ignored in the estimates of the impact of schooling on being in a union ever or when young or having a first child when young, the estimated impact of schooling attainment is greater algebraically (that is, less negative) than if there is control for these factors.

For males, the apparently significantly negative associations of own-schooling attainment with whether young at initiation of first union or at first parenting and the positive associations with age of first union and with partner’s height do not
appear significantly nonzero when male’s schooling attainment is treated as behaviorally determined. Therefore, for males there apparently are unobserved factors (such as innate ability and motivation) that are positively associated with schooling attainment and that directly affect some union outcomes so that they lead to misleading overestimates of some schooling impacts if they are not controlled (though, as for females, not controlling for the behavioral determination of schooling leads to, if anything, an underestimate of the impact of men’s schooling on the choice of partner and therefore the partner’s and the partner’s parents’ schooling attainment). Thus, in summary, if the preferred estimates are the instrumental variable (IV) estimates that attempt to control for the behavioral determinants of schooling, then considering associations without control for the behavioral determination of schooling tends to lead to underestimates of the positive schooling impacts for females but to overestimates of the positive schooling impacts for males for a number of outcomes.

Second, a priori, schooling would seem likely to be only one important factor in decisions about union formation and initial parenting. Other aspects of individuals’ human capital (such as health and physical attractiveness) and of their parents (such as social and economic status) are likely to be important determinants of these decisions. Our estimates provide a little, but only a little, evidence for this proposition. The point estimate for the impact of schooling attainment is changed a fair amount for two of the outcomes—age of marriage for females and age gap with partner for males—when height and/or family background is included in the specification. These two cases are consistent with the possibility that the failure to include other determinants of union matches might result in misunderstanding of the impacts of schooling attainment, even if large effects are not found for most of the outcomes that are considered.

Third, most of the related literature has focused on age(s) of first union or first parenting as the outcomes of interest. But there are other outcomes that are determined, particularly with the age of first union, that are likely to shape substantially individuals’ and their children’s subsequent options and welfare. Our study examines the effects of own schooling on selected union partner’s and union partner’s family’s characteristics that are also determined simultaneously with age of first union. It finds substantial significant impacts on partner’s and partner’s parents’ schooling attainment and, to a lesser extent, on partner’s anthropometrics (in particular, lower partner BMI for increases in female schooling attainment). The failure to incorporate such outcomes into the analysis is likely to mean that studies on the impact of schooling on ages of first union and first parenting, even if they are not subject to the problems noted above, are likely to result in only a partial understanding of the implications of the processes under study.

Conclusions

The age of first union and the age of first parenting are of considerable concern both in academic and in policy areas, not only because of their possible implications for individual welfare and well-being over the life cycle, but also because
they are strongly associated with fertility and productivity patterns that are thought to have important implications for the broader society as well as for the adolescents and young adults involved. There have been a number of important changes in ages of first union and first parenthood in developing countries in recent decades that have tended to result in a smaller proportion of young people being married than previously and a rise in the age of first parenting. But there still are many individuals, particularly women, who marry by age 18 and for whom it is perceived options are much more limited than would be the case with marriage delayed until they were older. Schooling attainment is significantly positively associated with ages of first union and first parenthood, and some have argued that delaying these outcomes is another reason, beyond direct productivity effects, to invest in schooling.

But while there are many positive associations between family wealth, living in more urban areas, and schooling attainment and ages of first union and first parenting in the literature, these associations do not mean that increasing these factors would cause increases in ages of first union and first parenting and subsequent family and labor market productivity. All of these behaviors may be determined in part by unobserved individual and family characteristics such as ability, motivation, and social connections. Therefore, to learn about the causal impacts, it is important to attempt to control for the behavioral determinants of the supposedly causal variables. Preliminary efforts to do so for a particular context suggest that schooling attainment may have more positive effects on union formation and outcomes for women than would appear to be the case from the standard associations in the literature, but less positive effects for men. But much more research is needed to be confident of the effects of schooling, and indirectly of policies that affect schooling, and of other determinants including other policies on ages of first union and first parenting and subsequent fertility and productivity outcomes.

References


In many developing countries, setting up one’s own household used to be and in many places still is synonymous with marriage and subsequent fertility. The frequently voiced concern regarding this transition is that it occurs too early, particularly for girls and young women (see, for example, World Bank 2006). This is particularly the case in South Asia and parts of sub-Saharan Africa where still today the mean age at marriage is below 20 (United Nations 2005). Such early marriage cuts short youth, usually denies the young person the option of choosing the partner, disrupts education, reduces employment chances, and leads to teenage pregnancies with associated adverse health consequences (NRC 2005). In recent decades, however, marriage ages have been rising everywhere, but particularly strongly in regions where they used to be very low. Thus, this concern, while still important in some regions, seems to be becoming less important and, thankfully, further education and employment as well as changes in public policies (such as legal marriage ages) and social attitudes seem to play the expected role in delaying marriage and early fertility (NRC 2005). This is not to imply that no further action is needed, but these issues are well covered in the World Development Report 2007 and related work (see, for example, NRC 2005).

In this paper, I want to highlight the converse problem that is present in many developing countries (and some developed countries too), and that is increasing delays in household formation. In some Southern African and North African countries as well as most countries of the Caribbean, average first marriage ages are now close to 30 for women (above 30 in the Caribbean) and above 30 for men. Part of this trend is surely related to the falling importance of marriage itself and the increasing role of consensual unions that form before a marriage decision is made. But much of it appears to be driven by young people residing longer with their parents before setting
up independent households. While the trend is observable for both sexes, it appears to be an issue of particular relevance for males, who have an increasing propensity to delay the setting up of their own household (with or without a spouse).

The causes and consequences of this increasing delay in household formation has not received much attention, and I want to highlight the issues and problems for the young people themselves as well as the larger developmental impacts caused by delayed household formation. I particularly highlight the experience of South Africa, where I have conducted some research on this issue.

The Household as a Safety Net

For a young person, the parental household offers the advantages of access to financial support but the disadvantages of delayed economic and social independence as well as reduced privacy. Consequently, young people’s decisions about household formation will be strongly influenced by their opportunities to establish a secure economic existence and the social acceptance of living independently, as well as by social attitudes that might affect the disadvantages of living with one’s parents. Here the empirical literature from developed countries has shown that the parental household acts as an insurance mechanism against poor labor market opportunities and adverse shocks, often by parents sharing their living quarters with their children (McElroy 1985; Ermish 2000; Rosenzweig and Wolpin 1993). Consequently, public policy that might encourage or discourage economic independence of young people can also affect decisions about household formation. As a long and intense debate about the effects of welfare programs in the United States has shown, the availability and generosity of welfare payments to single mothers affected their residence decision: more generous payments supported the setting up of independent households for single mothers (see, for example, Rosenzweig and Wolpin 1994; Ellwood and Bane 1985). In fact, that literature suggested that the interaction between such public safety nets and private safety nets also needs to be considered. More generous public safety nets partially displace private support from families, and much of that change is actually driven by the decision about household formation. When welfare programs are unavailable or low, young women and men often receive transfers from their parents through co-residence (see, for example, Rosenzweig and Wolpin 1994; Ermish 2000).

There is no reason to think that the household would not perform that safety net function in developing countries. In fact, the greater role of familial ties in many poor countries, high youth unemployment, and the unavailability of public safety nets would suggest that the household is even more important as a safety net than it is in rich countries. Similarly, as safety net programs (including generous cash transfer programs that are being implemented in a number of Latin American and some African countries) are being expanded, the interaction between these public safety nets and the household as a private safety net needs to be considered. One would expect that the co-residence decision of young people will be affected
as a result, with repercussions on the household formation decisions of young people.

Delayed Household Formation in South Africa

As an example of a country where delayed household formation is becoming a serious issue, South Africa is particularly illuminating. Table 1 shows the share of males and females by age group who have set up their own household (as household head or spouse) and those who remain dependent.\(^3\) The statistics are quite astonishing. A mere 11 percent of 20- to 24-year-old males have made the transition to form or head a household. While this share rises sharply for males in their late 20s and early 30s, more than 40 percent of 30- to 34-year-old males are still living as dependents in a household headed by someone else. More than 75 percent of those (31.6 percent of the 40 percent) continue to reside with their parents, while the others live with grandparents, siblings, other relatives, or nonrelatives. The shares are smaller for females, who are less likely to head households but much more likely to become spouses of the household head.\(^4\) But even among women ages 30–34, 38 percent remain dependents, a surprisingly high figure. If the data are separated by race groups, the share of dependents is, compared with other race groups, higher among African males and lower among African females in all age groups.\(^5\)

While part of the story of delayed household formation is related to delays in educational progress and catching up with education among Africans that are already beyond school-going age, Klasen and Woolard (2005) find that the most important predictor of delayed household formation is employment status. Using multivariate analyses, they show that a typical African adult male who reports to be in the labor force and employed has a 63 percent chance of heading a household, while this probability drops to 39 percent for an unemployed male. Among young

<table>
<thead>
<tr>
<th>Age categories</th>
<th>Household head(^a)</th>
<th>Spouse</th>
<th>Dependent(^b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20–24</td>
<td>10.5</td>
<td>0.5</td>
<td>89.0</td>
</tr>
<tr>
<td>25–29</td>
<td>34.6</td>
<td>1.3</td>
<td>64.1</td>
</tr>
<tr>
<td>30–34</td>
<td>57.6</td>
<td>1.8</td>
<td>40.6</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20–24</td>
<td>4.7</td>
<td>12.6</td>
<td>76.6</td>
</tr>
<tr>
<td>25–29</td>
<td>8.6</td>
<td>33.0</td>
<td>58.4</td>
</tr>
<tr>
<td>30–34</td>
<td>15.7</td>
<td>47.5</td>
<td>37.8</td>
</tr>
</tbody>
</table>

Source: Author’s calculations based on 1995 October Household Survey.

\(^a\) The (very few) people who report to be parents or grandparents of the household head are included here.

\(^b\) Dependents include those who report to be children, grandchildren, siblings, nephews or nieces, or unrelated to the household head.
African males, the differences are even more dramatic, while they are less stark among females. They also show that the process of delayed independence is indeed largely related to young jobless people never leaving the parental home, while a minority of unemployed people actually return to the home of parents or relatives as soon as unemployment hits. Clearly, the household is acting as the safety net ensuring young people particularly against unemployment risks. Last, the steep age gradient of household formation is closely related to a similarly steep age gradient in unemployment rates. In 2004 more than 60 percent of Africans ages 15–24 who were in the labor force reported to be unemployed. The jobless rates dropped to 40 percent among 25–34-year-olds and to about 10 percent of Africans over 55 (Klasen and Woolard 2005).

Thus the two transitions that are a particular focus of the World Development Report 2007—the transition to work and the transition to setting up households and forming families—are intimately related. The failure to provide opportunities to move into employment similarly inhibits the setting up of households.

The Effects of Delayed Household Formation on Development Outcomes

At first glance, one may see some positive aspects in this delayed household formation. It surely is delaying early childbearing and therefore is contributing to fertility decline in South Africa, an area where South Africa indeed has made considerable progress in the past 10 years. To the extent that this delayed household formation does not delay fertility, it ensures that young families or lone mothers are getting support from parents and relatives through co-residence. As a result, transfer programs nominally targeted at the elderly, such as South Africa’s generous old-age pension system, actually end up supporting the unemployed, lone mothers and their children (Case and Deaton 1998). One may also celebrate this delayed household formation as a sign of strength of familial ties in South Africa that demonstrates that the private safety net still works and should be supported (rather than replaced by public safety nets).

A closer look at the workings of this delayed household formation and associated private safety net, however, reveals a number of serious problems. First, the delayed household formation places a significant burden on the households supporting them. As shown in Klasen and Woolard (2005), the number of unemployed persons a household supports is one of the most important predictors of poverty risk. In related work using panel data from South Africa, Woolard and Klasen (2005) show that change in the number of unemployed persons in the household is also one of the most important predictors of downward income mobility. This burden of delayed household formation associated with unemployment is also closely related to inequality in the distribution of the unemployed young across households. In the South African case, 70 percent of households contain no unemployed, 20 percent have to support
one unemployed, 9 percent two or three unemployed, and just over 1 percent four or more unemployed. There is significant employment polarization among households because some families are much more affected by poor labor market prospects than others. As a result, inequality is increased overall, as it is typically the poor who have to support many of the unemployed, while the rich with better human capital largely escape this burden.

Also, from the perspective of the young people themselves, there are serious problems. The support the unemployed young people receive varies greatly because it depends on the resources of their families (and the willingness to share these resources through co-residence). In the South African case, some 30 percent of the unemployed found themselves supported by households that themselves have an extremely thin resources base; thus the unemployed person’s only option is to live in deep poverty (Klasen and Woolard 2005). In contrast, some other unemployed fared much better and could rely on significant household resources. Here, too, the unequal distribution of unemployment plays a role, affecting the support the unemployed can expect to receive in the households they reside in.

Moreover, delayed household formation can itself become a barrier to escaping unemployment, largely because co-residence forces the unemployed to reside where the means of support is instead of where the best labor market prospects are. In the South African case, many unemployed reside in rural areas (including the former homelands) because these are the places where their parents live. As a result rural unemployment rates are inordinately high—close to 40 percent in South Africa. Unemployed living in rural areas also find it difficult to travel to urban areas where they might find work.

Here public policy has a significant influence. Many rural households are sustained by the generous social pensions of the elderly. Households containing parents or grandparents who receive pensions are thus an attractive destination for their unemployed family members. The pensions not only sustain the elderly in rural areas but also support the unemployed there, drawing them away from promising labor market opportunities in more urban areas. At least in the South African case, not only does the failed transition to employment delay the transition to household formation, but the failed transition itself is providing further barriers to employment and can thus constitute a poverty trap for those affected by it. In this sense, the private safety net actually reduces the efficient workings of the labor market and prolongs unemployment, with negative repercussions for the unemployed and the households supporting them.

Finally, such delayed household formation cannot be in the interest of the youth themselves. It delays and blocks a critical and usually the final transition into independent adulthood and postponing this transition by a decade or more is curtailing the independence and autonomy young people should have access to.

Thus it appears that delayed household formation should be seen as a major concern for policy makers. It delays a critical transition into independence, it is associated with poverty among those who are delaying the transition as well as those who are supporting them, and it can contribute to reducing the chance to escape unemployment.
Conclusions and Policy Issues

In this short paper I have argued that delayed household formation should be seen as a major development problem in those countries that are affected by it. It is largely a consequence of a failed transition into employment, but, as the South African evidence seems to suggest, also a cause of lower employment prospects. This effect appears to be strengthened by the social pension program, which supports co-residence in areas with poor labor market prospects. It can increase inequality and raises poverty among those who delay household formation as well as those who support them.

The case was made largely on observations from South Africa (although a related literature exists for some industrialized countries, particularly Southern Europe; see Gallie and Paugham 2000). It is an empirical question whether other countries and regions in Africa and the Caribbean that show high marriage ages are similarly affected by this problem of late household formation. To the extent that it is, increased policy attention is warranted.

When thinking about policy issues, the obvious first item of focus is to reduce youth unemployment. Since delayed household formation is so closely related to youth unemployment, reducing the jobless rate would facilitate earlier household formation. Here labor market and macroeconomic policies are clearly very important. These issues are well covered in the World Development Report 2007 (World Bank 2006). But I also want to highlight some specific policy proposals that might be useful to support the transition to household formation. First, urban housing policies could play a role in facilitating the transition to household formation. Subsidized housing programs for young people (including young families) could make it easier for young people to move closer to where the employment prospects are and lower the costs of household formation. Second, supporting ways to transfer resources to young people without requiring co-residence might help speed up household formation without foregoing parental support. Here improvements in financial services might play a role.8 Finally, specific programs to support job search activities by the unemployed could reduce this rigidity caused by co-residence. Among issues to consider are job seeker allowances that would facilitate search activities, youth employment agencies, and apprentice and traineeship programs that reduce the financial and informational barriers to young people.

Currently, financial transfers to unemployed young people are not a policy option that is seriously considered. Apart from fiscal and administrative concerns, there are (legitimate) worries about the (potential) disincentive effects such payments could have on job search activities. The findings of this paper suggest that the failure to provide such support to young unemployed looking for work is also causing inefficiency and rigidity in the labor market, this time by forcing the unemployed to reside where their source of support is. It is not clear which of the two problems is worse. Thus I suggest that it would be worth exploring policies providing financial support to aid the job search activities of young people.
Endnotes

1. See Baliga, Goyal, and Klasen (1999) for a model and empirical assessment accounting for this trend and the associated reduction in the age difference between spouses.

2. See Gallie and Paugam (2000) for a related discussion emphasizing the delays in household formation in Southern Europe where the delays are intimately linked to unemployment questions.

3. This information is taken from the October Household Survey 1995, which asks a question of each individual regarding the relationship to the household head. Dependents are defined as those people who say that they are children, grandchildren, siblings, other relatives, or unrelated to the household head. The last category includes very few people. I conversely include those (few people) who say that they are parents or grandparents of the household head in the household head category.

4. Please note that this information is based on self-definition of headship (or being spouse of the head).

5. Africans make up 77 percent of the total population in South Africa.


7. See Klasen and Woolard (2005) for an econometric assessment of the importance of this issue.

8. Given that co-residence will always be cheaper than transfers (since one loses economies of scale through the setting up of separate households), there are clear limits to the success of such a policy.

References


Part VI: Becoming Citizens
Is Religion an Obstacle to Development in the Middle East?

JEAN-PHILIPPE PLATTEAU

People who blow themselves up in the name of Islam are typically young and educated persons. They are not drawn from among the poorest of the poor. Still, they must believe they have very poor life prospects to reach such a state of despair or anger that they are willing to sacrifice their lives and become martyrs. Also, the fact that they come from the lands of Islam must be part of the explanation. Can it thus be argued that there is something in the Islamic creed that blocks modernization and development and that drives young people into fanaticism? This is the issue that I want to explore here, starting with the famous thesis of Bernard Lewis and then proceeding to a targeted critique aimed at highlighting the relationship between religion, politics, and economics in the Islamic countries.

The Thesis of Bernard Lewis

Islam is considered by some influential authors—such as the American historian Bernard Lewis in his 2002 New York Times bestseller What Went Wrong?—as an obstacle to development. This is because, unlike Christianity, the separation between religion and politics, God and Caesar, church and state, spiritual and temporal authority, has never really occurred in the Islamic world. As a consequence, individual freedom, social pluralism, civil society, and representative government were prevented from evolving in Muslim societies. It is argued that the reason for the lack of separation between the religious and the political spheres in the Muslim world is historical: the Prophet Muhammad became the political leader of his own city (Medina), causing a complete merging of religion and politics and stifling any pressure for building a separate religious establishment.
While the first Christians built up such a structure to defend themselves against a state that oppressed them (until Constantine converted himself to Christianity) and adhered to the principle “render unto God that which is God’s and unto Caesar that which is Caesar’s” (Matthew 22:21), the Muslims had no such need. In Islam, there is no ecclesiastical body nor is there any vertical chain of command to direct the believers (except in Iran where the Shia tradition prevails and a clerical establishment exists, which has been expanded since Komeini’s revolution). As Lewis described it in *What Went Wrong* (2002: 113, 115):

Since the state was Islamic, and was indeed created as an instrument of Islam by its founder, there was no need for any separate religious institution. The state was the church, the church was the state, and God was head of both, with the Prophet as his representative on earth. . . . From the beginning, Christians were taught, both by precept and practice, to distinguish between God and Caesar and between the different duties owed to each of the two. Muslims received no such instruction.

There is actually no such thing as a laity in the lands of Islam. In the words of Lewis (111–12),

The idea that any group of persons, any kind of activities, any part of human life is in any sense outside the scope of religious law and jurisdiction is alien to Muslim thought. There is, for example, no distinction between canon law and civil law, between the law of the church and the law of the state, crucial in Christian history. There is only a single law, the *shariah*, accepted by Muslims as of divine origin and regulating all aspects of human life: civil, commercial, criminal, constitutional, as well as matters more specifically concerned with religion in the limited, Christian sense of the word. . . . One may even say that there is no orthodoxy and heresy, if one understands these terms in the Christian sense, as correct or incorrect belief defined as such by duly constituted religious authority. . . . Even the major division within Islam, between Sunnis and Shi’a, arose over an historical conflict about the political leadership of the community, not over any question of doctrine.

The only vital division in Islam is between sectarian and apostate: “Apostasy was a crime as well as a sin, and the apostate was damned both in this world and the next. His crime was treason—desertion and betrayal of the community to which he belonged, and to which he owed loyalty. His life and property were forfeit. He was a dead limb to be excised” (Lewis 1995: 229).

The *shariah* empowers Muslim jurists, the *ulama*, “to assess the legality of the actions of individuals on the basis of their compliance with God’s commands” (Cleveland 2004: 27–28). As for the sovereign, he is just the “shadow of God on earth,” in charge of enforcing, yet not interpreting, the words of God. In fact, there is no concept of nation or people in the Islamic world, only that of the community of believers (the *ummah*), which transcends physical boundaries.

People’s lives therefore follow the words of the Koran, with essentially no room for maneuver: the Koran being a divine law that defines the standard of right and wrong in all matters, it is to be considered as the final arbiter of human affairs and of truth and falsehood, the only reference to what is absolutely true and eternal (Hassan and Kivimäki 2005: 126). For Lewis and others, a direct consequence of the
Muslim refusal to admit that faith is a private matter is a continuous meddling of religion in political affairs that stifles private initiative.

The difference between Christianity and Islam is so radical that it reflects a clash of cultures and civilizations: to the Western perception of the separation of religion from political life and the assertion of the existence of individual rights, the Muslims oppose an all-encompassing view of the divine law that implies the amalgamation of religion and politics and the recognition of collective rights for all the Muslim faithful. From there, it is just a short step to contend that “Islam and democracy are antithetical,” since obedience to religious tenets is inherent in Islamic religious doctrine (Lewis 1993: 91).

Where Lewis’ Thesis Is Lacking

Lewis’ analysis of Islam and its fundamental differences with Christianity is both cogent and appealing. It undoubtedly rests on a considerable amount of scholarship. Upon reflection, however, it appears to be lacking in two important respects.

The first problem with Lewis’ analysis arises in connection with the critical question as to how the sharia is supposed to be interpreted by the believers, given that there is no ecclesiastical structure with the required authority to enforce uniform interpretation. It is correct to say that there is no priesthood in the Islamic world, in the sense that there are no human intermediaries between the individual believer and God. Nevertheless, it is hard to deny that Islam owed much of its vitality to the existence of a body of learned scholars who were able to provide a measure of unity to law and doctrine by codifying and transmitting religious knowledge. Moreover, the madrasahs, these schools of instruction created in Baghdad in the 11th century, helped a great deal to maintain a certain unity in the Islamic scholarly tradition (Cleveland 2004: 28–29).

A second problem with Lewis’ analysis is that the role of politics and its relation to religion in the actual history of the lands of Islam has not received the attention it deserves. This question of the interaction between Islam and politics arises as soon as it is recognized, as I have just suggested, that there is a certain measure of unity to Islamic law, doctrine, and judicial practices. Is it really true that states and political authorities in the lands of Islam have been subsumed or merged in their professed religion? Or is the reality more complex and the reverse relation plausible?

What does historical evidence teach about the relationship between the Islamic creed and the political game? Instead of a continuous merging between politics and religion, history shows that political power has very often been exercised by military who dressed themselves as emirs. Baybars, the great Mameluke ruler, used the prestigious figure of the caliph to sanctify his own worldly glory, in the same way that Friedrich II (1194–1250), a Hohenstaufen, obtained the title of king of Jerusalem to enhance his powers (Meddeb 2002). If rulers had to negotiate with the ulama, the lawyer-cum-theologians who represented wisdom in religious matters, a powerful tradition among the ulama (among both the Sunni and the Shi’ite Muslims) provided
that “they should keep their distance from the rulers of the world,” not linking themselves too closely with the government of the world yet preserving their access to the rulers and influence with them (Hourani, 1991: 144–45, 458).

Furthermore, Hourani (1991: 144) wrote, even if the ruler was unjust or impious, “It was generally accepted that he should still be obeyed, for any kind of order was better than anarchy.” As the traditionalist and influential philosopher Al-Ghazali (1058–1111) said, “The tyranny of a sultan for a hundred years causes less damage than one year’s tyranny exercised by the subjects against one another.” Revolt is justified only against a ruler who clearly went against a command of God or His prophet. Anarchy is the most abhorred state and, to prevent it from emerging, despotism is justified.

In light of the above historical evidence, it is hard to see an essential difference between Islam and Christianity regarding the respective roles of religious and political authorities. Although Christianity has a stronger tradition of centralized religious authority, the difference with Islam is probably a matter of degree only. Instead of being totally absorbed or merged into the religious realm, the political ruling elite in the Islamic world appears to have been either rather independent from the religious authority (as illustrated by the Iranian example) or able to bring it to heel (as attested by the Ottoman example). Overall, it is fair to say that the supremacy of the state over the church has always existed in the lands of Islam: “The Muslim caliph was first and foremost a prince; he was not a pope, and he did not have to contend with one” (Zakaria 2003: 147). It is only when the political elite were utterly decadent that they could lose ground in the face of religious dignitaries. In other, more ordinary circumstances, the striking fact is that rulers and their political opponents “could manipulate the faith in order to serve their own ends.” In particular, “rulers could always find some priest to legitimize them, and rebels could find inspiration in the words of others” (Zakaria 2003: 147). If Lewis is correct when he points out that in Islam religious agents never really succeeded in imposing ecclesiastical constraints on political and military rulers, he is wrong when he describes as rare the attempts made by Muslim sovereigns to bring religion under control (Lewis 2002: 135–36).

The Unavoidable Malleability of Religious Doctrines

Those who assert that religion is an obstacle to development in Islamic countries typically ignore the fact that a reactionary interpretation of a doctrinal body is often the consequence rather than the cause of the economic crisis in which a society is caught. Also, religion may become an obstacle to development because it is opportunistically used by the power elite to assert and entrench their position. The two questions are obviously interrelated insofar as the proclivity of political power to use religion is greater when a crisis in the society threatens the political elite. When trade expands and the economy is thriving, on the contrary, religious dogmas are kept in check not only because they are opposed by the merchant class but also because they do not have much resonance in the minds and hearts of the common people.
In present-day Islam, radicalization of Islamic ideology appears as a consequence of the economic, social, and military crisis faced by Muslim societies. In the words of Hourani (1991: 442):

The events of 1967 [a crushing military defeat of the Egyptian Army at the hands of the Israelis], and the processes of change which followed them, made more intense that disturbance of spirits, that sense of a world gone wrong, which had already been expressed in the poetry of the 1950s and 1960s. The defeat of 1967 was widely regarded as being not only a military setback but a kind of moral judgement. If the Arabs had been defeated so quickly, completely and publicly, might it not be a sign that there was something rotten in their societies and in the moral system which they expressed? . . . The problem of identity was expressed in terms of the relationship between the heritage of the past and the needs of the present. Should the Arab peoples tread a path marked out for them from outside, or could they find in their own inherited beliefs and culture those values which could give them a direction in the modern world?

To the extent that the first option appears as a surrender of independence to the external world, preference tends to be given to the second option.

It is revealing that power elites often started to use Islam and the language of religion in self-defense against opposition groups that were frustrated at the failures of corrupt, secretive, authoritarian, and ineffective states that did not deliver on what they promised (Hourani 1991: 452–53). Bear in mind that governments in Arab countries are made especially vulnerable by the fact that in Islam anyone can oppose the state on the grounds that it is insufficiently Islamic. This characteristic accounts for the tendency of fundamentalist thinkers to pronounce harsh judgments as to whether their rulers are “good Muslims,” and to excommunicate those whose Islam they deem too lenient or too liberal (Zakaria 2003: 144).

For example, in Egypt, the Muslim Brotherhood, whose leaders were articulate and educated men, appealed strongly to those who were shut out of the power and prosperity of the new societies. To defuse these criticisms and appeal to a wider segment of the nation, by the 1980s the regime began to rest its legitimacy in religion (Hourani 1991: 452). Saudi Arabia has followed that path in a continuous and systematic manner. Over the past three decades, the Saudis have funded religious schools (madrasahs) and centers that spread Wahhabism around the world. In the above-highlighted logic of the supremacy of temporal over spiritual authority, the Saudi king has his clerics, and Osama bin Laden has his (Zakaria 2003: 147).

It is unfortunate that Islam has little competition when it comes to articulate popular opposition to authoritarian and corrupt regimes. This is because, in the words of Zakaria:

The Arab world is a political desert with no real political parties, no free press, and few pathways to dissent. As a result, the mosque became the place to discuss politics. As the only place that cannot be banned in Muslim societies, it is where all the hate and opposition toward the regimes collected and grew. The language of opposition became, in these lands, the language of religion. This combination of religion and politics has proven to be combustible. Religion, at least the religion of the Abrahamic traditions (Judaism, Christianity, and Islam), stresses moral absolutes. But politics is all about compromise. The result has been a ruthless, winner-take-all attitude toward political life (Zakaria 2003: 142–43; see also Hassan and Kivimäki 2005: 133).
Islamist groups in many countries have built support among urban alienated people along two fronts. These groups have capitalized on the lack of legitimacy of weak states and their failure to integrate the entire population and increase political participation (many regimes have had only narrow support within particular ethnic, religious, or tribal minority groups). And they have also filled the gap left by the retreat of the state from the distribution of essential services, such as health, education, and child care. Thus, in Egypt, the number of Muslim nongovernmental organizations increased from 600 in the early 1970s to 2,000 in the mid-1980s, and the number of private mosques grew from 14,000 to 40,000 from the early 1960s to the early 1980s (Huuhtanen 2005: 78–79). Typically, a privately funded Islamic charitable institution provides a range of services organized around a private mosque, including donations for the poor, a clinic for health care, a kindergarten, and a primary school. Often, these institutions have also founded religious schools, orphanages, and homes for the elderly.

Conclusion

An important conclusion seems to emerge from this brief foray into history: religion does not constitute an autonomous force that is, by itself, susceptible of promoting or retarding economic growth and development. For one thing, a religious creed appears to be something sufficiently flexible to allow for substantial adjustments through evolving interpretations of the sacred texts. Concomitantly, religious authorities, to the extent that they exist, can be mobilized in varying directions and, in particular, different clerics can provide support to antagonistic political actors, for example, rulers and their political opponents. In a situation of protracted crisis such as that experienced by the Muslim world, a radicalization of religious beliefs may take place at the urging of frustrated groups of the population or, in self-defense, by the political rulers themselves. Such a risk is especially high when people can associate the failure of their governments in meeting the challenges of modernity with the failure of secularism and of the Western path (as the case of Egypt attests, socialism, nationalism, and secularism have all failed in this regard), and when military defeats are added to poor economic performances.

A vicious circular causation mechanism is set into motion when economic stagnation and political stalemate cause beliefs to evolve in a reactionary way, which makes the overcoming of the crisis even more difficult. Thus economic difficulties can lead to ideological radicalization that prevents or slows down the transformation of Islamic institutions despite their inefficiency. Finally, one has to ask whether the lack of a full-fledged movement of secularization and rationalization in the history of Islamic countries, such as the Enlightenment in 18th century Western Europe, is not responsible for the self-reinforcing effects that make the current crisis so hard to disentangle. In other words, is this crisis not especially vicious precisely because opposition to corrupt, inefficient, and repressive political regimes cannot root itself in secular, nonpuritanical, nonromantic ideologies and belief systems?
References


“May you be condemned to live in interesting times” goes the famous Chinese saying, which could well be the motto for youth in the contemporary world. And in no other field is this more evident than in politics. The past three decades or so have witnessed some of the most important and unexpected political transitions in more than a century. Relations of influence over public policy have shifted, numerous governments have fallen, whole types of regimes have collapsed, new states have been created, and the world order of sovereign national units has been transformed—all within a short space of time and across virtually the entire globe.

In some cases youth have been among the protagonists of change, in others among its major victims; in all cases they have been strongly affected. It is normal that children enter the status of youth powerless, without civic rights and public obligations of their own, and they are expected to leave it with a newly acquired set of rights and obligations as “politically mature adults.” Needless to say, how powerful they have become in the meantime—de jure or de facto—depends on the type of regime they are living under.

Which brings us to five political transitions that I believe are affecting contemporary youth. Any one of them would be daunting enough to require substantial attention; together, they form an unprecedented context that makes adjustment uniquely difficult.

The First Transition

At no time in history have more youth lived under some form or other of democracy. Between the mid-1970s and the 1990s, almost 70 different autocracies collapsed or negotiated their way into a change in regime. Even more astonishing, very few of
these new regimes have since regressed into the same or another type of autocracy. Most have remained democratic—admittedly, some precariously or incompletely so. In short, more of today’s youth are not only reaching “political maturity,” but also acquiring the status of “national citizens.” I draw the following brief conclusions from this observation:

- Today’s youth can vote and choose, more or less, freely between competing candidates who have some chance of winning.
- They can join political parties and even run for elected office.
- They are entitled by right to petition rulers, join associations, and organize their own social movements.
- Subject to varying restrictions, they have the right to assemble collectively in public places and to participate in strikes or boycotts of private firms.
- They are free to speak out on topics of interest to themselves or others and to access alternative sources of information.
- They are more likely to be free to travel, acquire an education, and seek employment in a country not of their birth—again, under limits imposed by others.

Given all these new opportunities, it should be the case that youth are participating more in political life and that their influence over public policies is increasing. Neither seems to be happening, however. Although the pattern is hardly uniform and the data are not always available by age cohort, youth do not seem to have seized most of these opportunities—especially in well-established democracies where, with the exception of movement activity, all indicators show a decline in voting, campaigning, party membership, candidacies, association membership, and participation in strikes. Youth do seem to have developed alternative forms of information and are more likely to engage in foreign travel, education, and employment—subject to, of course, different national and international constraints.

Some of youth’s failure to exercise its political opportunities can be attributed to so-called “illiberal democracies,” where effective access to these rights is impeded by ruling oligarchies, but most of it has been happening in well-established “liberal democracies” and hence where it seems to be a matter of voluntary choice.

There is no avoiding the ironic conclusion that, while more youth than ever live under democratic rule, the institutions and practices of democracies are not successful in appealing to them.

The Second Transition

At no earlier time have the proportional differences between age cohorts been so great and had such political significance. All youth experience and are affected by their passage as a cohort toward new political opportunities and duties. In stagnant societies, this difference may be barely perceptible and leave no enduring traces. Cohorts differ only marginally due to random factors such as the personality of
successive rulers or the impact of exogenous shocks. In dynamic societies, however, the opportunities for advancement and access to power are likely to vary much more from cohort to cohort. Much of this variation results from inexorable demographic changes that are increasing the size of older cohorts and diminishing the size of younger ones. This gap, however, has been greatly widened by the observation made earlier, namely, that youth are voting less and less frequently. Couple this fact with a steady rate of electoral participation among older citizens, and the political imbalance becomes much greater. Also, thanks to the increased number of immigrants living in many contemporary societies, who tend to be younger than the national average, youth is yet more underrepresented since these denizens (legal alien residents) usually have no voting rights. The following conclusions seem to follow, although not equally across all polities:

- Politicians are aware of this disparity in numbers and in voter turnout, and they orient their election campaigns and party manifestos accordingly.
- Consequently, public policies have become increasingly dedicated to protecting and even enlarging the entitlements and security of older citizens, whereas proportionately less effort has been made to deal with problems specific to youth.
- Youth lose interest in joining and participating in existing political parties and interest associations (especially trade unions) because these organizations are more concerned with the contributions and votes of older citizens.
- The form preferred by youth for political activism and representation has been the “social movement” with its more flexible structure, open leadership, and ability to shift its focus to emerging issues.

The Third Transition

*At no earlier time have the distances in political experience between successive generations been so great and had such political significance.* At specific (but usually unforeseeable) moments in history, political cohorts become political generations. They share distinctive experiences and values that set them apart from their predecessors. War—external or internal—has typically been one of these “generation-creating” moments; today, democratization has had this effect in many polities. Youth enter into political maturity before and after such a change in regime. Moreover, differences associated with this discontinuous “event” have been exacerbated by more continuous intergenerational trends, namely, toward higher levels of education, greater physical mobility, and more extensive use of communications technology. The result is a qualitative and not just a quantitative gap, and this has had a number of consequences for political life, although again to a varying degree across polities:

- There has been a dramatic decline in political communication and hence in socialization within families, such that lessons and images that were routinely passed on in the past are no longer being transmitted.
Youth are less and less likely to know what the political values of their parents are (or were) and therefore are less and less likely to acquire a partisan identity or trade union affiliation from them.

Not only are youth much less likely to join traditional political parties, but if and when they do vote, they are much more likely to shift opportunistically from one party to another.

When they do join organizations of civil society, these are less likely to represent the “interests” of class, sector, or profession (as in the past) than they are the “causes” of varying origin. Moreover, participation in these movements tends to be more erratic and to shift from one focus to another.

Youth have much more ambiguous images of the nature of political authority and hence are much more likely to question the behavior of those who claim to be acting legitimately on its behalf.

Confidence in political institutions, especially in such liberal democratic political institutions as parties and legislatures, has declined virtually everywhere but most of all among youth.

Confidence in individual politicians has declined even more and seems never to have been so low—again, with the opinions of youth leading the downward trend.

These generational gaps might be expected to produce a lower quality of political accountability and a more compliant population, that is, to provide greater comfort and support for autocratic rather than democratic regimes—despite the manifest trend in the opposite direction. What reverses this expectation is the (admittedly incomplete) evidence that, according to mass public opinion surveys, contemporary youth (almost everywhere) have a high and even expanding interest in politics. They have not resigned themselves passively but continue to harbor high expectations concerning what politics and public institutions should do—for them and for the society as a whole. One is reminded of de Tocqueville’s famous dictum that nothing is more dangerous for political stability than the widening gap between sharply enhanced expectations (produced by the “wave” of democratization) and regime performance (especially when affected by the introduction of reforms).

The Fourth Transition

In no recent times has the gap between the mix of civic rights and civic obligations of youth been so large and had such political consequences. All types of political regimes depend on some equilibrium between what they offer and what they demand of their subjects or citizens. Traditional authoritarian regimes neither demand nor offer very much; radical totalitarian ones promise a lot of both. Liberal democracies typically rest on a notion of citizenship based on a mix of obligations and rights—with youth bearing an inordinate part of the burden, and with the main burden, military conscription in war or peacetime, usually coming before the main benefit, that
is, voting rights and welfare rewards. This mix is currently in transition with several implications:

- Very few polities still maintain a general conscription of youth during peacetime and when they do, it is increasingly easy for urban and propertied youth to avoid it.

- “Alternative service,” which had become increasingly attractive when conscription existed, is now disappearing, a fact that could have an important impact on civil society organizations that were strengthened by it.

- With increased military professionalism and a decline in military conscription, youth have been deprived of a strong potential motive for political action (and politicians have been freed of a major potential constraint in their use of armed force).

- Youth are learning that citizenship in contemporary democracy is more a matter of enjoying rights than fulfilling obligations, and that the number and variety of these rights tend to expand.

- Moreover, increasing areas of policy making are being delegated to so-called “guardian” institutions—regulatory agencies usually run by senior technical experts.

- To the extent that the theme of governance has managed to replace the more old-fashioned notion of government, the sphere of accountability shifts from citizens to stakeholders.

- If youth tend to be poorly organized for collective action as citizens (with the exception of university students), they are even more poorly organized as stakeholders.

If the preceding observations are true, then there are two major implications for youth in both new and old democracies. They are faced with a systemic imbalance in the sense that they will be inclined to accept (and demand) more and more rights without corresponding obligations—a sort of built-in political inflation. At the same time, however, they will be increasingly opposed by guardian agencies that are created to be insensitive to such inflationary demands and to respond to (well-established and older) stakeholders and not citizens.

**The Fifth Transition**

*Perhaps never before has the tendency been as strong for short-term priorities to prevail in public policy at the expense of future generations.* In large part, this is a compound product of the preceding transitions. Democracies have always been accused of myopia, especially when incumbents respond to the periodic temptation posed by the electoral cycle to reward potential voters. The demographic transition makes politicians in power tempted to reward the more numerous, better organized, and electorally active older cohorts of citizens and to pass the costs on to younger
ones—youth, of course, but even more to cohorts not yet born. The generational transition and the wider gap between age cohorts presumably loosen the sense of responsibility that parents feel for their immediate and eventual descendants (and vice versa). And, finally, the only counterweight to the imbalance between entitlements and obligations comes from the specialized guardians who are supposed to be “above-party” and “impervious to special interests” in their pursuit of professional goals and hence are presumably more oriented toward the pursuit of longer-term goals for the system as a whole.

Evidence

These observations are drawn mainly from the Green Paper that I, along with others, have recently produced for the Council of Europe on The Future of Democracy in Europe.1 As its title indicates, it analyzes comparative data from the Western and Eastern polities of Europe. Some of these generalizations may also fit trends in North America; the United States in particular has a different demographic profile, although all of the four other transitions are roughly similar. Needless to say, systematic data and analyses of cases are not always available, and the range of variation is significant. Elsewhere in the world, autocracy or “illiberal democracy” is still the norm and hence the transition within the transitions is fundamentally different. From a political perspective, primacy of action in these cases is likely to focus on bringing down the incumbent regime, and the “unit” is less youth as such than organized university students. There have been very few cases where student collective action was crucial to bringing about this transition to democracy (the Republic of Korea comes to mind as a particularly salient case), but it has often made an important contribution at specific moments.

Reforms

In the Green Paper, we advanced the following suggestions for reforms that we believe will improve the interest of youth in politics and provide them with improved channels of communication with political authorities:

- **Universal citizenship** would grant voting rights to all legally entitled citizens from the moment of birth, with one parent exercising these rights until the age of political maturity.

- **Discretionary voting** would allow citizens to spread their vote across candidates according to their intensity of preference and to vote for “none of the above” (NOTA) when no candidates were preferred.

- **Lotteries for electors** would award each voter with a ticket to one of three lotteries (one for first-time voters, one for consistent voters, one for all others) with
substantial prizes that would allow the winners to distribute funds to public agencies or nongovernmental organizations of their choice.

- **Shared mandates** would allow parties to nominate two candidates for each elected position, one to serve as the “senior” representative, the other as his or her deputy, with the distribution of tasks to be determined by parties or candidates.

- **Specialized elected councils** would create representative bodies (where possible by election) to advise authorities on issues of specific concern to underrepresented groups such as youth, the handicapped, renters, the unemployed, and the like.

- **Democracy kiosks** would establish a national system of information and transaction centers at the local level where citizens and denizens could receive information and forms, complete business involving all public agencies, and, eventually, vote electronically for candidates and in referendums.

- **Citizenship mentors** would create a corps of modestly remunerated volunteers to advise personally all recent immigrants and other noncitizens about their rights and to help them to take advantage of opportunities.

- **Civic service** would establish an obligation of service (with modest remuneration) in public or semipublic institutions for all students upon graduation from secondary school for a period not to exceed six months.

- **Education for political participation** would provide primary and secondary students with the opportunity to serve as (unpaid) assistants or interns to officeholders, elected and selected, for short periods.

- **A Citizens’ Assembly** would establish an annual representative assembly composed of randomly selected citizens to review and decide whether to accept or reject one or more legislative drafts referred to it by a dissenting minority of regularly elected deputies.

- **Variable thresholds for election** would make it progressively more difficult for incumbent representatives to be reelected by raising the necessary threshold requirements for election.

- **Vouchers for funding civil society organizations** would finance associations and movements accepting semipublic status with public funds of a fixed amount to be collected from all citizens through their income tax filings.

- **Vouchers for financing political parties** would finance all registered parties through the distribution of vouchers, paid for by levying a fixed sum on voters. These vouchers could be combined with NOTA voting to provide an accumulating fund for financing new parties.

- **Electronic support for candidates and parliaments (“smart voting”)** to make available to all citizens on a voluntary basis questionnaires concerning their policy preferences before an election and to make it possible to match these preferences with those of candidates for office.
• *Electronic monitoring and online deliberation systems* to provide a publicly organized and funded system for monitoring the legislative performance of all elected representatives and for communicating with these representatives.

• *Postal and electronic voting* to facilitate the use of easy and secure means of postal voting, as an intermediate step toward the eventual widespread application of electronic voting, once security issues have been resolved.

These proposals, which are presented only very schematically here, are made, along with several others, in the Green Paper. For further explication, the reader is referred to the original publication.

**Endnote**

Some Notes on Beliefs and Development

RAFAEL DI TELLA AND ROBERT MACCULLOCH

Economists have long emphasized the role of institutions in development. But what really are those institutions? One of the most productive approaches has emphasized the role of beliefs (see Greif 1994 and Denzau and North 1994). Indeed, Greif (2006) defines an institution as a system of shared beliefs in the link between behavior and outcomes, as well as internalized norms, cognitive systems, and formal and informal rules that together generate a regularity of behavior. North (2005: 77, 119) attributes a central role to beliefs systems in shaping institutional designs, stating:

There is an intimate relationship between beliefs systems and the institutional framework. Beliefs systems embody the internal representation of the human landscape. Institutions are the structure that humans impose on that landscape in order to produce the desired outcomes. Beliefs systems therefore are the internal representation and institutions the external manifestation of that representation. . . . The key to building a foundation to understand the process of economic change is beliefs, both those held by individuals and shared beliefs that form beliefs systems.

This view giving a central role to beliefs has produced one of the most satisfying theories designed to explain differences in economic organization across otherwise similar countries. For example, many observers have wondered why the United States has an economic system based on low taxes and private initiative while Europe has a system with a large government sector and high taxes. The best explanation we have is that there are differences in the beliefs that Americans and Europeans hold.¹ This happens to be true empirically. For example, Alesina, Glaeser, and Sacerdote (2001) report that 60 percent of Americans, yet only 26 percent of Europeans, believe the poor are lazy.² Furthermore, they show that there is greater government intervention in terms of taxes and regulation in countries where relatively few people hold this belief (as well as other beliefs that are compatible with the proper workings of a

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² Berlin Workshop Series 2007
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One reason why this is extremely important is that many countries would like to imitate some of the policies that Americans have used in the course of their development. These findings suggest that they need to first engineer “American-style beliefs.” The relevant policy question, then, is how can they do that?

Before addressing this question, note that we are not concerned about all of society’s beliefs but rather about a subset that is important in shaping economic outcomes. In particular, we are concerned with affecting beliefs that are consistent with the workings of free markets, which we term pro-market beliefs. One example is the set of beliefs concerning the importance of individual effort relative to luck and connections in shaping income (meritocratic beliefs). Beliefs in this broad class include those referring to the desirability of redistributing income and the minimum standard of living that is desirable for the poor.

As a first piece of evidence in support of the idea that it is fruitful to focus on beliefs, consider figure 1, where growth rates are plotted against a basic set of beliefs. Countries with a more widespread belief that poverty arises because of society’s unfair treatment (rather than laziness) have lower growth rates. This visual impression is confirmed in the regressions in table 1, where we control for a standard set of determinants of growth, including convergence, geography, trade, and institutional background (proxied by legal origins).3

With respect to the causes, previous work in this area suggests that pro-market beliefs are negatively correlated with perceptions of corruption. This can be observed at the individual level at one point in time, as people who see a lot of corruption in the country also say they believe in government interventions such as redistributing income.
more income to the poor. This is inconsistent with work by Djankov and others (2002), which argues that regulation is caused by a “tollbooth” mechanism, whereby corrupt bureaucrats extort businessmen by producing unpopular and extortive regulations. If regulations are simply a way to generate bribes, people who are particularly aware of corruption should be less—not more—inclined to demand regulations. A more natural explanation, we argue, is that corruption delegitimizes business and commercial institutions, reducing the appeal of capitalism. It can also be shown that people are willing to “burn” money and vote for a socialist system under which they will likely earn less money (but where businessmen will also earn less, and the system will thus be perceived as more fair). Consistent with this, it is observed that within countries and over time, those who experience a shock to their corruption levels later tend to elect parties that espouse greater government intervention (Di Tella and MacCulloch 2002).

Another hypothesis backed by some evidence is that owning property may change the beliefs that people hold. This hypothesis has long been emphasized by conservative politicians. For example, in 2000 former British prime minister Margaret Thatcher stated:

... we also pioneered two radical policies for wider ownership. The sale of public sector houses at large discounts to their tenants turned hundreds of thousands of families into

<table>
<thead>
<tr>
<th>TABLE 1. Growth Regressions on Economic Beliefs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dependent Variable: GDP Growth Rate (1981–97)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Economic beliefs</th>
<th>(1)</th>
<th>(2)</th>
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<tbody>
<tr>
<td>Unfair for poor–L</td>
<td>–0.12***</td>
<td></td>
</tr>
<tr>
<td>Government help poor–L</td>
<td>–0.07**</td>
<td>–0.07***</td>
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</table>

<table>
<thead>
<tr>
<th>Other controls</th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Openness</td>
<td>0.08***</td>
<td>0.08***</td>
</tr>
<tr>
<td>Latitude</td>
<td>0.11**</td>
<td>0.08</td>
</tr>
<tr>
<td>Legal origins</td>
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<td>Yes</td>
</tr>
<tr>
<td>$R^2$ overall</td>
<td>0.10</td>
<td>0.09</td>
</tr>
<tr>
<td>Number of observations</td>
<td>571</td>
<td>537</td>
</tr>
<tr>
<td>Number of groups</td>
<td>38</td>
<td>36</td>
</tr>
</tbody>
</table>


Note: Regressions estimated using random (country) effects. Standard errors are in parentheses. Variables are described in the annex in detail. Economic beliefs have L (R) extension if higher numbers mean more Left (Right). They are the 1980–97 (average) answers to the economic beliefs questions, Unfair for Poor–L and Gov’t help Poor–L, given in the Data Definitions.

*Significant at 10 percent level.
**Significant at 5 percent level.
***Significant at 1 percent level.
property owners. Alongside this, the privatisation of industries with special preference for workers and for small buyers began to turn Britain into a nation of shareholders. Of course, ownership of assets brings risks as well as rewards. But the transformation it effects on a society is wholly positive, because it gives people a stake in prosperity and trains them to take control of their own lives.4

The available evidence suggests that the size of these effects can be quite large. For example, Di Tella, Galiani, and Schargrodsky (forthcoming) show that almost all of the difference in a measure of pro-market beliefs that exists between the Argentine general population and a group of squatters in the lowest-income quintile can be bridged simply by giving the squatters property rights to the small plots of land that they occupy. Finally, it has been argued that homeownership also helps with another set of beliefs that is crucial for the workings of the free market, namely, social capital (that is, beliefs concerning how trustworthy others are). Empirical evidence on this point has been gathered by Di Pasquale and Glaeser (1999), who find some connection between homeownership and “good citizenship” as measured by involvement in local politics and nonprofit organizations.

In this spirit, a natural hypothesis for countries with a history of macroeconomic disturbances that bring about arbitrary redistributions or violations of property rights (as in the confiscation of deposits during a banking crisis) is that very noisy income processes (or more precisely, a belief that luck dominates the generation of income) reduce the intensity of pro-market beliefs. A similar point can be raised with respect to countries with a heavy economic dependence on natural resources. A simple implementation of this idea is to look at beliefs in oil-producing countries, including República Bolivariana de Venezuela, Kazakhstan, and Nigeria. If oil, or natural resources more broadly, play an important role in driving overall GDP (gross domestic product) movements, then forces outside of the individual’s control determine a large component of individual income and this will affect beliefs. Similarly, macroeconomic volatility in politically unstable countries that lack financial institutions that can absorb shocks will have a role in the formation of beliefs. Indeed, it will be hard in such circumstances for individuals to hold on to the beliefs that sustain a truly capitalist environment with low taxes and a small degree of government intervention. In particular, the belief that “in general, people who put effort into working end up much better off than those who do not put in effort” will be hard to sustain, simply because it is not true.

Thus a first task is to test the effect of resource dependence (proxied by the proportion of fuel and mineral exports in total exports) and macroeconomic volatility (proxied by country risk) on beliefs with the available data from the World Values Survey. In table 2 we report how fuel exports as a proportion of GDP and country risk shape people’s economic beliefs. We also control for a set of individual effects such as gender, age, marital status, and position within the nation’s income distribution.5 The results support the idea that macroeconomic volatility and dependence on mineral rents affect beliefs in a direction that is less consistent with market economies based on low taxes and few government interventions.
Some Implications

Pro-market beliefs are a key institution that supports economic organization with few government interventions and low taxes. A natural hypothesis is that countries with heavy macroeconomic volatility or that depend heavily on oil and other natural resources have important challenges maintaining those beliefs, and the evidence we present is consistent with this hypothesis. Our findings suggest that, relative to other countries in the world, and given a similar ideological objective, such countries should “invest” in pro-market beliefs. One possible strategy is to promote industrial diversification, which would reduce the connection between overall GDP and natural resources, lending support to the idea that effort pays. Added to the usual arguments for industrialization, weakening the connection between GDP and oil will reduce the

### TABLE 2. Do Country Risk and Natural Resources Cause Beliefs?
Regressions Using World Values Survey, 1981–97

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Unfair for Poor–L</th>
<th>Government help Poor–L</th>
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</thead>
<tbody>
<tr>
<td><strong>Aggregate level variables</strong></td>
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<tr>
<td>Fuel exports</td>
<td>0.43</td>
<td>1.81**</td>
</tr>
<tr>
<td></td>
<td>(0.33)</td>
<td>(0.74)</td>
</tr>
<tr>
<td>Country risk</td>
<td>0.44**</td>
<td>1.36**</td>
</tr>
<tr>
<td></td>
<td>(0.21)</td>
<td>(0.65)</td>
</tr>
<tr>
<td><strong>Individual level controls</strong></td>
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</tr>
<tr>
<td>Work status: Unemployed</td>
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<td>0.22***</td>
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<td></td>
<td>(0.03)</td>
<td>(0.07)</td>
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<tr>
<td>Self-employed</td>
<td>−0.05**</td>
<td>−0.04</td>
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<tr>
<td></td>
<td>(0.02)</td>
<td>(0.08)</td>
</tr>
<tr>
<td>Retired</td>
<td>0.09***</td>
<td>0.21***</td>
</tr>
<tr>
<td></td>
<td>(0.02)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Student</td>
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<td>−0.04</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.07)</td>
</tr>
<tr>
<td>Home</td>
<td>−0.02</td>
<td>−0.06</td>
</tr>
<tr>
<td></td>
<td>(0.03)</td>
<td>(0.08)</td>
</tr>
<tr>
<td><strong>Other controls included</strong></td>
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</tr>
<tr>
<td>Income, sex, age</td>
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<td>Yes</td>
</tr>
<tr>
<td>Pseudo-R²</td>
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</tr>
<tr>
<td>Number of observations</td>
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<td>26,420</td>
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<td>Number of countries</td>
<td>27</td>
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Note: Dependent variables are economic beliefs, which have L (R) extension if higher numbers mean more Left (Right). They are the period answers to the belief questions on Unfair for Poor–L and Gov’t help Poor–L, given in the Data Definitions. Column (1) is probit and reports marginal probabilities; column (2) is ordered probit. Standard errors are in parentheses. All other variables are also described in detail in the annex.

*Significant at 10 percent level.
**Significant at 5 percent level.
***Significant at 1 percent level.
drive toward interventionist policies. Another strategy is to be particularly mindful of keeping macroeconomic volatility low, maybe by appointing very conservative central bankers to keep inflation low or by accumulating foreign exchange to reduce the likelihood of speculative attacks.

**Annex A. Survey Descriptions**

*World Values Survey and European Values Survey (1981–84, 1990–92, 1995–97).* The World Values Survey Series interviewed 168,482 people in 65 nations or regions. We use data on a subset of people who answered questions relevant to our study. The Combined World Values Survey is produced by the Institute for Social Research, Ann Arbor, Michigan. The series is designed to enable a cross-national comparison of a wide variety of values and norms and to monitor changes in values and attitudes across the globe. Both national random and quota sampling were used. All of the surveys were carried out through face-to-face interviews, with a sampling universe consisting of all adult citizens, age 18 and older, across more than 60 independent nations around the world. The 1981–84 survey covered 22 countries; the 1990–92 survey covered 42 countries; the 1995–97 survey covered 53 countries. In total, 65 countries have been surveyed in at least one wave of this investigation (counting East Germany as an independent country, which it was when first surveyed). These countries include almost 80 percent of the world’s population.

The full set of countries or regions covered is Argentina, Armenia, Australia, Austria, Azerbaijan, Bangladesh, Bosnia-Herzegovina, Belarus, Belgium, Brazil, Bulgaria, Canada, Chile, China, Colombia, Croatia, Czech Republic, Denmark, Dominican Republic, East and Unified Germany, Estonia, Finland, France, Georgia, Ghana, Hungary, Iceland, India, Ireland, Northern Ireland, Italy, Japan, Latvia, Lithuania, Macedonia, Madagascar, Mexico, Moldova, Montenegro, Netherlands, Nigeria,

### TABLE 3. Summary Statistics for Economic Performance Regressions in Tables 1 and 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of observations</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economic objective indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP growth rate</td>
<td>571</td>
<td>0.01</td>
<td>0.07</td>
<td>−0.44</td>
<td>0.22</td>
</tr>
<tr>
<td>Openness</td>
<td>571</td>
<td>0.23</td>
<td>0.19</td>
<td>0</td>
<td>0.83</td>
</tr>
<tr>
<td>GDP 1975–80</td>
<td>38</td>
<td>8,856</td>
<td>6,645</td>
<td>670</td>
<td>32,517</td>
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<tr>
<td>Latitude</td>
<td>38</td>
<td>0.40</td>
<td>0.18</td>
<td>0.09</td>
<td>0.71</td>
</tr>
<tr>
<td>Fuel exports</td>
<td>27</td>
<td>0.03</td>
<td>0.07</td>
<td>0</td>
<td>0.33</td>
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<tr>
<td>Country risk</td>
<td>27</td>
<td>0.28</td>
<td>0.12</td>
<td>0.09</td>
<td>0.52</td>
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<tr>
<td><strong>Economic attributes of beliefs</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unfair for poor–L</td>
<td>38</td>
<td>0.68</td>
<td>0.15</td>
<td>0.35</td>
<td>0.88</td>
</tr>
<tr>
<td>Government help poor–L</td>
<td>36</td>
<td>2.64</td>
<td>0.21</td>
<td>2.07</td>
<td>2.91</td>
</tr>
</tbody>
</table>

Source: Data are from World Economic Indicators and the World Values Surveys.
Norway, Pakistan, Peru, Philippines, Poland, Portugal, Puerto Rico, Republic of Korea, República Bolivariana de Venezuela, Romania, Russian Federation, Serbia, Slovak Republic, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan (China), Turkey, Ukraine, the United Kingdom, the United States, and Uruguay.

Annex B. Data Definitions

**Economic Beliefs**

*Unfair for Poor–L:* The response to the World Values question: “Why, in your opinion, are there people in this country who live in need? Here are two opinions: which comes closest to your view? (1) They are poor because of laziness and lack of willpower, or (2) They are poor because society treats them unfairly.” *Unfair for Poor–L* was redefined to equal 0 if the answer was the first view and 1 if the answer was the second view.

*Government help Poor–L:* The response to the World Values question: “Do you think that what the government is doing for people in poverty in this country is about the right amount, too much, or too little? (1) Too much, (2) About the right amount, or (3) Too little.”

**Aggregate Level Variables**

*Latitude:* The absolute value of the geographical latitude of the country in degrees measured from the equator. That is, the range is from zero degrees (the equator) to 90 degrees at the two poles.

*Openness:* Imports plus exports divided by GDP (from the World Bank’s *World Development Indicators*).

*GDP growth rate:* The growth rate of GDP per capita in constant 1992 U.S. dollars, purchasing power parity (PPP) adjusted (from the World Bank’s *World Development Indicators*).

*GDP 1975–80:* Average GDP per capita between 1975 and 1980 (inclusive) in constant 1992 U.S. dollars, PPP adjusted (from the World Bank’s *World Development Indicators*).

*Legal origins:* The quality of institutions, as proxied by whether the country has socialist, Scandinavian, French, German, or English legal origins. The base category is French origins.

*Fuel exports:* Fuel exports as a proportion of GDP (from the World Bank’s *World Development Indicators* 2000).

*Country risk:* A country risk rating on a 0–1 scale (from The PRS Group, Inc., 1979–2004, East Syracuse, NY). The composite rating provides a means of
assessing the political, financial, and economic risk of countries on a comparable basis. This is done by assigning risk points to a preset group of factors. A separate index is created for each of the subcategories. The Political Risk index is based on 100 points, Financial Risk on 50 points, and Economic Risk on 50 points. The total points from the three indexes are divided by two to produce the weights for inclusion in the composite country risk score. The composite scores range from zero to 100 points.

Political risk is an assessment of political stability that weights 12 factors covering both political and social attributes: government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability, and bureaucracy quality. PRS staff convert political information on these factors into risk points for each of these components on the basis of subjective analysis of the available information.

Financial risk is an assessment of a country’s ability to pay its way. In essence this requires a system of measuring a country’s ability to finance its official, commercial, and trade debt obligations. It weights five factors: foreign debt as a percentage of GDP, foreign debt service as a percentage of export of goods and services (XGS), current account as a percentage of XGS, net liquidity as months of import cover, and exchange rate stability.

Economic risk rating provides a means of assessing a country’s current economic strengths and weaknesses. In general terms where its strengths outweigh its weaknesses, the country will present a low economic risk, and where its weaknesses outweigh its strengths, it will present a high economic risk. The rating weights five factors: GDP per capita, real annual GDP growth, annual inflation rate, budget balance as a percentage of GDP, and current account balance as a percentage of GDP.

Endnotes

1. See, for example, Piketty (1995), Benabou and Ok (2001), Benabou and Tirole (forthcoming), and Alesina and Angeletos (forthcoming), among others.
2. Hochschild (1981) provides an illuminating discussion. See also work by Inglehart (1990) and Ladd and Bowman (1998), among others.
3. On geography, see Acemoglu, Johnson, and Robinson (2001). See Djankov and others (forthcoming) for a discussion of institutions; see also Knack and Keefer (1995).
5. For details, see Di Tella and MacCulloch (2006). For example, when explaining general political ideological orientation, the regression evidence suggests that males and older people are more likely to declare themselves as being conservative compared with younger people. It supports the often quoted line “Any man who is under 30 and is not a Liberal has no heart; and any man who is over 30 and not a Conservative has no brains,” variously attributed to Winston Churchill (1874–1965), Georges Clemenceau (1841–1929), or Benjamin Disraeli (1804–1881).
References


Appendix 1: Program
Workshop

DEVELOPMENT AND THE NEXT GENERATION

in preparation for the

WORLD DEVELOPMENT REPORT 2007

Grand Hyatt Hotel, Berlin

12–13 September 2005

PROGRAM

In cooperation with the German Federal Ministry for Economic Cooperation and Development (BMZ)

*InWEnt (Capacity Building International) was established in 2002 through a merger of the German Foundation for International Development and Carl Duisberg Gesellschaft.
Monday, 12 September 2005

09:00 A.M. Welcome Address:

Gudrun Kochendörfer-Lucius
Managing Director, InWEnt—Capacity Building International, Germany

Keynote:

François Bourguignon
Chief Economist and Senior Vice President, Development Economics, The World Bank, United States

09:30 A.M. Session I: Youthful Transitions in a Changing World—Demographic and Other Socioeconomic Challenges

Chair: Günther Taube
Head of Department, International Regulatory Framework, Good Governance, Economic Policy, InWEnt—Capacity Building International, Germany

Speakers:

Francesco C. Billari
Professor of Demography, Instituto di Metodi Quantitativi, Università Bocconi, Italy

David Lam
Professor of Economics, Department of Economics, University of Michigan, United States

Wolfgang Lutz
Program Leader, World Population Program, IIASA, Laxenburg, Austria

11:00 A.M. Coffee break

11:30 A.M. Session II: The Transition from Schooling

Chair: Boris Pleskovic
Research Manager, The World Bank, United States

Speakers:

Nicholas Barr
Professor of Public Economics, European Institute, London School of Economics and Political Science, United Kingdom

William M. Lyakurwa
Executive Director, African Economic Research Consortium (AERC), Kenya

Yasuyuki Sawada
Associate Professor, Department of Advanced Social and International Studies, University of Tokyo, Japan

01:00 P.M. Lunch buffet
02:15 P.M.  **Session III: The Transition to Work**
Chair: **Emmanuel Jimenez**
United States
Speakers: **Anjini Kochar**
India Program Director, Stanford University, United States
**Francis Kramarz**
Head of the Research Department, INSEE-CREST, France

03:45 P.M.  *Coffee break*

04:00 P.M.  **Session IV: Migration and the Young**
Chair: **Tanja El-Cherkeh**
Head, Migration Research Group, Hamburg Institute of International Economics, Germany
Speakers: **Christian Dustmann**
Professor of Economics, University College London, United Kingdom
**Robert E. B. Lucas**
Professor of Economics, Boston University, United States

06:00 P.M.  *End of session*

07:00 P.M.  *Departure for dinner at the restaurant “Käfer,” Reichstag Building Dinner*

Reflections: **Angela Josiah**
National Youth Chairman, Red Cross Society, Sierra Leone
**Arturo Rombolio**
Project Manager, World Organisation of the Scout Movement, Switzerland

**Tuesday, 13 September 2005**

08:30 A.M.  **Session V: Forming Families**
Chair: **Mamta Murthi**
Lead Economist, The World Bank, United States
Speakers: **Jere R. Behrman**
W. R. Kenan Professor of Economics and Director of the Population Studies Center, University of Pennsylvania, United States
**Jacques van der Gaag**
Professor of Development Economics, University of Amsterdam, The Netherlands
**Stephan Klasen**
Professor of Economics, Chair in Development Economics, University of Goettingen, Germany

10:30 A.M.  *Coffee break*
10:45 A.M.  **Session VI: Becoming Citizens**

**Chair:** Eduard Westreicher  
Head of Division, Governance; Democracy; Human Rights; Gender, Federal Ministry for Economic Cooperation and Development (BMZ), Germany

**Speakers:**  
Jean-Philippe Platteau  
Professor and Director, Center for Research in the Economics of Development, Facultés Universitaires Notre-Dame de la Paix, Belgium  
Philippe C. Schmitter  
Professorial Fellow, Department of Political and Social Sciences, European University Institute, Italy  
Rafael Di Tella  
Professor of Economics, Business, Government and the International Economy, Harvard Business School, United States

12:30 P.M.  **Closing:** Emmanuel Jimenez  

**Closing words:** Joachim Müller  
Senior Project Manager InWEnt—Capacity Building International, Germany

12:45 P.M.  **Farewell lunch buffet**
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Themes for the
9TH ANNUAL BERLIN WORKSHOP SERIES
Berlin, Germany

“AGRICULTURE AND DEVELOPMENT”
September 4–6, 2006

Agricultural Policy, Subsidies, and Trade
Markets and Institutions
Agriculture, Natural Resources Management, and the Environment
Agriculture, Rural Nonfarm Linkages, and Rural Poverty
Decentralization, Local Governance, and Rural Development
Emerging Policy Issues
The Berlin Workshop Series 2007 presents selected papers from discussions held September 12–13, 2005, at the eighth annual forum co-hosted by InWEnt and the World Bank in preparation for the Bank’s World Development Report. At the 2005 workshop, key researchers and policy makers from Europe, the United States, and developing countries met to identify and brainstorm on the challenges and opportunities faced by the world’s 12- to 24-year-olds that are later examined in depth in the World Development Report 2007.

This volume presents papers from Berlin Workshop sessions on Development and the Next Generation, covering issues relating to demographic transitions and socioeconomic challenges; schooling; work; migration and the young; forming families; and becoming citizens.

IN THIS VOLUME:
Introduction by Gudrun Kochendörfer-Lucius and Boris Pleskovic; a welcome address by Gudrun Kochendörfer-Lucius; an opening address by Emmanuel Jimenez; a keynote address by François Bourguignon; and papers by David Lam, Wolfgang Lutz, Nicholas Barr, William M. Lyakurwa, Yasuyuki Sawada, Anjini Kochar, Christian Dustmann, Jere R. Behrman, Stephan Klasen, Jean-Philippe Platteau, Philippe C. Schmitter, and Rafael Di Tella and Robert MacCulloch.