

Inequity within countries: individuals and groups

chapter 2

Across the world, individuals and groups face highly unequal opportunities to better themselves economically and socially. Inequalities, as such, might not be of particular concern if outcomes varied for reasons that had to do mainly with individual efforts. But, taking our cue from the first chapter, we are concerned here with systematic differences in opportunities for individuals and groups who differ only in skin color, caste, gender, or place of residence, predetermined characteristics that can be argued to be “morally irrelevant.” As illustrated in focus 1, on the Indian village of Palanpur, when such inequalities of opportunity are pronounced, they are often reproduced over time and not only affect welfare directly but also act to stifle human development and economic growth.

On the basis of what predetermined characteristics should groups be defined such that we would not want to see systematic differences in their opportunities? Clearly there is no single answer. Roemer (1998) argues that society has to make this choice through some kind of ethical and political process. The circumstances could include social origin variables outside an individual’s control, such as sex, race, ethnicity, caste, parental education and occupation, wealth, or place of birth. Cogneau (2005) notes that a society’s choice of circumstances establishes a direct link between equality of opportunities and the intergenerational transmission of outcomes. In this chapter, we are largely compelled to let data availability dictate the group definitions we consider. We can thus present only a partial, and often rudimentary, picture of the full range of inequity that might exist in a country. Because we wish not only to look within a

country but also to compare across countries, we use group definitions of broad relevance.

Although economic inequalities are clearly part of the story, this chapter goes beyond incomes to emphasize inequalities in key dimensions of opportunity, such as health, education, and the freedom and capacity of people to participate in and shape society. There is a special concern with inequalities that tend to perpetuate differences across individuals and groups over time, within and across generations. These result in “inequality traps” that are pervasive in many countries. Such inequality traps reinforce our concern with equity on intrinsic grounds, but they can also be particularly detrimental to the development process, because they act to curtail economic dynamism.

A key objective here is to show how inequalities combine, interact, and are reproduced through interlinked economic, political, and sociocultural processes. Individuals and groups differ markedly in their power to influence these processes; indeed, they differ even in their capacity to aspire to such influence. The report emphasizes that such “agency” is a dimension of opportunity, alongside education, health, and wealth. And inequalities of agency are central in explaining how inequalities of opportunity are transmitted over time (box 2.1).

This chapter presents evidence of a high degree of inequality of opportunity in many developing countries—inequalities manifest in a variety of dimensions, such as health, education, and income. It then focuses on the specific dimension of inequality of power, or agency. Throughout the chapter, we emphasize that

inequalities in different dimensions can interact with, and reinforce, one another over time. To highlight these connections, we end by focusing on the specific case of gender inequity.

Inequalities in health

Alongside the intrinsic importance of health as a dimension of welfare, poor health can directly influence an individual's opportunities—his or her earnings capacity, performance at school, ability to care for children, participation in community activities, and so on. This important instrumental function of health implies that inequalities in health often translate into inequalities in other dimensions of welfare. And these inequalities are reproduced over time. We focus here on children, while recognizing that differences in social status, wealth, and health also matter for adults.

Demographic and Health Survey (DHS) data indicate that health status varies sharply across population groups. To what extent does it vary across population groups defined by characteristics that are predetermined and arguably have no moral relevance? We draw on DHS data from 60 countries to examine how the health of children varies across population groups defined by mother's education, rural or urban residence, and parent's economic status, proxied by an index of household ownership of consumer durables. (We look further at cross-country differences in health in chapter 3.)

Infant mortality. For these countries, infant mortality rates vary markedly—from a low of around 25 per 1,000 live births in Colombia and Jordan, to more than 125 in Mali, Niger, and Mozambique (figure 2.1). But even where overall infant mortality rates are high, the figures for children whose mothers have a secondary education or higher are dramatically lower. The risk of death among children with well-educated mothers in Mali, for example, is about the same as that for the average child in Indonesia. And while the overall infant mortality rate in Brazil lies

BOX 2.1 Unequal opportunities persist across generations in Brazil

As a prelude to the themes in this chapter, we describe one attempt to quantify the level and persistence of inequalities of opportunity in Brazil, based on nationally representative household survey data. Brazil was selected for a reason. With a Gini coefficient of per capita incomes just below 0.6 and persistent over time, it is generally perceived to be one of the world's most unequal countries.*

Brazil's main household survey, the *Pesquisa Nacional por Amostra de Domicílios* (PNAD), included in 1996 a set of supplemental questions on the parents of respondents. This permitted an analysis of the intergenerational persistence in inequalities. Using four circumstance variables (parental schooling, father's occupation, race, and region of birth), Bourguignon, Ferreira, and Menendez (2005) investigated how inequalities of opportunity generate inequality in current earnings across different cohorts of adult individuals. Applying a conceptual framework closely related to that in chapter 1, they decomposed earnings inequality into a lower bound component attributable to the inequality of opportunity—to the effect of the four observed circumstance variables—and a residual component, which would account for personal effort, luck, measurement error, transitory income, and other unobservable characteristics. They found that the four variables accounted for more than a fifth of the total earnings inequality within gender

cohorts. Of the four, family background was most important.

This distribution of certain opportunities and outcomes has persisted across generations. When the authors estimated econometrically the relationship between schooling and race, region of origin, parental education, and father's occupation, only the coefficient on parental education seems to have fallen across cohorts. In other words, race, region of origin, and father's occupation continue to predict an individual's education level. And even for education, mechanisms are at work to reproduce schooling levels across generations, especially at the lower end of the distribution.

Brazil underscores the need to look at a range of outcomes (of which incomes are only one, with education, health and services also of great concern). It also underscores the need to look at a range of processes—of which income and economic wealth-based mechanisms form only part, and for which group-based interactions are as central as household and individual conditions, behaviors, and characteristics.

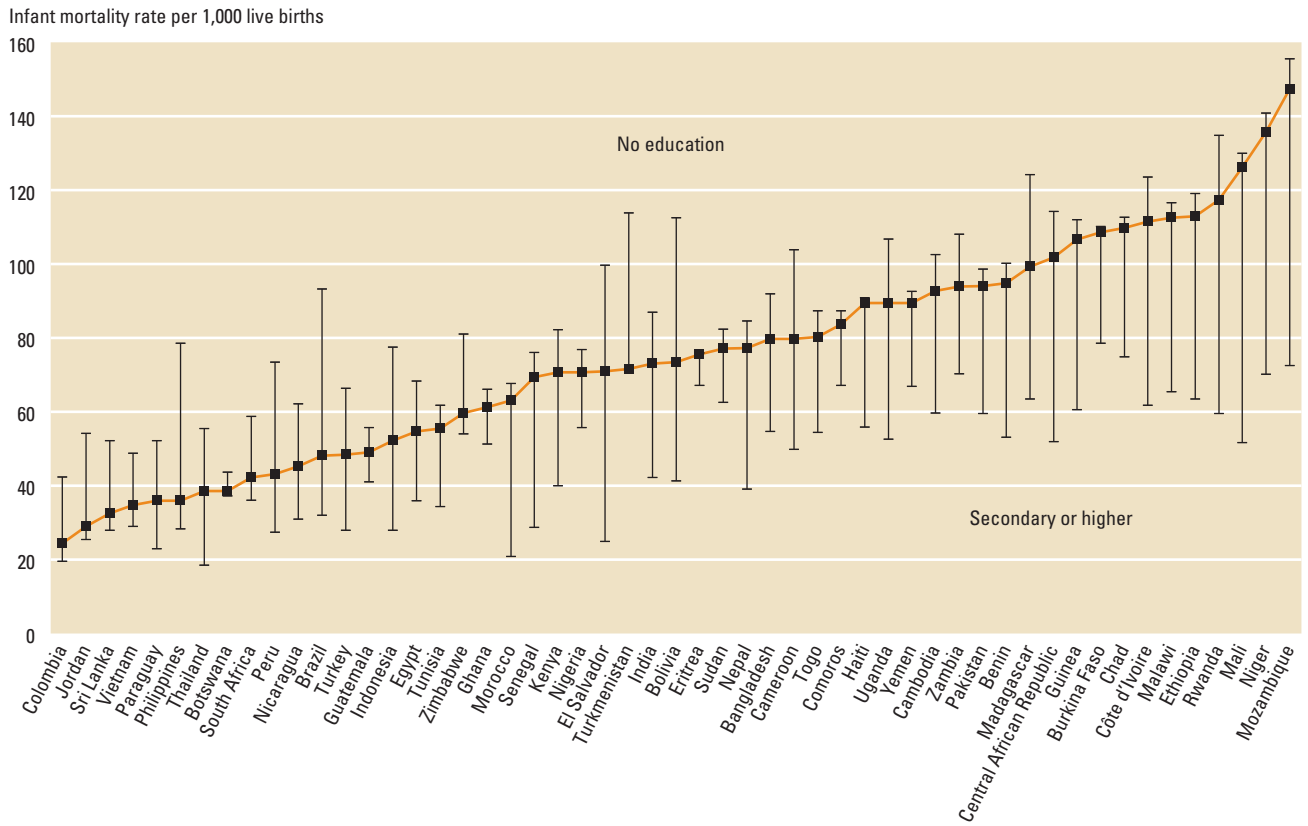
Source: Bourguignon, Ferreira, and Menendez (2005).

* The perception of particularly high inequality in Brazil may to some extent be a result of the way income is measured there. Alternative approaches to measuring inequality, based on other welfare indicators, indicate that Brazil may be less of an outlier in Latin America than previously believed. See box 2.5 and also De Ferranti and others (2004).

below 50 (estimates from 1996), the rate for children whose mothers have not been educated is roughly twice as high. Further analysis, not reported here, indicates that infant mortality rates are also sharply differentiated across population groups defined by rural-urban residence and economic status, proxied by asset ownership.

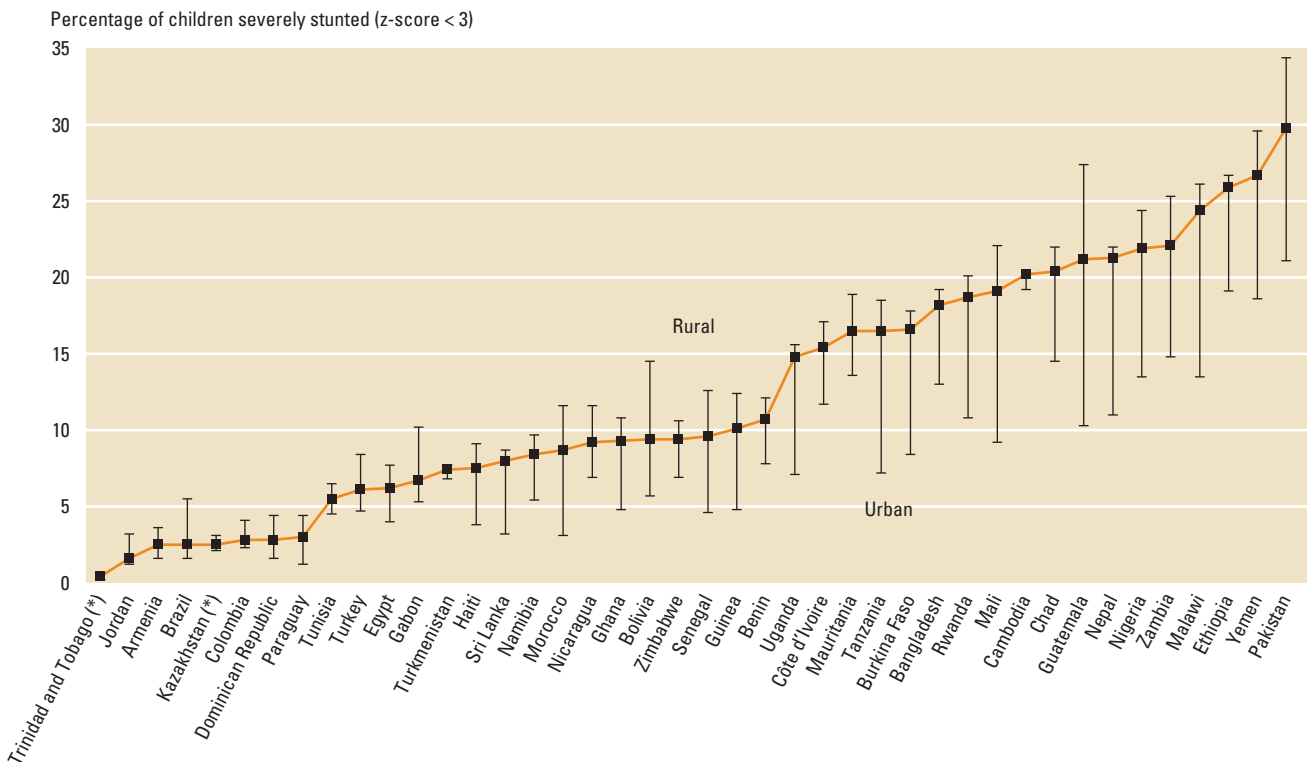
Stunting. Another dimension of health, extreme stunting (with height-for-age below three standard deviations from the reference population), also varies markedly across countries. Overall rates are as high as 30 percent in Pakistan and the Republic of Yemen, but negligible in Trinidad and Tobago and very low in Jordan, Armenia, Brazil, and Kazakhstan (figure 2.2).

Figure 2.1 Infant mortality varies across countries but also by mother's education within countries

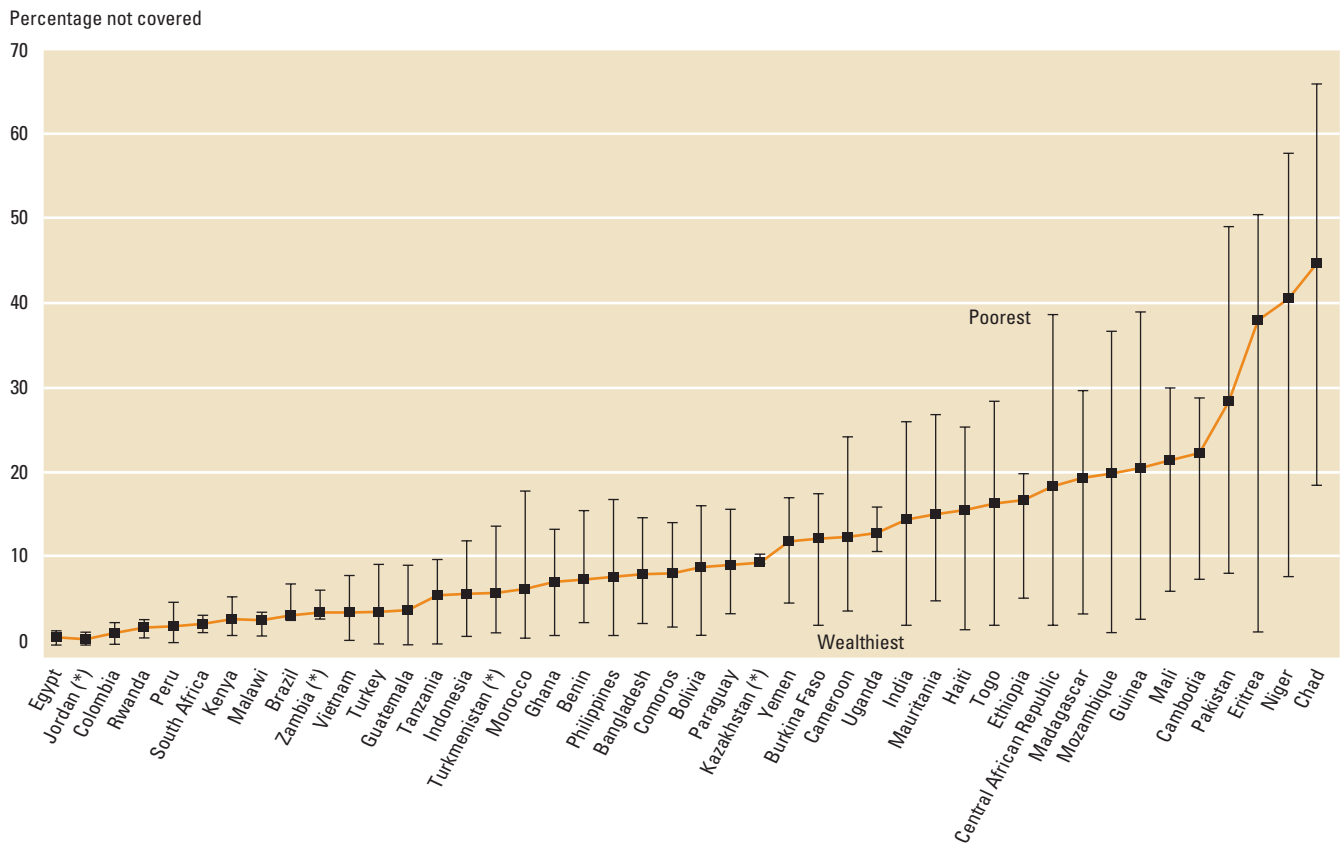


Source: Authors' calculations from Demographic Health Survey (DHS) data.
 Note: The continuous dark line represents the mean infant mortality rate in each country, while the endpoints of the whiskers indicate the infant mortality rates by different levels of mother's education.

Figure 2.2 Stunting levels of children born in rural versus urban areas are far from the same



Source: Authors' calculations from Demographic Health Survey (DHS) data.
 Note: The continuous dark line represents the percentage of severely stunted children in each country, while the endpoints of the whiskers indicate the percentages for urban and rural areas.
 * Indicates stunting level in urban areas are higher than in rural areas.

Figure 2.3 Access to childhood immunization services depends on parents' economic status

Source: Authors' calculations from Demographic Health Survey (DHS) data.

Note: The continuous dark line represents the percentage of children without access to a basic immunization package in each country, while the endpoints of the whiskers indicate the percentages for the top and the bottom quintile of the asset ownership distribution.

* Indicates that the poorest quintile have higher access to childhood immunization services than the wealthiest quintile.

The difference between children born in rural and urban areas can be dramatic, particularly at higher overall stunting levels. In Guatemala, stunting rates for children in urban areas are around 10 percent, but in rural areas they are as much as three times higher. Children in Guatemala clearly have no choice in deciding whether they are born in the countryside or the city, but their opportunities to achieve good health are clearly much less assured in rural than in urban areas. As for infant mortality rates, stunting among children is also sharply differentiated by mother's education and household economic status.

Access to immunization. Children born in families whose asset ownership places them in the top quintile of the distribution of economic status have a high probability of

access to health services, proxied here as having received at least one of three key childhood vaccinations—bacille Calmette-Guérin; diphtheria, pertussis, and tetanus; or measles (figure 2.3). This is so even in countries where the overall percentage of children without any coverage is as high as 40 percent. Conversely, children whose parents are in the bottom quintile are much more likely to lack access to such basic health care. In Morocco, where roughly 5 percent of children have not received even one of these three vaccinations, the proportion for children in the poorest quintile is well above 15 percent.

High-impact health services. The World Bank (2003j), drawing on DHS data from 30 low- and middle-income countries, finds that the poor are considerably less likely

than the non-poor to have access to high-impact health services, such as skilled delivery care, antenatal care, and complementary feeding. Similarly, Wodon (2005) draws on household survey data from 15 African countries to indicate that, while virtually all urban households are within one hour's travel time to a health center, the proportion in rural areas is generally only around half, and as low as 35–38 percent in Niger and Ethiopia.

Disability. Data from a number of countries suggest that disabled people are much more likely to be poor. Hoogeveen (2003) reports that in Uganda the probability of poverty for urban dwellers living in a household with a disabled head is 38 percent higher than for those who live in a household with an able-bodied head. The Serbian Poverty Reduction Strategy reports that 70 percent of disabled people are unemployed. In a study drawing on 10 household surveys in eight countries, self-reported disability was found to be more correlated with nonattendance at school than other characteristics, including gender or rural residence.¹ Sen (2004) emphasizes that the disabled face not only an “earnings handicap,” associated with a lower probability of employment and lower compensation for their work, but also a “conversion handicap.” By this he means that a physically disabled person requires more income than an able-bodied person to achieve the same living standard.

Social inequalities damaging health. Not only are health outcomes correlated with inequalities in other dimensions, but such social inequalities can be argued to be detrimental to individual health outcomes.² In his comprehensive review of the literature, Deaton (2003) argues that, while it is certainly plausible that various inequalities (such as those in power) cause bad health, it is not clear that inequality of income is the main culprit. He provides evidence suggesting that, after controlling for an individual's income, income inequality at the group level does not matter independently for individual health. Thus,

the main inequalities that affect health may not be in the income space. He cites examples of other key dimensions of inequality: land ownership, women's agency (health and fertility in India), and democratic rights (in England in the 1870s and in the U.S. South in the 1960s). In general, an individual's rank in the relevant hierarchy has been found to be important to health in animal and human experiments. Repeated stress associated with insults and the lack of control that comes from low rank has a well-developed biochemical basis.³

The consequences of poor health are reflected in education achievements, economic prosperity, and future generations. Consider the plight of AIDS orphans in southern Africa, the stark inequalities of opportunity they face, and the possible role for public action (box 2.2).

DHS data (figures 2.1–2.3) provide detailed insights into the relationship between inequalities in health and some key circumstance variables. But they are not particularly well suited to capturing the contribution of detailed spatial factors, such as place of birth, in overall inequality, because of the limited sample size. In one attempt to get around this problem, child height in Cambodia was estimated at the commune level based on a statistical procedure to combine DHS data with population census data.⁴ The study documents considerable heterogeneity across Cambodia's more than 1,600 communes in the prevalence of stunting and being underweight among children under the age of five (figure 2.4). The analysis provides clear evidence that in Cambodia a child's opportunities for good health have a strong spatial dimension to them. Yet clearly, no child is able to determine in which locality he or she is born.

Trends

Average health in most countries improved in the twentieth century (chapter 3). Deaton (2004) documents that improvements in health are likely to have accompanied economic growth, but he also emphasizes the globalization of knowledge, facilitated by local political, eco-

BOX 2.2 Unequal assets, unequal opportunities: AIDS orphans in Southern Africa

It is hard to imagine people with fewer assets, through absolutely no fault of their own, than AIDS orphans. Left to fend for themselves on the death of one or both parents from a progressively debilitating, heavily stigmatized, and costly-to-treat disease, their plight would be of concern even if they numbered but a few. In southern Africa, however, the United Nations Children's Fund (UNICEF) estimates that there were 12.3 million AIDS orphans in 2003, a veritable demographic group in their own right. By 2010, UNICEF projects that there will be 1.5 million AIDS orphans in South Africa; by 2014, 1 million in Zambia.

An entire generation of Africans is emerging who will have been raised, if they are lucky, by grandparents or extended family members (themselves likely to be impoverished, overwhelmed, and suffering from the disease). At worst, they will grow up in child-headed households or in situations in which their basic rights to food, clothing, shelter, and adequate care are routinely denied.

Wills and schooling

Beginning to overcome the huge disadvantages that AIDS orphans start life with requires special attention on numerous fronts (box 7.11 considers a variety of policy options). From a legal standpoint, parents who know their death is imminent and who have young children need to be encouraged (even if they are illiterate) to prepare enforceable wills that will protect the inheritance rights of their children to ensure that surviving adults do not just forcibly take their land,

savings, or other valuables. From an education standpoint, it is vital to keep children in school, where the acquisition of even basic skills can give them some viable prospect of being able to move out of poverty. Where a child is the head of a household and perhaps its sole income earner, however, the pressures to drop out of school are enormous. Numerous studies document significantly higher dropout rates of AIDS orphans. In Kenya, one extreme example found that "52 percent of the children orphaned by AIDS were not in school, compared to 2 percent of non-orphans" (UNAIDS 2002, 135).

Attending school is also important from a civic perspective: it socializes children into the norms and mores of society, and gives them the confidence and capacity to participate more fully in it. Without such socialization, vulnerable young children are easy targets for those offering them security and status through membership in a street gang, criminal network, or militia movement. If AIDS orphans continue to stay from school at their current rate, comments one senior U.N. official, "you will have a society where kids haven't been to school and therefore can't fulfill even basic jobs...a society where a large proportion can have antisocial instincts because their lives have been so hard. You [will] have a generation of children who will be more vulnerable to exploitation and to disease because they won't have the same sense of self-worth" (cited in Fleshman 2001, 1). Such children face the dismal prospect of failing to accumulate assets because of the extreme burdens thrust on them

in their most formative years and the paucity of opportunities available to them thereafter.

Avoiding infection

The most immediate priority, however, is ensuring that AIDS orphans do not themselves become infected with the disease, thereby increasing the likelihood that they will perpetuate the cycle. AIDS orphans face precisely such a risk, however, because the stigma of HIV/AIDS means that people often assume that the children of parents who died from AIDS must be infected, shunning, shaming, or exploiting them accordingly. Some AIDS orphans have even been denied access to schools and health clinics because of the fear their very presence generates. Children grieving the loss of a parent are also vulnerable to the sexual predations of those putatively claiming to offer them comfort. Indeed, the desperation and apparent hopelessness of their circumstances—all the more so if it coincides with a natural disaster such as drought—can drive AIDS orphans into prostitution.

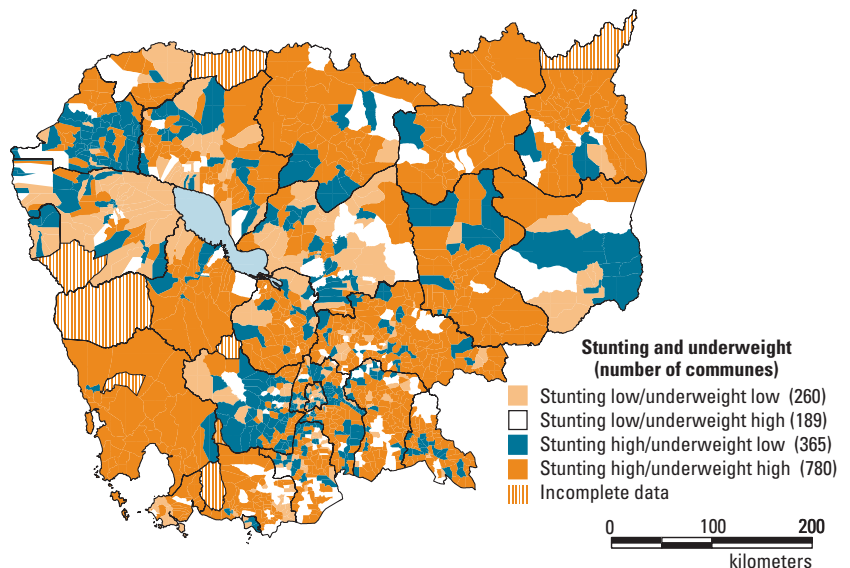
The plight of AIDS orphans provides a graphic illustration of how cycles of disadvantage can perpetuate themselves, and how social isolation and exclusion (especially at a young age) can preclude the acquisition of assets and undermine the capacity to sustain participation in the institutions that provide the best path out of poverty.

Sources: Avert.org (2004) <http://www.avert.org/aidsorphans.htm>. Accessed December 14, 2004. Fleshman (2001). Hargreaves and Glynn (2002), Lewis (2003), UNAIDS (2002), UNICEF (2003), USAID, UNAIDS, and UNICEF (2004).

conomic, and educational conditions. In the 1980s and 1990s, however, progress slowed—a result of the worldwide HIV/AIDS epidemic and rises in cardiovascular mortality in Eastern Europe and former Soviet Union countries.

How have inequalities in health evolved *within* countries? Data from DHS provide some clues. For a subset of countries, multiple rounds of DHS data are available to document changes in infant mortality over time. Of some 36 "spells" of health change that could be identified, roughly 25 corresponded to improved health outcomes in the form of lower infant mortality rates. Although overall health improved in these 25 cases, the gaps between urban and rural areas, between groups defined by mother's education, and between groups defined by durable asset ownership did not universally decline alongside the overall declines

Figure 2.4 Stunting and underweight in Cambodia



Source: Fujii (2005).

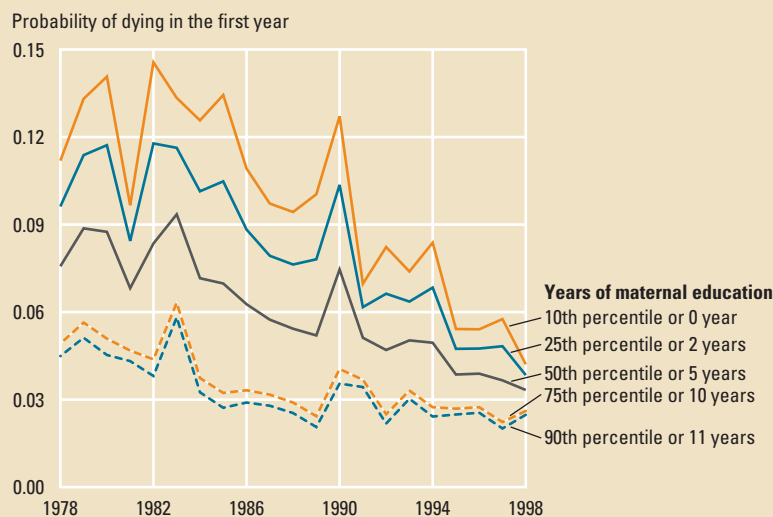
BOX 2.3 Health improvements and greater health equity in Peru

Paxson and Schady (2004), drawing on multiple rounds of DHS data, document the declining infant mortality rate in Peru between the late 1970s and late 1990s. A general downward trend exhibited a sharp setback during the major economic crisis between 1988 and 1992, but resumed after the crisis. The downward trend remained evident even after adjusting for age of mother, recall period, education, and urban status—indicating that the overall trend decline in infant mortality was not attributable only to general improvements in education, an aging population, or urbanization. In addition, the fact that infant mortality rose sharply around 1990, even after these adjustments, supports the notion that the decrease in household income and the collapse of public expenditures on health as a result of the crisis were important.

Infant mortality rates in Peru varied markedly with the education level of the mother in late 1970s and the 1980s (see figure below). During the economic crisis, increases in mortality were largest among infants born to women with less education. After the crisis, the gap between infant mortality rates associated with different maternal education levels declined steadily, suggesting an overall decline in inequality in mortality alongside the decline in overall mortality rates.

There is some support for the view that changes in the amount and composition of public expenditures on social programs drove these improvements. Real total expenditures increased two and a half times between 1991 and 2000, and such public spending did not bypass the poor.

Adjusted infant mortality rates by maternal education



Source: Paxson and Schady (2004).

in infant mortality.⁵ The improvements in health were not necessarily shared across all groups in the population.

As Cornia and Menchini (2005) note, mortality differentials across groups tend to narrow with an improvement of the average only if policies focus explicitly on equity. Without such a focus, improvements in the average may not translate to declining group differences. For example, in the United States between the 1950s and

1990s, the overall decline in the infant mortality rate to 7.9 in 1994 was accompanied by an increase in the ratio of black to white infant mortality rates from 1.6 in 1950 to 2.2 in 1991. Inequality in health does not inevitably fall as overall health improves, but such a virtuous process is possible (box 2.3).

Inequalities in education

Education is of great intrinsic importance when assessing inequalities of opportunity. It is also an important determinant of individuals' income, health (and that of their children), and capacity to interact and communicate with others. Inequalities in education thus contribute to inequalities in other important dimensions of well-being.

Measuring inequality in education is not easy. Census and survey data in most countries can generally yield statistics on, for example, years of schooling. But such information does not capture well the quality of education and how that might vary across individuals. Nor is it easy to compare years of schooling across countries, because those years might mean something quite different from country to country.

Test results. Despite the measurement difficulties, there is considerable evidence of inequalities of opportunity in education in the developing world. Consider the differences in test performance among Ecuadorian children ages three to six years across population groups defined by parental education, region of residence, and wealth (box 2.4).

Test results among very young children capture well the inequality in opportunity in education, but such data are not readily available for large numbers of developing countries. So we look instead at the percentage of household heads with no education by gender and by urban-rural residence.

Male and female household heads. The overall percentage of household heads without any education varies dramatically across our sample of 60-odd countries (figure 2.5). In the high-income countries, the percentage rates are negligible. But at

the other extreme, in Burkina Faso and Mali, for example, the overall percentage is more than 80 percent. What is similarly striking is that, in most countries, the likelihood that the household head is uneducated is dramatically higher than average when she is a woman. In the Laos People's Democratic Republic, for example, although the overall percentage of household heads with no education is about 20 percent, the rate is closer to 70 percent for female household heads.

Rural and urban household heads. Similar patterns can be observed for rural and urban areas (figure 2.6). In general, household heads are far more likely to have no education when they are based in rural areas than in urban areas. Even in countries where the overall percentage without education is very high, the rate in urban areas can be dramatically lower. For example, in Burundi, the percentage of household heads with no education in urban areas compares with the national average in Mexico, the Dominican Republic, and Brazil.

Access to teachers. A recent study of primary schools and health clinics in Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda has identified teacher absenteeism as an important, common, problem. The study found that higher income areas generally have lower teacher absentee rates than poorer areas.⁶ It also found that higher paid teachers, generally more educated and experienced, appear equally or more likely to be absent than contract or less remunerated instructors, perhaps because these instructors sense a lower risk of being fired for their absence. And although salaries in rural areas were often higher than in urban areas, teacher attendance in these areas was typically lower than in urban areas. In most surveyed countries, the quality of infrastructure and the frequency of monitoring appeared to contribute to lower absenteeism.

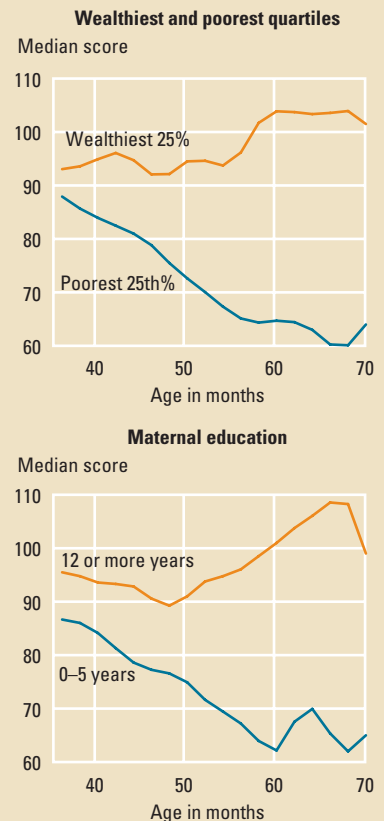
Trends

Another way to assess inequalities of opportunity in education is to calculate an overall index of inequality for years of edu-

BOX 2.4 *Child test scores in Ecuador: the role of wealth, parental education, and place of residence*

That education achievements vary markedly by population groups—and that this can have profound implications—is brought out forcefully in a recent study by Paxson and Schady (2005). They show that cognitive development of Ecuadorian children ages three to six years, as measured by a test of vocabulary recognition (TVIP), varies significantly depending on the wealth of their household, their place of residence, the education of their mother, and that of their father. The extent to which these circumstance variables are associated with performance on cognitive tests is typically more pronounced for the older children in their sample.

These socioeconomic characteristics are significantly associated with cognitive development even after controlling for child health and home environment. The researchers point to the striking evidence that, in Ecuador, the youngest children, irrespective of wealth quintile or education of their parents, perform broadly as well as their comparators. But as children in Ecuador get older, their cognitive development, relative to this benchmark, falters significantly. Only children in the top half of the wealth distribution and with highly educated parents maintain their performance relative to their comparators. By the time they are six years old, most children in the sample are so far behind in their cognitive development that it is uncertain whether and how they could ever catch up.

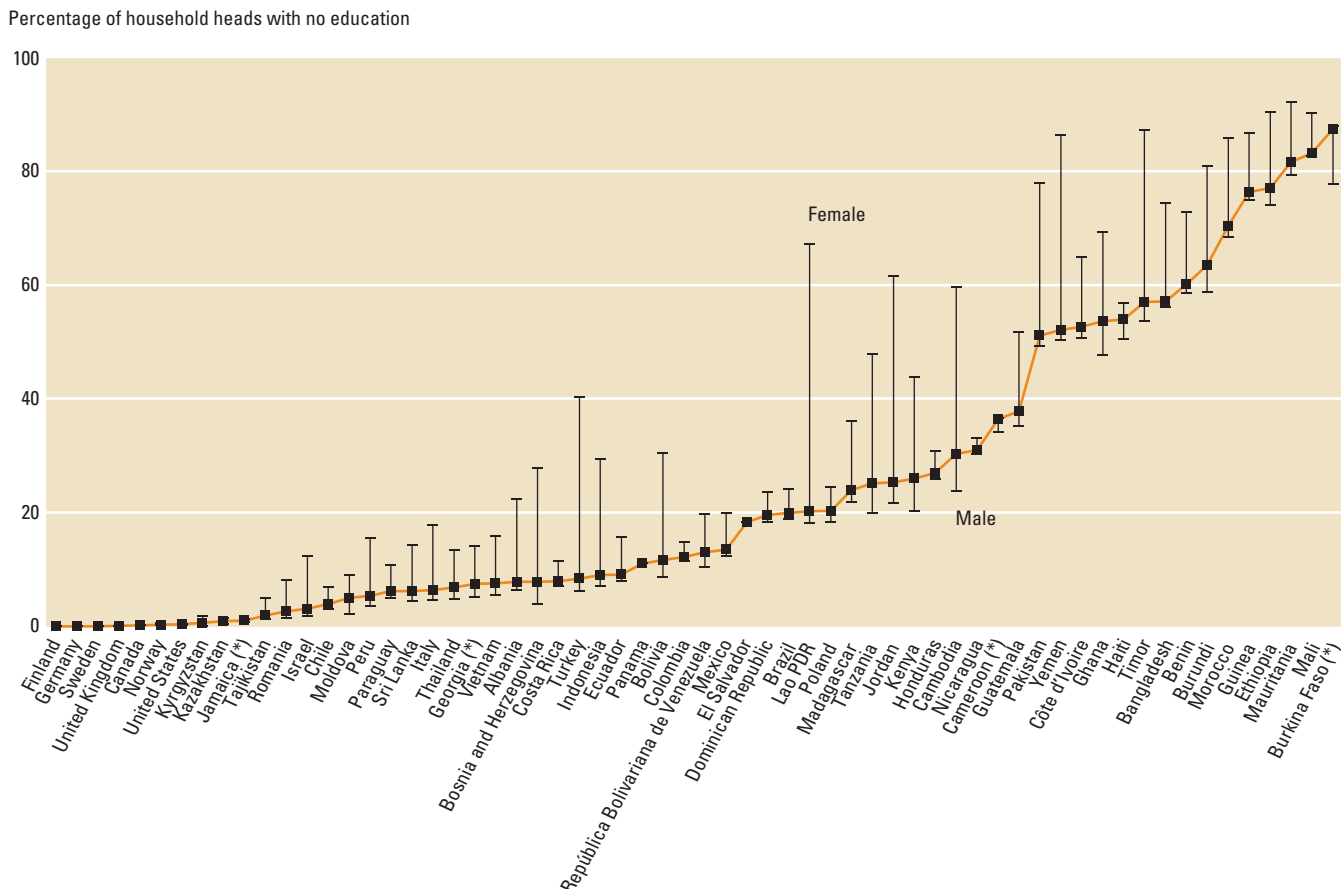


Source: Paxson and Schady (2005).

cation and to assess how much overall inequality of education can be attributed to mean differences between “morally irrelevant” groups. Araujo, Ferreira, and Schady (2004) find that the inequality of adult education, measured by years of schooling for 124 countries, can be pronounced. They also find that it is strongly (and inversely) correlated with mean years of schooling across countries.⁷

The data assembled by these authors also indicate that the inequality of education for specific subgroups of the population can change. While female schooling achievements relative to male achievements were dramatically lower among the oldest cohorts, particularly in Sub-Saharan Africa, South

Figure 2.5 Education levels vary across countries, but they also depend on gender of household head



Source: Authors' calculations from household survey data.
 Note: The continuous dark line represents the percentage of household heads with no education in each country, while the endpoints of the whiskers indicate the percentages for male and female-headed households.
 * Indicates that female-headed households have higher average levels of education than male-headed households.

Asia, and to a lesser extent the Middle East and North Africa, these disparities are noticeably lower for the younger cohorts, particularly in Sub-Saharan Africa (figure 2.7). Additionally, disparities in years of schooling between urban and rural areas have been falling in some regions, most strikingly in the Middle East and North Africa and in Eastern Europe and Central Asia. But in Sub-Saharan Africa there has been little, if any, change. The (urban-rural) between-group contribution to inequality in this region has hovered at around 30 percent across all the cohorts examined.

Economic inequalities

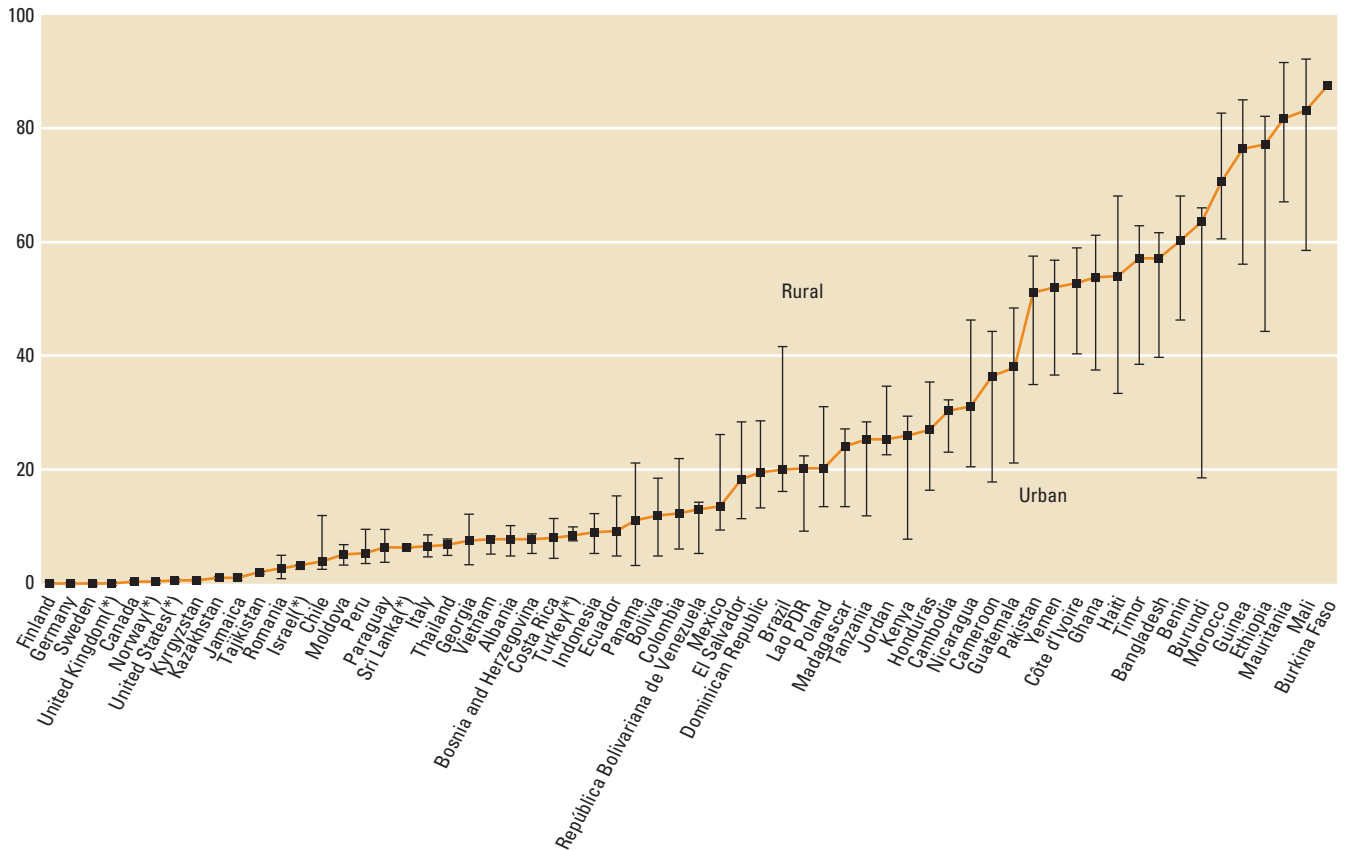
An individual's consumption, his or her income, or his or her wealth have all been used as indicators of the command of an

individual over goods and services that can be purchased in the market and that contribute directly to well-being. It is clear too, that individuals' economic status can determine and shape in many ways the opportunities they face to improve their situations. Economic well-being can also contribute to improved education outcomes and better health care. In turn, good health and good education are typically important determinants of economic status.

An ideal measure of economic well-being for assessing inequality will capture an individual's long-term economic status. But it is difficult to produce such a comprehensive indicator accurately. In practice, it is common to work with measures of current income or consumption compiled from household survey data. While consumption

Figure 2.6 Education levels vary by country and between rural and urban sectors

Percentage of household heads with no education



Source: Authors' calculations from household survey data.

Note: The continuous dark line represents the percentage of household heads with no education in each country, while the endpoints of the whiskers indicate the percentages for urban and rural households.

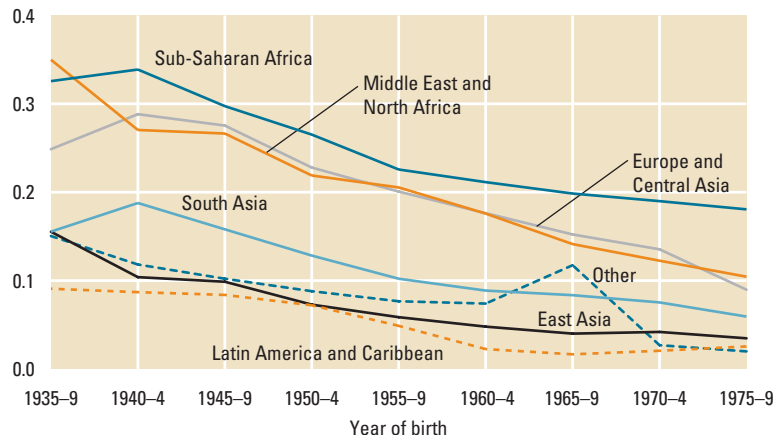
* Indicates that rural households have higher average levels of education than urban households.

and income inequality are expected to correlate reasonably well with long-term well-being, it is unclear exactly how well they actually do. And different measures of economic welfare—based on income, consumption, or wealth—can yield quite different assessments of inequality (see also box 2.5).

For example, Sudjana and Mishra (2004), drawing on evidence produced by Claessens, Djankov, and Lang (2000), argue that wealth inequality in Indonesia is far more concentrated than suggested by comparable figures based on consumption (figure 2.8). In 1996 more than 57 percent of the stock market capitalization in Indonesia was controlled by 10 families. This is in stark contrast to neighboring countries, such as Singapore and Malaysia, but it is

Figure 2.7 The share of inequality in years of schooling attributable to differences between males and females has been declining

Between-group contribution to total inequality (proportion)



Source: Araujo, Ferreira, and Schady (2004).

BOX 2.5 Beware of intercountry comparisons of inequality!

Because countries differ in their data collection systems, cross-country data on economic inequality are generally based on a variety of indicators that are treated interchangeably. The lack of a uniform basis for measuring economic inequality in different countries has serious implications for comparability.

One of the main sources of noncomparability of inequality is that some countries use household income as indicator of well-being while others use consumption expenditures (Atkinson and Brandolini 2001). These two indicators capture different aspects of economic welfare, with the former perhaps seen better as a measure of welfare opportunity and the latter as a measure of welfare achievement. In most countries, measured inequality based on income is higher than if it is based on consumption. But this is not inevitable, and the degree to which the two indicators disagree varies from country to country (see table to the right).

The problem of comparability is not confined to the choice of welfare indicator. An important but underappreciated additional issue is that, even for a given indicator, its definition varies considerably across countries and even within countries over time. Consumption inequality based on different definitions of consumption can vary markedly, and will depend on a variety of factors, including the following:

- The length of the recall period over which consumption is recorded.

- The degree of disaggregation of consumption items.
- The methods for imputation of housing and durables consumption.

Similarly, income inequality can vary depending on whether income—

- Is intended to capture pre- or post-tax income,
- Includes actual and implicit transfers, and
- Refers to full income or earnings only.

Additional factors confounding comparability include differences in survey nonresponse rates across countries (which are likely to affect measured inequality—see Korinek, Mistiaen, and Ravallion forthcoming). Differences across countries in the availability of spatial price indexes can also affect conclusions. Thomas (1987) demonstrates that adjusting for spatial price variation can affect conclusions about the degree of income or consumption inequality. Across countries there tends to be little uniformity in whether, and how, spatial price variation is accommodated.

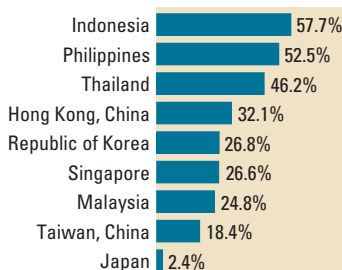
Cross-country datasets on economic inequality generally incorporate some attempts to improve comparability, but they typically fall far short of achieving strict comparability. Without a concerted effort to harmonize data collection across countries, it is unlikely that such global databases can be relied on to provide more than a tentative picture of differences in inequality across countries.

Inequality: summary measures in a selection of countries: consumption versus income

	Year	Gini coefficient	
		Consumption	Income
Panama	1997	0.468	0.621
Brazil	1996	0.497	0.596
Thailand	2000	0.428	0.523
Nicaragua	1998	0.417	0.534
Peru	1994	0.446	0.523
Morocco	1998	0.390	0.586
Vietnam	1998	0.362	0.489
Nepal	1996	0.366	0.513
Albania	1996	0.252	0.392
Bulgaria	1995	0.274	0.392
Russian Federation	1997	0.474	0.478
Bangladesh	2000	0.334	0.392

Source: Authors' creation.

Figure 2.8 Market capitalization controlled by the top 10 families in selected countries, 1996



Source: Claessens, Djankov, and Lang (2000).

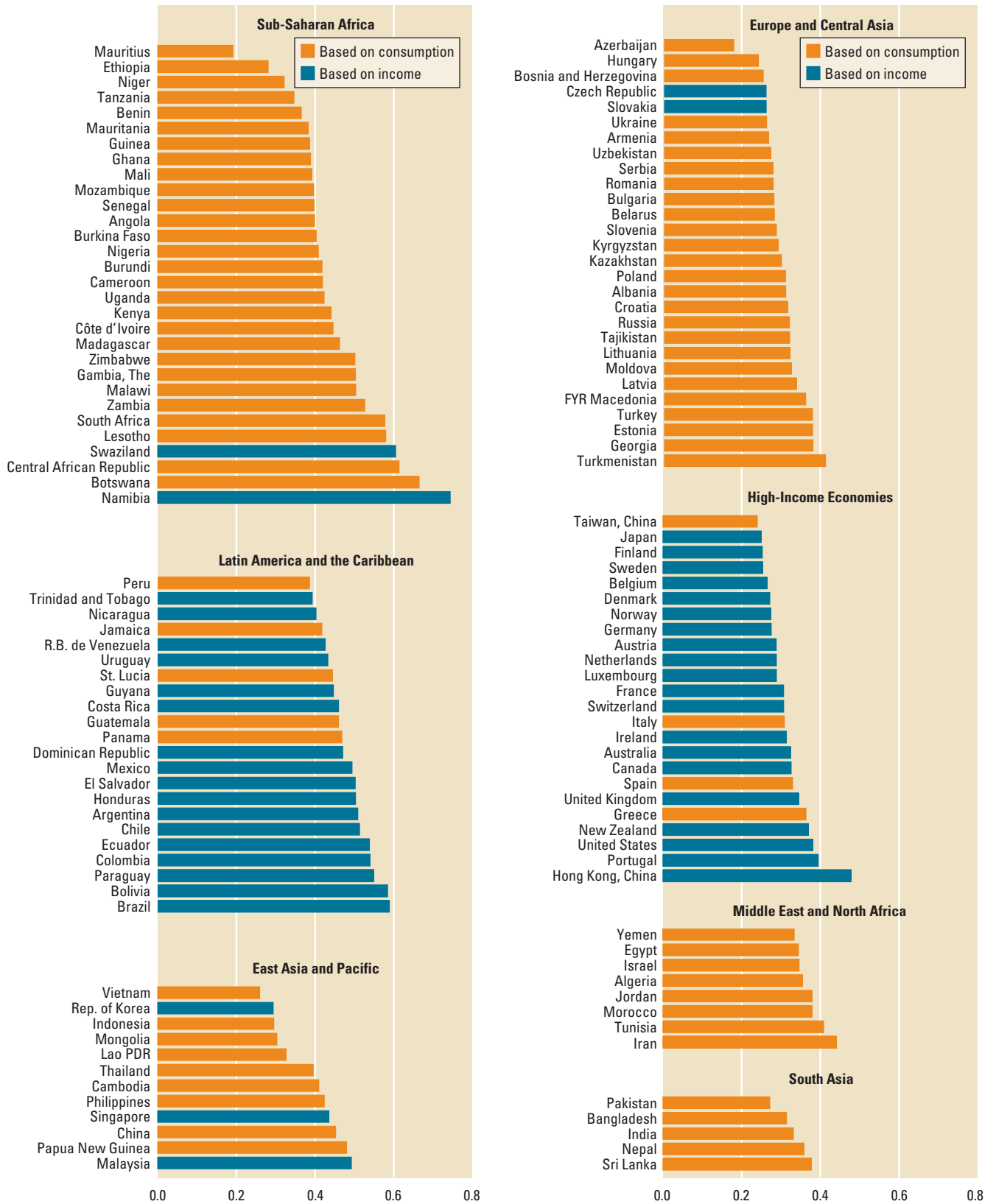
only marginally higher than the figure for the Philippines. More generally, Davies and Shorrocks (2005) report estimates published by Merrill Lynch and Forbes that some 20 percent of the world's millionaires come from the developing world. Similarly, Morck, Stangeland, and Yeung (2000) find a higher ratio of billionaire wealth to gross domestic product (GDP) in Latin America and the Caribbean, and East Asia, but not India and South Africa (see chapters 6 and 9 for further discussion). These figures imply that the distribution of wealth may, on average, be more concentrated in developing countries than in the developed. When wealth is associated with political influence, such inequalities also translate into political capture and can provide a window on this added dimension of opportunity.

Bearing in mind the warnings offered in box 2.5, figure 2.9 provides an approximate

picture of how economic inequality is distributed across countries. The highest levels of recorded inequality occur in Africa, the second highest in Latin America. But inequality measures for Latin America come largely from income data, while those in other regions, such as South Asia, come mainly from consumption data. As box 2.5 illustrated, income data tend to produce higher measured inequality. Within regions, the data suggest that inequality can vary markedly between countries: consumption inequality in South Africa is extremely high, while in Mauritius it is lower even than in OECD countries.

How much overall economic inequality within countries is attributable to differences across population groups? Unlike health and education inequalities, the systematic decomposition of income inequality by population groups has long been subject to analysis in the economics literature.

Figure 2.9 Africa and Latin America have the world's highest levels of inequality
Income and expenditure Gini coefficients



Source: Authors' calculations from household survey data.

These decomposition exercises seek to understand what share of inequality can be attributed to differences between groups and what to inequality within groups. There are several attractions to studying certain population groups in this way and to comparing findings across countries.

Our interest here is to define groups by circumstances we might consider “morally irrelevant,” thereby gaining a window on the importance of inequality of opportunity in the economic sphere. Additionally, decomposition results generally are far less sensitive to differences in definitions of underlying welfare indicators than are

measured levels of inequality. In that sense, some of the difficulties with cross-country comparisons described in box 2.5 are attenuated by subgroup decompositions.

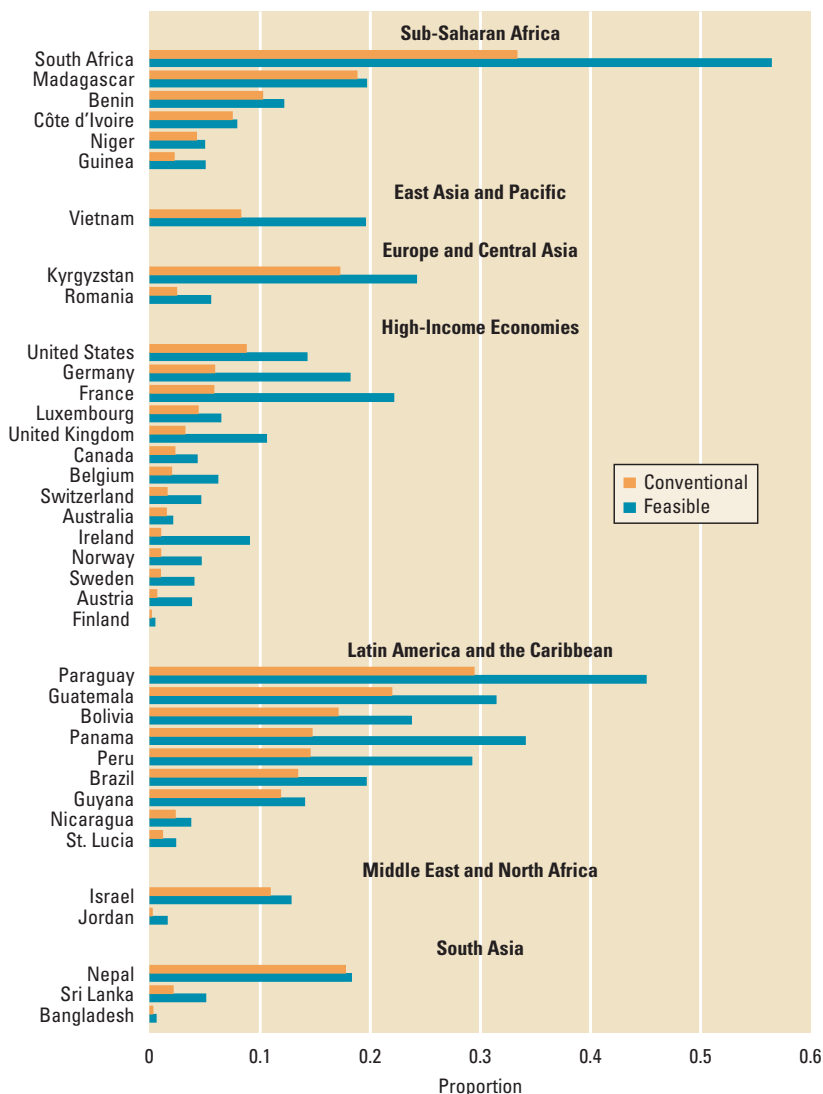
Between-group shares of total inequality

While the “between-group” share of overall inequality is an appealing indicator of the salience of differences across groups in the overall assessment of inequality, there are concerns about its interpretation.⁸ In particular, empirical measures of between-group shares are generally found to be quite low (see figures 2.10 and 2.11).⁹ The conventional presentation of between-group inequality is relative to total inequality. Elbers and others (2005), however, note that total inequality can be viewed as the between-group inequality that would be observed if every household in the population constituted a separate group. Clearly, against such a benchmark, one would rarely observe a high share of between-group inequality.

Elbers and his colleagues propose an alternative, comparing the actual between-group inequality with the maximum possible inequality that would be obtained by keeping the number of groups and their sizes at actual levels. For example, an assessment of the contribution of gender differences to inequality compares actual between-gender inequality with the hypothetical between-gender inequality that would be obtained by sorting the income distribution so that all males appeared at one end of the distribution and all females at the other. This ratio provides a measure of how far actual between-group inequality lies below the maximum between-group inequality that is feasible given the existing configuration of groups.

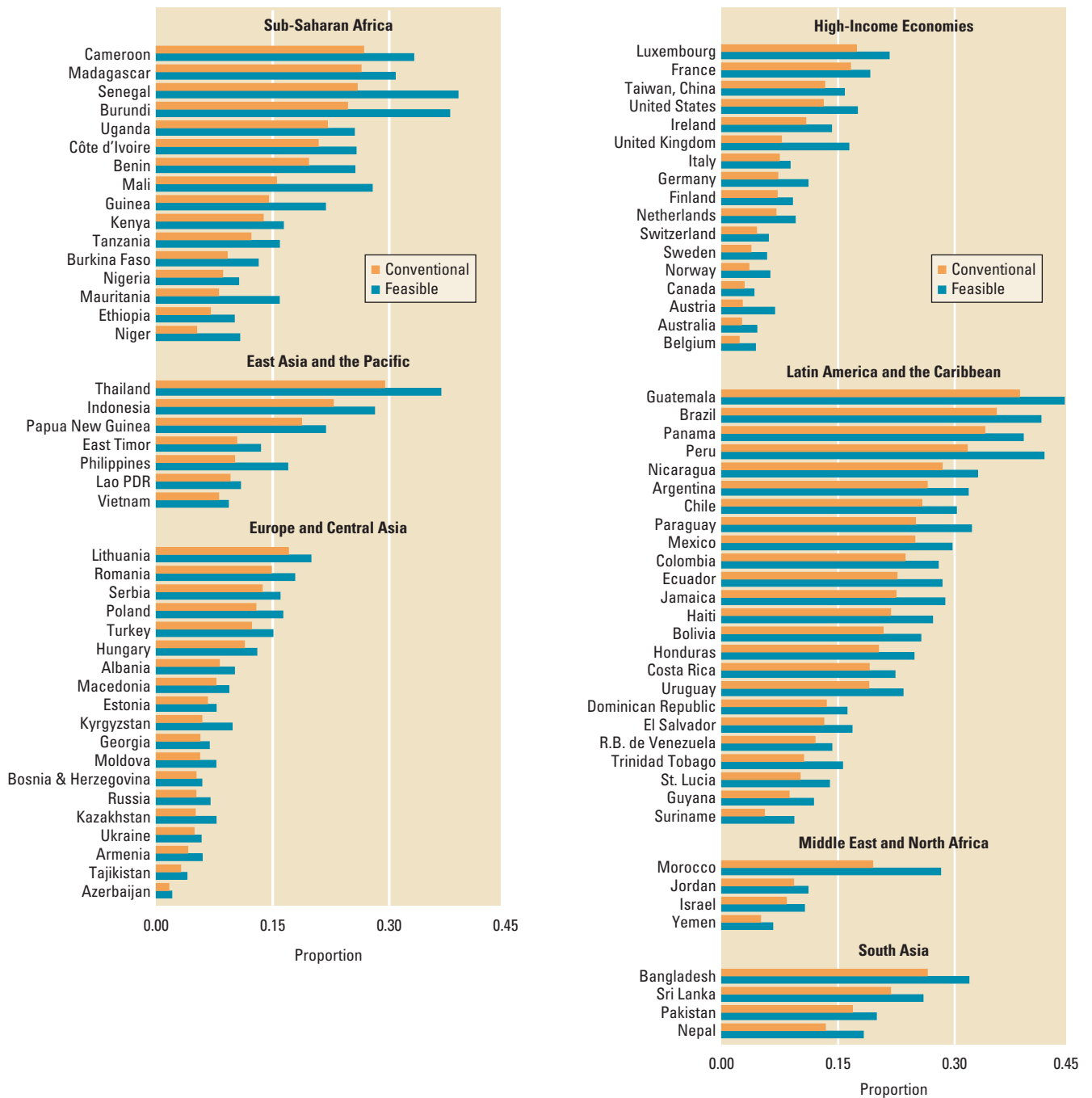
Economic inequality can be decomposed in a large sample of countries based on several population breakdowns, two of which are presented in figures 2.10 and 2.11: social group and education of household head. Such decompositions can follow the conventional decomposition methodology, complemented by the Elbers and others (2005) measure of feasible group decomposition.

Figure 2.10 Between-group inequality decompositions: social group of the household head



Source: Authors' calculations from household survey data.

Figure 2.11 Between-group inequality decompositions: education of the household head



Source: Authors' calculations from household survey data.

Different population breakdowns contribute to differing extents to overall inequality. In general, the conventional calculation of the between-group contribution points to a fairly low share attributable to between-group differences. But in some countries even the conventional share is

high. For example, in Paraguay, when inequality is decomposed between groups by language spoken at home, the conventional between-group share is approximately 30 percent (figure 2.10). And when inequality is decomposed for five broad education groups in Guatemala,

the between-group contribution is above 40 percent (figure 2.11).

In most countries, the between-group share is noticeably higher for decompositions based on the alternative, “feasible” calculation. Based on this approach, observed between-group differences are indeed substantial in many countries—for the group definitions here. To the extent that these circumstances are judged “morally irrelevant,” the findings suggest that in economic life, just as in health and education, a substantial portion of observed inequality in many developing countries can be linked to inequalities of opportunity.

Spatial differences

As with inequalities in health, conventional survey data cannot say much about the contribution of finely detailed spatial heterogeneity to overall inequality—because of the limited sample size. In an exercise analogous to that for health in Cambodia (figure 2.4), a variety of studies have applied statistical techniques to combine survey data with population census data to produce tentative estimates of inequality at the community and district levels. Elbers and others (2004) document the contribution to overall estimated inequality of differences in mean consumption for subdistricts in Ecuador, Madagascar, and Mozambique. They demonstrate that the between-subdistrict contribution to total estimated inequality ranges from a low of 22 percent in Mozambique to more than 40 percent in Ecuador (table 2.1). Based on a similar approach, World Bank (2004e) reports between-commune differences in Morocco, accounting for 40 percent of overall estimated consumption inequality. The general impression is that spatial differences across locali-

ties account for a larger share of total inequality as the number of localities increases. The analysis confirms that for some countries the spatial dimension of inequality is of considerable importance. This conclusion carries over even more powerfully at the global level, where the between-country contribution to global inequality is dramatic (chapter 3).

Other studies and methodologies corroborate the finding that spatial differences within countries are important. Using farm-household data for rural China, Jalan and Ravallion (1997) identify “spatial poverty traps,” where poorer areas have lower provisions of essential public goods (such as roads) and, as a result, households in the area experience lower productivity on their investments. Various studies find spatial effects on living standards, even after controlling for nongeographic household characteristics. Ravallion and Wodon (1999) demonstrate that place of residence is an important determinant of poverty in Bangladesh. They also note that important spatial differences can be discerned even within urban areas—households in the district of Dhaka are markedly better off than their counterparts in other urban districts.

Many studies suggest that spatial differences in incomes are driven by policy. In China, Kanbur and Zhang (2001) find a measurable polarization between inland and coastal regions where factors unrelated to physical geography—development of heavy industry in certain provinces, trade openness, and government investment in coastal regions—are associated with widening interregional inequality. Escobal and Torero (2003) compare coastal Peru with the highlands and find that average per capita expenditures vary markedly and that this variance is associated with fewer and weaker infrastructure services in the highlands.

The role of infrastructure is thus central. Although it is not disputed that physical geography can also influence poverty directly, the association between geographic variation in poverty and geographic variation in infrastructure access is typically strong. Accordingly, it is argued that the influence of regional geographic location on inequality will diminish as access to transport and

Table 2.1 Decomposition of inequality between and within communities

Level of decomposition	Number of communities	Within-group inequality (percent)	Between-group inequality (percent)
Ecuador	1,579	58.8	41.2
Madagascar	1,248	74.6	25.4
Mozambique	424	78.0	22.0

Source: Elbers and others (2004).

Note: Our communities in Ecuador are zonas in urban areas and parroquias in rural areas. Communities in Madagascar are firiasons (communes) and in Mozambique they are administrative posts. The decompositions are performed using the conventional methodology.

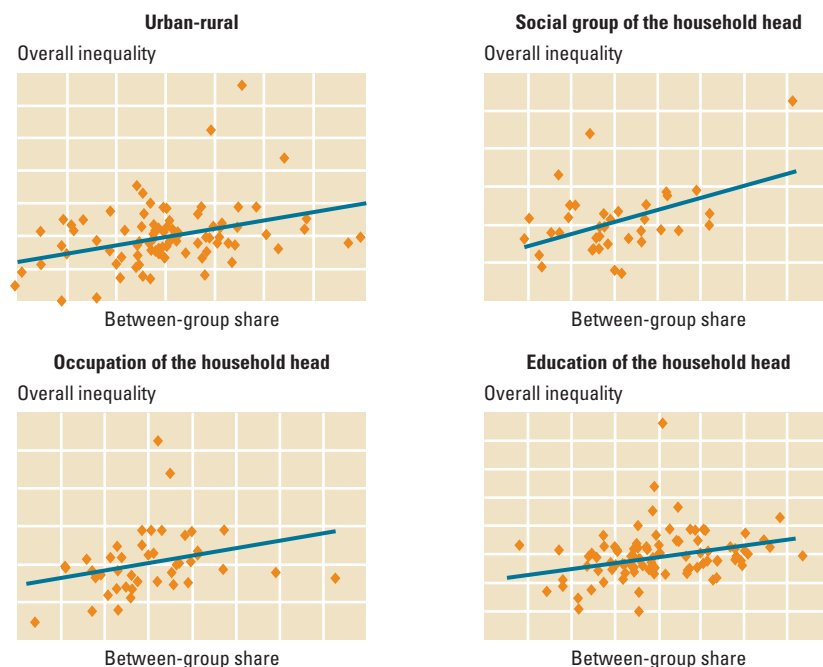
communications services improve; being geographically isolated will matter less because infrastructure improvements will help compensate for distance.¹⁰

The relationship between group differences and inequality

As is clear from the discussion here, our interest in the contribution of group differences to total inequality extends beyond normative considerations of fairness and justice. Differences between groups are also thought to explain overall inequality outcomes, particularly the reproduction of inequalities over time. The basic idea is that between-group differences in income inequality, for example, will tend also to be mirrored in between-group differences in health and education inequalities—and in the agency of groups in influencing their circumstances (see below). These group differences will then reinforce one another. Group differences in education, for example, will translate into differences in incomes and in political voice and participation. These inequalities will, in turn, affect health inequalities between groups, which are passed on to education inequalities and so on. “Inequality traps” are the result. A corollary of this idea is that efforts to moderate overall inequality levels might require a focus on reducing between-group differences.

It is difficult to systematically document this instrumental role of group differences. Figure 2.12 illustrates one attempt. Overall inequality is correlated with the between-group share for the sample of countries in figures 2.10 and 2.11, controlling for region and whether the underlying welfare indicator is income or consumption. Nothing in the mechanics of the calculation forces overall inequality to be correlated with the share attributable to between-group differences. Yet, for this sample of countries, higher overall inequality is associated with a larger between-group share of overall inequality, which is attributable to the rural-urban breakdown, to differences across social groups, to differences in education, and (weakly) to differences in broad occupation class of the household head.¹¹

Figure 2.12 Location, education, and social groups can make a difference: regressions of total inequality on shares of between-group inequality of different household characteristics



Source: Authors' calculations from household survey data.

Note: Regressions include as controls (X) regional area dummies and a welfare measure (Y/C) dummy. The shares of the between component of inequality across gender and age of the household head, and regions within the country were not significant.

One interpretation of these findings is that between-group differences account for, and possibly explain, a non-negligible portion of overall inequality. This is consistent with the broader theme of this report: that group differences reinforce one another and in this way contribute to the replication of inequality over time. But these simple correlations, while suggestive, could also be pointing to other processes and on their own cannot exclude other competing explanations.

Inequality and growth, economic structure, and trade

Systematic exploration of the impact of between-group shares on overall inequality has not, to date, been a major topic of empirical investigation. A longer-standing question in economics has been how inequality evolves with economic growth more generally. Pioneering work by Kuznets in the 1950s launched an enormous amount of empirical work on this question, stimulating much debate. There is still no

BOX 2.6 *Revisiting the Kuznets hypothesis for economic growth and inequality*

The starting point of the literature linking economic development and income inequality dates to the well-known works of two Nobel Prize winners, W. Arthur Lewis (1954) and Simon Kuznets (1955). Lewis, in his classic 1954 article “Economic Development with Unlimited Supplies of Labor,” developed a theoretical model in which growth and accumulation in a dual economy would start in the modern industrial sector, where capitalists would hire at a given wage and reinvest a share of their profits. The number of traditional agricultural laborers willing to move to this high-productivity, high-wage sector was assumed to be unlimited. In this process of development, and as long as these assumptions would prevail, inequality in the distribution of income would increase as average incomes rose. There would be a turning point after which inequality would fall again as the surplus labor phase ends and the dualistic economy becomes a single-sector, fully industrialized economy.

Although Kuznets did not explicitly model the intersectoral shifts of population as part of the development process, he did build on them to articulate his basic idea of an inverted-U relationship between economic growth and income inequality (the “Kuznets curve”). In his presidential address at the Annual Meeting of the American Economic Association in 1954, he hypothesized that in the process of growth and industrialization, inequality would first increase, because of the shift from agriculture and the countryside to industry and the city, and then decrease as returns across sectors equalized. The data Kuznets used to make this statement came

from a long-run series of inequality indicators for England, Germany, and the United States, and from a single observation in time for three developing countries—India, Ceylon (Sri Lanka today), and Puerto Rico. These were the data available at that time, and Kuznets was well aware of the limitations of the empirical backing of his argument, in his own words, on “5 percent of empirical information and 95 percent speculation, some of it possibly tainted by wishful thinking.”

Kuznets based his speculation primarily on longitudinal data and called for in-depth case studies of the economic growth of nations. But many subsequent studies simply used aggregate cross-country data (often of not particularly high quality) and reduced-form models to explore and support the hypothesis of an inevitable tradeoff between development and equality. The Kuznets curve became one of the most quoted stylized facts of the study of income distribution for nearly four decades.

Cross-country data can be misleading for dynamic processes

With the development of much larger data sets, such as the Deininger and Squire (1996) international inequality database (following on from Fields 1989), empirical “tests” of the Kuznets curve were widely conducted. But it has become understood that the use of cross-country data to analyze what are essentially dynamic processes can be strongly misleading. Moreover, numerous studies have shown that the evidence in favor of the Kuznets curve is not at all robust to econometric specifications, sample

composition, and period of observation. See, among others, Bourguignon and Morrisson (1989), Fields and Jakubson (1994), Deininger and Squire (1998), and Bruno, Ravallion, and Squire (1998). Bruno, Ravallion, and Squire (1998), while drawing in part on cross-country data, also analyzed one country—India—for which relatively long time-series data had become available, and again found no sign that growth increased inequality.

Why the Kuznets curve does not hold in practice probably has to do with the fact that developing countries do not generally satisfy the assumptions on migration processes and sectoral development underlying the Kuznets hypothesis. To explain international differences in inequality of incomes, it is important that the link between economic inequalities and other factors, such as economic dualism, land, education, and regional differences, be more carefully analyzed.

No straightforward relationship between income and inequality

To conclude, there is today something of a consensus that no straightforward relation between income and inequality can be established. As argued by Kanbur (2000) in his exhaustive review of the Kuznets curve literature in the *Handbook of Income Distribution*: “it seems to us far better to focus directly on policies, or combination of policies, which will generate growth without adverse distributional effects, rather than rely on the existence or nonexistence of an aggregative, reduced form relationship between per capita income and inequality.”

Source: Authors’ creation.

consensus on a systematic relationship between the long-term growth processes of industrialization and urbanization—and overall inequality (box 2.6).

Cross-country studies have also analyzed the relationship between inequality and economic structure. Bourguignon and Morrison (1990), for example, argue that “developing countries which are comparatively endowed with mineral resources and land (climate) tend to be less egalitarian than others, although the effect of the agricultural comparative advantage may be offset by the distribution of land.” They also find that the labor productivity difference between agriculture and the rest of the economy is a powerful explanatory factor for differences in income inequality in a number of developing countries in the 1970s and 1980s.¹²

A large body of literature has also explored the relationship between trade openness and inequality but has not reached a consensus. For example, Dollar and Kraay (2002) and Dollar and Kraay (2004) find no effect of trade openness on inequality, but Lundberg and Squire (2003) do find such an effect. Ravallion (2001) and Milanovic (2002) report that at low incomes openness may be inequality-increasing, but that this effect reverses at higher incomes.

Trends

The discussion above highlights the many mechanisms for hypothesizing how aggregate economic growth, and the evolution of different sectors of the economy, can influence economic inequality. Popular lines of argument have emphasized Lewis-Kuznets

type processes, the race between relative supply and demand for skills along with household adjustments to participation, education, and fertility; the transitions from controlled to market-oriented economic systems; and various forms of power and bargaining-related views of the world. In the end, and perhaps not surprisingly, it is difficult to identify a single overarching explanation. Until recently, this did not seem to matter much because there was a general perception that inequality does not vary markedly over short periods.¹³ In earlier studies, few countries having data on inequality over multiple time periods indicated sharp changes.

For countries and regions. Empirical investigation of how inequality evolves in a country is subject to concerns similar to those for comparisons of levels (see box 2.5). But there is a growing sense that the impression of stable, unchanging income inequality may well be misleading. A few recent examples of changing inequality bear mentioning. First, careful work by Atkinson (2003) has documented the evolution of inequality in OECD countries during the second half the twentieth century. He finds that inequality in the United States has been rising steadily since the early 1970s (after seeing little change, and possibly some decline, in the preceding decades) and has risen dramatically in the United Kingdom since 1980. Between 1984 and 1990, the Gini coefficient in the United Kingdom rose by 10 percentage points (but then did not increase further)—an unprecedented increase over such a short time. Elsewhere in the OECD, inequality changes have been less marked. But to the extent that the early and middle decades of the twentieth century were associated with declining inequality in these countries, this trend seems to have halted by the century's later decades.

Second, inequality in China was markedly higher at the end of the 1990s than it had been in the early part of the 1980s. In general, the recent evidence in East Asia suggests that inequality has risen faster in the second round of high growth Asian economies—such as China and Vietnam—than had been observed in the first

round—Hong Kong (China), Republic of Korea, Malaysia, Singapore, and Taiwan (China). A complete picture of the factors behind this process is as yet unclear. Although it is likely that at least part of the story is linked to intersectoral transfers, as emphasized by Lewis (box 2.6), Ravallion and Chen (2004) indicate that inequality in China grew fastest during periods when economic growth and poverty reduction were slow. They argue that China provides little support for the view that rising inequality is inevitable with rapid economic growth and poverty reduction.

Third, South Asia has generally been perceived as a region with relatively low inequality. This probably is due, in part, to inequality being measured by consumption. In this region, too, the prevailing view has been that inequality changes little over time. But the stylized fact of low and stable inequality in South Asia has also been challenged. In India, the largest country in the region, some uncertainty remains over how inequality has evolved, because of well-publicized issues concerning data comparability over time.¹⁴ The best available estimates suggest that inequality in India has been rising, but with no solid assessment of by how much.¹⁵

In Bangladesh, Nepal, and Sri Lanka, however, recent and reliable data show very large increases of inequality in the late 1980s and 1990s. In Bangladesh, income inequality (as opposed to consumption inequality) has been documented to have risen from a Gini of 0.30 to 0.41 between 1991 and 2000.¹⁶ In Sri Lanka, the increase in consumption inequality has been very similar, from 0.32 to 0.40 between 1990 and 2002.¹⁷ And, in Nepal, the Planning Commission has produced estimates suggesting that consumption inequality rose from 0.34 to 0.39 between 1995–6 and 2003–4.¹⁸ Only in Pakistan is the evolution of inequality not clear, because of difficulties with data comparability.

In other regions of the world, the recent picture on inequality trends is more difficult to summarize. For Latin America, De Ferranti and others (2004) indicate that inequality increased in most countries, by a sizable margin, during the “lost decade” of

the 1980s. But during the 1990s, inequality continued to rise in only about half of the countries in the region, and less rapidly. The authors note that, in Argentina, inequality has risen sharply in the growth period and during the crisis years. In Brazil and Mexico, the 1990s witnessed some small declines. In Eastern Europe and Central Asia, changes in inequality during the early 1990s, associated with the transition to the market economy, have been difficult to document systematically because of data problems, according to World Bank (2000c). Between 1998 and 2003, consumption inequality declined in the former Soviet Union countries (with the exception of Georgia and Tajikistan), while there was no clear trend in eastern and southern European countries (World Bank, 2005a). In Africa and the Middle East, it is difficult to point to broad trends, largely because of concerns with data comparability over time.

To what extent does our examination of levels and trends in income inequality bear on the themes of this report? This report is most concerned about changes in inequalities in incomes, and other specific dimensions, if these dimensions are associated with changes in underlying inequalities of opportunities. Rising income inequality in Russia during the 1990s, for example, is of concern precisely because of its strong association with rising political influence and state capture.

But this is not inevitably the case. A recent study of income distribution dynamics in six East Asian and Latin American countries by Bourguignon, Ferreira, and Lustig (2005) decomposes income distribution dynamics into the underlying driving forces. They show that complex and country-specific interactions between powerful underlying social and economic phenomena imply that distributional experiences must be assessed country by country. For example, improvements in education (equalizing opportunities) may be associated in one case with falling income inequality—Brazil or Taiwan, China—but in another country with rising inequality—Indonesia or Mexico. Our assessment of the equity implications of changes in

income inequality will thus differ across countries.

Across generations. Our assessment will also depend on the degree to which inequalities are transmitted across generations. The study of intergenerational transmission of welfare is not straightforward, because of the scarcity of datasets containing information on various generations of adults in the same family. Data from long panels are rare, and questions about family background of individuals are not always asked in surveys (the Brazil data described in box 2.1 are a rare exception). Information about education or occupation for various generations can be captured relatively easily in recall questionnaires. But information about other dimensions, such as the incomes, earnings, or even health status of earlier generations, is not easily remembered by individuals (not least because they often change during a lifetime). The scarcity of intergenerational data is particularly striking in developing countries. Even though the persistence of inequalities across generations is often thought to be much more acute in developing countries, studies on intergenerational mobility in the developing world remain few and far between.

Even when the data exist, differences in methodologies and data often limit the scope for comparisons across countries. The most widespread measure of intergenerational mobility in the economics literature is the intergenerational earnings elasticity, or the elasticity of sons' earnings with the earnings of their parents. This measure generally comes from a log-linear regression of sons' earnings (although it could also be income or years of schooling) on fathers' observed earnings (or its predicted value using such other information as education or occupation). The closer the elasticity is to zero, the more mobile the society is supposed to be. This elasticity has been widely used in the U.S. literature, where longitudinal data are relatively abundant. And for comparability, it has also been calculated in most other countries' recent studies.¹⁹

Until recently, estimates of the intergenerational elasticity of earnings were thought to

be around 0.4 in the United States, suggesting a reasonably mobile society in incomes.²⁰ More recently, however, Mazumder (2005) uses new data and recent econometric techniques to correct for transitory fluctuations in earnings—he shows that the previous estimates of intergenerational elasticity were biased downward by about 30 percent. He argues that the true estimate is somewhere around 0.6 for the United States.

An intergenerational elasticity of 0.6 compared to 0.4 paints a dramatically different picture of mobility in American society. For example, it implies that a family whose earnings are half the national average would require five generations instead of three before it substantially closed the gap. Obviously a difference of two generations, or about fifty years, is quite substantial and suggests the need to examine policies that foster greater mobility.²¹

In parallel analyses, estimates of intergenerational mobility in Canada, Finland, or Sweden, among others, have tended to report elasticities closer to 0.2 or lower, suggesting that these societies are considerably more mobile than the United States. A relatively early study of mobility in the United Kingdom (Atkinson, Maynard, and Trinder 1983) reports an elasticity of 0.43, while a more recent study by Dearden, Machin, and Reed (1997) estimates an elasticity of 0.57. These studies indicate that people in the United Kingdom are about as mobile as those in the United States. Because of the data limitations, only a few exceptional studies on intergenerational earnings elasticities for less-developed countries have been carried out. These provide evidence of relatively low mobility.²²

In another literature review of cross-country differences in intergenerational earnings mobility, Solon (2002) asks whether there is any link between cross-sectional inequality within a generation and the intergenerational transmission of inequality. Although there is greater cross-sectional inequality in the United States and the United Kingdom than in Sweden or Finland, Canada also has relatively high inequality. The evidence needed to provide a clear answer to this question is therefore still fragmentary, and only “con-

tinuing research (on international evidence of intergenerational mobility) will improve our understanding of why the intergenerational transmission of economic status is strong in some countries and weak in others.”²³

The intergenerational transmission mechanisms of inequalities will differ across countries and within countries across different population groups. As described above, Mazumder (2005) points to rather low levels of intergenerational mobility in the United States. He also highlights an important racial dimension to this limited mobility and finds evidence of substantial immobility at the ends of the distribution. He shows that of the individuals whose fathers were in the bottom decile of the earnings distribution, 50 percent will be below the thirtieth percentile and 80 percent below the sixtieth percentile. He finds the evidence to be consistent with the hypothesis that such immobility “might be due to the inability of families to invest in their children’s human capital due to the lack of resources.” By contrast, more than 50 percent of the individuals whose parents were in the top decile will remain above the eightieth percentile and two-thirds will be above the median.

In another U.S. study, Hertz (2005) confirms the findings of Mazumder (and others) on the size of the intergenerational elasticity. He then shows evidence that it is largely driven by the especially low rate of mobility of black families from the bottom of the income distribution. While only 17 percent of whites born to the bottom decile of family income remain there as adults, the corresponding figure is 42 percent for blacks. He also finds that “rags-to-riches” transitions from the bottom quartile to the top were less than half as likely for black as for white families. He further provides evidence that the black-white mobility gap is not “appreciably altered by controlling for parents’ years of schooling.” Last, he provides evidence that the incomes of black children are unresponsive to small changes in parents’ incomes at the bottom of the distribution.

To recap, summary measures suggest that even in such developed countries as the

United States and United Kingdom there is rather limited intergenerational mobility across generations. Research in these countries has highlighted important heterogeneities in the patterns of reproduction of different inequalities across populations groups. For most developing countries, relatively little is known about intergenerational income mobility. But given the acute group-based inequalities in many developing countries, there appears to be little basis for expecting much intergenerational mobility.

Agency and equity: inequalities of power

The foregoing discussion has raised explicitly the question of how inequalities are determined and reproduced. It has pointed to the potentially important role of group differences in this process. This focus on process and the factors that account for the persistence of inequality over time puts the spotlight on how much inequality is rooted in deeper institutions in society—institutions of governance, access to land, control of labor, market regulation. Chapter 6 deals with the emergence and effects of such institutions in more detail. Here we turn to different kinds of evidence—and traditions of analysis—to discuss the unequal capacity of people to influence the form taken by these institutions and the consequences of unequal institutions for continuing inequality in such capacities. For

poverty the inequalities in capacity to forge the institution or society can be as important as inequalities in health, income, and education.²⁴

A recent study of inequalities in governance in four slums of Delhi found that access to formal government by slum dwellers is more available to the better off and to those who have good contact networks.²⁵ Community leaders in these slums facilitate access primarily to their caste members, and slum dwellers are more likely to delegate custodianship of their interests to better-educated community leaders. The study concludes that because access to bureaucracy and political representation for slum dwellers in Delhi is largely the preserve of the better off and better connected, decisions of formal policymakers do not seek to represent slum interests as a whole, producing interventions that do not target those in most need. The lack of broadly distributed “voice” thus results in patterns of resource allocation, and income generation, that are far from egalitarian.

The nature of this unequal capacity can be captured through the sociological concept of agency. Agency refers to people’s capacity to transform or reproduce such societal institutions. Some of this capacity is conscious—for example, when interest groups lobby for a change in land tenure legislation, or when women refuse to accept laws around marriage that systematically disadvantage them. Some of it is uncon-

BOX 2.7 *Inequitable agencies and institutions in Pakistan*

A recently completed Human Development Report for Pakistan provides rich documentation of the skewed distributional impact of corruption (United Nations Development Programme 2003). The report notes that corruption raises the costs of getting things done—for setting up a new business, for crossing borders, for obtaining a driver’s license. In Pakistan these costs fall most heavily on those least able to afford them: the poor. According to the Pakistan Human Development Report, 16.7 percent of the extremely poor reported paying a bribe to run their business enterprise, handing over an average of 6,800 rupees. Only 6.7 percent of the non-poor paid a bribe, of 9,300 rupees. In rural areas, the contrast is even starker: 20 percent of

the extremely poor paid a bribe, while only 4.3 percent of the non-poor had to do so. In urban areas, the extremely poor paid on average 8,700 rupees in bribes, while the non-poor paid only 1,200 rupees.

Similar patterns emerge for mediating disputes. The extremely poor not only pay a higher price to seek a resolution than the non-poor, but also they are less likely to receive a satisfactory outcome (38.5 percent versus 80.8 percent). Indeed, the fee the extremely poor must pay is often higher than their annual household income, leaving many to choose to suffer the consequences of a dispute even when they are clearly in the right. In addition, the extremely poor receive less assistance from the police (the

most immediate representatives of the formal justice system), who are involved in only 1 percent of their disputes but nearly 5 percent of the disputes of the non-poor. The poor perceive that the police will be slow and inefficient in handling their cases, and they frequently experience outright harassment and intimidation. Even to register a case of kidnapping with the police requires paying a bribe. In these situations, it is hardly surprising that the poor find it more expedient to take the law into their own hands, creating in many urban areas a host of new problems related to gang violence and vigilantism.

Source: United Nations Development Programme (2003).

BOX 2.8 *Legacies of discrimination and the reproduction of inequalities and poverty among the Batwa in Uganda*

The Batwa, who are described in many parts as pygmy peoples, live in Eastern Uganda, eastern Democratic Republic of Congo, and Rwanda. Batwa have been subject to negative stereotypes since at least 1751, when Edward Tyson concluded that pygmies were not human but rather apes or monkeys. They suffer multiple asset depletion and wide ranging forms of discrimination, a situation that public actions have at times made worse. Though longstanding forest dwellers, the British sought to expel them to create forest reserves in the 1930s. In 1991, the Uganda National Park authorities increased efforts to enforce this exclusion from forest areas. Although the World Bank—which was funding some of the park authorities' work—required that the government assess the impact on indigenous communities and follow defined compensation procedures, these did not take sufficient account

of power differences among Batwa and other affected groups, nor consider Batwa preferences. All communities were viewed as uniform, a practice that the authorities later recognized “did not take into account Batwa realities and left them with nothing” (Zaninka (2003), 170).

Non-Batwa locals have resisted efforts to provide more appropriate compensation to the Batwa. A Participatory Poverty Assessment (PPA) highlighted persistent discrimination, describing the Batwa as a “group of people who are despised” and who “have no means of production such as land, credit and training. They are regarded by other ethnic groups in Kisoro as a people with no rights.” This leads to everyday and institutionalized forms of exclusion, with the Batwa suffering discrimination in access to both public spaces and services. While some Batwa respond to this by organizing themselves, others

respond in ways that—however rational and self-protecting—often reproduce the extent to which they are excluded. The same PPA reports some Batwa children saying that they did not attend school because it was so unfriendly to them. When asked what they wanted to do upon completing school, one child replied that she wished to be “a cleaner.” Discrimination and prejudice diminish the capacity to aspire to and imagine a different future.

Repudiation and discrimination can also lead the Batwa to self-exclude from the public sphere. The PPA notes that no Batwa attended PPA exercises. Non-Batwa locals explained: “Batwa would never come to such meetings, so there is no point in mobilizing them.”

Source: Moncrieffe (2005), citing Participatory Poverty Assessment reports.

scious—for example, when people engage in land transactions without questioning them, they reproduce the institutions of land tenure and the markets in land. When a disadvantaged group accepts its disadvantage as “taken for granted,” the effect is to allow the continuing existence of the relationships that create such disadvantage.

The internalization of disadvantage leads to pernicious forms of agency that perpetuate inequalities. From inequalities in agency come inequalities in power, voice, and self-confidence—a major part of our story (box 2.7). Inequalities of agency are as much products of dominant institutions as sources of those institutional arrangements. Maintaining these arrangements both reflects and produces the distribution of power among people. As for health, education, and income, though, this distribution can change—and it has. Indeed, it has often changed in relation to changes in these other distributions.

Internalization of disadvantage and inequalities of agency

Recent work on urban slum dwellers in India²⁶ (and elsewhere)²⁷ suggests that a key form of powerlessness for the poor involves living with “negative terms of recognition.” This concept highlights the conditions and constraints under which the poor negotiate

the very norms that frame their social lives. Being so routinely treated with contempt by government officials, employers, and fellow citizens—and encountering such enormous obstacles to advancement—means that excluded groups can, over time, come to subscribe to norms about themselves and their situation “whose social effect is to further diminish their dignity, exacerbate their inequality, and deepen their lack of access to material goods and services.”²⁸

In these circumstances, the poor are not only persistently and overtly discriminated against. Their problems are further compounded and consolidated by their apparent complicity in it, their revealed “adaptive preference”²⁹ for menial occupations and ascription to norms and subservient behaviors that only legitimize and perpetuate their powerlessness. Dire material circumstances, rational expectations about their limited prospects for upward mobility, and strong beliefs about the legitimacy and immutability of their situation conspire to create a vicious circle from which it may be very difficult for the poor to escape (see box 2.8).³⁰

Inequality traps may cause crime and violence. First, people who perceive their poverty as permanent may be driven by hostile impulses rather than rational pursuit of their interests. Second, sensitivity to inequality, especially by those feeling

trapped at the bottom, may lead to higher-risk tactics like crime, when the expected payoffs from socially legitimate activities are poor. Third, people may be particularly sensitive to group-based inequalities. If, for example, racial heterogeneity and income inequality are correlated and consolidate status distinctions in a society, this could spell potential for violence. Finally, as Merton (1938) elegantly states,

. . . when a system of cultural values emphasizes, virtually above all else, certain *common* symbols of success *for the population at large* while its social structure rigorously restricts or completely eliminates access to approved modes of acquiring these symbols *for a considerable part of the same population*, . . . anti-social behavior ensues on a considerable scale. (italics reflect original emphasis)

A lack of upward mobility in a society, combined with a high premium on economic affluence, results in anomie—a breakdown of standards and values.³¹

Changing between-group inequalities of agency and institutional power

Inequality of agency often leads to institutions that reproduce such inequality. But these relationships are not immutable. There are ample cases in which interventions—by civil society, reformist public officials, external actors, religious institutions, and others—have given more self-confidence and assertiveness to disadvantaged groups, worked against the internalization of disadvantage, and created new channels for excluded groups to exercise voice with greater effect. These changes improve the terms of recognition for the powerless: they become recognized by more powerful groups who otherwise would not acknowledge them at all, leading to empowerment of disadvantaged groups in economic, social, and political realms.

Empowerment can occur in many ways.³² Change typically occurs through the interaction between the opportunities for action created by dominant political structures and the capacity of poorer or middle groups to engage. The “political opportunity structure”—that shapes the possibilities for action—is itself a function of the openness of political institution, the coherence and

positions of elites, and the effectiveness of governments to implement approved courses of action. The capacity of subordinate groups is influenced by their “economic” capital—their education and economic resources—their “capacity to aspire,” and the closely associated capacity to organize.³³

In Indonesia, the Kecamatan Development Project (KDP) illustrates change occurring through action from above and below: it aims to improve the terms of recognition and the political agency of marginal groups, and to create new institutions for greater agency to lead to material changes in patterns of public investment. Consistent with the ongoing process of democratization in Indonesia, the source of change comes from public policy rather than nongovernmental action, allowing the project to operate on a large scale (see also focus 4 for examples of change occurring at the local level).

A recent study³⁴ of the efficacy of the KDP on challenging and changing the terms of recognition of participants suggests that it does provide villagers with a set of deliberative routines for more equitably managing the conflicts it inevitably triggers.³⁵ These routines introduce marginal actors to more equitable spaces of engagement with more organized and influential actors. But building this conflict management capacity among marginal groups depends on more than just forging collaborative routines. It also requires a set of rules—defined by the KDP—that limit the unfair exercise of power by dominant groups. With the KDP cultivating collaboration and tangible points of political power for marginalized groups, the results include a well-functioning school or medical clinic but equally important a style of group (re)definition and defense.

Changes in the agency of indigenous peoples in Ecuador since the 1960s provide another example in which mobilization from below came to change national and local structures. These changes are clear at both local and national levels. In the 1960s in the Andean province of Chimborazo, the indigenous *Quichua* people suffered multiple deprivations. They were subject to everyday forms of violence and to domination and racism in their interactions

with other ethnic groups and with authorities.³⁶ Power was concentrated in the triumvirate of landowner, priest, and local government authority. Much indigenous labor was tied to large rural estates on which labor relations were sometimes violent and returns to labor manifestly unfair. Life expectancy was short, alcoholism severe, and children's access to education and health acutely constrained.

At the start of this twenty-first century, indigenous people now occupy several county mayorships and have a majority of councilors in several counties. The provincial prefect is also Quichua. Similarly at a national level, former leaders of national indigenous people's organizations are now ministers. And the national Confederation of Indigenous Nationalities of Ecuador has control of the directorate of bilingual education, the indigenous development council, and the office of indigenous health. It also played a big part in negotiating and administering a World Bank and International Fund for Agricultural Development-supported national Program for the Development of Indigenous and Afro-Ecuadorian Peoples. By any calculation, power relationships have changed in Ecuador, becoming more equitable, with indigenous people participating more completely (and more equitably) in their society.

The inequality trap for women

Unequal opportunities in health, education, economic welfare, and political agency can be readily observed in most developing countries. The preceding sections have emphasized that these different manifestations of inequity are not generally independent from one another and that this interdependence can replicate inequalities over time. This interrelationship can be vividly illustrated by examining the nature and implications of the inequality that traps many women in developing countries.

Men and women around the world have starkly different access to assets and opportunities, reinforced by unequal norms and social structures, perpetuating gender differences over centuries. Gender inequity directly affects the well-being of women and deci-

BOX 2.9 Sex ratios and "missing women"

Gender inequity causes many societies to display some preference for male children. But the "son preference" is strong enough to result in substantial excess female child mortality in parts of East and South Asia—leading to the phenomenon of what Amartya Sen calls "missing women." (Sen, 1990). In China and India the practice of female infanticide was noted at least a century ago, and in the Republic of Korea and India high juvenile sex ratios (the proportion of male to female children below the age of 4) have been documented since the first modern censuses were taken. By contrast there seems to be little son preference in Southeast Asia or in most other parts of the developing world.

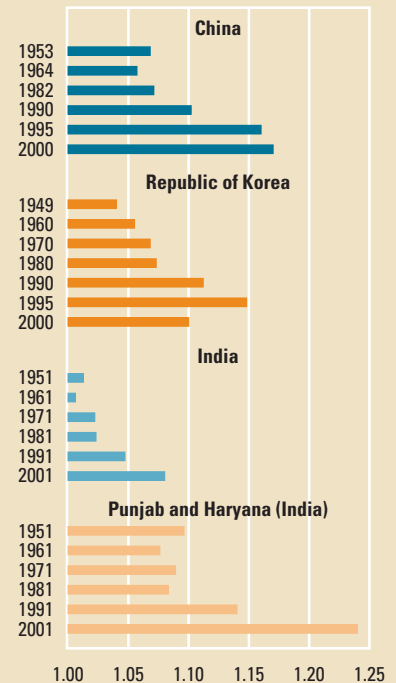
The reasons for this seem to stem from rigid patrilineal inheritance systems. While most societies deny women inheritance rights, in other parts of the world there is some flexibility in these rules. In peasant Europe and Japan, for instance, women could inherit land if their parents had no sons. Despite egalitarian laws, customary practices in China, the Republic of Korea, and northwest India permit a man, if he does not have sons, to adopt one from other male kin. In the past, it would also have been possible to take another wife.

The driving motivation is to use whatever means possible to continue the male family line. Thus, girl children are undervalued.

During pregnancy, sex-selection may lead to aborting female fetuses, reflected in sex ratios at birth that are more masculine than the biological rate of 105 boys for every 100 girls. Sex-selection can also happen through infanticide, although the data make it difficult to distinguish between selective abortion and infanticide. The third, and most common, mechanism is the neglect and other practices that result in higher mortality rates for girls than boys during early childhood.³⁷

In China, intense efforts by the government resulted in a brief improvement in the sex ratio during 1953–64 (see figure to the right). But since the 1980s it has steadily

Juvenile (newborn to four years old) sex ratios in China, the Republic of Korea, India, and Punjab and Haryana, 1950–2000



risen. In the Republic of Korea stark declines have become only apparent in the last decade—perhaps because of improvements in labor market opportunities for women. India, as a whole, does not have juvenile sex ratios that are far different from many other parts of the world. But northwest India has seen some particularly worrying trends, with sex ratios sharply rising between 1981 and 2001, much attributable to the higher incidence of sex-selection in abortion. Other parts of India, especially the south, have more equitable labor markets and fewer restrictions on women's mobility and inheritance.

Source: Das Gupta and others (2003).

sions in the home, affecting investments in children and household welfare (box 2.9).

Gender inequity is the archetypal "inequality trap." Most societies have norms that preserve the prevalent social order, delineating different roles and spheres of influence for men and women. The male sphere is typically outside the home in market work and social interactions that enhance the family's

status and power. The female sphere is usually inside the home—looking after household work, rearing children, and contributing to the stability of the household. So, women's activities serve primarily as inputs into the household's collective well-being, while men are ostensibly at its center—its breadwinners and its link to the larger world where economic and social status are determined.

Marriage and kinship systems preserve these structures of patriarchy. Most societies are “patrilocal,” with women moving from their parents to their husband's home after marriage. Marriage can therefore be thought of as a framework that serves to exchange women between households, and marriage decisions are made with a view toward ensuring that this exchange of women promises the maximum gain to both households. The man's household is the point of reference—while the woman is simply an input into the processes for households controlled by men to generate economic and social returns.³⁸

Inheritance tends to be consistent with this pattern. Most societies are not just patrilocal—they are also patrilineal, with inheritance and property rights primarily passed on to men. The majority of countries, outside of Europe and Central Asia and Latin America and Caribbean, restrict inheritance rights to women.³⁹ Some countries have legislation that guarantees equality in inheritance laws. But these laws often are not enforced, and real authority over decisions on inheritance rests in the hands of village elders and chiefs, who follow customary practices that discriminate against women.

Most countries that have unequal inheritance laws also have unequal property rights regimes.⁴⁰ Indeed, the vast majority of land owners are men.⁴¹ Many societies compound this by denying women the right to divorce. This inequality in property rights regimes persists even in countries where agricultural production depends heavily on women's labor, such as many in Sub-Saharan Africa. In Cameroon, women make up more than 51 percent of the population and do more than 75 percent of the agricultural work, but they are estimated to hold fewer than 10 percent of all land certificates.⁴² So, if women work on farms, they are usually working on farms owned by men.

In addition to being denied inheritance and property rights, women in many societies face restrictions on their mobility. For example, in the state of Uttar Pradesh in northern India close to 80 percent of women require their husband's permission to visit a health center, and 60 percent have to seek permission before stepping outside their house.⁴³ These mobility restrictions may be socially imposed, as with *gunghat* among Hindus—or have religious sanctions, as with *purdah* among Muslims. Such practices are not just socially enforced, they can be internalized by women who treat them as marks of honorable behavior. These norms are transmitted by parents to their children, ensuring their continuity over generations; in many societies, they are enforced by older women in the community.⁴⁴

Restrictions on mobility and rules of kinship and inheritance help shape social perceptions about women's roles. If women are socially and economically directed to focus their attention and energy on activities in the home, this is not just what men expect of them—it is also what other women expect of them. In much of the developing world, women's participation in the labor market is more a function of adversity than active choice—because husbands cannot earn an adequate income or because of an unanticipated shock, such as a child's illness. Bangladeshi women described it this way, “Men work to support their families, women work because of need.”⁴⁵ Women around the world participate in a fair amount of market-based activity for a wage, but they have to continue to perform most household chores (figure 2.13). They thus face a time squeeze, spending more time at work, both in and out of the home, than men do.

Because social and economic factors determine women's life chances more in marriage than in labor markets, parents invest less in their human capital. Throughout the developing world, women are much less likely to be enrolled in secondary school or university than men.⁴⁶ So, they typically work in less lucrative occupations. Moreover, labor markets may themselves be discriminatory, paying women less than men for the same work. For these reasons, even when women participate in the labor market, they earn less

than men. Low earnings are a further disincentive for women to enter the labor market, perpetuating traditional social roles.

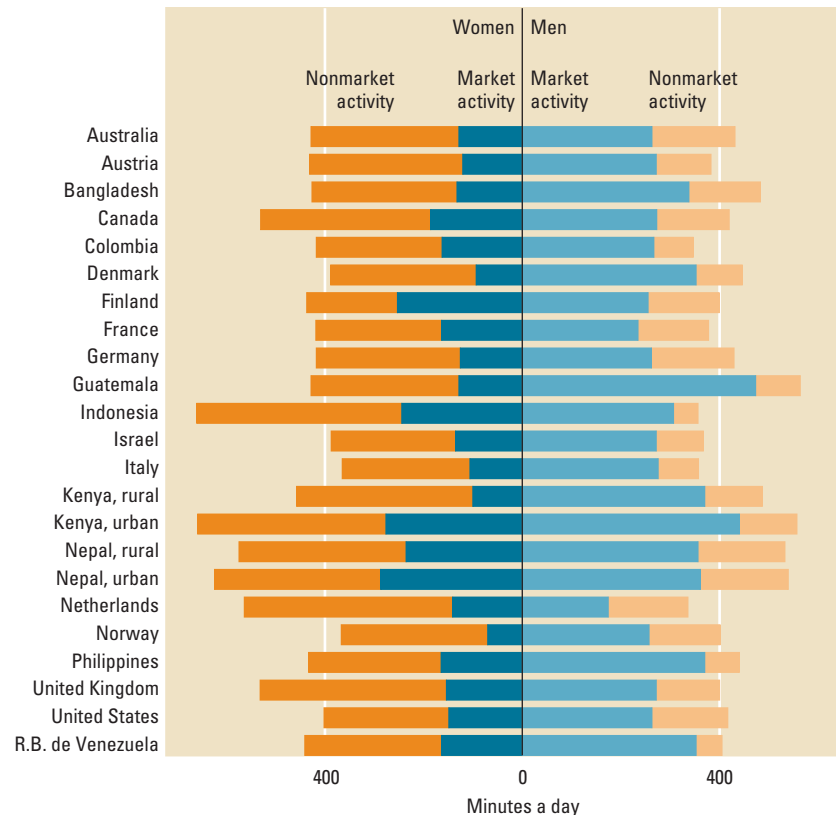
Inequality in the home

For a long time, economists did not adequately recognize that gender inequity has an impact in the home, and models of the household assumed that decisions were taken by one person—with no room for different choices across spouses. The consequence of this world view is not just academic. It suggests, for instance, that policy interventions that attempt to alleviate poverty should not bother with targeting by gender—or suggests that taxes on a household will not affect the allocation of resources within it.

Economists now question this view, developing models of household decision making that allow for inequality between spouses. The new models start with the assumption that households are efficient, in the sense that they make decisions that maximize the use of the household's resources. With this assumption, the models show that a spouse's share in household resources is determined by two factors. The first is the fallback option for the spouse in the event of divorce—laws of inheritance, property, and divorce would matter here. Second is the relative size of the spouse's contribution to the household's income, which is determined by their opportunities in the labor market.⁴⁷ If husbands and wives have different preferences, an increase in a woman's outside options or in her labor market opportunities should reflect consumption choices more in line with her preferences.

Econometric work confirms that an increase in a woman's relative worth and an improvement in her fallback options have effects on consumption patterns.⁴⁸ The health of Brazilian children improves when additional nonlabor income is in the hands of women.⁴⁹ In the United Kingdom, when legislation ensured that child support payments were made directly to mothers, expenditures on children's clothing tended to rise.⁵⁰ In Bangladesh and South Africa, women bringing more assets into the marriage increase household expenditures on children's education.⁵¹ The patterns seem to indicate that, when women are better off, children seem to

Figure 2.13 Women work longer hours than do men



Source: United Nations Development Programme (1995).

Note: Data refers to rural Bangladesh in 1990, urban Colombia 1983, rural Guatemala 1977, urban Indonesia 1992, rural Kenya 1988, urban Kenya 1986, rural Nepal 1978, urban Nepal 1978, rural Philippines 1975–77, urban Venezuela 1983, Australia 1992, Austria 1992, Canada 1992, Denmark 1987, Finland 1987–88, France 1985–86, Germany 1991–92, Israel 1991–92, Italy 1988–89, the Netherlands 1987, Norway 1990–91, the United Kingdom 1985, and the United States 1985.

benefit more than when men are better off. The most obvious way to explain bargaining and sharing is to assume that women intrinsically care more about children than men do, but this risks being tautological.

Perhaps the explanation can benefit from understanding that social and economic differences outside the household can matter not only for determining bargaining power but also for socially determined perceptions of what men and women consider important. If men and women occupy different “outside” and “inside” spheres of influence, it seems to make sense that improvements in women's incomes would have a greater impact on investments in the household. Improvements in the income of men, by contrast, are more likely to result in socializing activities outside the home and in purchases that reflect social status.

Another consequence of this separation between inside and outside roles is that

Table 2.2 Percentage of women who have ever experienced physical or sexual violence by an intimate partner

	Physical violence	Sexual violence
Bangladesh, rural	42	
Brazil, urban	27	10
Ethiopia, rural	49	59
Namibia, urban	31	17
Peru, rural	62	47
Samoa	41	20
Serbia and Montenegro	23	6
Tanzania, urban	33	23
Thailand, rural	34	29

Source: Unpublished data from the WHO Multi-Country Study on Women's Health and Domestic Violence Against Women obtained from a presentation by Claudia Garcia-Moreno at the World Bank's Conference on Gender-Based Violence. The final published comparative report is forthcoming.

Note: Data refer to different time periods. Brazil, Peru, and Thailand refer to 2000. Reference period for Bangladesh, Ethiopia, Namibia, Samoa, Serbia and Montenegro, and Tanzania are unknown.

inequalities in the home are also manifested in differences in access to information, which can be used to manipulate intra-household bargaining. In an ethnographic study of Bangladeshi garment workers, Kabeer (1997) found that men and women tried to control information about their incomes from their spouses so that they could make purchases without consulting them. Women may also hesitate to share information with their husbands, or to collaborate efficiently in farming their plots of land, to retain control over their property. In studying the farms owned by men and those owned by women in Ghana, Udry (1996) found, keeping other things constant, that women-owned farms were less productive than those owned by men. When wives and husbands are not sharing information, or manipulating the flow of information, they clearly are not using their resources optimally. In other words, intrahousehold behavior is not efficient—contradicting an important assumption in economic models.

The widespread domestic violence in the family is another type of inefficiency. Recent World Health Organization (WHO) data show that both physical and sexual violence are widespread in diverse parts of the world (table 2.2). An important reason for domes-

tic violence is that it allows husbands to institute a regime of terror to control their wives' behavior. In India, Bloch and Rao (2002) find that husbands systematically use violence as a means of extracting a larger dowry from their wives. This "instrumental" use of violence has widespread acceptance among both men and women. Surveys have found that large percentages of respondents in developing countries report that men have the right to beat their wives when they answer back or disobey them.⁵²

Gender inequity is thus the result of an overlapping set of economic, social, cultural, and political inequalities that reinforce each other. They cause women to have less access to property rights, wealth, and education—and limit their access to labor markets and to spheres of activity outside the home. This, in turn, constrains their ability to influence household decisions. Also limiting this influence are asymmetries of information in the household and the use of violence to control women's behavior. All of this maintains a clear demarcation between the roles of women and men, readily reproduced across generations.

There are some signs that changes in labor markets and interventions by the state can break this inequality trap. The development of the garment industry in Bangladesh has resulted in a sharp and visible increase in women's access to a lucrative labor market, expanding their ability to influence household choices.⁵³ Higher wages for women seem to compensate for restrictive practices, such as *purdah*, by reducing limits on women's physical mobility, and increasing their say in household decision making.⁵⁴ Globalization has expanded opportunities for women in Mumbai and increased their access to schooling.⁵⁵ A comparative study of the Philippines, Sumatra, and Ghana found that patterns of land inheritance and investments in schooling have become more egalitarian because of changes in labor market opportunities for women.⁵⁶ And although China, Republic of Korea, and India started out with similar discriminatory social structures, intervention by the state has improved gender equity much more in China than in Republic of Korea or India.⁵⁷