3

Promoting Gender Equality and Women's Empowerment

The 2006 *World Development Report* acknowledges the importance of ensuring equal opportunities across population groups as an intrinsic aspect of development and as an instrument for achieving poverty reduction and growth (World Bank 2005). Noting that men and women have starkly different access to assets and opportunities in many countries around the world, the report refers to gender inequality as the archetypal "inequality trap," reproducing further inequalities with negative consequences for women's well-being, their families, and their communities. MDG3 reflects the strong belief by the development community that redressing gender disparities and empowering women is an important development objective on grounds of both fairness and efficiency.[1]

This chapter reviews the evidence on the relationship between gender equality, poverty reduction (MDG1), and growth. There is also compelling evidence that gender equality and women's empowerment are channels to attaining other MDGs—universal primary education (MDG2), lower under-five mortality (MDG4), improved maternal health (MDG5), and lower likelihood of contracting HIV/AIDS (MDG6).[2]

The chapter also tracks progress of countries toward meeting MDG3 since 1990, using the official MDG3 indicators. Because these indicators only partially capture the elements of gender equality, the chapter introduces five complementary indicators that provide a more complete and nuanced description of gender equality and women's empowerment. The indicators are measurable, actionable, and parsimonious; three of the five build on existing measures of other MDGs, so the data requirements for monitoring them are not onerous. Further, some of these complementary indicators (or similar measures) are being considered for inclusion in the MDGs as part of new targets for decent and productive work and for reproductive health services. Finally, the chapter extracts preliminary lessons from countries that have achieved high levels of—or fast progress toward—gender equality, but does not undertake a systematic analysis of policies. Countries that perform well on MDG3 illustrate that investments in equality in rights, resources, and voice can make a difference.

Thanks to the push to achieve universal primary education with gender-informed education policies, girls' enrollments at all levels of schooling have increased, and several countries have achieved gender parity in primary enrollments. Their success story suggests that concerted action can foster progress in gender equality not only in education but also in the economy and the society, where advances have been more modest.

Success in boosting girls' enrollment may offer important lessons for the unfinished agenda in education and the largely unaddressed agenda in the other domains of gender equality:

- Closing the gaps in well-being (health and education) and opportunities for girls and women in disadvantaged subgroups within nations who face multiple exclusions on the basis of their sex and their race, residence, ethnicity, caste, and disability. It is also essential to monitor progress in gender equality and women's empowerment for these subgroups.
- Giving priority to improving and monitoring gender equality and women's empowerment in Sub-Saharan Africa, which consistently lags behind in most areas measured by MDG3.
- Paying special attention to gender equality and women's empowerment issues in fragile states where progress on MDG3 is hampered both by slow economic advancement and gender-specific consequences of conflict.
- Scaling up significantly the collection and analysis of sex-disaggregated data to measure more accurately and fully the progress in achieving MDG3. Data on all six official indicators of MDG3 are available for only 59 out of 154 developing countries (for 2000–05), and even fewer countries have time series data that would allow tracking over time. For both the official and expanded list of indicators recommended in this chapter, only 41 countries have current (2000–05) information. This lack of data limits considerably the ability to monitor progress, learn from success, and, ultimately, to make informed decisions regarding scaling up investments.

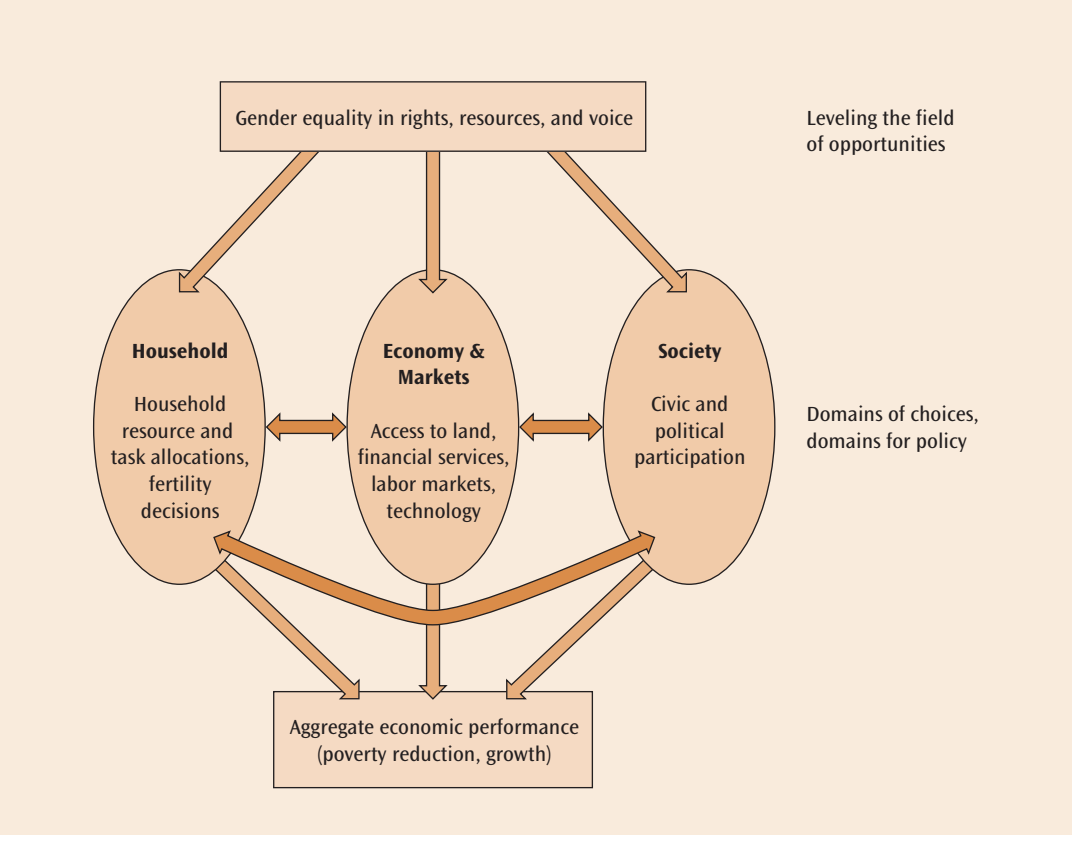
Gender Equality and Economic Performance: A Framework

Gender equality does not necessarily mean equality of *outcomes* for males and females. Using the definition in the *World Development Report 2006,* gender equality means equal access to the "*opportunities* that allow people to pursue a life of their own choosing and to avoid extreme deprivations in outcomes"—that is, gender equality in rights, resources, and voice (World Bank 2001; World Bank 2005). Equality of rights refers to equality under the law, whether customary or statutory. Equality of resources refers to equality of opportunity, including equality of access to human capital investments and other productive resources and to markets. Equality of voice captures the ability to influence and contribute to the political discourse and the development process.

Figure 3.1 presents a framework that ties together key elements of gender equality. Gender inequality in rights, resources, and voice can surface in three domains: in the *household,* in the *economy and markets,* and in *society*. In the household, evidence suggests that increased gender equality between men and women changes the allocation of household expenditures, resulting in a larger share of resources devoted to children's education and health. Gender inequalities influence the distribution of household tasks, often limiting women's ability to work outside the home, as well as women's control over fertility decisions. In the market, gender inequality is reflected in unequal access to land, credit, and labor markets, and in significantly less access to new production technologies. In society, gender inequality is expressed as restrictions to women's participation in civic and political life. Finally, as figure 3.1 shows, in addition to improving individuals' lives, increased gender equality can contribute to better aggregate economic performance.

These long-term benefits, of course, come with costs in the short run. Policies to achieve gender equality (for example, introducing quotas in representation in parliament or labor legislation prohibiting discriminatory practices) could have political costs for their proponents when some groups win and some lose. Some policies may also have economic costs that come from unintentionally under-

FIGURE 3.1 Gender equality, domains of choice, and economic performance: A framework



Source: World Bank staff.

cutting individual incentives in the name of gender equality. These costs are additional to the budgetary expenditures associated with implementing the policies. It is important to keep these short-term trade-offs well in mind in assessing specific policies.

Gender Equality, Poverty, and Economic Growth

Poverty incidence tends to be lower in countries with more gender equality. This relationship is quite robust to various measures of poverty and of gender equality—in terms of the latter, the female-to-male ratio of sex-specific Human Development Indices, the ratio of the gender-related development index to the human development index (GDI-HDI ratio), and the gender empowerment measure (GEM).[3] Economic growth also appears to be positively correlated with gender equality. This correlation is robust to changes in the length of the period over which per capita GDP growth rates are averaged and to two alternative measures of gender equality (the female-to-male ratio of sex-specific HDI indices and the GDI-HDI ratio).[4] When gender equality is measured by the GEM, however, the relationship is not statistically significant.

Simple correlations across countries—while suggestive—do not imply a causal relationship between gender equality and poverty reduction or economic growth: gender equality could "cause" faster growth and accelerated poverty reduction, but faster development could also spur improvements in gender equality. Alternatively, the causal arrows may point in both directions, or a

third factor may be responsible for both faster development and greater improvements in gender equality—perhaps better governance.

Regression analyses that control for other (possibly confounding) factors have also been employed, although the estimated coefficients by themselves do not imply causality. Cross-country growth regressions, building on widely accepted macroeconomic growth models, have examined the link between greater equality in educational opportunities and growth rates or levels of per capita income.[5]

Recent studies using cross-country regressions typically find that female education has a larger impact on growth than male education (Abu-Ghaida and Klasen 2004).[6] Klasen (2002), for example, finds that the direct and indirect effects of gender inequality in educational attainment account for 38 percent of the 2.5 percentage point gap in growth rates between South Asia and East Asia, 17 percent of the 3.3 percentage point gap between Sub-Saharan Africa and East Asia, and 45 percent of the 1.9 percentage point gap between the Middle East and North Africa and East Asia.[7]

Growth regressions have serious limitations, however, and those that use gender-disaggregated data are no exception. One serious limitation is the ad hoc nature of extensions to the augmented Solow model, which underlies growth regressions. Variables have been added to capture economic openness, government spending, political instability, ethnic diversity, and a host of other potential determinants of growth—frequently with little or no justification in economic theory. A second weakness is a simultaneity problem that results in biased results: gender equality affects growth, but growth presumably also affects gender equality, because the economic pressure in rapidly growing markets makes gender discrimination much more costly. Finding appropriate identification factors to address this bias is extremely difficult, which leads to a search for other evidence.

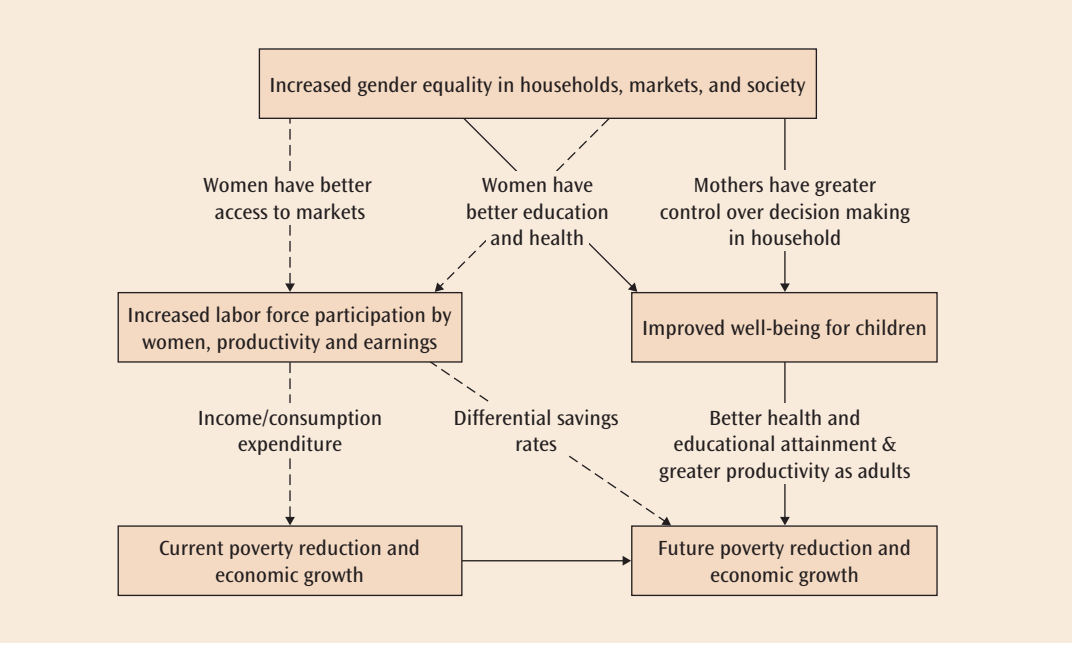
Cross-country correlations and growth regressions can be suggestive, but they do not explain *how* gender equality might be associated with poverty reduction or faster growth. There are several *pathways* through which gender equality in rights, resources, and voice stimulate productivity, earnings, and better child development outcomes, thus generating better development outcomes in an economy. Figure 3.2 depicts the pathways of women's labor force participation and earnings (identified by dashed arrows) and children's well-being (identified by solid arrows).

Women's Labor Force Participation, Productivity, and Earnings

Whether engaged in self-employment or wage employment, working women contribute to household income and expenditure. In poor households, such contributions can be crucial for keeping the household out of poverty; this is a reason to increase access to education, markets (labor, land, credit), and technology. This increased access can contribute to current poverty reduction and economic growth through higher consumption and to future poverty reduction through the impact on children's accumulation of human capital and the potential impact on aggregate saving (the dashed arrows in figure 3.2).[8]

Women face many constraints at home and in the marketplace when they decide to seek paid employment. Numerous studies point to women's reproductive role as affecting female labor force participation, in general, and work for pay, in particular. In the Kyrgyz Republic, for example but not atypically, 24.8 percent of women reported that "housekeeping, taking care of children, sick persons, or the elderly" kept them from working outside the home, but only 1.5 percent of men reported these reasons (Morrison and Lamana 2006). Besides child care, women also face the time burden of domestic tasks, especially collecting water and firewood. In rural areas of Burkina Faso, Uganda, and Zambia the potential time savings from locating a potable water source within 400 meters of all households range from 125 hours per household per year to 664 (Barwell 1996)—time that could be used to work for pay.

FIGURE 3.2 Women's earnings, children's well-being, and aggregate poverty reduction and economic growth—The pathways



Source: World Bank staff.

Wage gaps and discrimination against women in labor markets may lower labor force participation, both contemporaneously and for future generations. The contemporaneous effect occurs as the wage loss due to discrimination persuades some women to stay at home rather than engage in paid work. The wage loss due to discrimination will also cause parents to systematically underinvest in the education of girls relative to boys (see Anderson and others 2003 for evidence on Malaysia). The segregation of women into low-paying occupations may be another important driver of underinvestment in girls' education. But empirical documentation of the impact of these two disincentives to female labor for participation has been limited, and further research is needed.

For self-employment, imperfections and discrimination in other markets constitute barriers for women. If access to inputs such as land, credit, capital, and technology is limited for noneconomic reasons, women's productivity and earnings in self-employment will be lower than those of self-employed men. These lower potential earnings may discourage women from entering self-employment.

For households dependent on agriculture, land is the most important productive asset. The limited evidence available, however, indicates that the distribution of land ownership is heavily skewed toward men. For example, in a set of Latin American countries, roughly 70–90 percent of formal owners of farmland are men (Deere and Leon 2003). When women do own farmland, their holdings are typically smaller than men's.[9] Similar evidence is found for Sub-Saharan Africa (Doss 2005; Udry 1996; Quisumbing and others 2004). The evidence also clearly points to the importance of access to land and land size for increasing income.[10]

When they do have access to land, women frequently have less secure tenure rights. For example, under customary law in much of Sub-Saharan Africa, permanent land rights are held by men, typically male household heads. In contrast, women traditionally held (strong) usufruct rights to individual plots

offered by men (Lastarria-Cornheil 1997). Land redistribution reforms and land titling and registration programs have, in many cases, either maintained the rights status quo or weakened women's rights (Jacobs 2002; Agarwal 1994; Agarwal 1993; Lastarria-Cornheil 1997).[11]

Most studies find that women are not more likely to be rejected for loans or be subject to higher interest rates by lenders, but they are often less likely to apply for loans than men, partly because they do not have land, property, or other assets to offer as collateral (Baydas and others 1994; Storey 2004; Ratusi and Swamy 1999; Buvinic and Berger 1990). As a result, in both Malawi and Bangladesh, women are more likely than men to face constraints to credit, as measured by credit limits (the maximum amount individuals report they can borrow from various sources) and unused credit lines (the difference between the credit limit and amounts borrowed) (Diagne and others 2000). But when women are the direct beneficiaries of credit rather than men, the impact of credit on various measures of household welfare is greater.

Technological innovation and adoption have undoubtedly been key drivers of increases in productivity and household incomes. Most empirical studies of the determinants of technology adoption and diffusion in developing countries examine the adoption decision at the level of the household. They have not examined how female farmers fare relative to male farmers in terms of schooling and literacy (considered to be critical for processing relevant new information); access to information (through social networks and agricultural extension services); access to credit, labor, and commodity markets; risk exposure and risk aversion; and land size and land rights.[12] Most of the evidence suggests that many of the barriers to adoption are not related to the characteristics of the technology, but originate in other markets relevant for the adoption decision, such as land, labor, credit, and information. For example, Croppenstedt and others (2003) find that female-headed households in Ethiopia have significantly lower endowments of land, and that land size is a significant positive determinant of fertilizer use.

Children's Well-Being

Women's education, health, and greater control over household resource allocation improve children's well-being (figure 3.2, solid arrows). Studies from developing and developed countries consistently show that when mothers have greater control over resources, more resources are allocated to food and to children's health (including nutrition) and education. In Ghana, an increase in the share of women's assets raises household spending on food and children's schooling (Doss 1996). Similarly, in Côte d'Ivoire, the higher women's share of cash income, the higher is the household budget share allocated to food (Hoddinott and Haddad 1995). In Ghana, in years when the production of women's crops is higher, the household spends a large share of its budget on food and on private goods for women; in years when the production of men's crops is higher, however, the household spends more on goods consumed by men (Duflo and Udry 2004).

Better nutritional status of mothers is associated with better child health. In Brazil maternal height has a large impact on infants' height (length) while paternal height has no impact (Thomas and Strauss 1992). One way this happens is that mothers who are underweight or who suffer from micronutrient deficiency before pregnancy are more likely to give birth to low-birth-weight infants (Galloway and Anderson 1994).

The benefits of mother's education for children are well known; they flow through several pathways:

- Safer health and hygiene practices, which improve children's health (Cebu Study Team 1991).
- More time and resources for children's health and education (Brown 2006).
- More exposure to information from a wider range of sources, and higher ability to process and act on the information received

(Webb and Block 2004; Thomas, Strauss, and Henriques 1991; Caldwell 1979).

- Better nutritional outcomes, in part because of higher ability to process and act on information (Glewwe, Jacoby, and King 2001; Alderman, Hoddinott, and Kinsey 2006; Behrman and Rosenzweig 2004).
- Fewer children, reducing household dependency ratios and increasing per-capita consumption expenditure (Schultz 1997, 2002).
- Higher labor force participation and earnings, which in turn increase household consumption expenditures (see review in Schultz 2002).
- Greater bargaining power within the household and therefore a higher ability to act on preferences for investing in children (World Bank 2001).

Several studies have estimated the welfare effects of participation in programs where women are the main direct beneficiaries. In their study of microcredit programs in Bangladesh, and after controlling for self-selection in program participation, Pitt and Khandker (1998) find that female borrowing has a larger impact on children's school enrollment than male borrowing. Exploiting a natural experiment in which black families became eligible for large old-age pension payments in South Africa, Duflo (2003) finds that girls who live with a grandmother who is eligible to receive pension benefits are healthier (measured by anthropometric measures) than those who live with a grandmother who is not eligible to receive pension benefits; in contrast, the effects were not statistically significant for households in which the pension was received by a man. Comparing the marginal effect on household expenditure patterns of transfers received by mothers through *Oportunidades*—a conditional cash transfer program in Mexico initially implemented as a randomized social experiment—with the marginal effect of other sources of household income, Rubalcava and others (2004) find that cash transfers from the program increased the household budget shares allocated to children's schooling, clothing, and protein-rich foods.[13]

Given the evidence linking increases in women's productivity and earnings to lower household poverty and better outcomes for children, it is clear that barriers to women's labor force participation, productivity, and earnings also constrain poverty reduction. Given the weaker evidence linking increased women's productivity and incomes to faster growth, it is less certain that removing those barriers will generate a growth dividend. Nevertheless, it is difficult to imagine that higher female labor force participation and earnings would not lead to higher levels of total output and per capita output. Similarly, increases in productivity and earnings in health and education, and in control over resources, lead both to better child development outcomes in the present and to an intergenerational transmission of earnings capability that improves the prospects for future poverty reduction and growth.

Monitoring Progress Toward MDG3 Using the Official Indicators

Progress toward attaining MDG3 is measured by the target and four indicators defined in the Millennium Declaration (table 3.1). The target is "the elimination of gender disparities in primary and secondary education, preferably by 2005, and at all levels of education no later than 2015." The target and the first two indicators measure progress in gender equality in the household, the third measures progress in the economy generally, and the fourth measures progress in society. They provide important, albeit incomplete, measures of achievements (since 1990) in gender equality for the three domains identified in the framework in figure 3.1.

Progress in the Household Domain: School Enrollment and Literacy

Through concerted efforts by government, civil society, and the development community, girls' enrollments in all levels of schooling

rose significantly in the last decade. Indeed, thanks to these efforts, most low-income countries made substantial progress during the 1990s in reaching gender parity in primary school enrollments and literacy (Lewis and Lockheed 2006; EFA Global Monitoring Report 2007). Between 1990 and 2005, girls' enrollment in primary education increased in virtually all regions; the sole exception was East Asia and the Pacific, where girls' gross enrollment rate already exceeded 100 percent in the early 1990s (figure 3.3). Girls' enrollment in secondary school increased as well. Gains in girls' secondary school enrollment were notable in East Asia and the Pacific, Latin America and the Caribbean, and Middle East and North Africa. This progress is quite remarkable and shows the responsiveness of girls' school enrollments to gender-informed policy interventions such as stipends, conditional cash transfers, and vouchers.

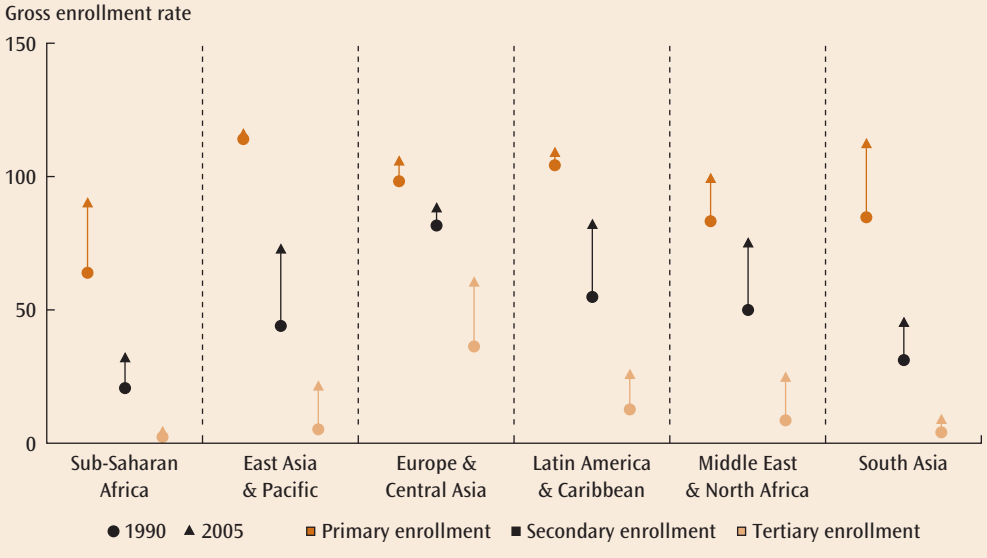
These improvements in girls' enrollment helped increase gender parity ratios. Figure 3.4 shows that between 1990 and 2005, there were notable improvements in gender parity ratios in enrollments at all levels of schooling,

TABLE 3.1 Official indicators for MDG3

Household	Economy and market	Society
Ratio of girls' to boys' enrollment in primary, secondary, and tertiary education[a]	Share of women in wage employment in the nonagricultural sector	Proportion of seats held by women in national parliaments
Ratio of literate females to males among 15–24-year-olds		

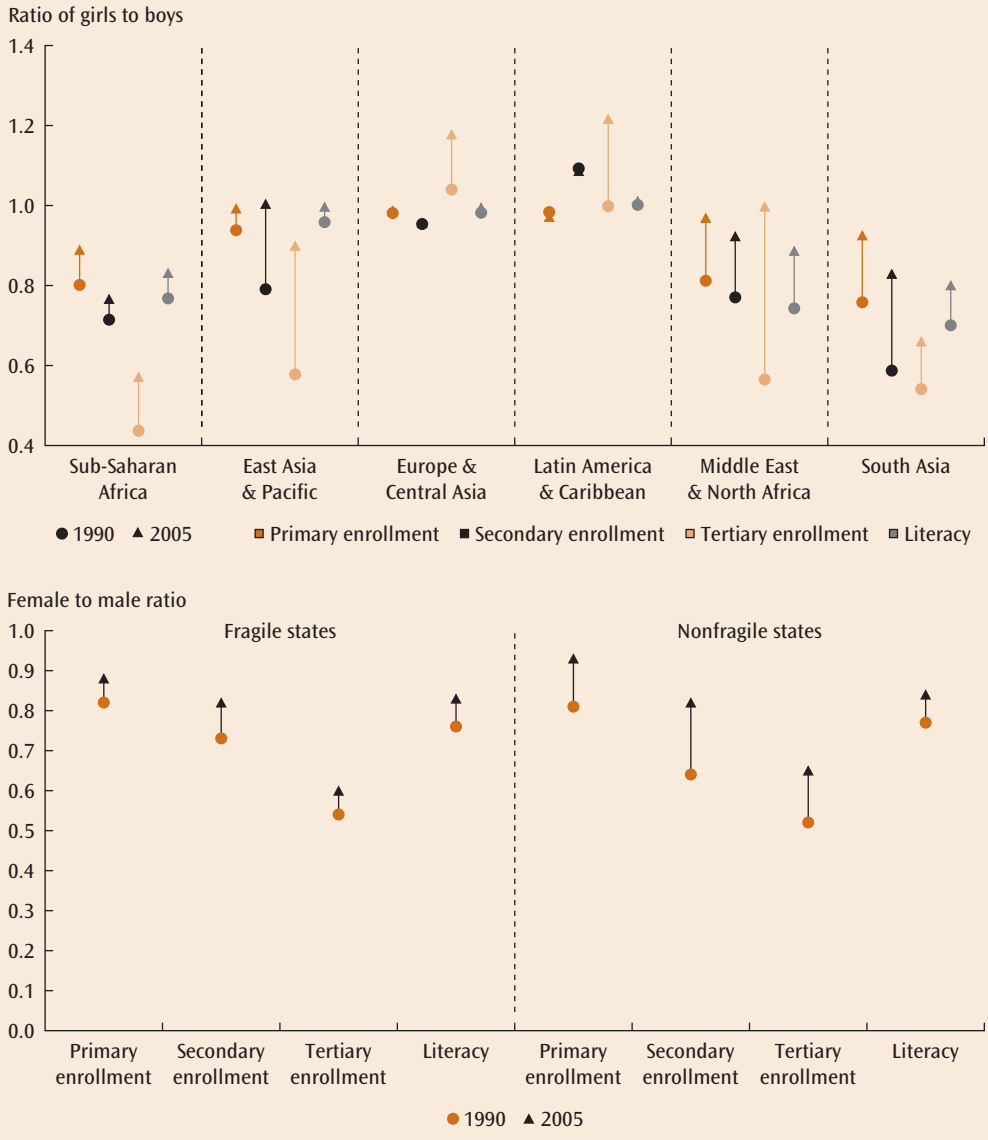
Source: United Nations 2003.
a. Measured using gross enrollment rates.

FIGURE 3.3 Progress in girls' enrollment rates between 1990 and 2005



Source: World Development Indicators 2006.

FIGURE 3.4 Trends in gender parity in enrollment and literacy rates, 1990 and 2005



Source: World Bank Indicators (top); World Development Indicators 2006 (bottom).
Note: The regional averages are calculated using the earliest value between 1990 and 1995 and the latest value between 2000 and 2005 for each country. The averages are weighted by the country population size in 2005. In the second figure, trend is shown for countries that were fragile states in the 2000–05 period. For fragile states, data are available for 25 countries for primary enrollment, 22 for secondary enrollment, 8 for tertiary enrollment, and 13 for literacy. For nonfragile comparator countries, corresponding sample sizes are 36, 31, 21, and 25.

particularly in regions that had large disparities at the beginning of the period.

Combining performance in primary and secondary enrollments, by 2005, 83 developing countries (out of 106 with data) had met the intermediate MDG3 target of parity in primary and secondary enrollment rates (table 3.2).[14] Most of these countries are in regions where enrollment has historically been high—East Asia and the Pacific, Europe and Central Asia, and Latin America and the Caribbean. In the Middle East and North Africa, most countries met the target by 2005, but this region also included 3 countries (out of 11 with data) with significant female disadvantages in enrollment. In Sub-Saharan Africa, less than one-quarter of all countries met the target by 2005.

Among 14 fragile states with data, five countries met the target by 2005. Poor data availability for this group of countries makes it difficult to accurately compare their progress with that of nonfragile states. However, an analysis of averages for countries that have data for the two periods shows that, as compared to nonfragile states, fragile states made only modest progress in moving toward gender parity in enrollments (figure 3.4).

Despite significant improvements in girls' primary school enrollment, half of all countries in South Asia failed to meet the target because of low gender parity in secondary school enrollment. In South Asia, Bangladesh and Sri Lanka are notable for achieving parity.

In 2005 the female tertiary enrollment rate lagged behind the male rate in 63 countries (of 130 countries with data) and exceeded the male rate in 65 countries. Female disadvantage was evident mainly in Sub-Saharan Africa, South Asia, and in fragile states. Male disadvantage was notable in Middle East and North Africa (Algeria, Iran, Jordan, and Libya), East Asia and the Pacific (the Philippines and Thailand), Latin America and the Caribbean (Honduras, Nicaragua, Panama), and Europe and Central Asia. Reflecting the legacy of the Soviet Union and historically high enrollment rates in Europe and Central Asia, countries there had high female tertiary enrollment rates that exceeded male enrollment rates.

The education system's ability to deliver basic literacy skills and progress in school enrollments over the years has resulted in higher literacy rates and greater gender parity among youth (ages 15–24). But gender gaps remain: UNESCO estimates that of the nearly 137 million illiterate youths in the world, 63 percent were female (UNESCO, EFA Global Monitoring Report, 2005). The female-to-male literacy ratio was lowest in Sub-Saharan

TABLE 3.2 Regional performance in attaining the primary and secondary enrollment target by 2005

	Achieved target by 2005	On track to achieve target by 2015	Off track or unlikely to achieve target by 2015	No data	Total
Sub-Saharan Africa	10	1	16	21	48
East Asia and the Pacific	13	0	0	11	24
Europe and Central Asia	22	0	1	4	27
Latin America and the Caribbean	27	0	0	4	31
Middle East and North Africa	8	0	3	3	14
South Asia	3	0	2	3	8
Total	83	1	22	46	152
of which: Fragile states	5	0	9	21	35

Source: World Bank estimates using data on enrollments between early 1990s and 2004/2005.
Note: The column showing countries with no data indicates the number of countries with missing data either at the start of the period or at the end of the period or both. Of the 49 non-fragile low-income countries, 25 had met the target by 2005, 1 was on track to meet the target by 2015, 9 were unlikely to meet the target, and 14 had no data.

Africa, Middle East and North Africa, and South Asia—regions that also had female disadvantages in primary and secondary enrollment (figure 3.4). In 25 countries in these regions, there were fewer than 80 literate young women for every 100 literate young men. The ratio was lowest in Yemen and Afghanistan, where only 36 young women were literate for every 100 literate young men.

The Unfinished Education Agenda

Despite the considerable success in increasing girls' enrollment and improving gender parity ratios at all levels of schooling, several challenges remain.

Fragile states and countries unlikely to attain the enrollment target. For the 23 countries that did not meet the enrollment target by 2005, the World Bank estimates, based on the rate of change in the ratios over the 1990s, that 22 countries are unlikely to achieve the target by 2015; 16 of these countries are in Sub-Saharan Africa (table 3.2). This list includes 9 low-income countries such as Benin and Burkina Faso, where improvements in gender parity ratios in the 1990s might not compensate for large pre-existing gender disparities. The list also includes 9 fragile states (all in Sub-Saharan Africa).

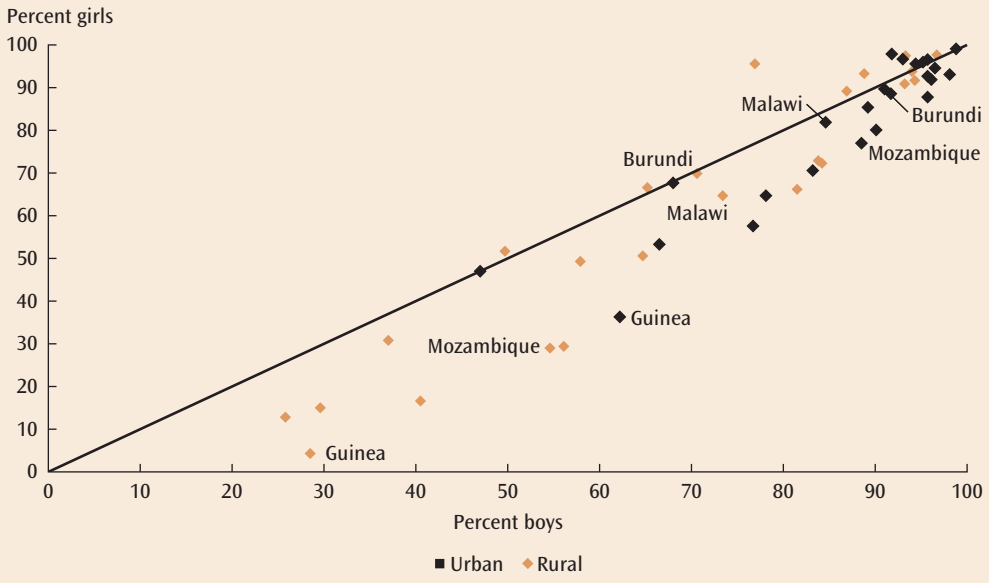
Disadvantaged and excluded groups. A second challenge is uncovered when average national gender parity ratios are disaggregated by income, location, race, ethnicity, disability, or other features that identify disadvantaged or socially excluded populations within a country. Large gender gaps in education and literacy in rural areas, among minority groups or lower-income quintiles may explain why some countries have not reached the gender parity target (Bolivia, Cambodia, Ecuador, Guatemala, Lao PDR, Morocco, and Pakistan). For education and literacy, the female disadvantage is always larger in rural areas and among lower-income households (figure 3.5). This is further accentuated in countries that have not reached overall gender parity in school enrollments (largely in Sub-Saharan Africa and Middle East and North Africa).

It has been estimated that of the 60 million girls not in primary school in 2002, 70 percent were from excluded groups (UNESCO Institute for Statistics 2005). In Bolivia, household survey data show gender gaps in school attainment among indigenous children but not among non-indigenous children (figure 3.6). Although boys and girls have similar profiles at ages 7–13, attainment rates for indigenous girls already start to decline at age 9, with a faster decline after age 13 (Duryea, Galiani, Nopo, and Piras 2006). Even in countries that have attained the gender parity target in education, girls' enrollment in some subgroups continues to lag behind that of boys' (for example, in Chile, Mexico, and Panama). Gender parity ratios in school enrollments and literacy thus need to be disaggregated by characteristics related to disadvantage and exclusion, and targeted policies are needed to increase the school enrollments of girls from disadvantaged groups.

Levels not just ratios. A third challenge is that the ratio of girls to boys in enrollment is silent on levels of enrollment. Although all regions increased their secondary school enrollments since 1990, no region showed universal enrollment in secondary education in 2005 (figure 3.3). Only four regions had two-thirds or more of their eligible population in secondary school in 2005: Europe and Central Asia with 86 percent, Latin America and the Caribbean with 70 percent, Middle East and North Africa with 66 percent, and East Asia and Pacific with 64 percent.[15] In both South Asia and Sub-Saharan Africa, fewer than half of secondary-age students were enrolled (48 percent and 32 percent, respectively). Efforts to increase school enrollments, especially in secondary education, need to be informed by gender equality concerns and scaled up in regions with lagging enrollment rates (see box 3.1).

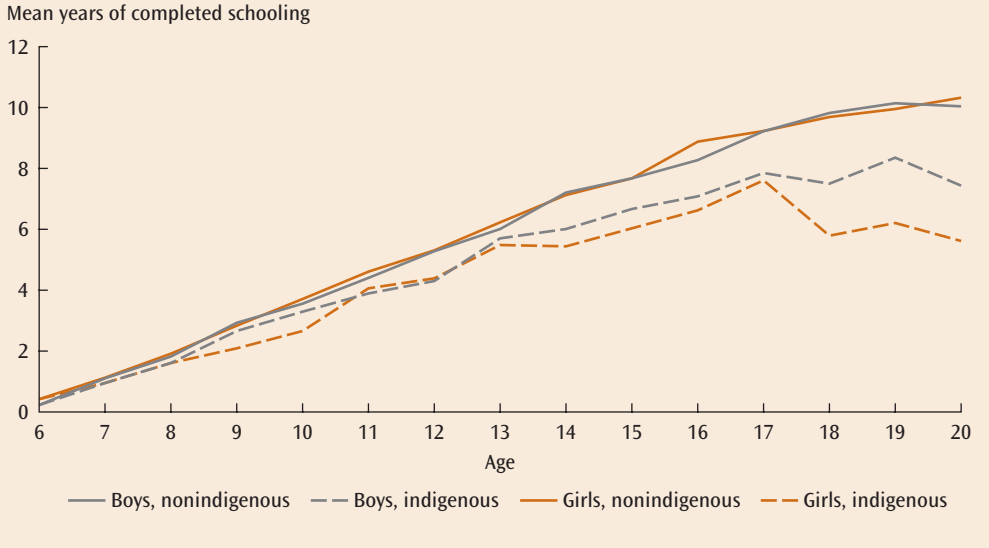
Transitions from one level to the next and from school to work. Promoting equality in education opportunities involves entering the education system at primary level, progressing through to higher levels, and making the transition to the labor market. But the offi-

FIGURE 3.5 Average youth literacy rates in Africa conceal rural-urban disparities



Source: World Bank staff estimates using household survey data from 24 Sub-Saharan African countries. Four countries labeled for illustrative purposes.

FIGURE 3.6 Bolivia has a gender gap in schooling among indigenous children



Source: Duryea, Galiani, Nopo, and Piras 2006.

cial MDG3 indicators measure only parity in school participation at each level. They do not capture potential gender disparities in transition from one level of schooling to the next, in the quality of what is learned in school, and in the transition from school to work.

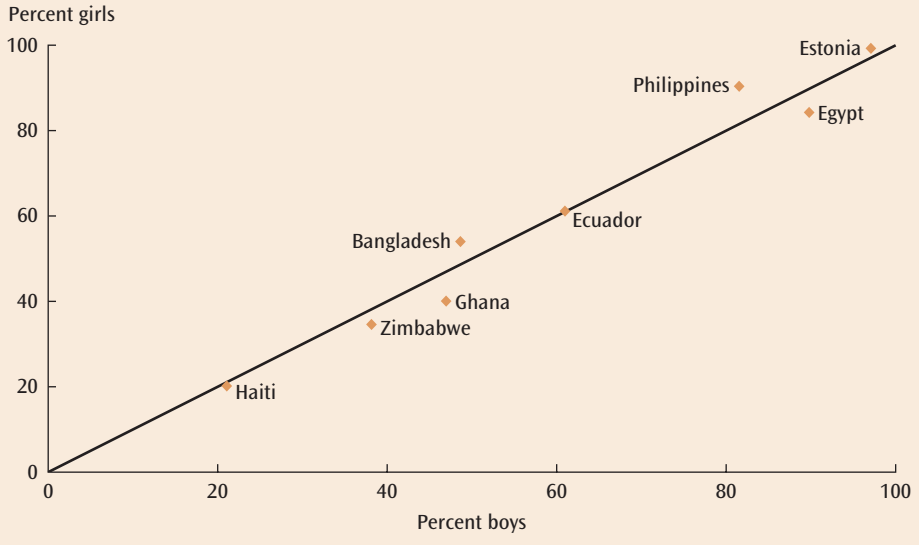
Progress in the Economy and in Society: Nonagricultural Wage Employment and Political Participation

The MDG3 indicator in the economy and market is the share of women in nonagricultural wage employment (with no set target). Women's share of nonagricultural wage employment increased in all regions in 1990–2005; this increase was modest, however, with significant variation across regions and countries (figure 3.7). In 2005 the share of women in nonagricultural employment was highest in Europe and Central Asia (47 percent) and lowest in Middle East and North Africa (20 percent). In Latin America and the Caribbean and East Asia and Pacific, it exceeded 40 percent. Women's share of nonagricultural wage employment was highest in the highly urbanized upper-middle-income countries (43 percent) and lowest in the still predominantly

BOX 3.1 "Good" parity levels may hide huge enrollment challenges

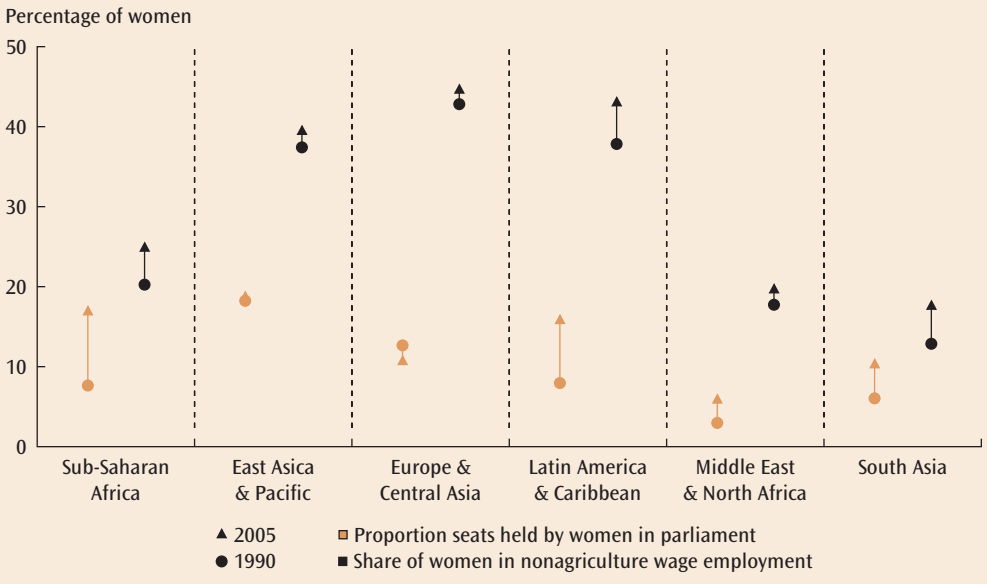
Gender parity ratios say nothing about absolute levels of enrollment. A ratio of one (perfect equality) may indicate "equality of deprivation" rather than equality of opportunity. In Haiti the parity ratio in secondary enrollment rates was 1.03 in 2003, but only 20 percent of both girls and boys in Haiti were enrolled in secondary school (box figure). In such an environment, the challenge is to boost enrollments while maintaining gender parity.

Parity ratios can be at high and low secondary enrollments



Source: World Development Indicators 2006.

FIGURE 3.7 Progress in share of women in nonagricultural wage employment and proportion of seats in parliament held by women, by region



Source: World Development Indicators 2006. The regional averages are calculated using the earliest value between 1990 and 1995 and the latest value between 2000 and 2005 for each country. The averages are weighted by the country population size in 2005.

rural low-income countries (30 percent). In 15 countries, mostly in Europe and Central Asia, women dominated nonagricultural wage work. Women also dominated this work in Cambodia, Honduras, and Vietnam—countries where recent growth in export-oriented manufacturing industries increased the demand for female workers. For 20 countries in Sub-Saharan Africa, South Asia, and Middle East and North Africa, women's share was below 20 percent.

Trends and patterns in this indicator are difficult to interpret without taking into account the circumstances in each country—such as the share of nonagricultural employment as a percentage of total employment. A favorable score on this indicator might, on the surface, seem to indicate equitable conditions for women in labor markets, but it may capture conditions for only a very small proportion of the total labor force (see the following section for a discussion of the limitations of this indicator).[16]

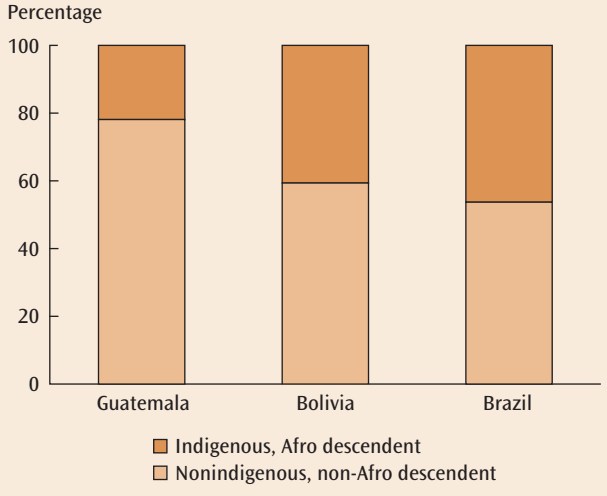
Like the education indicators, the average share in nonagricultural wage employment also conceals inequalities within countries. In several countries of Latin America, indigenous and Afro-descendent women, who have significantly fewer years of education than other women, are also less likely to be employed in nonagricultural paid employment (figure 3.8). For example, nearly 60 percent of all women engaged in nonagricultural paid work in Bolivia in 2002 were nonindigenous, a percentage that far exceeds the population share of nonindigenous women. Duryea and Genoni (2004) find that in Bolivia, Brazil, Guatemala, and Peru, indigenous and Afro-descendant women are overrepresented in low-paying and informal jobs.

The fourth official MDG3 indicator is the proportion of seats held by women in national parliaments (with no set target). Between 1990 and 2005 all regions except Europe and Central Asia saw an increase in the propor-

tion of women's seats in national parliament, but starting from low levels (figure 3.7). However, in no region did the average proportion exceed 25 percent, at either the beginning of the period or the end.

Quotas to increase women's presence in parliament (candidate quotas and reserved seats) were adopted by a large number of countries during the 1990s. By 2005, more than 40 countries had introduced electoral quotas. Because of quotas, countries like Argentina, Costa Rica, Mozambique, Rwanda, and South Africa have reached levels of women's parliamentary representation comparable to those in Nordic countries (Ballington and Karam 2005). However, quota rules are not sufficient by themselves to ensure increased participation by women; implementation and enforcement are key. In addition to quotas at the national level, increasing women's opportunities to participate in local politics can increase the number of women who are able to participate at the national level.

FIGURE 3.8 Share of women in nonagricultural wage work by ethnicity



Source: World Bank staff calculations using household survey data from Guatemala (2002), Bolivia (2002), and Brazil (2001).

Strengthening the Monitoring of Gender Equality and Women's Empowerment

While the official indicators for MDG3 cover the three domains of society, economy/markets, and the household, they suffer from four serious shortcomings. First, the official MDG3 indicators only partially capture gender equality and empowerment in the areas they are designed to measure: education, employment, and political participation. Education enrollment rates say nothing about equality in learning or educational outcomes. The share of women in nonagricultural wage employment is of limited relevance for low-income countries where wage employment is not a main source of jobs. It does not capture many dimensions of job quality (Grown and others 2005), nor does it quantify the serious barriers that may inhibit women from participating in labor markets: time burdens of domestic tasks; limited availability of child care; lower educational attainment (in some regions); wage gaps (relative to men); limited access to complementary inputs such as credit, capital, and technology; and the impact of law and custom on women's ability to work outside the home (Morrison, Raju, and Sinha 2007). And political participation is captured only at the national level, not at provincial or local levels where access to women's decision making is also important.

Second, the official indicators do not monitor key elements of gender equality such as health outcomes and disparities in access to productive resources such as land, credit, and technology. Health outcomes are a particularly important determinant of well-being and productivity. Although indicators for other MDGs measure performance on health (MDGs 4, 5, and 6), they are not designed to monitor progress on gender equity in health status.

Third, while MDG3 refers to the promotion of *both* gender equality and women's empowerment, the official indicators are far better at measuring gender equality than empowerment. Gender equality is a measure

of the rights, resources, and voice enjoyed by women *relative* to those enjoyed by men. Three of the official four indicators (ratio of girls' to boys' enrollment rates, ratio of literate females to males among 24-year-olds, and share of women in wage employment in the nonagricultural sector) measure the status of women relative to men, rather than whether women are empowered in an absolute sense—that is, whether they have the ability to exercise options, choice, control, and power.[17] Knowing, for example, that girls are equally likely to be enrolled in secondary schools as boys indicates gender equality but not necessarily empowerment if only a small percentage of girls are enrolled (box 3.1).[18] Important elements of empowerment not captured by the official MDG3 indicators include the ability of women to work for pay (economic empowerment) and the ability to control their own fertility.[19]

In addition to being poor measures of empowerment, changes in the indicators based on parity ratios are difficult to interpret (Grown 2006). Increases in female-to-male ratios can result from a fall in male rates with female rates remaining constant, or from a decline in both female and male rates with male rates declining faster, or from female rates increasing faster than male rates. While rising female rates of school enrollment or literacy are undoubtedly welcome, falling rates of male enrollment or literacy are not.

Finally, national-level indicators—whether parity ratios or absolute levels—can mask inequalities between groups.[20] Improvements in aggregate enrollment ratios, for example, may hide the fact that girls (or in some cases, boys) belonging to socially excluded groups in the population fare much less well. Thus it is critical to disaggregate indicators by characteristics related to disadvantage and exclusion to monitor countries' performance—and to develop targeted interventions not just at the national level, but also for particular subgroups.

A Proposal for Strengthening the Official Indicators

The shortcomings of the official indicators for monitoring progress in attaining MDG3 are widely recognized (see, for example, the report of the UN Millennium Project Task Force on Education and Gender Equality). In response, this chapter recommends that countries consider monitoring five additional indicators complementary to the official MDG indicators, to better measure gender equality (table 3.3). These indicators meet three criteria: data availability (wide country coverage), strong link to poverty reduction and growth,

TABLE 3.3 Recommended additional indicators for MDG3

Household		Economy and markets
Modifications of official MDG indicators	**Additional indicators**	**Additional indicators**
Primary completion rate of girls and boys (MDG 2)[a]	Percentage of 15- to 19-year-old girls who are mothers or pregnant with their first child[b]	Labor force participation rates among women and men aged 20–24 and 25–49[b]
Under-five mortality rate for girls and boys (MDG4)		
Percentage of reproductive-age women, and their sexual partners, using *modern* contraceptives (MDG6)		

Source: World Bank staff.
a. Recommended by UN Millennium Project Task Force on Education and Gender Equality.
b. Under consideration by Inter-Agency and Expert Group for MDGs.

and amenability to policy intervention. Indicators that met all three criteria but were highly correlated with other indicators were dropped from the list.[21]

This proposed list draws on the recommendations of the UN Millennium Project Task Force, but is more parsimonious in its recommendations—both because it explicitly takes into account data availability and collinearity issues, and because of the high costs associated with imposing additional monitoring burdens on already taxed national statistical offices.[22]

Four of the five indicators monitor gender equality in the household; the remaining indicator monitors gender equality in the economy. No additional indicators are recommended to monitor gender equality in society, because none of the indicators considered for inclusion meet the criteria of data availability. Three of the recommended indicators are modifications of official indicators already being monitored as part of the MDGs.

Additional Indicators for the Household Domain

EDUCATION

Primary school completion rates. As mentioned above, the official MDG3 indicator of school enrollment ratios is a far better measure of gender equality than of women's empowerment; it does not indicate whether enrolled students go on to complete primary school—the outcome that brings immense benefits for development. Thus this chapter recommends supplementing the official MDG3 indicators with primary school completion rates for girls and boys.[23] This indicator (without sex disaggregation) is currently monitored as part of MDG2 on attainment of universal primary education, and sex-disaggregated data are reported annually by the World Bank and UNESCO.

Primary school completion is measured as the number of students in the last primary grade minus repeaters in this grade as a proportion of the number of children at the expected graduation age.[24] Girls are less likely than boys to complete the first schooling cycle, particularly in South Asia, where the primary completion rate is estimated at 90 percent for boys and 83 percent for girls; and in Sub-Saharan Africa, the primary school completion rate is 67 percent for boys and 57 percent for girls (table 3.4). Almost all regions made significant progress in raising girls' primary school completion rates between 1991 and 2004. Sub-Saharan Africa, South Asia, and Middle East and North Africa had the largest percentage increases (about 21 percent), followed by Latin America and the Caribbean (14.4 percent). Gaps between girls' and boys' completion rates, however, remain significant in Sub-Saharan Africa and South Asia.

MORTALITY AND MORBIDITY

Under-five mortality. As mentioned above, health is one of the elements of gender equality that is not adequately covered by the official MDG3 indicators. A low-cost step toward remedying this is for countries to disaggregate the MDG4 indicator of under-five mortality by sex. Rates of under-five mortality are typically higher for boys than for girls (because of biological differences between the sexes) in countries where there is no significant discrimination against girls. For example, in four countries considered to be characterized by high levels of gender equality (Denmark, Finland, Norway, and Sweden) the girl-to-boy ratio is

TABLE 3.4 Girls lag behind boys in primary school completion rates in most regions

	Girls		Boys	
	1991	2004	1991	2004
Sub-Saharan Africa	47.1	56.9	62.3	67.3
East Asia and Pacific	92.3	96.3	92.3	95.8
Europe and Central Asia	92.9	92.6	94.3	96.5
Latin America and the Caribbean	88.4	101.1	83.0	99.4
Middle East and North Africa	73.3	89.0	87.8	92.9
South Asia	68.3	83.0	90.4	90.2
Total	78.6	84.0	93.4	89.4

Source: World Development Indicators 2006.
Note: Population weighted regional averages.

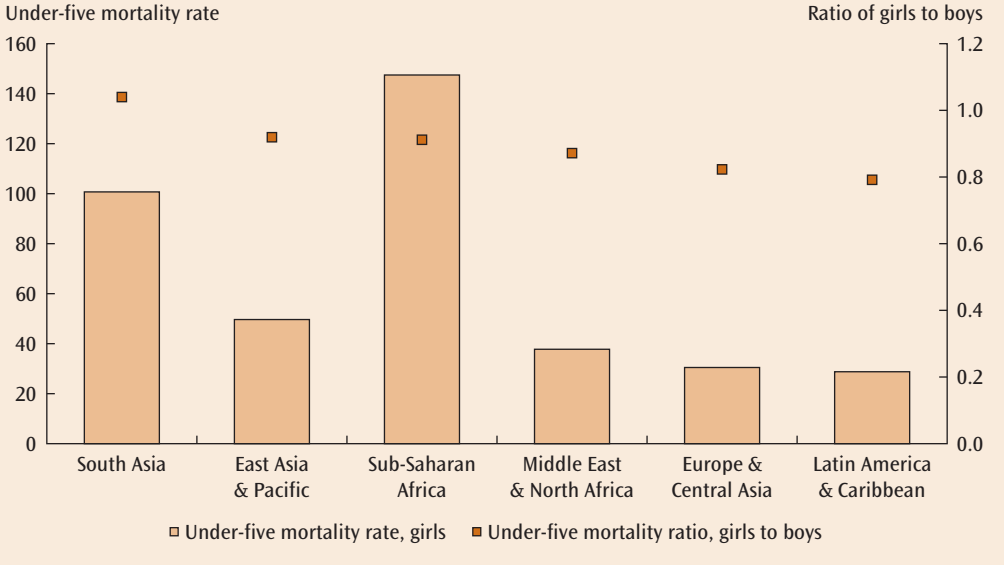
between 0.81 and 0.88. Where there is general discrimination against girls, this is manifested in higher under-5 mortality for girls than for boys. This comes about due to inequality in nutrition and health care during childhood.

The data sources for sex-disaggregation of under-five mortality are the same as those for the MDG4 indicator. The data issues are the same as well—although the best source of data is a complete vital statistics registration system, such systems are uncommon in developing countries, so estimates are also obtained from sample surveys or derived by applying direct and indirect estimation techniques to other data sources. One source of internationally comparable data on global and regional trends in under-five mortality by sex is the estimates published by the United Nations using available national data. Using this data, overall levels of under-five mortality indicate where efforts must focus on improving child health outcomes—Sub-Saharan Africa and South Asia (figure 3.9). When sex-disaggregated data are analyzed, East Asia and Pacific, in addition to Sub-Saharan Africa and South Asia, stand out as regions where efforts must be focused on reducing the health disadvantages faced by girls (figure 3.9).

Prenatal sex selection is one dimension of discrimination against girls that is not captured in under-five mortality. It affects the sex ratio at birth, and is especially prevalent in the East Asia and Pacific region, and to much less extent in South Asia (box 3.2). Because it is not a concern in other regions of the developing world, sex ratio at birth is not recommended as an additional indicator.

Mortality and morbidity beyond childhood. The use of sex-disaggregated data for monitoring under-five mortality is a first step toward measuring gender equity in health. In the area of health, the term "gender equity" is used instead of "gender equality" in order to emphasize that differences between men and women in some health outcomes are due primarily to biological differences between the sexes. Gender differences in average life expectancy at birth are heavily influenced by

FIGURE 3.9 Female under-five mortality rate and female-to-male ratio, 2004



Source: World Population Prospects 2004.

gender disparities in child mortality rates and so they do not reflect sufficiently the health conditions of adolescents and adults. Over the life cycle, males and females face different risks and causes of morbidity and mortality, and monitoring these differences should help inform health policy and programs. While MDG5 monitors maternal health, this indicator misses sources of illness and death among women that are unrelated to maternal causes and are not relevant for women and girls not in the reproductive age group. Monitoring the incidence of specific diseases, as done by MDG6 (HIV/AIDS, malaria, and tuberculosis), while important, also does not offer a full view of sex and gender differences for the design of health policy priorities.

An international attempt to measure adult morbidity and mortality was made by the Global Burden of Disease project, a worldwide collaboration of over 100 researchers, sponsored by the World Health Organization and the World Bank. The study used information from a number of countries to estimate the costs of individual causes of morbidity and mortality to healthy life. This measure, the disability-adjusted life years (DALYs), estimates potential years of life lost due to premature death, poor health, or disability for all age groups. Table 3.5, which summarizes the results of this study for the 15–29 age group, shows that there are important differences in the distribution of the burden of disability and death between males and females; it shows that young women are more likely to suffer from mental health–related issues and HIV/AIDS, while young men are more likely to suffer from the fallout of violence as well as injuries and road traffic accidents.

The first DALY estimates were published in *World Development Report* 1993. Two years of estimates are now available, one for 1990 and another for 2000. The 2000 estimates were subsequently revised, and the most recent estimates are available for 2002. Due to changes in methodology and classification of mortality causes, the 1990 and 2002 estimates are not comparable; hence it is not possible to assess trends in DALYs.

TABLE 3.5 Sources of death and disability with largest gender differentials in disease burden for 15- to 29-year-olds, low- and middle-income countries

Disease/condition	Burden of disease (% of total) Females	Burden of disease (% of total) Males	Gender ratio (female/male)
Females			
Fires	2.13	0.9	2.34
Migraine	1.46	0.68	2.12
Panic disorders	2.49	1.24	2.0
HIV/AIDS	12.76	9.03	1.4
Unipolar depressive disorders	8.05	5.82	1.37
Males			
Other unintentional injuries	4.29	8.09	0.53
Road traffic accidents	2.24	7.73	0.29
Violence	1.24	7.58	0.16
Alcohol use disorders	0.68	4.12	0.16
War	0.13	2.68	0.05

Source: WHO 2002.
Note: The burden of disease has been calculated as the percent of DALYs lost due to a specific cause over the total DALYs lost (for men and women separately). For identifying priority diseases for gender equity, all diseases that primarily affect males (such as prostrate cancer) or females (such as maternal conditions) were removed from the list. The burden of disease for males and females were multiplied by the gender ratio. The diseases with the greatest gender differential are those that have a weighted differential above the statistical threshold of its distribution—mean plus one standard deviation.

BOX 3.2 Sex ratios at birth and removing unwanted daughters in East Asia and South Asia

Sex ratios at birth have been excessively masculine in much of East Asia for decades, compared with the "normal" ratio of 104–106 males per 100 females in most populations. In China and the Republic of Korea, the sex ratio at birth was around 107 in 1982, rising sharply thereafter with the spread of sex-selective abortion in the mid-1980s. In China it increased to nearly 120 in 2005.[a] In the Republic of Korea, it peaked at around 116 in the early 1990s and has since declined to below 108 in 2005.

Skewed sex ratios at birth reflect sex-selective abortion, but may also include some amount of female infanticide, where the child is not reported as a live birth and is therefore indistinguishable in the statistics from an abortion. Another route for removing unwanted daughters is selective neglect during early childhood, typically by giving girls less aggressive health care for illnesses than boys. As sex-selective abortion becomes more accessible, it becomes easier to remove daughters—as a result, sex ratios at birth rise, and selective neglect after birth declines.

The net effect of sex selection before birth, at birth, and after birth is reflected in the sex ratios of children aged 0–4 (box figure). The data show that discrimination against girls is also increasing in India—by 2001 the 0–4 year sex ratio was high in the country as a whole.[b] It is concentrated in the northwestern states of Punjab and Haryana, where the 0–4 year sex ratios have been historically high, rising sharply with the spread of sex-selective abortion in the 1980s and 1990s.

Cultural factors help explain why these parts of Asia exhibit child sex ratios so much higher than anywhere else in the world. These societies have similar lineage-based kinship systems, which effectively ensure that only boys can continue the household and lineage and care for their parents in their old age. In most other societies, daughters are not so sharply excluded from participating

continued

This chapter stops short of recommending that countries use DALYs as a monitoring indicator for adult morbidity and mortality to complement the indicator of child health, since its ultimate practicality and usefulness as an indicator will depend on how frequently estimates will be available. (Given the availability of recent DALY estimates for 2002, however, some of the analysis below incorporates DALYs in exploratory fashion.) One significant shortcoming of DALYs is that the methodology is costly for individual countries to apply. Countries that wish to use the DALYs for results-based monitoring can rely on the WHO's production of country-level estimates.

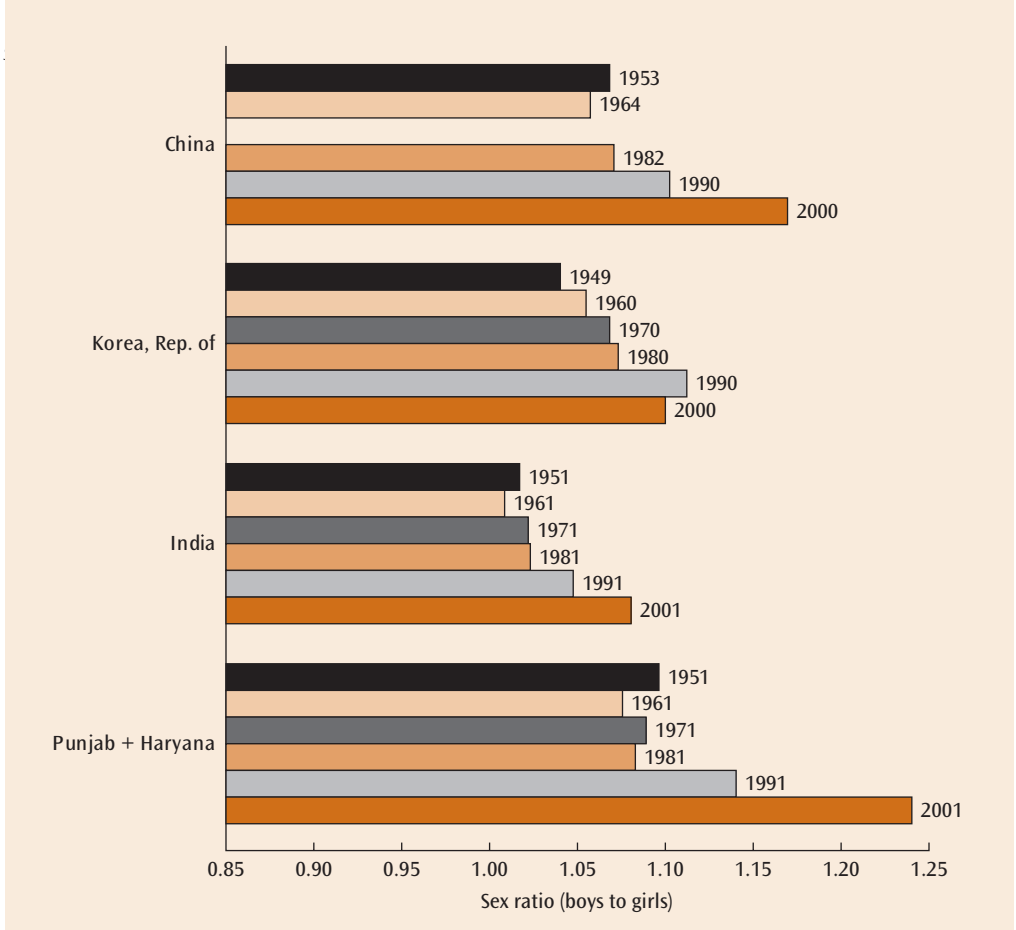
Reproductive Health

Modern contraceptive use. This proposed indicator responds to the need to better measure women's ability to regulate fertility and choose desired family size. Since ability to regulate fertility is strongly linked to labor force participation and earnings, it also is an indirect measure of the potential for women's economic empowerment. The official indicator for MDG 6—contraceptive prevalence rate—considers all methods of contraception, computed as the percentage of women who are practicing, or whose sexual partners are practicing, any form of contraception, traditional or modern (United Nations 2003). But compared to traditional methods, modern methods offer women and their partners a more reliable way to control their fertility and to prevent the spread of sexually transmitted disease. This indicator also reveals the availability of family planning services to women and their sexual partners. This chapter therefore recommends that countries also monitor the percentage of women of reproductive age (and their sexual partners) who use modern contraceptives. Data on contraceptive use are typically available with a gap of three to four

BOX 3.2 Sex ratios at birth and removing unwanted daughters in East Asia and South Asia *(continued)*

in the well-being of their parental households. Decades of urbanization and industrialization in the Republic of Korea have eased the grip of these traditional social structures, reflected in the trend toward normalizing child sex ratios.

Child (0-4 year) sex ratios in China, India (Punjab and Haryana), and Korea (1950–2000)



Note: The data for India are for the age group 0–6.

Sources: Korea National Statistical Office 2006; Goodkind 1996; Chung and Das Gupta 2007; and Das Gupta and others 2003.
a. Derived from Chinese census and intercensal survey data: the 1982 estimate is from Zeng and others 1993; the 2000 estimate from Yuan and Tu 2005, and the 2005 estimate is reported by Xinhua (2005.08.24) and Shanghai's Business Weekly citing the Chinese Academy of Social Sciences (http://news.bbc.co.uk/2/hi/asia-pacific/250557.stm).
b. India does not officially estimate the sex ratio at birth, partly because of the absence of good vital registration data.

years from Demographic and Health Surveys (DHS), Multiple Indicator Cluster Surveys, and contraceptive prevalence surveys.

A related indicator, percentage of women with unmet need for contraception, is being considered for inclusion in MDG5.[25] It is defined as the percentage of sexually active women who are not using any method of contraception and who either do not want to have any more children or want to postpone their next birth for at least two more years (Westoff 1978; Westoff and Pebley 1981). Since computation of unmet need requires survey data on intentions for future births, this indicator is available for a smaller set of countries (mainly those with DHS surveys) than is the indicator for use of modern contraception. Where available, unmet need can be used as an indicator of availability of family planning services.

TABLE 3.6 Trends in modern contraceptive use, selected countries

	Year	% Using modern contraceptive
Cameroon	1991	4.3
	2004	12.5
Ghana	1988	4.2
	2003	18.7
Kenya	1989	17.9
	2003	31.5
Mali	1987	1.3
	2001	5.7
Uganda	1988	2.5
	2001	18.2
Egypt, Arab Rep. of	1988	35.5
	2000	53.9
Morocco	1987	28.9
	2004	54.8
Kazakhstan	1995	46.1
	1999	52.7
Bangladesh	1994	36.6
	2004	47.6
Indonesia	1987	43.9
	2003	56.7
Philippines	1993	24.9
	2003	33.4
Brazil	1986	56.5
	1996	70.3
Colombia	1986	52.4
	2005	68.2

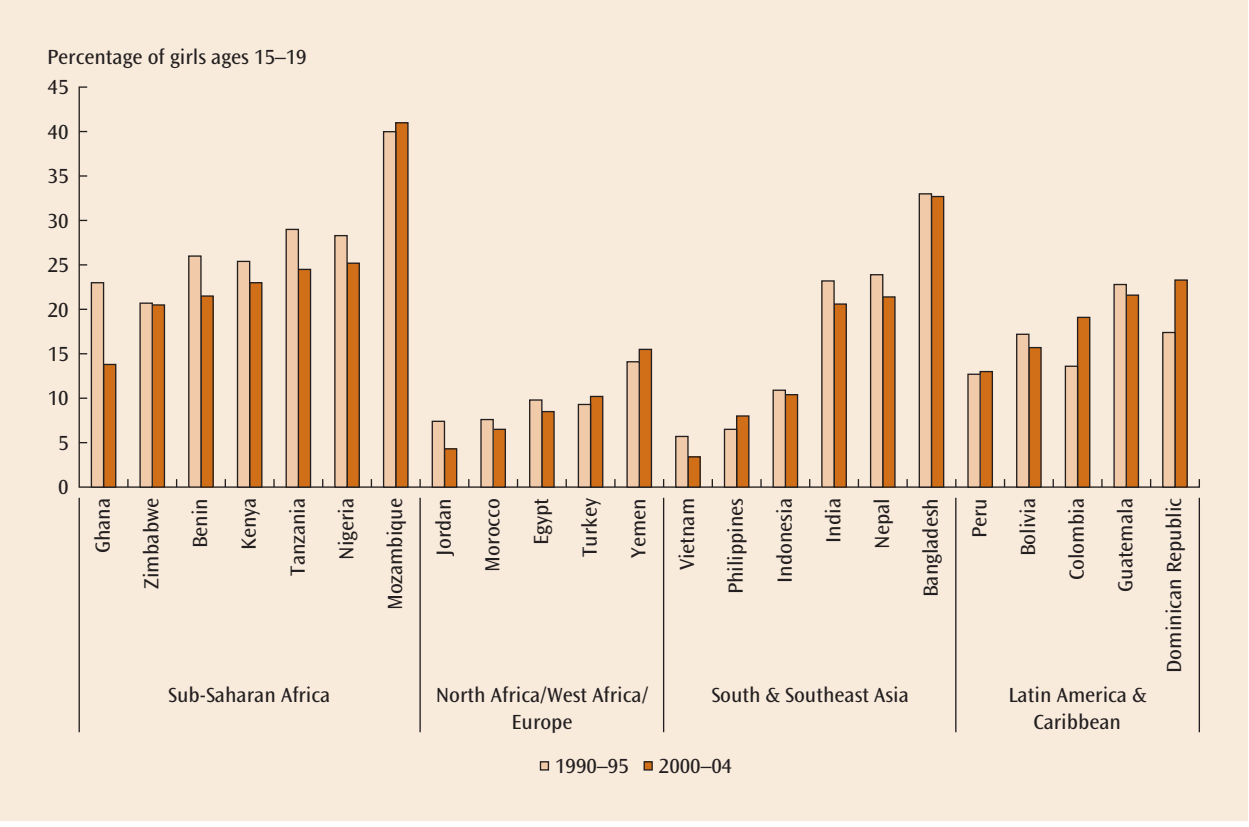
Source: Demographic and Health Surveys.

The percentage of women reporting use of modern contraceptives has increased over the last two decades, from 47 percent in 1990 to 56 percent in 2000 (United Nations, Department of Economic and Social Affairs, Population Division 2002). Table 3.6 reports data from countries that have had two or more DHS between 1985 and 2005. The percentage of women aged 15–49 reporting use of modern contraceptives has increased over the 1990s in every country in this table.

Adolescent motherhood. Childbearing among teenagers can bring disproportionate health risks to the mother and the baby (maternal mortality, delivery complications, premature delivery, and low birth weight). In parts of Sub-Saharan Africa where female genital mutilation is practiced, pregnancy can also heighten the health risks to teen mothers (Zabin and Kiragu 1997). Beyond health outcomes for mother and baby, adolescent motherhood is associated with early departure from school, lower human capital accumulation, lower earnings, and a higher probability of living in poverty (World Bank 2006). Thus this chapter suggests that countries monitor the percentage of women aged 15–19 who are mothers or are pregnant as an additional indicator of gender equality and women's economic empowerment.[26] Data for this indicator are available from DHS and other reproductive health surveys.

Births to teenage girls are common in many developing countries. Most recent data show that more than 10 percent of 15- to 19-year-olds are mothers in Sub-Saharan Africa, South Asia, and Latin America (figure 3.10). In Bangladesh and Mozambique more than 30 percent of 15- to 19-year-olds are mothers or are pregnant. In most developing countries, unlike in developed countries, teenage childbearing frequently takes place within marriage (World Bank 2006).[27] The percentage of girls marrying before age 18 is high in a number of countries and ranges from less than 20 percent in Central Asia to more than 60 percent in Ban-

FIGURE 3.10 Trend in adolescent motherhood



Source: Demographic and Health Surveys.
Note: Percentage of girls who are mothers or are pregnant.

gladesh, Guinea, Mali, and Nicaragua.[28] In Mali nearly 36 percent of young women were married by age 15.

Between the early 1990s and 2000, the percentage of adolescent mothers declined in a number of countries (figure 3.10). This is, however, far from a universal trend: adolescent motherhood increased over this period in Colombia, the Dominican Republic, Mozambique, Peru, the Philippines, Turkey, and the Republic of Yemen.

Additional Indicators in the Economy and Markets Domain

Labor force participation. To strengthen the official MDG3 labor force indicator (share of women in wage employment in the nonagricultural sector), this chapter recommends monitoring the labor force participation rates of men and women aged 20–24 and 25–49.[29] The labor force participation rate is interpreted as indicating women's potential economic empowerment.

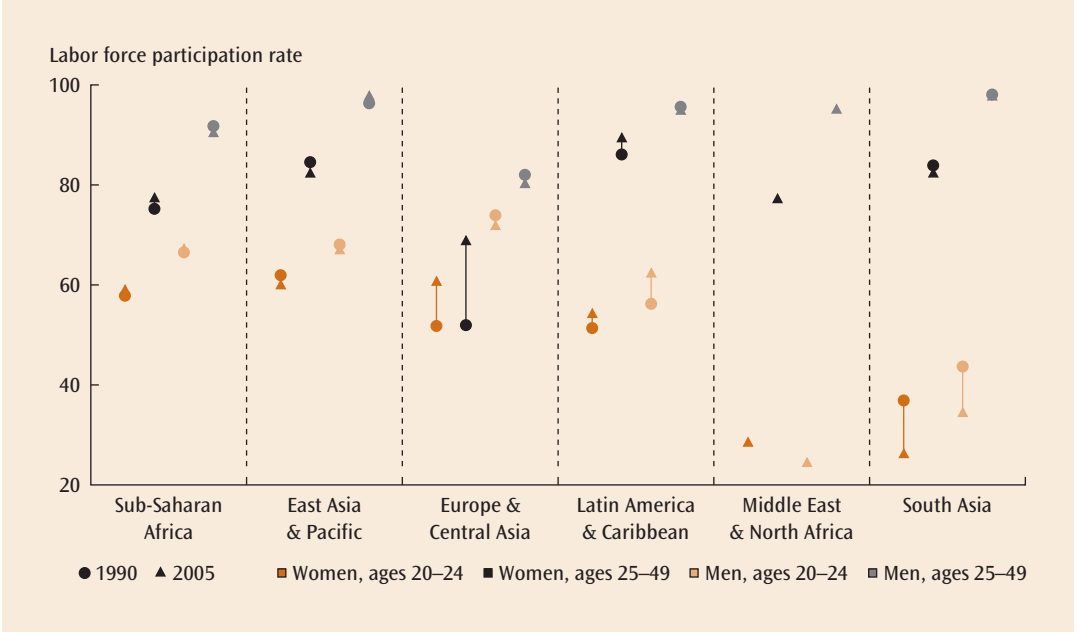
Evidence from a number of developing countries shows that girls are less likely than boys to make the transition from school to the labor market (National Academy of Sciences 2005). Monitoring labor force participation among girls aged 20–24 thus indicates the extent to which education and skills acquired in school are used in the labor market. Age patterns of labor force participation show that in almost all regions of the world the

greatest gender gap in participation occurs between the ages of 25 and 49. This is not surprising since the gender division of tasks typically results in women in this age group contributing more of their time to child and home care while men increase in work outside the home. Monitoring employment indicators for this age group thus offers potential for policy interventions (such as child care services) to influence labor market behavior of men and women.

Analysis of women's labor force participation in developing countries is sensitive to the data source. The UN Handbook on Indicators for Monitoring Millennium Development Goals (United Nations 2003) recommends using data from population censuses, labor force surveys, enterprise censuses and surveys, administrative records of social insurance schemes, and official estimates. These sources typically undercount women's participation, especially where women workers participate mainly in unpaid agricultural work. Household surveys asking respondents a detailed set of questions about their participation in work activities offer a more accurate estimate of women's labor force activities. Thus, this chapter uses household surveys to calculate the indicators on labor force participation and employment by type.[30]

When data on women's and men's labor force participation rates are examined, three patterns emerge. First, there are regions where women's participation in the labor force itself is low. In these regions, there has been little change in women's participation between 1990 and 2005 (figure 3.11). These are also regions where the greatest gender difference in participation. In a sample of 96 developing countries, female participation rates are the lowest in countries of Middle East and North Africa, South Asia, and Latin America and the Caribbean.[31] For the 20–24 age group in these regions, the average female labor force

FIGURE 3.11 Female and male labor force participation rates by region, 1990–2005



Source: Household and Labor Force surveys. The regional averages are calculated using the earliest value between 1990 and 1995 and the latest value between 2000 and 2005. The averages are weighted by the country population.
Note: Computed from household surveys (1995–2005). Labor force participation rates for males and females aged 20–24 and 25–49. Population weighted regional averages for South Asia (5 countries), Latin America and the Caribbean (20 countries), Sub-Saharan Africa (10 countries), East Asia and Pacific (8 countries), and Europe and Central Asia (13 countries). For 5 countries in Middle East and North Africa, data are only available for 2000–05.

participation rate ranges from 37 percent to 49 percent—below the average of 55 percent or higher for the remaining regions. Similarly, for the 25–49 age group in these regions, the average female participation rate is between 37 and 60 percent, again much lower than that in other regions.

Middle East and North Africa, South Asia, and Latin America and the Caribbean are also the regions with the greatest gender gaps in participation rates (figure 3.11). In these regions, for both age groups, male labor force participation rates are between 1.5 and 2 times the female labor force participation rates. For 20- to 24-year-olds in Latin America and Caribbean, this gender gap is paradoxical, given the region's success in educating girls and eliminating the gender gap in schooling. This gap suggests that, unlike their male counterparts, young women there face barriers to reaping the labor market returns to increased schooling.

Second, there are countries where female participation rates for both age groups are high, the gender gap in participation is low, but women are concentrated in low-paying agricultural employment. These are mainly the countries of Sub-Saharan Africa. Countries in this region have among the highest female participation rates. Of the 29 countries with data, female labor force participation rates exceed 60 percent in 12 countries for the 20–24 age group and in 21 countries for the 25–49 age group. In Benin, Burkina Faso, Burundi, Guinea, Mozambique, Rwanda, Tanzania, and Uganda, female participation rates are close to 80 percent for both age groups.

In these countries, female participation appears to be concentrated in agricultural employment or self-employment in the nonagricultural sector. Of the 28 countries where the female share of agricultural employment exceeds 40 percent (out of 71 countries for which we have data on employment by type), 17 are in Sub-Saharan Africa. For example, in Burundi, Rwanda, and Uganda, close to 60 percent of agricultural workers are female. In Ghana, where women workers dominate nonagricultural employment, most tend to be self-employed.

Third, there are countries where female participation rates are high for both age groups, gender gaps in participation rates are low, and women's share in nonagricultural paid work is high. These countries are mainly in Europe and Central Asia and in East Asia and Pacific where female participation rates are 60 percent or higher (except in Turkey, where the participation rate is 38 percent). Despite this high participation, as well as high educational attainment, women receive lower wages than men (see World Bank 2001; World Bank 2002; Pham and Reilly 2006).[32] An analysis of gender wage gaps in Russia and Poland during the mid-1990s found that only about 20 percent of the gender gap in wages could be explained by male-female differences in observed worker or job characteristics. The remaining gap was "unexplained," which is frequently interpreted as an indicator of labor market discrimination against women.

Of course labor force participation rates do not tell the whole story of women's economic empowerment in labor markets. Additional information on quality of employment—in addition to the official MDG3 indicator on share of women in nonagricultural wage employment—is needed to give a context to participation rates (box 3.3).

Value-Added of the Proposed Indicators

The proposed complementary indicators deal with some of the shortcomings identified in the official MDG3 indicators. They capture additional elements of gender equality in two of the three areas the official MDG3 indicators measure: education (by examining sex-disaggregated completion rates) and employment (by adding sex-disaggregated labor force participation rates); they do not improve, however, the measurement of political participation. The indicators also incorporate an important new area of gender equity in health; due to data limitations, however, it was not possible to incorporate measures of access to remunerated employment and disparities in access to productive assets. These indicators, in conjunction with the official

BOX 3.3 Beyond participation: Self-employment, informality, and household work

When women are employed, it is often claimed that, relative to men, they are more likely to: (1) be self-employed rather than work for wages; (2) work in the informal rather than the formal sector; and (3) work as own-account workers, domestic workers, and contributing family workers, while men are more likely to work as employers and wage and salaried workers (UNIFEM 2005).

The evidence to support these contentions is mixed:

- Among 91 countries with recent data, male workers on average appear to be more likely to be self-employed than female workers (KILM, 4th edition).
- Whether women are overrepresented or underrepresented in the informal employment sector relative to total nonagricultural employment sector differs across developing countries. In Sub-Saharan Africa, Latin America, and India, the share of women in informal employment is larger than the share of men so engaged. In the Middle East and North Africa, the reverse seems to be the case (Grown and others 2005).
- Among 80 developing countries with data, male workers appear to be more likely than female workers to be own-account workers (KILM 4th edition). Female workers are indeed more likely to be domestic workers and unpaid workers in family enterprises than male workers.

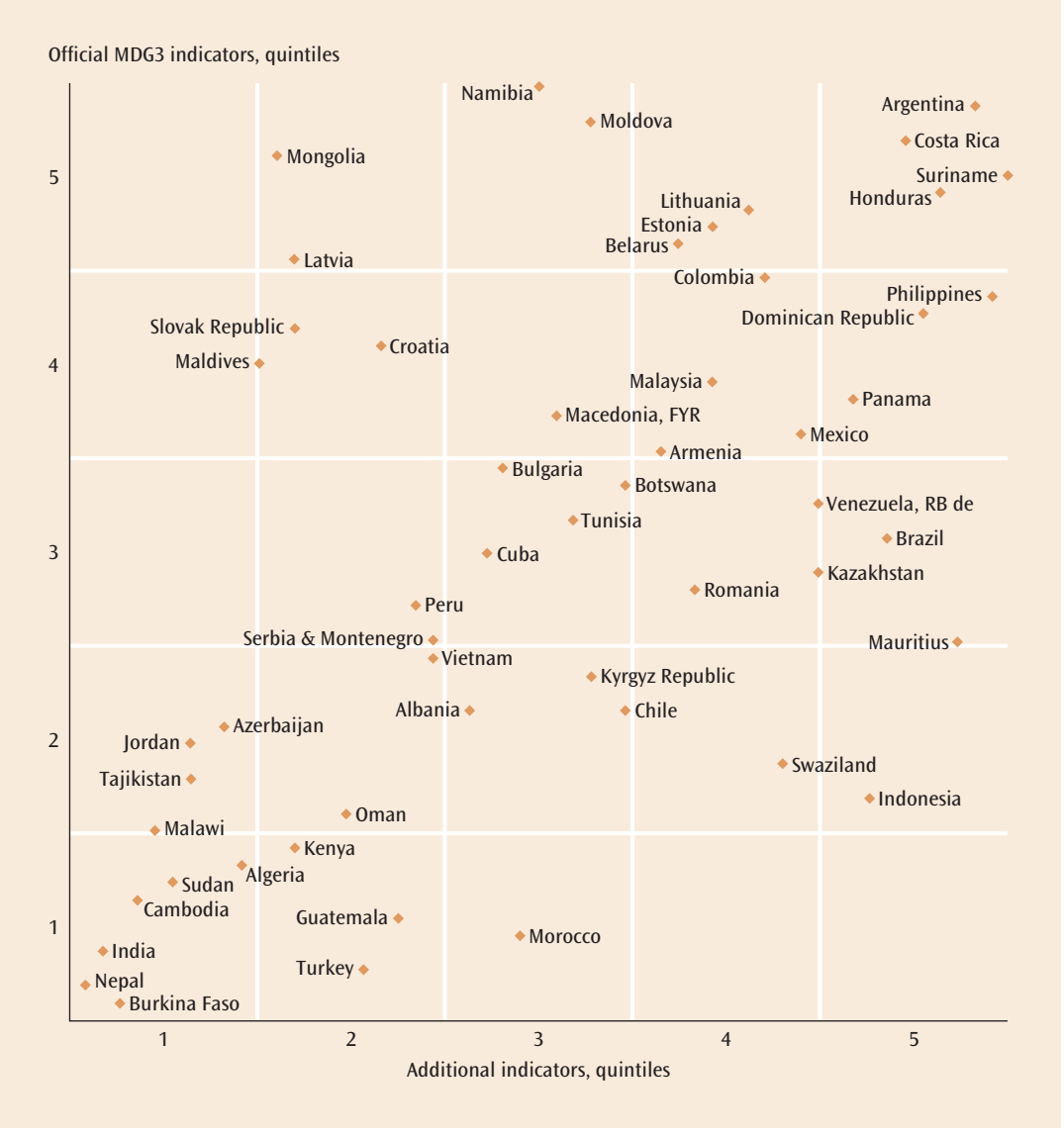
A key question is whether women prefer to work at home or in family-owned businesses because of the location or the flexibility of work hours, which allows them to more easily combine work, domestic chores, and care. Or, do prevailing gender norms condition women to assume this triple workload or restrict their mobility? Or, is this pattern a result not of supply considerations, but rather of the gendered demand for labor, which presumably reflects existing societal gender norms?

Sources: Grown and others 2005; KILM, 4th edition; Carr and Chen 2004.

MDG3 indicators, do a better job of measuring empowerment of women and of including sex-disaggregated levels of key indicators, thus overcoming some of the interpretation difficulties associated with parity ratios.

The value added of the additional indicators is in part an empirical question and in part a policy question. On the empirical side, the additional indicators are only valuable if they provide a ranking of countries on gender equality that is substantially different than that produced by the official MDG3 indicators—that is, they add information.[33] For each country, we calculate the rank according to the official MDG3 indicators and the proposed indicators.[34] Figure 3.12 plots the scores of 54 countries on the official MDG3 indicators against two of the additional indicators (the female-to-male ratio of primary completion and the under-five mortality rate).[35] The figure shows that the additional indicators provide significant information beyond that supplied by the official indicators. Thirty-two of 54 countries change rankings. Some countries that score relatively high on the official indicators score relatively low on the additional indicators (for example, the Baltic countries and some other countries in Europe and Central Asia, as well as Cuba, Namibia, and Maldives). On the other hand, some countries with relatively low scores on the official indicators have substantially higher relative scores on the additional ones (for example, Brazil, Indonesia, Mauritius, Morocco, and Swaziland). For both sets of countries, the additional indicators are capturing elements of gender equality not captured by the official MDG3 indicators. For countries close to the diagonal in figure 3.12, the ranking on

FIGURE 3.12 Comparison of country scores on official and expanded MDG3 indicators



Source: Calculations using data from household surveys, World Development Indicators, and World Population Prospects 2004 for 54 countries 2000–05.

Note: To calculate the aggregate rank of countries for each set of indicators, we rank all countries that have data on the official MDG3 and proposed indicators for the period 2000–05. For purposes of comparability, countries for which the most recent data are older than this period are not considered. Each country is ranked by the value of each component indicator, from lowest to highest, and assigned a consecutive number (starting with 1) in accordance with its rank. Countries with exactly the same value are given the same rank. The sum of these values for each country yields a composite measure for that country, which then becomes the basis for a final ranking of the countries. This composite measure or index takes a minimum value of 6 and a maximum value of 6 times 54. For each set of indicators—official and proposed—we group the countries into quintiles according to this ranking. Because the official MDG3 indicators consist of four education indicators, a country's rank on the official indicators depends heavily on its performance in education. A country's ranking on the official indicators was not adjusted for this overrepresentation of education indicators, because it reflects the priority placed on education in the MDGs.

the official and additional indicators is quite similar; for these countries (for example, Albania, Argentina, Malaysia, Nepal, and Tunisia) the latter indicators provide little extra information on overall levels of gender equality.

On the policy side, the value added of the additional indicators hinges on their policy relevance. One aspect of policy relevance is the ability to identify countries that have scored particularly high or particularly low on specific elements of gender equality and draw conclusions about how public policy has influenced these outcomes. Another related aspect of policy relevance is whether scores on these additional indicators are useful in identifying other areas for public policy intervention. These themes are explored in more detail in the section that follows.

The Measurement of Gender Equality and Empowerment: Data Needs

The proposed complementary indicators discussed above do not remedy all the shortcomings of the official MDG3 indicators. Table 3.7 lists other prospective indicators that meet the criteria of being modifiable by policy and having a strong link to poverty reduction and growth, but for which data are not currently widely available. Data collection for these indicators should be strongly considered.

Information is most needed for indicators that measure gender equality in society. Data on the share of women in positions in the executive branch of government and in local government are available only for some regions and some countries. Increasing coverage to a larger number of countries and regions should not be too onerous, especially because these data are straightforward and easy to collect. Similarly, voting behavior by sex should be easily obtained from voting records or from international opinion surveys, such as the regional barometer surveys (Latin, African, and Asian barometers) and the World Values Surveys, which now include more questions about voting behavior.

A potentially revealing indicator with direct implications for using services and enjoying citizen rights, is the number and share of women and men with basic citizenship documents, starting with birth registrations (and ending with death registries).[36] Recent research by the Inter-American Development Bank showed

TABLE 3.7 Prospective indicators for which data are not currently available

Household	Economy and markets	Society
Test scores, male and female	Gender gap in wages[a,b]	Percentage voting by male, female, and ratio
Proportion of women who have ever been victims of physical violence by an intimate male partner	Share of women in informal wage and self-employment in nonagricultural employment	Proportion of seats held by women in local government
	Percent of employed women who have access to child care	Proportion of women in the executive branch
	Businesses, by average size and sex of owner[b]	Percentage of individuals who possess basic citizenship documents, female, and ratio
	Access to credit for women and men	
	Land ownership by female, male, and jointly held[a,b]	

Source: World Bank staff.
a. Recommended by UN Millennium Project Task Force on Education and Gender Equality.
b. Included in World Bank's Country Policy and Institutional Assessments (CPIA).

underregistration of births in six Latin American countries, varying from 8.4 percent in Peru to 25.8 percent in the Dominican Republic. Characteristics associated with the risk of a child being undocumented from birth to age five included poverty, rural residence, and teen motherhood (Duryea and others 2006).

In the economy and market, comparable and timely data with good country coverage are urgently needed on the share of women in informal and self-employment (as part of a more comprehensive package of information on women's and men's employment, covering agricultural and nonagricultural activities formal and informal, wage, and self-employment). Data are also needed on wages and earnings by sex and type of employment. This recommendation, made first by the subgroup on gender indicators of the Inter-Agency and Expert Group on the MDG indicators, needs to be implemented, with efforts to improve and expand the collection and analysis of such data by national statistical offices.[37]

There also needs to be a significant international effort to obtain even basic data on both productive and consumer assets—land, livestock, house ownership, other property, credit, business ownership—disaggregated by sex, at the level of individuals, households, and firms. Some countries have information on land tenure by the sex of the owner in agricultural censuses or surveys. But information on access to credit (formal and informal) and business ownership by sex is almost nonexistent, except for micro studies. The international development agencies that produce and run large-scale specialized surveys—such as FAO's and IFAD's agricultural and rural surveys and the World Bank Group's household and business surveys—need to make a special effort to collect and analyze sex-disaggregated information on asset ownership and control.

The most complete existing coverage of reliable and actionable data is for indicators of gender equality in the household (where there has been the greatest advance in gender equality). Additional data-gathering efforts are needed to obtain measures of educational achievement (test scores) by gender and to measure the results of gender-informed educational interventions. On the former, new international tests, such as the TIMSS, PIRL, PISA, and SACMEQ, measure achievement, but coverage of developing countries is still too limited.

Reliable and comparable data with good coverage are also needed on the prevalence of violence against girls and women in the family. Comparable victimization surveys conducted by the World Health Organization in 10 countries and a recently published major study by WHO (2005) are a promising start, as is the initiative by Macro International to include questions about intimate partner violence in Demographic and Health Surveys in nine countries (Kishor and Johnson 2004). These efforts need to be scaled up. WHO should lead an international effort to collect data on an appropriate, measurable, and actionable indicator of violence against women: tentatively, the proportion of women who in the past 12-month period have been victims of physical violence by an intimate male partner.[38]

In describing data that are needed for an expanded set of indicators, one must not lose sight of the fact that data on all six official indicators of MDG3 are available for only 59 out of 154 countries (for 2000–05). Many others have produced data but do not update the information regularly. This limits the number of countries that can be used for making valid cross-country comparisons; of the 154 countries in the database for this report, only 41 have information for both the official and the expanded lists of MDG3 indicators for 2000–05. Collecting and publishing updated information for these indicators is a clear—and doable—priority.

The UN Statistics Division, in collaboration with the World Bank and UNFPA, recently set up an Interagency and Expert Group for Gender Statistics, with broad representation of international organizations, national statistical offices, and nongovernmental institutions. At its inaugural meeting, in December 2006, the group launched a global gender statistics program to strengthen and complement national, regional, and other international gender statistics programs. This and

similar efforts need to be fully supported by the international development community—since without good data, little progress will be made in national and international efforts to achieve MDG3.

Learning from Country Experiences

This section identifies outliers—countries that have especially high or low performance with respect to the official and expanded set of MDG3 indicators in the most recent year for which data are available (in the 2000–05 period).[39] This exercise is undertaken in order to extract lessons learned about policies to promote gender equality from both high and low performers, rather than to obtain a global ranking of countries for MDG3.[40] For those countries identified as outliers (*only* with respect to the relatively small subset of countries for which data are available), the section then examines the evolution of these indicators over the 1990–2005 period, both to understand how these countries ended up where they did and to determine whether there has been convergence among countries that started at very different levels of gender equality. Lastly, the section discusses changes in laws, institutions, and policies in outlier countries that may have contributed to the improvement (or worsening) of indicators and the policy framework for gender equality and women's empowerment.

Outlier Countries According to the Official MDG3 Indicators

To identify outlier countries according to the official MDG3 indicators, we use the ranking method described above. We group the countries into quintiles according to this ranking. Of the 12 countries in the top 20 percent or quintile, 10 are in Europe and Central Asia and Latin America and the Caribbean, indicating a clear regional pattern (table 3.8). Mongolia and Namibia deserve a closer look because they differ significantly from the other countries in their regions. Of the 12 countries in the bottom quintile, four are in Sub-Saharan Africa, three are in South Asia, and two are in North Africa. Note that four out of the eight countries in Sub-Saharan Africa and three of the four in South Asia are in this bottom quintile. Guatemala and Cambodia stand out because most other countries in their regions are in the top two quintiles.

To understand better the levels of gender equality achieved in about 2005, the performance of countries in the two quintiles on the official MDG3 indicators is examined over a 10- to 15-year period. Three basic patterns can be observed:

- For primary enrollment, secondary enrollment, and literacy rates, there has been significant convergence: countries that were in the bottom quintile in 1990 reg-

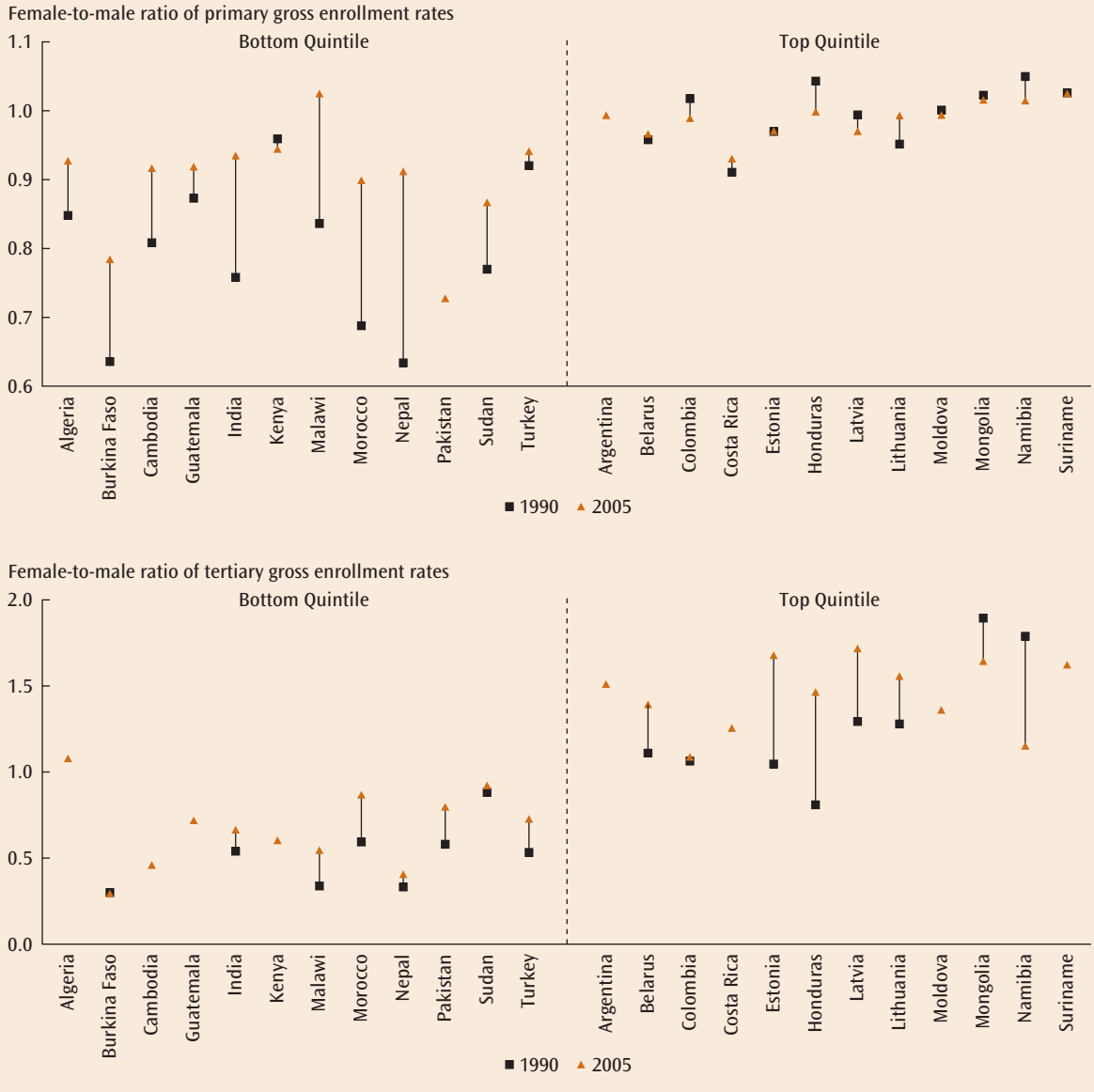
TABLE 3.8 Countries in the top and bottom quintiles, according to scores on official MDG3 indicators

World region (number of countries with comparable data)	Bottom quintile	Top quintile
Sub-Saharan Africa (8)	Burkina Faso, Malawi, Kenya, Sudan	Namibia
East Asia & Pacific (8)	Cambodia	Mongolia
Europe & Central Asia (20)	Turkey	Belarus, Lithuania, Estonia, Moldova, Latvia
Latin America & the Caribbean (14)	Guatemala	Argentina, Honduras, Colombia, Suriname, Costa Rica
Middle East & North Africa (5)	Morocco, Algeria	
South Asia (4)	India, Pakistan, Nepal	

Source: World Bank staff.
Note: There are 59 countries with data for 2000–05. The number of countries with comparable data for these indicators in each region is given in parentheses.

istered significantly more rapid progress than those in the top quintile. The case of primary enrollment (figure 3.13 shows the size of the change in the levels of one indicator, depicted by the length of the arrows) is especially striking.[41] By 2005, several of the countries that were in the bottom quintile in 1990 had caught up with the top quintile. This reflects the progress of most countries in basic education, a point made in the preceding section and illustrated by the remarkable leaps for

FIGURE 3.13 Changes in official MDG3 indicators for countries in the bottom and top quintiles, 1990–2005



continued

FIGURE 3.13 Changes in official MDG3 indicators for countries in the bottom and top quintiles, 1990–2005 *(continued)*

Source: World Development Indicators 2006.
Note: A few countries do not have data around 1990, defined here as 1998–95. The countries for which initial data are missing appear with just one point.

several bottom-quintile countries—especially in comparison with the countries in the top quintile. Note the progress by Burkina Faso, Malawi, Morocco, and Nepal. Countries in the top quintile show little change in this ratio because they were already close to gender equality in 1990.

- In the case of tertiary enrollment (also pictured in figure 3.13), there has been a widening of the gaps between bottom and top quintile countries. By and large, top quintile countries had female-to-male enrollment ratios in excess of one in 1990, and these rates rose substantially over the 1990–2005 period. This is indicative of severe male disadvantage. At the same time, bottom quintile countries, characterized by severe female disadvantage, made significant progress in boosting the female-to-male enrollment ratio; the only two exceptions to this pattern are Burkina Faso and Nepal.
- A third pattern emerges with respect to women's share in nonagricultural wage employment and political participation. For these two indicators, there is little difference in performance between top and bottom quintile countries.[42] For nonagricultural wage employment (see figure 3.13), Kenya stands out because its rapid progress on this indicator puts its 2005 score at about the initial level for several top-quintile countries. Cambodia also stands out because it begins the period on par with the countries in the top quintile; in contrast, it is in the bottom quintile of performers because of its record on the other MDG3 indicators. In several countries in the top quintile, notably Argentina and Namibia, women's share in nonagricultural employment continues to rise.

Outlier Countries Using the Expanded Gender-Equality Indicators

Now consider the proposed additional gender-equality indicators and how countries perform. Because comparable data across

countries on these additional indicators are even more scarce than for the official MDG3 indicators, we focus on two subsets of indicators: (1) the primary completion rates and the under-five mortality rate, for which comparable data are available for 54 countries, and (2) labor force participation rates and DALYs for which comparable data are available for 41 countries. Countries are re-ranked for each subset, and the most gender-equal and the least gender-equal countries are listed in tables 3.9 and 3.10.

As with the official MDG3 indicators, the top quintile features several countries in Latin America, but even more with this new set of indicators. Countries in blue are common to both rankings, four in the top quintile (Argentina, Costa Rica, Honduras, and República Bolivariana de Venezuela) and seven in the bottom (Algeria, Burkina Faso, Cambodia, India, Malawi, Nepal, and Sudan).

How have these countries performed since 1990? Except for Honduras and República Bolivariana de Venezuela, there has been very little change in the gender ratio in primary completion rates in the top-quintile countries; essentially, all these are roughly at parity (figure 3.14). In the bottom quintile, however, five countries achieved notable progress, and with the exception of Burkina Faso, appear likely to achieve gender equality in this indicator.

The gender ratio for under-five mortality rates is a different story. There has been very little change in or among countries in both quintiles. Remember that in four industrial countries considered to be the most gender equal (Denmark, Finland, Norway, and Sweden), the female- to-male ratio is between 0.81 and 0.88. The developing and transition countries in the top quintile were near this level in about 1990. But for a few of these countries (Indonesia, Kazakhstan, Panama, the Philippines, and Suriname), the indicator suggests worsening mortality rates for boys relative to girls. In contrast, the countries in the bottom quintile are all above this range, with the three South Asian countries having data showing the greatest disadvantage for girls.

On the second subset of proposed indicators (using data on 41 countries) the similarities and differences are striking. In the bottom quintile, five countries are in the bottom quintile on the official MDG3 indicators (table 3.8) and the first subset of proposed indicators (table 3.9). The top quintile consists only of the countries in Europe and Central Asia (table 3.10), who achieve their high ranking due to desirable outcomes for females in labor force participa-

TABLE 3.9 Countries in the top and bottom quintiles, according to primary completion rates and under-5 mortality

World region (number of countries with comparable data)	Bottom quintile	Top quintile
Sub-Saharan Africa (8) East Asia & Pacific (6) Europe & Central Asia (18)	Burkina Faso, Cambodia, Malawi, Sudan	Mauritius, Indonesia, Philippines
Latin America & the Caribbean (14)	Azerbaijan, Tajikistan	Argentina, Brazil, Costa Rica, Dominican Republic, Honduras, Kazakhstan, Panama, República Bolivariana de Venezuela
Middle East & North Africa (5) South Asia (3)	Algeria, India, Jordan, Maldives, Nepal	

Source: World Bank staff.
Note: The total number of countries with data during the period 2000–05 is 54. The number of countries with comparable data for these indicators in each region is given in parentheses. The countries in blue (Algeria, Argentina, Burkina Faso, Cambodia, Costa Rica, Honduras, India, Malawi, Nepal, and Sudan) also appear in the lists in table 3.8.

TABLE 3.10 Countries in the top and bottom quintiles, according to labor force participation rates and disability-adjusted life years

World region (number of countries with comparable data)	Bottom quintile	Top quintile
Sub-Saharan Africa (3)	Burkina Faso, Malawi, Swaziland	
East Asia & Pacific (5)	Indonesia	
Europe & Central Asia (18)	Turkey	Belarus, Estonia, **Kazakhstan,** Latvia, Lithuania, Moldova, Romania, Russian Federation, Ukraine
Latin America & the Caribbean (12)	Honduras	
Middle East & North Africa (1)	**Jordan**	
South Asia (2)	India, Pakistan	

Source: World Bank staff.
Note: The total number of countries with data during the period 2000–2005 is 41. The number of countries with comparable data for these indicators in each region is given in parentheses. The countries in blue (Burkina Faso, Malawi, Turkey, Pakistan, India, Latvia, Moldova, Estonia, Lithuania, and Belarus) appear also in the lists in tables 3.8 and 3.9; the countries in bold (Kazakhstan and Jordan) appear also in table 3.9.

tion and an undesirable male disadvantage in DALYs. Five of them are in the top quintile in the previous lists. Due to a lack of comparable data for the beginning of the period, it is not possible to track the progress of countries on this set of indicators.

Changes in Rights, Resources, and Voice in Outlier Countries

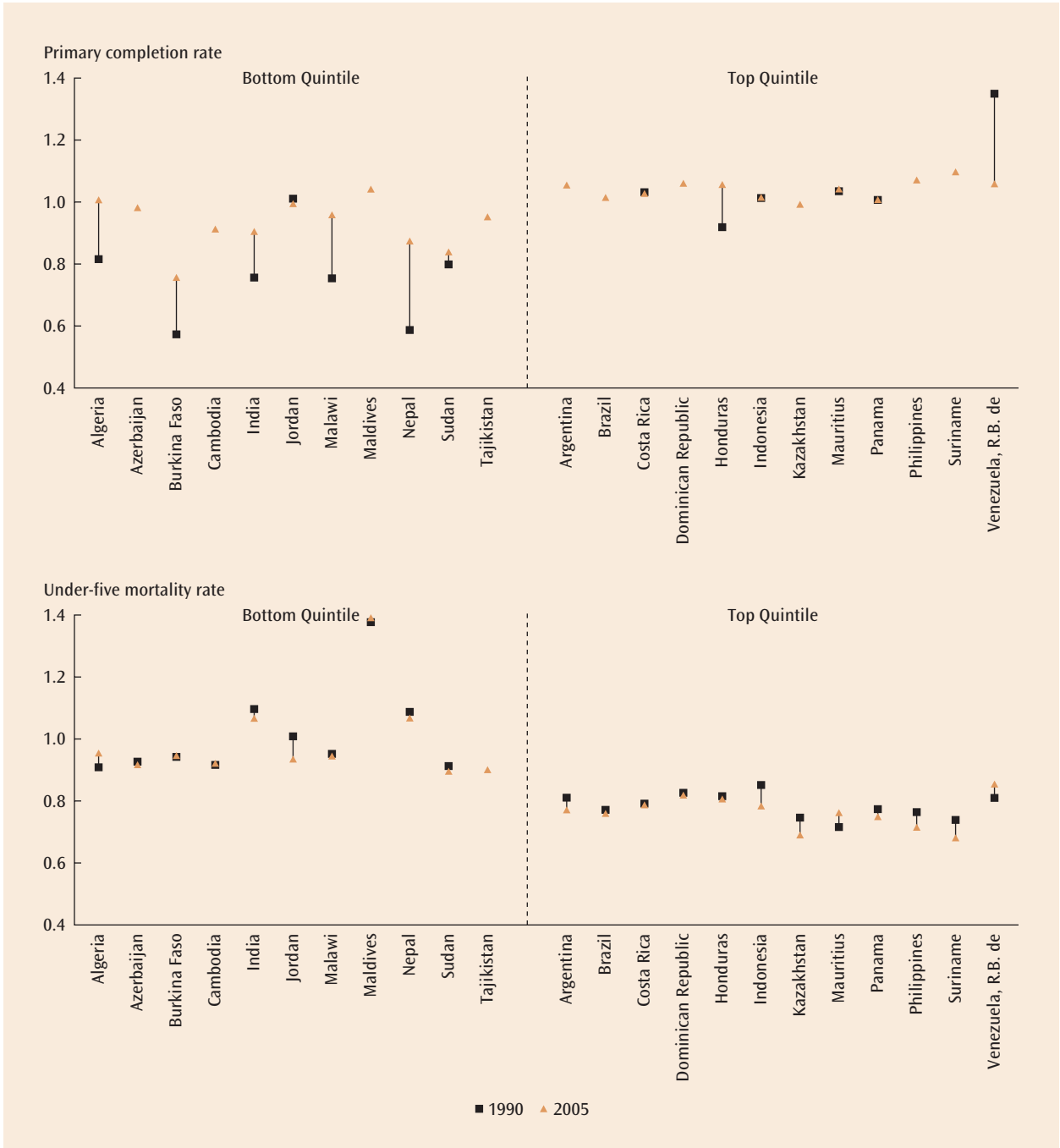
Sweeping changes in a country's institutional environment can affect gender equality. Large social and economic transformations tend to change gender structures and relations, with effects on gender indicators. For example, the fall of the Taliban in Afghanistan ushered in the highest increase in school enrollment rates in its history for both boys and girls, but with the previous restrictions harsher for girls, the rise in their enrollment was especially impressive. This change was brought about by a near-doubling in the number of schools in the country after 2003 and cessation of physical threats on girls who attend school. Even so, long-standing institutional obstacles and investment shortfalls will keep Afghanistan's indicators of gender equality below those of other countries in the region for some time.

Equal rights. Both high and low performers have enacted constitutional or legal reforms to "level the playing field" between men and women by prohibiting discrimination on the basis of sex and by adopting special measures for women's advancement. The difference between high- and low-performing countries is not so much the laws themselves, however, as in the mechanisms to implement them. High-performing countries tend to have more developed policy frameworks to enforce the laws. Without institutions for enforcement, including the information needed for it and the associated budget allocations, good laws can become mere statements of noble intention.

A good illustration of a coherent package of legal reforms that includes provisions for their enforcement is Moldova's Gender Equality Law, passed in February 2006.[43] The law specifies the mandates and responsibilities of public institutions with a role in enforcement, authorizes public budget funding for these agencies, and establishes both penalties and reparations for violations of the law. In Lithuania the office of Equal Opportunity Ombudsman gave "teeth" to a series of antidiscrimination laws passed between 2000 and 2004 by investigating and penalizing offenders for violating the Law of the Republic of Lithuania on Equal Opportunities for Men and Women.

High-performing countries do not have discriminatory laws condoning differential treatment between men and women, while many low-performing countries do. Women

FIGURE 3.14 Changes in two proposed indicators for countries in the bottom and top quintiles, 1990–2005



Sources: World Development Indicators (2006) for primary completion rates and World Population Prospects (2004) for under-five mortality rates.

in low performing countries are often treated as minors in family law—for instance, they cannot pass on citizenship to a child, and they need their husband's permission to include their children's names in a passport or obtain a national identity card. In addition, laws in these countries often directly or indirectly constrain women's options for employment and their ownership of productive assets. Examples include supposedly "protective" labor laws, such as bans on women's night work in the agricultural sector (India's Plantations Labor Act of 1951) and the requirement that employers bear all costs of maternity benefits (Burkina Faso, India), that increase employers' costs of hiring women. Some of these countries have no gender-specific provisions in labor laws that ban dismissal during pregnancy (Burkina Faso, Kenya). Land registration laws strengthen the land rights of male heads of household and weaken women's customary land rights (Kenya).

Many legal changes ensuring equal rights for men and women are quite recent, underscoring the fact that legal changes often follow and reflect social changes. Legal reforms have often followed and may have benefited from improvements in gender equality in both high- and low-performing countries.

Pakistan, a low performer, suggests the close connection between social and legal changes. Pakistan's national assembly passed the Protection of Women Bill in November 2006, after much debate and controversy. Removing rape from the jurisdiction of Islamic laws, the bill makes rape a crime punishable under Pakistan's penal code. Despite Pakistan's overall low scores on gender equality in the 1990–2003 period, it improved gender parity ratios considerably in secondary and tertiary schooling, and it increased women's representation in parliament from 10 to 22 percent. These gains in gender equality and women's empowerment quite likely set the stage for or facilitated the bill's passage into law.

Most countries now have separate government offices or agencies to promote gender equality and women's empowerment and to enforce equal opportunity legislation. And as a result of the commitments at the UN Beijing Women's Conference (1995), many governments elevated these offices to ministerial status. Despite this high profile, a frequent commentary is that these offices or ministries continue to be marginal or fragile in their institutional capacity, budgets, and influence (INSTRAW 2005; UNDAW 2004). Their performance seems to be influenced by their location in the government structure (the closer to the office of the president or prime minister, the better), by their resources, and by their links with women's movements in civil society. Relatively well-resourced women's ministries have played significant roles in promoting gender equality. Cambodia's Ministry of Women's and Veteran's Affairs (established in 1998), for example, was singled out as one of the key ministries to execute the medium- term expenditure framework (2005–08) and to implement Cambodia's National Strategic Development Plan (2006–10) (box 3.4).

Equal resources. A notable feature that differentiates the high-performing countries (by definition) is their gender parity in education and health indicators—suggesting that gender-informed investments in human capital are key to promoting gender equality, and that low-performing countries with aggressive education policies are on a good track. Malawi, for instance, has achieved significant increases in gender parity ratios at all levels of schooling, thanks both to universal free primary education (1994) and to a specific emphasis in increasing girls' attainment in basic education. Gender-informed policy reforms included reducing the direct costs of girls' schooling, increasing access and retention of girls in school, and removing gender bias in teaching (Semu 2003).

Various factors are associated with women's greater opportunities in the labor force in the high-performing countries. For the countries of Europe and Central Asia, gender equality is the legacy of explicit state policies that emphasized employment as both a right and a duty for both men and women. There is little evidence that the treatment of women in the labor market has systematically deterio-

BOX 3.4 How Cambodia's Ministry of Women's Affairs addresses the MDG3 challenges

Since peace was restored in 1997, Cambodia has made huge strides to recover from nearly 30 years of conflict. But the legacy of war still constrains growth and gender equality. Cambodia remains one of the poorest countries in East Asia, with 35 percent of households living below the national poverty line, and low levels of health and education in the population. A very unbalanced adult sex ratio during the war—the result of more men dying than women—is evening out, but has left a high percentage of poor households headed by women; it may have worsened gender relations and contributed to rising levels of domestic violence. In response, with backing from the prime minister, the Ministry of Women's Affairs (MWA) has had a major role in integrating gender equality concerns in government plans, including the poverty reduction strategy and the national development plan (2006–10).

At the *macro* level, MWA is institutionally well positioned to influence laws and policies, and it benefits from having gender equality enshrined in the constitution. It has invested in statistics and has expanded the official MDG3 indicators to sharpen the government's focus on gender inequalities. It added the indicators of gender equality in: (1) literacy rates for 25- to 44-year-olds, to cover women in prime childbearing and working ages; (2) wage employment in agriculture, industry, and services, to monitor sex segregation within sectors (women are underrepresented in the service sector); and (3) all elected bodies (National Assembly, Senate, and commune councils) and government positions. In addition, it added a new target focused on reducing all forms of violence against women and children.

At the *meso* level, MWA provides technical assistance and training on mainstream gender issues in line ministries, including agriculture (the most important source of economic livelihood for women and men), education (to increase the number of females in secondary education), and labor (to draft bilateral agreements that will ensure safe international migration for women workers). At the *micro* level, MWA takes the lead in developing services that are not yet a priority for line ministries and in piloting projects—for instance, assistance and business training to women garment workers in order to reduce their vulnerability to garment industry retrenchment.

The MWA active engagement in mainstream policy formulation, collaboration with line ministries, and ability to monitor progress have all contributed to its success. Constraints affecting its performance include insufficient technical and research capacity, limited allocation of resources, and poor understanding of gender equality and gender mainstreaming—on the latter, there is still a tendency to undertake isolated, women-specific activities, with little overall impact.

Source: Phavi and Urashima 2006.

rated with the transition to the market economy, though there is concern that women are not taking full advantage of the process of economic liberalization and privatization. These countries thus need to strengthen equal rights to access to resources, such as land, capital, and credit and other financial services (World Bank 2002).

For the Latin American countries that record high rates of women's participation in the official nonagricultural wage employment indicator, the rise in women's participation in the workforce in the 1990s seemed to be the result of neither specific government policy nor economic growth, since women's participation rose despite widespread economic stagnation in the 1990s. Instead, the rise is related to secular changes in the role of women in households and in the labor market, associated with their higher education, lower fertility, and higher wages. While the gender gap in wages is still wide in some countries in the region, it has narrowed significantly in others, and in high-performing Colombia it has already closed (Duryea and others 2004).

Cultural barriers often constrain the employment options of women in low-performing countries, especially in some countries in the

Middle East and North Africa with comparatively high levels of female schooling. In addition, structural changes in the economy—such as losses in the agricultural sector and increased rural to urban migration—can result in a decline in female labor force participation. This was the case in Turkey, where men compensated for the steady fall in agricultural employment by taking up nonagricultural work while women had to leave the market "voluntarily" (World Bank 2003).

Equal voice. Women's representation in parliament is the only indicator currently available to identify high- and low-performing countries on the issue of equal voice, and it is the one area in which changes can be more directly attributed to affirmative government action. The two countries with the highest representation of women in parliament and the largest increases are Argentina and Costa Rica, which adopted quota laws for women's representation in parliament in the early 1990s. In Argentina the current female membership in the National Congress is the highest ever attained—42 percent in the Senate and 33 percent in the House. Namibia, the only high-performing country in Sub-Saharan Africa, adopted quota laws for parliamentary and municipal elections in the mid-1990s. As result, women's representation in parliament rose from single digits to 28 percent during 1990–2003. Quota laws appear to help solidify women's gains in parliamentary representation. Without them, women's gains in representation can be quite volatile. Mongolia is a high-performing country with high gender parity in education and health, growing women's participation in employment and self-employment, and a new constitution that guarantees equal rights and includes many provisions prohibiting gender discrimination (1996). Even so, women's representation in parliament declined sharply in 1990-2003, from the mid–1920s to the single digits.

The Policy Framework for Gender Equality and Women's Empowerment

These examples underscore three main instruments available to governments to advance women's rights, resources, and voice: laws, institutions, and policies. There has been perhaps most progress in reforming constitutional and legal frameworks to ensure equal rights for women under the law. CEDAW and other international and regional conventions have provided a general framework for national legislation that bans discrimination on the basis of sex and protects women's rights. A first challenge is enforcement of these laws. Second, and despite the advancements made, laws in many countries still condone differential treatment between the sexes or, more blatantly, treat women as minors or second-class citizens. Laws without enforcement may not guarantee equal rights but differential treatment under the law seems to be a good predictor of gender inequality in society. Legal reforms, both to change the letter of the law and to strengthen the vehicles for enforcement, need to be paired with efforts to improve the collection and analysis of sex-disaggregated statistics—the basic building blocks for enforcing rights, designing policy, insuring government accountability, and monitoring progress in MDG3.

Institutions, even without the presence of overtly discriminatory rules, can reflect and reinforce gender inequality by restricting women's access to resources and services, or they can enforce equal rights and unlock opportunities for women. Governments have most often promoted an enabling institutional environment for gender equality both by setting aside resources to "mainstream" promotion and enforcement functions in line ministries and other government agencies, and by establishing a separate office or ministry with promotion, oversight, and/or enforcement functions. Mainstreaming should increase the positive impacts of government interventions and prevent unintended negative impacts of government action on gender equality. Because mainstreaming makes it difficult to track the amount of resources allocated to promote gender equality, public scrutiny of budgets is an important tool for holding the government accountable (box 3.5).

Over time, effective mainstreaming should obviate the need for having a separate agency or function for promotion. However, more than two decades of experience with "national women's machineries" (and with the integration of gender concerns in donor and international agencies—see chapters 4 and 5) has shown that mainstreaming is a long-term process, and that technical soundness, instrumental rationales, and financial incentives all help with the mainstreaming task. The experience also suggests that gender mainstreaming does not reduce the continuing need for a separate function or agency with vigilance functions. The challenge is to ensure that separate and mainstreaming functions complement and reinforce each other, rather than duplicate efforts and/or compete for scarce resources.

Advocacy organizations in civil society, including NGOs and grassroots groups, have been central in promoting gender equality and women's rights. Effective action, especially in terms of protecting women's rights, has often been the result of alliances between them and government counterparts.

In terms of policies, there is considerable knowledge on cost-effective ways to promote gender equality in the domain of the household, especially in terms of increasing girls' and women's access to education and maternal and reproductive health services. Demand-side interventions that condition transfers and subsidies to gender equality objectives are increasingly popular and proving to be cost effective. Delivery of health and education services can be designed to promote gender equality by putting in place measures that prevent discrimination by providers and encourage providers to be responsive to gender differences in client needs. Such measures include the provision of single-sex facilities and female providers which have been effective in increasing women's service utilization in a variety of contexts (World Bank 2001).

The promotion of gender equality in the economy is less easily influenced, because it depends not only on gender-targeted policy and project interventions, but also on macroeconomic factors, demographic trends, and the functioning of different markets. In Bangladesh, for example, the opening of the economy to trade significantly increased economic opportunities for women in the garment export sector (Kabeer and Mahmud 2004). Globalization and the opening of markets in many other countries, however, have benefited skilled over unskilled workers, which may have widened the differences in economic opportunities between more educated and less educated women, and between women and men. A growing economy and well-functioning markets expand opportunities for all. If women's economic empowerment contributes to poverty reduction and growth, stable growth that generates quality employment and provides an enabling environment for entrepreneurship is necessary, if not sufficient, to expand women's economic opportunities.

Universal programs can work—and have worked—to reduce gender inequalities (as in the case of the push for universal primary education); nevertheless, reducing gender inequalities most often requires targeted action and (sometimes) specialized agencies. There is comparatively good knowledge, for example, on expanding labor market opportunities for women through gender-informed training and job intermediation programs. And there is substantial knowledge on the design of microfinance institutions to increase women's access to credit and other financial services. More knowledge is needed in terms of what works to expand women's access to productive resources and productive infrastructure.

Targeted action is especially needed in the case for those left behind because of the interaction of gender and other forms of exclusion (such as ethnicity, race, location, or disability). Cumulative disadvantages present both institutional and legal challenges on how best to promote opportunities and protect the rights of girls and women who belong to excluded groups in the population.

Much more can be done to promote gender equality in the societal domain, a cornerstone for the promotion of overall gender equal-

BOX 3.5 Gender-informed public finance management

Public scrutiny of the budget from a gender equality perspective is important for both mainstreaming gender in government policies and empowering citizens to influence policy making and hold governments accountable for public finance management. In the last decade, more than 60 countries have undertaken analyses of public budgets to assess differential incidence and effect on men and women, as well as to measure men's and women's economic contributions.

Different approaches to gender-informed budget analysis. Approaches have differed in terms of focus, coverage, and methodology:

- The Women's Budget Initiative (WBI) in **South Africa** expanded its initial broad focus on the national budget to analyses of specific budgets for domestic violence prevention, treatment, housing, and child support grant programs, among others. The **Uganda** Gender Budget Project analysis covered the national budget by sector. In **Mexico,** the analysis focused on antipoverty programs and public expenditure on health in several states. **Korea** and the **Philippines** analyzed women-targeted policies and activities at the local level. In **Morocco,** gender budgeting is being introduced also at the local level. In general, the more specific or focused the gender-informed budget exercise, the easier its implementation.
- Most efforts have covered public expenditures, classified into: (1) women-specific expenditures; (2) gender equality expenditures in sectors or line ministries; (3) mainstreamed government expenditures that provide goods or services to the whole community; and (4) expenditures to achieve equity in public sector staff rosters. Some also extended coverage to revenues: the South African WBI looked at taxation to reduce bias against women, and a review of the value-added tax (VAT) in Uganda recommended tax relief on items used by women in the care economy.
- The most commonly used method takes the government's policy framework and examines it sector by sector, both in terms of utilization of budget expenditures and longer-term impacts on men and women. The **Uganda** analysis compared administration expenditures with public services that citizens received and proposed reallocations within and between sectors. The **Mexico** analysis focused on how "gender-neutral" programs recognized and addressed the limitations women face and whether they covered women's needs and build their capacities. Ideally, these analyses should cover the four dimensions of government budgets and their interaction: expenditure, revenue, the macroeconomics of the budget, and participation in budget decision-making processes.
- Tools have included gender disaggregated beneficiary assessments, public-expenditure benefit incidence analysis, and tax incidence analysis, among others. **Chile** has included gender as a cross-cutting theme in a performance-based national budget, and is using incentives (salary bonuses) for public sector staff as a tool to achieve measurable results.
- The World Bank has undertaken gender-disaggregated public expenditure reviews in a number of countries, including Cambodia, Ghana, Morocco, Paraguay, St. Vincent and the Grenadines, Vietnam, and Uganda. Most have combined the use of gender-disaggregated benefit incidence analysis with gender institutional analyses or gender impact assessments of public programs. The reviews have shown that undertaking gender analysis can contribute to better targeted, more efficient, and more equitable public expenditure.

Lesson and challenge. The main lesson from the experience with gender-informed budget analysis is that changing public policy priorities is a more complex process than pointing out gender differences and disparities in budgets. The implementation of budget initiatives requires upgrading the technical skills of budget officials and gender experts; raising public awareness of gender issues to ensure the sustainability of the initiatives; and supporting well-informed coalitions of NGOs for advocacy. Most importantly, effective government agencies are central to their implementation. The key challenge for gender-informed budget analysis and policy making is moving beyond gender-targeted interventions to full and sustained gender mainstreaming in the budget process.

Sources: Asesorias para el Desarrollo (2007); BRIDGE (2003); Budlender and Hewitt (2002, 2003); Elson (2006); UNIFEM (2002); World Bank (2007).

ity. Women's voices in society—expressed through leadership positions in politics and grassroots and other women's organizations in civil society—should continue to be a main driver for gender equality and women's empowerment.

This chapter has highlighted the intrinsic importance of MDG3. It has also documented that progress toward attaining MDG3 should have multiplier effects and spur progress in other MDGs. To monitor this advancement, the chapter has recommended complementing the official indicators with selected additional ones; it has highlighted the need to strengthen the collection and analysis of sex-disaggregated data in all domains of gender equality. The additional investments needed to monitor MDG3 should go hand-in-hand with the scaling up of successful interventions to expand opportunities for girls and women.

Policy lessons from the review of the evidence in this chapter include, first and most importantly, that there can be significant advancement in gender equality when there is the will—as shown by the remarkable leaps that countries, even low-performing ones, have made in improving girls' access to schooling. Second is that laws, institutions, and policies matter. Laws provide an appropriate framework for leveling the playing field between men and women, but have no impact if they are not enforced; enforcement requires institutions with budgets and with reliable information to back enforcement. The promotion of gender equality requires distinct institutional arrangements (for vigilance and accountability), as well as actions to mainstream gender issues across public sector agencies. Gender mainstreaming can work, but it requires high-level leadership as well as technical and budgetary resources—it is not cost free.

There are well-known policy tools available to promote gender equality. They include interventions that, if designed properly, do not need to be specifically targeted to women. Examples range from government policies to promote export-oriented manufacturing to those that seek to facilitate the operation of microfinance institutions. But they also include targeted interventions, especially for subgroups of women in the population that suffer multiple exclusions. A third policy lesson is that civil society and the private sector have key roles to play in promoting gender equality—the former by forming alliances with government and promoting government accountability, and the latter by expanding economic opportunities for women.

In the short run, there may be policy-level tradeoffs between equity and efficiency; in the long run, however, greater gender equality in access to opportunities, rights, and voice can lead to more efficient economic functioning and better institutions, with dynamic benefits for investment and growth. The business case for investing in MDG3 is strong—it is nothing more than smart economics.

Notes

1. This belief is formalized in several international conventions: the Convention to Eliminate All forms of Discrimination Against Women (CEDAW); the Inter-American Convention on the Prevention, Punishment, and Eradication of Violence against Women (Convention of Belem do Para); and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa.

2. See UN Millennium Project Task Force on Gender Equality 2005; Germain 2004; Burkhalter 2002; de Walque 2006; and van der Straten and others 1998.

3. For 73 countries, the correlation coefficient between the poverty headcount ratio using 1997 data or the closest year to 1997 with available data (US$2/day; 1993 PPP dollars) and the female-to-male ratio in HDIs (1997) is –0.67, with an R square = 0.43. For the relationship between poverty and other gender equality measures, see Klasen (2006).

4. For 103 countries, the correlation between the average annual GDP per capita growth rate 1997–2004 (in percent) and the female-to-male ratio in HDIs (1997) is 0.35, with an R square of 0.14.

5. Equality of opportunity in education has received particular attention for two simple reasons. First, education—and, more broadly,

human capital—are easily incorporated into two frequently used econometric models of economic growth: the augmented Solow model and the endogenous growth models. Second, educational inequalities are easily measurable, and these measures are widely available.

6. See Knowles and others (2002) and Lorgelly (2000) for careful reviews of this literature.

7. Klasen estimates the effect of the gender gap in years of total schooling in the adult population on per capita income growth, using cross-country and panel regressions for the 1960–92 period for 109 developed and developing countries. He uses a variety of techniques to deal with potential simultaneity between economic growth rates and educational attainment, including instrumental variables and the use of only initial levels of educational attainment, which are not affected by growth in the subsequent period.

8. For a cross-country analysis of the impact of increased gender equality in earnings on household savings and gross domestic savings, see Seguino and Sagrario (2003).

9. The countries in Deere and Leon's sample are Brazil, Chile, Colombia, Ecuador, Honduras, Mexico, Paraguay, and Peru. The gender difference in average farmland size is statistically significant in only two countries: Chile and Paraguay.

10. Direct evidence is largely lacking that women's disadvantage relative to men's with respect to land ownership translates into inferior outcomes for women in investment, productivity, and individual incomes. Much more research is needed to understand the efficiency and welfare effects of this disadvantage for women as farmers and as household heads.

11. An important exception is Latin America, where recent episodes of agrarian reforms and land titling programs recognized dual-headed households, conferred joint titles, and explicitly targeted female-headed households (Deere and Leon 2001).

12. When studies do examine how gender affects technology adoption, they typically do so by including a variable for female-headed households as an additional covariate in multiple regression analyses. The empirical evidence on the conditional relationship between the gender of the household head and technology adoption is decidedly mixed. Most studies find that, controlling for differing sets of relevant characteristics, female-headed households are either less likely than—or as likely as—male-headed households to adopt new technologies (Asfaw and Admassie 2002; Paolisso and others 2002; Wier and Knight 2000; Chirwa 2003; Doss and Morris 2001). A much smaller number of studies find that female-headed households are more likely to adopt new technologies than male-headed households (Bandiera and Rasul 2005).

13. Unlike the studies of the impact of women's control over resources using household surveys, the studies of the impact of transfer programs are argued to be free from the potential simultaneity between unearned or earned income and control over household resources.

14. Following UNESCO (2004), parity is defined as a female-to-male ratio exceeding 0.97. A ratio below 0.97 indicates significant female disadvantage. In 35 countries (of the 83 that achieved the 2005 target), there was significant male disadvantage, with boys' gross enrollment rate lagging behind girls' (the female-to-male ratio exceeded 1.03). In these countries, mostly countries of East Asia and the Pacific, Europe and Central Asia, and Latin America and the Caribbean, boys' enrollment exceeds 90 percent. Thus a male disadvantage tends to occur in education systems with overall high participation in schooling.

15. Net enrollment rates.

16. In Cambodia the share of women in the nonagricultural sector is about 53 percent, but the sector as a whole represents only 30 percent of total (male and female) employment—so only 16 percent of all employed women are in nonagricultural employment. Compare this with Latvia, where women's share in nonagricultural employment is also 53 percent, but the sector accounts for 86 percent of total employment, implying that 46 percent of all employed women are in this sector.

17. The fourth indicator, the proportion of seats held by women in national parliaments, is expressed as a proportion, but it is actually a measure of empowerment. While there has been a lot written on women's empowerment, there is no single accepted definition of empowerment. However, there is significant overlap in the words used to define the term: options, choice, control, and power—most often in the context of the ability of women to make decisions and affect outcomes that are important to them and their families (Malhotra and others 2002). Self-efficacy is also frequently an element of empowerment; women should be capable of defining self-interest and choice and be able and entitled to make choices (Chen 1992; G. Sen 1993; Rowlands 1995; A. Sen 1999; Nussbaum 2000; and Kabeer 2001; cited in Malhotra 2002).

18. This should not be interpreted as an argument for enrolling girls at the expense of boys,

once gender equality in enrollments has been achieved; rather, it simply notes that in order to measure the economic empowerment of women, absolute values matter, not just parity ratios.

19. Although an MDG6 indicator does measure contraceptive prevalence rate, this is problematic because it includes all forms of contraception, not just modern forms.

20. This is clearly the case not just for the MDG3 indicators, but for all MDG indicators.

21. This list of proposed indicators was culled from nearly one hundred indicators of gender equality that are currently used or recommended for use by the UN and sister agencies. They cover education, health, employment, violence against women, legal rights, and political voice. Their wide scope underscores the multidimensionality of gender equality.

22. The UN Millennium Task Force recommends replacing the existing four MDG3 indicators with 12 indicators, of which only two are current indicators (gross enrollment rates in primary, secondary, and tertiary education and percentage of seats held by women in the national parliament). Of the remaining ten proposed indicators, only four currently have enough data availability to be serious candidates as indicators: (1) ratio of female-to-male completion rates in primary, secondary, and tertiary education; (2) adolescent fertility rate; (3) proportion of contraceptive demand satisfied; and (4) share of women in employment, both wage and self-employment, by type. The remaining six (gender gaps in earnings in wage and self-employment; hours per day, or year, women and men spend fetching water and collecting fuel; land ownership, by male, female, or jointly held; housing title, by male, female, or jointly held; percentage of seats held by women in local government bodies; and prevalence of domestic violence) do not currently have sufficient data availability. For more details on these recommendations, see UN Millennium Project 2005a.

23. Survival to grade 5 is another measure of primary school completion rate. This indicator is not suitable for monitoring gender parity regarding completion, because it is based on the population of children enrolled in primary school and thus potentially excludes a large group of girls who never enroll in school. Girls who do enroll in school are more likely to be from advantaged backgrounds, especially in countries where discrimination against females is prevalent. Indeed, survival rates tend to be higher for girls than for boys, in all regions (UNESCO 2004).

24. A better measure would express the number of pupils graduating from the last grade of primary school as a proportion of the total number of children at the typical graduation age. But countries often do not report the number of primary graduates. Another shortcoming of this measure is that the primary school cycle varies greatly across countries. Although primary school in most countries lasts five to six years, there is a large variation in the length of the primary school (3 to 10 years) (UN Millennium Project Task Force on Universal Primary Education). This affects the comparability of the indicator across countries. It remains a useful indicator to measure gender equality in education, because it captures both access and quality of schooling.

25. To be discussed at the March 2007 meeting of the Inter-Agency and Expert Group for MDGs.

26. The adolescent (15–19) fertility rate, a closely related indicator, is being considered for inclusion in MDG5.

27. In countries of Sub-Saharan Africa and Latin America and the Caribbean, however, teenage childbearing before marriage or union is common. For example, data from Kenya and Colombia in 2003 show that close to 20 percent of teenage mothers were unmarried.

28. Based on Demographic and Health Surveys data.

29. The UN Millennium Project Task Force has recommended the indicator "share of women in employment, both wage and self-employment, by type." This chapter does not recommend using this indicator, although it is a valuable descriptive tool, because it is difficult or impossible to interpret as a measure of job quality. First, the share of women in any particular sector or employment must be put in the context of the overall importance of the sector to the economy as a whole. Second, there is enormous heterogeneity of job quality in each of the categories of employment; some self-employment is well remunerated and stable, while other self-employment is low-paid, unstable, and with no employment benefits. An alternative indicator of "percentage of women (as a share of female population) in remunerative employment" was explored, but not chosen because it was highly correlated with the existing MDG3 indicator of share of women in wage employment in the nonagricultural sector.

30. The reference period of the survey and the depth of questions that are asked influence the estimates of women's labor force participation. In developing countries, activities related to agriculture

predominate in rural areas, and large informal markets predominate in urban areas, where production often is home-based and mostly unregulated. The standard mode of eliciting information appropriate to developed country settings, therefore, is likely to yield much poorer estimates of labor force participation, particularly for women. Sociocultural practices can also affect data gathering. In strongly sex-segregated societies like those of South Asia, surveys using female enumerators to elicit information from women are generally better able to gather data on a range of topics, including data on work performed by women. Female enumerators tend to have better access to women in the households selected for the survey. In a setting where female work—especially paid work—has negative connotations, a male respondent such as the household head is likely to under-report female participation in labor.

31. Exceptions in these regions are Bolivia, Brazil, Nepal, and Uruguay where the female labor force participation rate exceeds 60 percent.

32. During the 1990s a number of countries in East Asia (such as Cambodia, Mongolia, and Vietnam) and Europe and Central Asia underwent a transition from a centrally planned economy to a market-based one. This transition was expected to affect gender wage differentials, but there is no consistent evidence of a widening or narrowing of the gap.

33. If the ranking were basically identical, the principle of parsimony would argue for retaining the existing indicators.

34. Empirical analysis was also carried out for the official MDG3 indicators against four recommended indicators (female-to-male primary completion rate, under-five mortality, female-to-male labor force participation rate, and DALYs). Because the sample size shrinks to 37 countries when labor force participation and DALYs are incorporated, the text discusses the comparison between the official and two of the proposed indicators (the female-to-male ratio of primary completion rate and the under-five mortality rate), with a sample of 54 countries.

35. We include only two of the proposed indicators because of sample size issues; were all the proposed recommended indicators included in one scatter plot, the sample size would shrink significantly.

36. Underregistrations of births and deaths are perhaps some of the most telling indicators of societal exclusion.

37. Analytical work in support of this recommendation and indicator was carried out by Women in Informal Employment: Globalizing and Organizing and the ILO, and reported in UNIFEM (2005).

38. Collecting data on intimate partner violence presents both methodological and ethical challenges. Methodologically, there is a tradeoff between the higher cost and greater accuracy of stand-alone surveys on intimate partner violence (such as the recent WHO multicountry study) and the lower cost and lower accuracy (such as underestimation of prevalence rates) of modules incorporated in other surveys, such as Macro International's DHS surveys (Ellsberg and others 2001). The principal ethical challenge of collecting data on intimate partner violence is to ensure that women respondents and interviewers are protected from potential retaliatory violence from the perpetrators of violence. WHO has recognized this challenge and has adopted a set of ethical guidelines for conducting population-based surveys on intimate partner violence (Watts and others 2001).

39. Outliers are defined as countries that fall in the highest or lowest 20 percent of the distribution of scores on gender equality.

40. A global ranking cannot be done because over 100 countries lack comparable data for 2000–05.

41. For reasons of space, trends in secondary enrollment and literacy rates are not pictured. Although they are not pictured, progress was notable for Algeria, Malawi, Nepal, Pakistan, and Sudan re literacy rates, and for Algeria, Cambodia, Malawi, and Nepal re secondary enrollment parity.

42. For reasons of space, trends in women's political participation, as measured by women's share in the national parliament, are not pictured. The top-quintile countries started off at levels similar to those of some bottom-quintile countries—the shares of Argentina, Mongolia, and Namibia were about the same as Guatemala, India, and Nepal. Since then, however, the top-quintile countries achieved much larger improvements in this dimension of gender equality. Two exceptions are Honduras and Mongolia, which lost ground after about 1990 and ended the period with levels below those of countries in the bottom quintile. In the bottom quintile, Morocco and Pakistan stand out because they made more significant gains than all other bottom-quintile countries. Indeed, Pakistan compares favorably to many top-quintile countries.

43. Law on Ensuring Equal Opportunities for Women and Men, No. 5-XVI of February 9, 2006.