Despite the hardships many women endure in their daily lives, things have changed for the better-and at a speed that would not have been expected even two decades ago. In four major areas-women's rights, education, health, and labor force outcomes-the gains in the second half of the 20th century were large and fast in many parts of the world. Improvements that took 100 years in wealthier countries took just 40 years in some low- and middle-income countries. Change has also been accelerating, with gender equality gains in every decade building on gains from the decade before.

## TIMES ARE CHANGING?

This chapter traces where progress has been made on gender equality and how. It starts with the evolution of women's rights and the fight for equality under the law. Equality of rights matters because a lack of rights can constrain the choices available to women in many aspects of life. Achieving them in today's high-income countries took considerable time. In contrast, gains under the law have occurred much faster in the developing countries, aided by a rising global consensus supporting formal rights and guarantees of equality for women.

In tandem with these gains in formal rights, low- and middle-income countries have seen unprecedented gains in outcomes for women, both in absolute terms and relative to men. More women are literate and educated than ever before, and the education gap with men has shrunk

dramatically. For younger cohorts, the gender gap in primary education enrollments has practically disappeared, and the gains in secondary and higher education have been enormous. Women are living longer and healthier lives in much of the world, in part because lower fertility has reduced their risk in childbirth. And they are participating more than ever in market work. Economic growth has driven much of the progress, through higher household incomes, better service delivery, and new labor market opportunities for women. But it has not been the only factor-the association between economic growth and better outcomes for women has been neither automatic nor uniform across countries.

Changes in one domain of gender equality have fostered change in others, influencing the next generation, reinforcing the whole process. For example, the expansion of economic opportunities for women in service industries in Bangladesh and India has boosted school enrollments for girls, which feeds into higher labor force participation and better educational outcomes for the next generation. ${ }^{1}$

This is not to say that all problems have been solved or that progress was easy. Indeed, chapter

2 looks at countries and population groups with continuing gender disadvantages as well as at the many facets of life where gender imbalances remain serious, even crippling. Delineating the areas of change provides a foundation for understanding the constraints to gender equal-ity-especially where they remain pervasive and deep. And this understanding can help in setting priorities for policy and public action.

## RISING GLOBAL CONSENSUS FOR WOMEN'S RIGHTS

The past three decades have seen great progress in securing women's formal rights and constitutional guarantees of equality. The Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), which the United Nations General Assembly adopted in 1979, established a comprehensive framework for the advancement of women. Ten years later, almost 100 nations across all continents had ratified this international bill of rights for women. And today, the number of signatories has almost doubled, to 187 countries.

More than 30 years in the making, CEDAW is the most widely supported international human rights treaty and the primary international vehicle for monitoring and advocating gender equality. Defining what constitutes discrimination against women and setting an agenda for national action, CEDAW is particularly concerned with civil rights, the legal status of women, reproductive roles and rights, and the impact of cultural factors on gender relations and on barriers to the advancement of women. It is the only human rights treaty to explicitly address decisions about family planning and family formation. Countries ratifying CEDAW are required to ensure that domestic legislation complies with it,


I know that [women] have many
rights: I can remember the right to education, the prohibition of the excision, and the prohibition to forced
marriage.


Adult woman, Burkina Faso
with progress monitored independently by the Committee on the Elimination of Discrimination against Women.

Despite being known in the 1980s as the "Cinderella treaty" for its vagueness of language and weak monitoring and sanctions, CEDAW has promoted legislative and administrative change. ${ }^{2}$ In 1998, it influenced Turkey's domestic violence act (Law No. 4320 Family Protection Law). Turkey's Constitutional Court also annulled requirements that husbands give permission for a wife's professional activities, making extensive references to CEDAW. ${ }^{3}$ Australia's Sex Discrimination Act 1984 draws on CEDAW to prohibit discrimination in public life on the basis of sex, marital status, pregnancy, or potential pregnancy.

In 2003, the African Union adopted the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa. Better known as the Maputo Protocol, it asserts women's rights to take part in the political process, to enjoy social and political equality with men, and to control their reproductive health. Article 5 refers to the "elimination of harmful practices," including ending polygamous marriage and female genital cutting. Of 53 African countries, 46 signed the protocol, and by February 2011,30 countries had ratified it. ${ }^{4}$

Under the auspices of the Organization of American States, all Latin American countries signed in 1994 the Belém do Pará InterAmerican Convention on the Prevention, Punishment and Eradication of Violence against Women. Since then, 28 nations have enacted laws with sanctions against domestic abuse.

These different international legal frameworks reflect the rising global consensus on equal rights for men and women-a consensus that did not emerge overnight but rather evolved from a long, slow struggle for equal rights for women that started in the advanced economies as early as the 18th century and continued in developing countries in the second half of the 20th century, reinforced by the emphasis on gender equality in the Millennium Development Goals (MDGs) (box 1.1).

## Equal rights in the advanced economies-A long time coming

Women's circumstances in the 18th century were very different than they are today. In 1789, the French revolution asserted that men are "born

## вох 1.1 Gender and the Millennium Development Goals

The 2010 MDG Summit concluded with a global action plan to achieve the eight MDGs by 2015. It also adopted a resolution calling for action to ensure gender parity in education and health, economic opportunities, and decision making at all levels through gender mainstreaming in the formulation and implementation of development policies. The resolution and the action plan reflect the belief of the international development community that gender equality and women's empowerment are development objectives in their own right (MDG 3), as well as critical channels for the achievement of the other MDGs. Gender equality and women's empowerment help to promote universal primary education (MDG 2), reduce under-five mortality (MDG 4), improve maternal mortality (MDG 5), and reduce the likelihood of contracting HIV/AIDS (MDG 6).

The 2010 resolution also stresses that achieving the MDGs will require coordinated interventions that target women and other vulnerable groups across sectors:

- Taking action to improve the number and active participation of women in all political and economic decision-making processes, including investing in women's leadership in local decision-making structures and creating an even playing field for men and women in political and government institutions
- Expanding access to financial services for the poor, especially women
- Investing in infrastructure and labor-saving technologies, especially in rural areas, that benefit women and girls by reducing their domestic burdens
- Promoting and protecting women's equal access to housing, property, and land, including rights to inheritance.

Source: WDR 2012 team.
and remain free and equal in rights" universally, but the Declaration of the Rights of Man and of the Citizen did not include women, and a year later, the National Assembly chose not to extend civil and political rights to women. The legal system in the British colonies, based on English common law, is another case. As Sir William Blackstone summarized in his Commentaries on the Laws of England in 1765:

By marriage, the husband and wife are one person in law: that is, the very being or legal existence of the woman is suspended during the marriage, or at least is incorporated and consolidated into that of the husband; under whose wing, protection, and cover, she performs everything; and is therefore called in our law-french a femme-couvert. For this reason, a man cannot grant anything to his wife, or enter into covenant with her: for the grant would be to suppose her separate existence.

The march toward equal property and suffrage rights has been slow and long. Only in 1857 did the British Parliament pass the Matrimonial Causes Act, allowing married women to inherit property and take court action on their own behalf. And not until 1882 did the Married Women's Property Act recognize a husband and a wife as two separate legal entities, conferring to wives the right to buy, own, and sell property separately. Suffrage was not universal until 1928, when, as a result of the Representation of the People Act, women over age 21 received the vote on equal terms as men. The story is similar in Scandinavia: Norway, for example, provided full economic rights to women in 1888 and suffrage rights in 1913.

In the United States, New York was the first state to pass, in 1848, a Married Women's Property Act. Wives' rights to earnings and property gradually spread to other states over the following half century. Political voice was longer in coming. A proposed constitutional amendment guaranteeing women's right to vote was introduced in the U.S. Senate in 1878, but it did not receive a full vote until 1887, only to be voted down. Three more decades elapsed before the 19th amendment to the constitution guaranteeing universal suffrage was ratified in 1920.

The struggle against discrimination in other domains, such as labor and family law, picked up momentum in the second half of the 20th century.

In the United States, until the passage of Title VII of the Civil Rights Act of 1964, women could legally be passed over for promotions in the workplace. Married women needed the consent of their husbands to obtain a loan. And marital rape was not recognized as a criminal act. ${ }^{5}$ Until the 1980s, female flight attendants were required to be single when they were hired and could be fired if they married.

In Germany in the early 1950s, women could be dismissed from the civil service when they married. And through 1977, they officially needed their husbands' permission to work. Until reunification with East Germany in 1990, children of single mothers were assigned a legal guardian. ${ }^{6}$

Japan's Equal Employment Opportunity Act of 1985 obliged employers merely to endeavor to treat men and women equally during job recruitment, assignment, and promotion. The mandate for equal treatment came about in
1997. The first domestic violence law was passed in 2001.

## Progress has been faster in low- and middle-income countries

Progress has been most notable for political rights, tied to a change in the concept of citizenship. National franchise movements gave shape to a more inclusive paradigm of the nation-state in the first half of the 20th century. Until then, citizenship had long been construed as "male." Extending suffrage in already established nation-states involved local social movements and social networks redefining citizenship only after a lengthy renegotiation of domestic political power. In contrast, new nations emerged into a "new world order." National and international organizations embraced a genderneutral model of citizenship, with women fully accepted as persons capable of autonomous decisions. ${ }^{7}$ Only three countries that became independent in the 1900s (Austria, Ireland, and Libya) extended suffrage to men before women. But Switzerland did not break with tradition and extend the franchise to women until 1971. Among the latest countries to give women the right to vote, Bhutan changed the practice of casting one vote per household and adopted women's full suffrage in 2008. Today, only Saudi Arabia restricts the franchise to men and removing this restriction for municipal elections is under consideration.

Similar progress has been made in women's rights beyond full suffrage. In the Philippines, sweeping legislative changes in the 1980s and 1990s recognized gender equality across a wide array of domains. The 1987 constitution reinforced earlier constitutions by giving added emphasis to the notion of gender equality. The Comprehensive Agrarian Reform Law of 1988 assured equal rights to ownership of land. And a 1989 act amended the Labor Code to protect women from discrimination in hiring and pay. Similarly, in 2004, Morocco overhauled its family code to promote greater equality between women and men in multiple spheres.

The ratification of CEDAW and other international treaties established a comprehensive framework to promote equality for women. These treaties spurred further progress toward securing formal rights in other domains of women's lives, in large part by facilitating new legislation or promoting the repeal of discrimi-
natory legal provisions. In 2005, the Kenyan Court of Appeal held that there was no reasonable basis for drawing a distinction between sons and daughters in determining inheritance. In 2001, the Tanzanian High Court held that a widow is entitled to administer the estate on behalf of her children. In both cases, principles of equality and nondiscrimination prevailed.

## BETTER OUTCOMES FOR WOMEN IN MANY DOMAINS

The march for women's rights has gone hand in hand with better outcomes for many womenboth in absolute terms and relative to men. During the past quarter century, sustained growth in many countries has reduced disparities on some dimensions of gender equality. And the pace of change in these outcomes has been much faster in today's low- and middle-income countries than it was in high-income countries. That can be seen in indicators as varied as fertility, female education and literacy, and female labor force participation. In most countries where broad-based income growth has combined with better institutions for service delivery and more economic opportunities for women, the improvements in these indicators have been dramatic-and in some cases at rates never before witnessed.

Moreover, they occurred along some dimensions even in the face of social turmoil or significant institutional challenges. Consider Bangladesh, Colombia, and the Islamic Republic of Iran.

Starting from a low base, the Bangladesh economy has almost tripled since 1980. The Bangladesh constitution, adopted in 1972, guaranteed equal rights to all citizens, regardless of gender, religion, or other social divisions, and reserved 15 parliamentary seats for women, later increased to 30 . In 1975, the government reserved 10 percent of public jobs for women and created a special Ministry of Women's Affairs. Outcomes for women also improved dramatically on various fronts:

- From 1971 to 2009, the total fertility ratethe number of children a woman is expected to have through her reproductive years-declined from 6.9 children to 2.3 .
- Between 1991 and 2005, the number of girls in school increased from 1.1 million to 4 mil-
lion. Female enrollment climbed from 33 percent of the total to 56 percent, with somewhat smaller increases among girls from the poorest two quintiles.
- The labor force participation of young women (ages 20-24) increased almost two and a half times over 1995-2000. Although overall labor force participation remains low, the expansion of employment opportunities for young women (linked to the growth of the garment industry, health services, and social work) has increased girls' school enrollment and lifted social restrictions on female mobility, allowing for a visible feminization of public spaces (chapter 6). ${ }^{8}$

The economy of Colombia, an upper-middleincome country in Latin America, has expanded over one and a half times since 1980. Following upheavals and a recession in 1999, it stabilized after 2002. Colombia has also long been beset by violence and the illegal drug trade. One remarkable feature is the improvement in women's status in the past 25 years:

- From 1986 to 2005 , the total fertility rate dropped from 3.2 children to 2.4 .
- Women reversed the education gap and now have higher completion rates than men for primary, secondary, and even tertiary education. The last is particularly striking given that in 1984 almost twice as many men relative to women were college educated.
- In 1980, the labor force participation of Colombian females in the 13 largest cities was the second lowest in the region (above only Costa Rica), but by 2004, it was the second highest, next to Uruguay. Remarkably, the largest increases were among women with children ages $0-6$-women least likely to work in most countries. And the representation of women is high in managerial positions and in finance-the glass ceilings notoriously hard to break in many advanced economies.

The Islamic Republic of Iran's economy has almost doubled since 1980. And human development outcomes among Iranian women have consistently improved along some key dimensions in the aftermath of the Islamic revolution:

- From 1979 to 2009, the Islamic Republic of Iran saw the world's fastest decline in fertil-ity-from 6.9 children to 1.8 (below replacement).
- The female-to-male ratio in primary school is the world's highest, with 1.2 girls enrolled for every boy. The number of women in secondary school as a percentage of the eligible age group more than doubled from 30 percent to 81 percent, and in 2009, more than half of all Iranian university students, 68 percent of the students in science, and 28 percent in engineering were women.
- Women make up 30 percent of the Iranian labor force today, with the percentage of economically active women having increased from 20 percent in 1986 to 31 percent in 2008.

Each of these three societies has faced some circumstances commonly viewed as constraining gender equality. Yet in all of them, income growth, better institutions for service delivery, and new market opportunities for women have contributed to greater gender equality in health, education, and labor market outcomes even as women in these countries continue to face significant challenges in other aspects of their lives.

## More girls in school

More women are literate than ever before. Between 1950 and 2010, the average schooling for women over age 15 in low-income countries increased from 1.5 years to 6.5 . Compare that with an increase from 2.6 years to 7.6 for men-and with current averages in adult high-income populations of 10.9 years for women and 11.2 years for men. ${ }^{9}$ Because the adult population includes older people who do not increase their educa-

Child marriages have stopped. Girls are being sent to school. Even the poorest of us are sending our daughters to school.

## FIGURE 1.1 Gender parity in enrollments at lower levels has been achieved in much of the world, and tertiary enrollments now favor women



Source: WDR 2012 team estimates based on World Development Indicators.
Note: The $45^{\circ}$ line in each figure above shows gender parity in enrollments. Any point above the $45^{\circ}$ line implies that more women are enrolled relative to men.
tion, these rising averages reflect even greater changes among young cohorts. In the United States, it took 40 years, from 1870 to 1910, for the share of $6-12$-year-old girls in school to increase from 57 percent to 88 percent. Morocco did the same in 11 years from 1997 to 2008.

These younger cohorts in all world regions have experienced steady and sustained improvement toward greater gender equality in primary education. In the past decade, female enrollments have grown faster than male enrollments in the Middle East and North Africa, South Asia, and Sub-Saharan Africa. Gender parity has been reached in 117 of 173 countries with data (figure 1.1). Even in regions with the largest gender gaps-South Asia and Sub-Saharan Africa (particularly West Africa)-gains have been considerable. In 2008, in Sub-Saharan Africa, there were about 91 girls for every 100 boys in primary school, up from 85 girls in 1999; in South Asia, the ratio was 95 girls for every 100 boys.

The patterns are similar in secondary education, with one notable difference. In roughly one-third of developing countries (45), girls outnumbered boys in secondary education in 2008 (see figure 1.1). Although the female gender gap tends to be higher in poorer countries,
boys were in the minority in a wide range of nations including Bangladesh, Brazil, Honduras, Lesotho, Malaysia, Mongolia, and South Africa.

Tertiary enrollment growth is stronger for women than for men across the world. The number of male tertiary students globally more than quadrupled, from 17.7 million to 77.8 million between 1970 and 2008, but the number of female tertiary students rose more than sevenfold, from 10.8 million to 80.9 million, overtaking men. Female tertiary enrollment rates in 2008 lagged behind in only 36 developing countries of 96 with data (see figure 1.1). In Tunisia, 59 percent of the 351,000 students enrolled in university in 2008 were women. As chapter 6 shows, this increase in female enrollment is consistent with an increasing demand for "brain" rather than "brawn" jobs in a globalizing world.

Although boys are more likely than girls to be enrolled in primary school, girls make better progress-lower repetition and lower dropout rates-than boys in all developing regions. ${ }^{10}$ According to international standardized student achievement tests, girls tend to outperform boys in language skills, while boys tend to have a smaller advantage over girls in mathematics.

The 2009 Program for International Student Assessment shows that 15 -year-old girls in all participating countries performed better than boys in a reading test.

Economic growth has lowered the barriers to school entry for millions of boys and girls throughout the world and reduced gender inequality in schooling, particularly as countries move from lower to middle and higher incomes. ${ }^{11}$ First, as countries prosper economically, the supply of services by government or other service providers increases. Second, rising incomes erode the need for families to differentiate educational investments across children, on the basis of gender, birth order, or any other reason, as they face less stringent budgets. ${ }^{12}$ Because more girls than boys had been out of school, overall improvements in enrollments tend to reduce gender differences. Third, as growth opens new employment opportunities for women in sectors that demand a certain level of skills, such as light manufacturing or services, incentives for parents to invest in their daughters' education increases, because that education now yields a greater return.

Eliminating school fees has had a similar effect in increasing overall enrollments and reducing gender differences. The free primary education programs across Sub-Saharan Africa have had an overwhelming response. In their first year, student enrollments climbed 68 percent in Malawi and Uganda and 22 percent in Kenya. ${ }^{13}$

States have also mandated and enforced participation in schooling through compulsory education laws. Mass education systems expanded quickly after World War II, and universal education laws can now be found in almost all nations. ${ }^{14}$ Such laws, usually combined with large infrastructure and human resource investments to enhance service delivery, have brought more children into school throughout the world. In 1997, Turkey sought to increase educational opportunities for children ages 11-13 years, particularly rural girls, by expanding mandatory education from five years to eight. With the launch of the Basic Education Program, enrollments jumped by 1.5 million children. Net enrollment rates, on the decline between 1991 and 1997, then rose from 86 percent in 1997 to 96 percent in 2002. Gains for rural girls were particularly impressive, jumping 160 percent in the program's first year alone in the nine provinces (of 81 ) with the greatest gender disparity. ${ }^{15}$

Gender now explains very little of the remaining inequality in school enrollment (figure 1.2). In a large number of countries, a decomposition of school enrollments suggests that wealth is the constraining factor for most, and in only a very limited number will a narrow focus on gender (rather than poverty) reduce inequalities further (chapter 3). ${ }^{16}$

## Healthier lives

The second half of the 20th century also saw large improvements in men's and women's health. Life expectancy at birth most clearly reflects improvements in health in populations across the world. The average number of years women could expect to live rose from 54 ( 51 for men) in 1960 to 71 ( 67 for men) in 2008. This period also saw the world's fastest ever decline in fertility-from an average of about 5 births per woman in 1960 to 2.5 in 2008, lowering the number of deaths associated with maternal mortality. And bearing fewer children has given women more time to invest in acquiring human capital and to participate in market work.

In most world regions, life expectancy for both men and women has consistently risen, with women on average living longer than men. The gap between male and female life expectancy, while still rising in some regions, stabilized in others. On average, life expectancy at birth for females in low-income countries rose from 48 years in 1960 to 69 years in 2008, and for males, from 46 years to 65 . Mirroring the worldwide increase in life expectancy, every region except SubSaharan Africa added between 20 and 25 years of life between 1960 and today (figure 1.3). And since 1980, every region has had a female advantage in life expectancy.

But there have been notable reversals. In Eastern Europe and Central Asia, women's advantage in life expectancy increased partly because of a sharp increase in male mortality, with the differences apparently increasing over time (see figure 1.3 for Ukraine). In some SubSaharan countries, the ravaging effects of AIDS, especially for women, are evident. Since 1990, gains in female life expectancy relative to men have shrunk (see figure 1.3 for Botswana).

Increases in female life expectancy have been driven in part by a significant decline in the risk of mortality during one of the most dangerous periods in a woman's life-the early reproductive years and the experience of childbirth. First, the

FIGURE 1.2 Gender explains little of the inequality in education participation for children 12-15 years old


Source: WDR 2012 team estimates based on Demographic and Health Surveys.
Note: The measure of inequality refers to the percentage of total opportunities that must be reallocated to ensure that all the circumstances groups have the same average coverage rate. Low inequality is between 0.3 percent and 2.1 percent, moderate inequality is between 2.3 percent and 6.4 percent, and high inequality is between 6.5 percent and 26.7 percent. Results are sorted by size of gender contribution to total inequality.
risk of death per birth declined. During 19902008, 147 countries experienced declines in the maternal mortality ratio, 90 with a decline of 40 percent or more. ${ }^{17}$ The Middle East and North Africa had the largest decline ( 59 percent), followed by East Asia and Pacific ( 56 percent) and South Asia ( 53 percent). Second, the exposure to the risk of death was lower because of dramatic declines in fertility rates all over the world. With women choosing to have fewer children, the lifetime risk of death from maternal causes declined, even where the risk of death during each birth changed little.

In most developing countries, fertility rates fell sharply in a fairly short period. These declines were much faster than earlier declines in today's rich countries. In the United States, fertility rates fell gradually in the 1800s through 1940, increased during the baby boom, and then leveled off at just above replacement. In India, fertility was high and stable through 1960 and then sharply declined from 6 births per woman to 2.3 by 2009. What took the United

States more than 100 years took India 40 (figure 1.4). Similarly, in Morocco, the fertility rate fell from 4 children per woman to 2.5 between 1992 and 2004.

On various other aspects of health status and health care, differences by sex are small. In many low-income countries, the proportion of children stunted, wasted, or underweight remains high, but girls are no worse off than boys. In fact, data from the Demographic and Health Surveys show that boys are at a slight disadvantage. ${ }^{18}$ In Brazil, Côte d'Ivoire, and Vietnam, men's and women's heights are increasing at almost identical rates, while in Ghana women's heights have increased more rapidly than those of men. ${ }^{19}$ In many countries, children's and adults' anthropometric outcomes do not allow them to reach their full potential, but an individual's sex is not the main culprit. North Indian states are a notable exception; women have grown taller at a much slower rate than men, and girls' anthropometric outcomes remain worse than boysboth in levels and in changes over time. ${ }^{20}$

FIGURE 1.3 Women are living longer than men


[^0]figure 1.4 What took the United States 100 years took India 40 and the Islamic Republic of Iran 10


Source: http://www.gapminder.org.

Similarly, there is little evidence of systematic gender discrimination in the use of health services or in health spending. Out-of-pocket spending on health in the 1990s was higher for women than for men in Brazil, the Dominican Republic, Paraguay, and Peru. ${ }^{21}$ Evidence from South Africa reveals the same pro-female pattern, ${ }^{22}$ as does that for lower income countries. In the Arab Republic of Egypt, more was spent per capita on outpatient services for females ( 68 Egyptian pounds a year) than on male health care (58). ${ }^{23}$ The gender difference in amounts spent on inpatient services also favored females but much less. In Ghana, females absorbed more of a health subsidy than males did ( 56 percent of overall health spending in 1992). Evidence from India, Indonesia, and Kenya tells a similar story. ${ }^{24}$

For preventive health services such as vaccination, poverty rather than gender appears to be the major constraining factor (figure 1.5). ${ }^{25} \mathrm{As}$ with education enrollments, a decomposition

FIGURE 1.5 Gender explains little of the inequality in use of preventive health services


Source: WDR 2012 team estimates based on Demographic and Health Surveys.
Note: The measure of inequality refers to the percentage of total opportunities that must be reallocated to ensure that all the circumstances groups have the same average coverage rate. Low inequality is between 1.0 percent and 3.2 percent, moderate inequality is between 3.4 percent and 5.2 percent, and high inequality is between 5.2 percent and 22.0 percent. Results are sorted by size of gender contribution to total inequality.
suggests that only a handful of countries have high inequality in measles vaccinations (other vaccines are even more universal) and where gender is a major contributing circumstance.

## More women participate in market work

Female labor force participation has grown since 1960, dramatically in some regions. Expanding economic opportunities have drawn large numbers of new female workers into the market. Between 1980 and 2008, the global rate of female labor force participation increased from 50.2 to 51.8 percent while the male rate fell slightly from 82.0 to 77.7 percent. So the gender gap narrowed from 32 percentage points in 1980 to 26 percentage points in 2008 (figure 1.6). ${ }^{26}$

Driving the convergence across countries are large increases in participation in countries that started with very low rates (primarily in Latin American and the Caribbean and in the Middle East and North Africa) combined with small declines in countries that started with very high rates (primarily in Eastern Europe and Central Asia). Participation rates now exceed 50 percent in Sub-Saharan Africa, East

Asia and the Pacific, Europe and Central Asia, and Latin America and the Caribbean, while more than 60 percent of women remain economically inactive in South Asia and the Middle East and North Africa.

Labor force participation increased markedly for women with more education, but declined among women ages $15-24$, who have remained in school longer, slowing the growth in overall participation since 1990.

Around the world, for very poor countries, female labor force participation is high, reflecting a large labor-intensive agricultural sector and significant numbers of poor households. ${ }^{27}$ In this situation, women are willing to enter the labor force even at fairly low wages because unearned incomes are also low. As per capita incomes rise, unearned income rises (through higher male wages and earnings), and these higher incomes are typically associated with women withdrawing from the labor market. Social barriers against women entering the paid labor force also regain prominence, and their participation rates fall. But as countries continue to develop, further increases in women's

## FIGURE 1.6 The gender gap in labor force participation narrowed between 1980 and 2008



Source:WDR 2012 team estimates based on International Labour Organization 2010.
Note: The $45^{\circ}$ line in the figure above shows parity in the values on the vertical and horizontal axis.
figure 1.7 Across countries, at every income level, female labor force participation increased between 1980 and 2008


Source: WDR 2012 team estimates based on International Labour Organization 2010.
education and wages move them back into the labor market.

The relationship between economic development and female labor force participation,
estimated on the basis of data from 130 countries around 1980 and 2008, highlights these two features (figure 1.7). First, there is a clear U-shape relationship across countries at different incomes for both periods. Second, the participation rate associated with each level of development increases over time-the U-shaped curve moves upward as time passes. So at each level of income, more women were participating in market work in 2008 than in 1980.

Changes in education and family structure have also driven women's employment over time. Delays in the timing of marriage and childbearing as well as lower fertility have brought more women into the labor market, ranging from as little as 7 percent in Bolivia to about 30 percent in Argentina and Colombia, and contributing an average of 21 percent overall to the rise in female labor force participation across 10 Latin American countries. An additional 42 percent of the rise in female labor force participation in Latin America can be attributed to more education-in Panama, education accounts for as much as 81 percent. Urbanization, household technology, and the sectoral structure of the economy appear to matter much less in bringing women into the labor force. ${ }^{28}$

## CHANGE BEGETS CHANGE

A notable transformation has taken place around the world with impressive gains in women's rights, educational attainment, health outcomes, and labor force participation. Positive feedback loops between gains in these different areas explain why change has been so quick in the developing world.

Improvements in one area (higher education) can drive changes in other areas (such as lower fertility and higher labor force participation). Similarly, better labor opportunities can in turn induce more investments in education and in women's health for the next generation, while equal rights can underpin progress on all fronts. Conversely, a lack of improvement in, say, rights can hold back improvements in women's access to market work, and failures to redress gender gaps can impair a whole range of health outcomes for women. Understanding these feedback loops is important for policy design. So is understanding the constraints to progress, and whether they are rooted in what happens in
households, in how markets operate, or in institutions (formal and informal).

## New labor market opportunities can spur investments in education and health for girls

How much parents invest in their children's education is partly determined by the returns to that education. Early studies showed that new agricultural technologies that favored women's production increased girls' enrollment. ${ }^{29}$ A new generation of studies extends these insights in a globalizing economy.

For instance, the rise of outsourcing in India offers new opportunities for women in the wage sector and increases parental investments in girls' education. ${ }^{30}$ Recruitment services that informed families about new employment opportunities for Indian women increased the chances of girls ages $5-15$ years to be in school by 3 to 5 percentage points but had no effect on boys. ${ }^{31}$ The girls also had higher body mass index (a measure of health) and were 10 percent more likely to be employed in wage work. Perceived improvements in the likelihood of a job triggered investments in human capital for girls even when there were no changes in other potential limiting factors, such as poverty, cost, or distance to school. Evidence of greater returns was enough to stimulate greater human capital accumulation.

It has often been posited that cultural and social norms (or "informal institutions" in the Report's framework) "hold back" human capital investments. So, many policy efforts try to change the status quo by trying to nudge norms. The results here present an alternative routeexpand economic opportunities, and human capital investments in girls will increase. Markets can affect private household decisions, even with slow-moving social norms.

## Investing in the future

A similar consideration-linking parental investments in education and returns down the line-underpins the relationship between health and schooling. At its starkest, lowering the risk of death should lead to greater human capital accumulation during childhood. Put simply, the longer you get a payout from your investment, the more attractive it is to make that investment. If the risk of dying from childbirth is high, parents factor in this risk and reduce investments in daughters.

Perhaps the clearest demonstration of the link comes from declines in maternal mortality. Life expectancy rose sharply in Sri Lanka between 1946 and 1953 as a result of declines in maternal mortality ratios, from 180 per 1,000 live births to 50 . Given that women had 5 children on average, 1 in 10 women died giving birth before these declines-a huge risk. Using variation in the timing of the declines in different parts of the country, one study shows that the overall declines in maternal mortality ratio boosted female life expectancy by 1.5 years, female literacy by 1 percentage point, and female education by 0.17 years. ${ }^{32}$

Given that a reduction in the maternal mortality ratio also reduces maternal morbidity, it increases the ability of women to participate in the labor force. Evidence from the United States shows that in 1920 one in six women suffered from a long-term disability incurred in childbirth. A sharp decline in maternal mortality resulting from the discovery of sulfa drugs in 1936 (and their immediate widespread use) went hand in hand with dramatic improvements in health for women after childbirth. Improvements in the conditions of childbirth were the biggest force behind the rise in married women's labor force participation in the United States between 1920 and 1950. ${ }^{33}$

Who would have thought that the fastest way to increase female labor force participation in the United States at the beginning of the 20th century would be to reduce maternal mortality? Households, markets, social norms, and formal institutions are inextricably connected, and the key is to find ways to stimulate progress in all domains. For reducing maternal mortality, chapter 3 shows that income or household actions are less powerful than effective institutions-and public investments are critical.

## What are your hopes for your daughter's future?

She must be bright and intelligent, educated, and look after this community. For my sons, they must be educated to take ownership of land, build permanent houses, and develop this community. $)$

Adult woman, Papua New Guinea

## Choosing differently

Recent findings suggest that women's rights and agency play a role seeing that those public investments are made. In a world where women care about different things from men (and women do appear to care for children more than men do), it may be that when women have more voice, they can drive institutional investments in a way that favors children. So, when women have more rights in the political arena, does the nature of public investment change? Yes.

Recall that in the United States women won voting rights state by state over the 19th century until they were federally mandated by constitutional amendment in 1920. Public health spending increased dramatically as women won the right to vote. The Sheppard-Towner Maternity and Infancy Protection Act of 1921 provided federal funding for maternity and child care. According to one observer,

> Indeed, fear of being punished at the polls by American women, not conviction of the bill's necessity, seems to have motivated Congress to vote for it. As one senator admitted to a reporter from the Ladies Home Journal, if the members of Congress could
have voted on the measure in their cloak rooms, it would have been killed as emphatically as it was finally passed out in the open. ${ }^{34}$

Growth in public spending led to the scaling up of intensive door-to-door hygiene campaigns and to a sharp decline in child mortality by 8 to 15 percent. Roughly 20,000 child deaths were averted every year because women won the right to vote. A variant of these broad results has also been documented in Switzerland, with the additional twist that women seem to have become more supportive of health and welfare expenditures over time than men. ${ }^{35}$ For Europe, the results suggest that female suffrage increased spending on health, education, and welfare expenditures over time. ${ }^{36}$

## Intergenerational cycles

The links across sectors also play out over time. Recent studies show that, in England and the United States, more maternal education leads to a host of better outcomes for children-better education and better health. For children ages $7-8$, an additional year of mother's schooling increases the child's performance on a standard-

FIGURE 1.8 Who agrees that a university education is more important for a boy than for a girl?


[^1]figure 1.9 Who agrees that when jobs are scarce, men should have more right to a job than women?


[^2]ized math test and reduces the incidence of behavioral problems. ${ }^{37}$ Similar results document the link between maternal education and child education in low-income countries, where even a single year of maternal education can make a large difference. Children of mothers with a single year of education in Pakistan spent an additional hour every day studying at home and reported higher test scores. ${ }^{38}$

The intergenerational impact of female education is not restricted to the home. Contemporaneous and intertemporal links came together in the rise of private schooling in Pakistan, which exploded after $1990 .{ }^{39}$ A curious feature of the expansion was that these private schools were overwhelmingly located in villages where a public girls' secondary school had existed a decade earlier. By establishing secondary schools for girls in rural areas, the government created a cohort of teachers who could then teach children at the primary level in the next generation. The students of today became the teachers of tomorrow. An institutional improvement (public secondary schools for girls) enabled a household response (more girls with secondary education) that then played out in a change in the market (private schools and more female employment opportunities) one generation later.

## Changes in attitudes

Upholding rights also has a ripple effect in social mores and attitudes. The World Values Survey provides a window on how social perceptions have shifted. Traditionally, social attitudes toward women have given primacy to their domestic roles as mothers and homemakers. Progressively, social norms appear to be shifting to be more accepting of women as social actorsacross a large number of countries with data, even if significant differences remain across countries.

Women are increasingly considered to have equal standing with men in access to tertiary education and participation in the labor force. In most countries with data, there has been a significant reduction in the share of people who believe that "university is more important for men than for women" and "men should have more right to a job than women when jobs are scarce" (figures 1.8 and 1.9). In Turkey, the share of individuals concurring that higher education is preferable for men fell from 34 to 20 percent in 10 years.

## NOTES

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26. International Labor Organization 2010.
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28. Chioda, Garcia-Verdú, and Muñoz Boudet 2011.
29. Bardhan 1974; Rosenzweig and Schultz 1982; Foster and Rosenzweig 1999.
30. Oster and Millet 2010.
31. Jensen 2010.
32. Jayachandran and Lleras-Muney 2009.
33. Albanesi and Olivetti 2009; Albanesi and Olivetti 2010.
34. As cited in Miller 2008.
35. Funk and Gathmann 2007.
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37. Currie and Moretti 2003; Carneiro, Meghir, and Parey 2007.
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[^0]:    Source: WDR 2012 team estimates based on World Development Indicators.

[^1]:    Source: WDR 2012 team estimates based on World Values Surveys, 1994-99 and 2005-07 waves.
    Note: The $45^{\circ}$ line in the figure above shows parity in the values on the vertical and horizontal axis.

[^2]:    Source: WDR 2012 team estimates based on World Values Surveys, 1994-99 and 2005-07 waves.
    Note: The $45^{\circ}$ line in the figure above shows parity in the values on the vertical and horizontal axis.

