



Women, Sports, and Development: Does It Pay to Let Girls Play?

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The practice of sport is a human right. Every individual must have the possibility of practicing sport, without discrimination of any kind and in the Olympic spirit, which requires mutual understanding with a spirit of friendship, solidarity and fair play.

—Olympic Charter¹

A woman's place is on home, first, second, and third.

—*A League of Their Own*, 1992²

From the pulse-racing fight for hockey gold between Team Canada and Team USA, to Darya Domracheva's three straight biathlon wins, to Dutch speed skater Ireen Wüst becoming the most decorated athlete at the Games, the Winter Olympics in Sochi in February reminded us that women have come a long way in the world of sports. First allowed to join men in

1. The charter is available at www.olympic.org/Documents/olympic_charter_en.pdf.

2. Tagline for the 1992 film *A League of Their Own*, a fictionalized account of the formation of the All-American Girls Professional Baseball League.

1900, female Olympians were initially limited to lawn tennis, croquet, and golf. By 2014 ski jumping has followed boxing as the newest sport open to women, and women and men now compete in nearly all the Olympic sporting events.

The Olympics is an elite arena where a handful of the world's most talented athletes compete, but the Games are also a snapshot of current trends. Women's gains in the Olympics have tracked trends in women's participation in political and economic life. With about half of the world's countries participating, and hundreds of millions of people watching, the Olympics emphasizes the importance of sports and is a symbol for what girls can strive for.

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While most girls who participate in athletics do not reach the Olympics, studies show that they do receive important and far-reaching benefits throughout their lives and that these effects reinforce and enhance each other, with comparable benefits for societies as a whole. It is well known, for example, that increasing women's access to education and labor markets has similar multiplier effects on women and their societies, but it is increasingly understood that access to sports and physical activity can add to the benefits in these areas.

This Policy Brief reviews the evidence that young women and youth in general who participate in sports are more likely to attain educational success and specifically that girls who play sports do better in school, suffer fewer health problems, achieve more in areas dominated by men, such as science, and hold better jobs as adults. The trend is especially striking among girls from minority groups, who appear to experience greater social and economic mobility, more confidence, and even more personal safety if they have participated in sports. In developing countries, sports can help women overcome cultural and

economic barriers to their advancement and therefore benefit their societies as a whole.

The costs of improving sports programs for women can be high, especially in poor societies where the leadership seeks to concentrate on basic issues of health and literacy. But investing in sports programs for women can yield a significant payoff. Countries should increase opportunities for girls and women to participate in sports.

Among the steps recommended in this Policy Brief are incorporating physical education programs in primary and secondary school, training teachers in gender sensitivity in physical as well as mental activities, and guaranteeing equal access to facilities, equipment, and mentors. The Title IX requirements in the United States, while not perfect for some countries, provide an instructive model. Finally, countries should showcase the achievements of female athletes and enlist the world of sports to promote their women achievers as role models. The Olympics proves the value of symbolism in that regard.

GIRLS AND SPORTS: SPRINTING INTO THE FUTURE

A growing body of literature has established a strong link between youth sports participation and educational achievement (see, for example, Cornelißen and Pfeifer 2006; Miller et al. 2005; Videon 2002). Sports provide useful labor force attributes: the ability to be a team player, to compete, and to win and lose with grace. Studies show that, on average, former college athletes earn a wage premium over others. Annual wages of former athletes, all other factors held constant, are on average about 7 percent higher than those of nonathletes.³ In addition to the ethical value of offering women the same access to these gains as men, research indicates that this positive relationship between participation in sports and educational and professional success applies as strongly, or even more strongly, to girls and women.

The Title IX program in the United States offers a unique set of conditions with a decades-long time series of data. Enacted in 1972, Title IX mandated equal access to sports in public schools for boys and girls. Title IX's mandate was national, but implementation was determined by local variables. Since the objective was equal access, the opportunities that became available to girls were determined by the existing level of male sports participation and not by any factor related to the girls who could choose or not to participate. As such, Title IX serves as a random control experiment for testing the benefits of allowing girls greater opportunity to participate in athletics.

3. See Curtis, McTeer, and White (2000); Henderson, Olbrecht, and Polachek (2005); Polachek (2004); and Stevenson and Wolfers (2012).

Title IX had a strong impact on female participation in sports in the United States. Before 1972, only about 3 percent of high school girls participated in sports, and these sports were generally limited to those viewed as feminine, such as cheerleading and square dancing. Female college athletes received only about 2 percent of overall athletic budgets. By 1998, the proportion of female high school students participating in athletics had risen to 1 in 3—compared with about 1 in 2 boys (Lopiano 2000, Stevenson 2010).

Numerous studies have drawn upon this dataset and generally find that girls who play sports in school tend to do better in school, resort less to drugs, have better health, and have better workplace outcomes than those who do not.⁴ Positive academic results associated with participating in high school athletics seem to be even stronger for girls than for boys.⁵ Female high school athletes have a better chance of graduating from both high school and college. Female athletes from ethnic minority groups reported better school grades and greater involvement in extracurricular activities than their nonathlete counterparts and in some cases were considerably less likely to drop out of school.⁶ Studies have also suggested that sports participation can help girls overcome traditional gender stereotyping in academic aptitude. Sandra Hanson and Rebecca Kraus (1998, 1999) link high school girls' participation in sports with a positive effect on their achievements in science, traditionally a male field.

High school sports also help propel girls to better labor market outcomes as women. Betsey Stevenson, in her 2010 comprehensive study of the impact of Title IX, shows that a 10-percentage-point rise in state-level female sports participation generates a 1 to 2 percentage point rise in female labor force participation. Stevenson also shows that greater opportunities to play sports lead to greater female participation in previously male-dominated occupations, particularly those that are high-skill.

4. Stevenson finds the positive gains associated with sports participation by girls to be treatment effects, caused by participation in sports, rather than selection effects (that is, the relationship is not determined by the type of student who chooses—and is able—to participate in high school athletics being more successful due to other factors). Nicola Persico, Andrew Postlewaite, and Dan Silverman (2004) also find that taller youth earn greater wages, and see participation in high school sports as the mediating factor. Some studies suggest a reverse correlation: Anne Case, Christina Paxson, and Mahnaz Islam (2008) find that height is correlated with cognitive ability and that more advantaged children have earlier growth spurts and are taller as adults. Stevenson (2007) finds that sports participation is greater among children from more advantaged backgrounds.

5. See Crosnoe (2001); Hanson and Kraus (1998); Sabo, Melnick, and Vanfossen (1993); Miller et al. (2005); Stevenson (2007); Bailey, Wellard, and Dismore (2005); for a dissenting view, see Videon (2002).

6. See Troutman and Dufur (2007); Greendorfer, Lewko, and Rosengren (2002); Stevenson (2007); Sabo, Melnick, and Vanfossen (1989); and Sabo et al. (1998).

GIRLS, SPORTS, AND DEVELOPMENT: EXTENDING THE GAINS

The US case offers strong evidence of the positive effects of girls' access to sports. Allowing girls the same access to sports as boys can help them stay healthier, perform better in school, and do better in the labor market. Sports can serve as an effective and relatively low cost vehicle for boosting countries' gender equity performance.

Given the much-cited and tested benefits of gender equity,⁷ equalizing access to sports should be a priority for policymakers in countries where gaps persist, particularly in developing countries. The benefits of gender equity in terms of development and growth gains are well recognized, underscored by the inclusion of gender equity as one of eight Millennium Development Goals. As seen in table 1, while significant progress has been made, many countries have not yet reached the targets.⁸

The connection between sports participation and female social/economic mobility in developing countries is increasingly being recognized. Box 1 describes some of the programs in different parts of the world.

However, in many developing nations, women face significant barriers to participating in sports. One of these is the persistence of strictly enforced gender roles and legal and cultural restrictions on movement. In India, for example, where although women like wrestler Sonika Kaliraman and tennis star Sania Mirza are paving the way for women in sports, girls do not participate widely in athletics. Among the reasons are lack of encouragement from parents and family members and tradition: Because women have not commonly participated in sports in the past, girls face criticism for wanting to do so.

Afghanistan's women's cricket team captain, Diana Barakzai, cites the challenges to involving girls in sport, including that women "are victims of unacceptable rules that prevented them leaving the house."⁹ The CEO of the Afghanistan Rugby Federation, Asad Ziar, underlines the cultural complications to introducing women's sports: "Promoting women's rugby requires a lot more from us. There are no private grounds and it's impossible for women to train in public. We need secured and proper facilities for the development of women's

rugby. When we have these facilities we will start working on the development of a women's team."¹⁰

Another factor is the danger of going out to play sports. In many parts of the world, women face physical security concerns. Several programs cited in box 1 address this concern by providing a safe space for girls to play and fostering interaction with boys with a view to increasing familiarity between the sexes and deobjectifying women.

Girls and women in developing countries also often have limited time available for sports, as they tend to spend more of their nonwork and nonschool time on household tasks. This is largely due to the lower value placed on girls' participation in sports activities. A lack of female role models also limits girls' participation. This is being slowly overcome through the demonstration effect of prominent female athletes. International sporting events that showcase women, such as the Women's World Cup or the Olympic Games, viewed by millions of people

Sports can serve as an effective and relatively low cost vehicle for boosting countries' gender equity performance.

in nearly every country, function as a constant feedback loop for women's social gains. These events' ideational effects simultaneously affirm how far women have come in a society and mold the next generation's expectations for their own future. Simply put, when runners like Ethiopia's Deratu Tulu, the first black African to win a gold medal at the Olympic Games, return home, they are celebrated and become walking billboards for keeping girls in school and empowering them to compete on the same level as boys. They can help to overcome girls' hesitancy to participate in sports. Badminton silver medalist Saina Nehwal has said, "In India I feel the girls are a little shy. They don't come out and play a lot of sports.... But I hope that my success will change that and more and more girls will come forward to play. I can already see the change in my academy [where I trained]. A lot more girls are coming in and they all want to play like me."¹¹ Seeing successful women athletes can provide incentives for girls to venture into sports and assurances to parents that their daughters will not be shunned and can do well by working hard at a sport.

Girls may be hesitant to move into new spheres, and parents may not feel comfortable with their daughters engaging

7. For a summary of the literature linking gender equity to better economic outcomes, see Duffo (2011).

8. Women are still at a greater risk than men of living in extreme poverty. According to the United Nations Development Program (UNDP), six out of ten of the world's poorest people are women.

9. Tim Wigmore, "Afghan women look to emulate meteoric rise of the men's team," *The Independent*, March 5, 2012, www.independent.co.uk/sport/cricket/afghan-women-look-to-emulate-meteoric-rise-of-the-mens-team-7536340.html.

10. Joanna Tilley, "Afghanistan Sport: Closing the Gap," *Al Jazeera*, February 26, 2014, www.aljazeera.com/sport/2014/02/afghanistan-sport-closing-gap-20142261039952565.html.

11. Nilanjana Bhowmik, "India's Society: How Sports and the Olympics Can Uplift Women," *Time*, August 21, 2012, <http://olympics.time.com/2012/08/21/indias-golden-girls-how-sports-and-the-olympics-can-uplift-women/#ixzz2uUsif0TD>.

Table 1 Millennium Development Goals: Progress to date

Goal	Africa			Asia				Latin America and the Caribbean	Caucasus and Central Asia
	North	Sub-Saharan	East	Southeast	South	West	Oceania		
1 Eradicate Extreme Poverty and Hunger									
Reduce extreme poverty by half	On target	Insufficient	On target	On target	On target	Insufficient	Insufficient	On target	On target
Productive and decent employment	Insufficient	Insufficient	On target	Insufficient	On target	Insufficient	Insufficient	Insufficient	On target
Reduce hunger by half	On target	Insufficient	On target	On target	Insufficient	No progress/deterioration	No progress/deterioration	On target	On target
2 Achieve Universal Primary Education									
Universal primary schooling	On target	Insufficient	On target	Insufficient	Insufficient	Insufficient	Missing or insufficient data	Insufficient	Insufficient
3 Promote Gender Equality and Empower Women									
Equal girls' enrollment in primary school	On target	On target	On target	On target	On target	Insufficient	Insufficient	On target	On target
Women's share of paid employment	Insufficient	Insufficient	On target	Insufficient	Insufficient	Insufficient	Insufficient	On target	On target
Women's equal representation in national parliaments	Insufficient	Insufficient	No progress/deterioration	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient
4 Reduce Child Mortality									
Reduce mortality of under-5-year-olds by two-thirds	On target	Insufficient	On target	On target	Insufficient	On target	Insufficient	On target	Insufficient
5 Improve Maternal Health									
Reduce maternal mortality by three-quarters	Insufficient	Insufficient	On target	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient	On target
Access to reproductive health	Insufficient	Insufficient	On target	On target	Insufficient	Insufficient	Insufficient	Insufficient	Insufficient
6 Combat HIV/AIDS, Malaria, and Other Diseases									
Halt and begin to reverse the spread of HIV/AIDS	No progress/deterioration	On target	Insufficient	Insufficient	On target	Insufficient	On target	Insufficient	No progress/deterioration
Halt and reverse the spread of tuberculosis	Insufficient	Insufficient	On target	On target	On target	On target	Insufficient	On target	Insufficient
7 Ensure Environmental Sustainability									
Halve proportion of population without improved drinking water	On target	Insufficient	On target	On target	On target	Insufficient	Insufficient	On target	No progress/deterioration
Halve proportion of population without sanitation	On target	Insufficient	On target	On target	Insufficient	Insufficient	Insufficient	On target	On target
Improve the lives of slum dwellers	On target	Insufficient	On target	On target	On target	No progress/deterioration	Missing or insufficient data	Insufficient	Missing or insufficient data
8 Global Partnership for Development									
Internet users	On target	Insufficient	On target	On target	Insufficient	On target	Insufficient	On target	On target

Source: United Nations (2012, 2013).

Box 1 A sample of programs to bolster girls' sports participation in developing countries

Most developing countries do not have gender equity laws pertaining to sports. Girls often have a difficult time accessing sports. In Argentina, for example, despite the strong soccer culture, women are often excluded from fully participating, other than as models advertising *fútbol* or as players' girlfriends. Despite world famous female boxers (world champion Marcela "La Tigresa" Acuña) and tennis players (Gabriela Sabatini), women's sports have not taken off in Argentina. Most developing countries do not have legislation comparable to Title IX in the United States, which requires that all educational institutions that receive government funds spend the same on male and female sports. Reports regularly cite increasingly substandard equipment and facilities and little or no funding for girls' and women's teams.

However, recognizing the benefits of stimulating girls' participation in sports, an increasing number of programs have been implemented to overcome some of these barriers.

Global

Goals for Girls provides disadvantaged girls access to health and education through the game of soccer. It gives girls an opportunity to break down cultural and socioeconomic barriers to create change by addressing common challenges.

Africa

In Kenya's **Mathare Youth Sports Association (MYSA)**, female football program participants receive scholarships, learn how to protect themselves from HIV, and create a social environment outside their traditionally defined gender role. MYSA provides an opportunity for girls to coexist with males in public spaces, where otherwise girls would not go due to social stigma and physical security concerns. Also in Kenya, **Moving the Goalposts Kilifi** uses soccer to help girls develop essential life skills and complements reproductive health, human rights, and economic empowerment initiatives. Another program that uses soccer for empowerment is **Soccer without Borders Uganda**, in the Nsambya neighborhood of Kampala, Uganda. **Empowering 1000 Girls through Sport in Zambia** provides girls with information on HIV/AIDS, gender equality and equity, and life and sports skills. Finally, the **Go Sisters' Program** uses sporting events for female youth in 16 communities across Zambia to train and equip them with skills and knowledge to pursue equality.

Asia

The Australian Sports Outreach Program, **ASOP India**, aims to help build the capacity of organizations in India to use quality sports activities as a tool to improve livelihoods, with women as a key target group. **Integrated girl-child education through sports**, Maslandapur Sarada Sevashram, India, set up by nongovernmental organizations in West Bengal State, aims to integrate "girl child" education through sports. The program also includes women's training and involves community school children.

Latin America

Programs in Latin America tend to build on the enthusiasm for soccer (*fútbol* in Spanish, *futebol* in Portuguese) to teach girls and women life skills. These programs include the **Guerreiras Project** in Brazil, which works with professional female football players to encourage participation of women and girls in sports, challenge gender and racial prejudices, and promote safe and democratic attitudes through physical activity and dialogue. Also in Brazil, the **Vencedoras** program translates the lessons learned on the playing field into valuable and marketable job skills complemented with employment and entrepreneurship training. Girls complete vocational technical and entrepreneurship training, take part in an internship, are mentored by local business leaders, and complete a service learning project. In Colombia, **Asociación Bogotá Colombia** uses street soccer leagues for girls and young women, ages 15 to 19, to develop projects for homeless and people suffering from poverty, discrimination, violence, insecurity, and conflict. Another Colombian organization, **Football for Peace**, uses soccer to promote peace but also has measures to promote gender equality. Girls and boys play on the same team. Goals are not counted unless a girl has participated in the play. In Central America, **Fútbol Sin Fronteras**, Granada, Nicaragua,

(continues on next page)

Box 1 A sample of programs to bolster girls' sports participation in developing countries *(continued)*

works with girls ages 7 to 16 to provide a safety net of supportive mentors and peers and a safe space through sports. **El Encuentro Juvenil (Young Meeting Place)** in El Salvador provides girls with the opportunity to play sports traditionally considered masculine, such as basketball and soccer.

Middle East

The Middle East ranks relatively low on most indicators of gender equity. One program that celebrates women's athletic achievements and encourages girls to participate openly is **Courir pour le plaisir**, the largest women's race held in a Muslim country (Morocco), started by Moroccan runner Nawal El Moutawakel, the first Muslim-African woman to be an Olympic champion. In Egypt, **Ishraq**, which means sunrise in Arabic, provides opportunities to marginalized rural girls. It aims to encourage formal school attendance and offers adolescent girls the opportunity to play sports and games, an unprecedented intervention in Egypt. The **Afghan Women's Network** works to break restrictions on the free movement of women through organized sports in Afghanistan.

Sources: Education through Sport, www.edusport.org.zm; Goals for Girls, www.goalsforgirls.org; The Guerreiras Project, www.guerreirasproject.org; Mathare Youth Sports Association (MYSAs), www.mysakenya.org; Moving the Goalposts Kilifi, www.mtgk.org; Right to Play (2008); Rao (2010); Soccer without Borders, www.soccer-withoutborders.org.

in traditionally male activities. Advertising women's success will make more girls and women want to participate. Brazil lifted its ban on women's participation in *futebol*, or soccer, in 1979. Caitlin Davis Fisher, former captain of Harvard University's women's soccer team, in a TED talk in Brazil,¹² describes the discrimination the women felt, with women's sports receiving fewer resources than men and women who play soccer often seen as less feminine. After Brazilian girls brought home the silver medal and with Marta Vieira da Silva (the only female among six ambassadors to the FIFA 2014 World Cup Brazil and often referred to as the "female Pele") rising in international prominence, "it appears that women's entrance into this historically male space has started to dislodge stereotypes and we see signs of progress." She then describes some of the pressure women feel, once successful, to conform to gender norms. She also strikes a cautionary note regarding the negative results sometimes associated with success in women's sports: pressure to conform to gender physical stereotypes, which at its extreme leads to eating disorders, etc.

And, of course, developing countries, which often already have stretched education and sports budgets, may have few extra resources to bolster girls' sports programs. However, the costs of not doing so, in the long term, will almost certainly outweigh the money that must be spent to accommodate girls in sports programs.

12. Caitlin Davis Fisher, "The body image of female athletes," 2012, TEDTalkSearch, www.youtube.com/watch?v=zj-oJqQYQXM.

Below I outline a few areas where enhancing girls' access to sports could have sound development effects.

Education

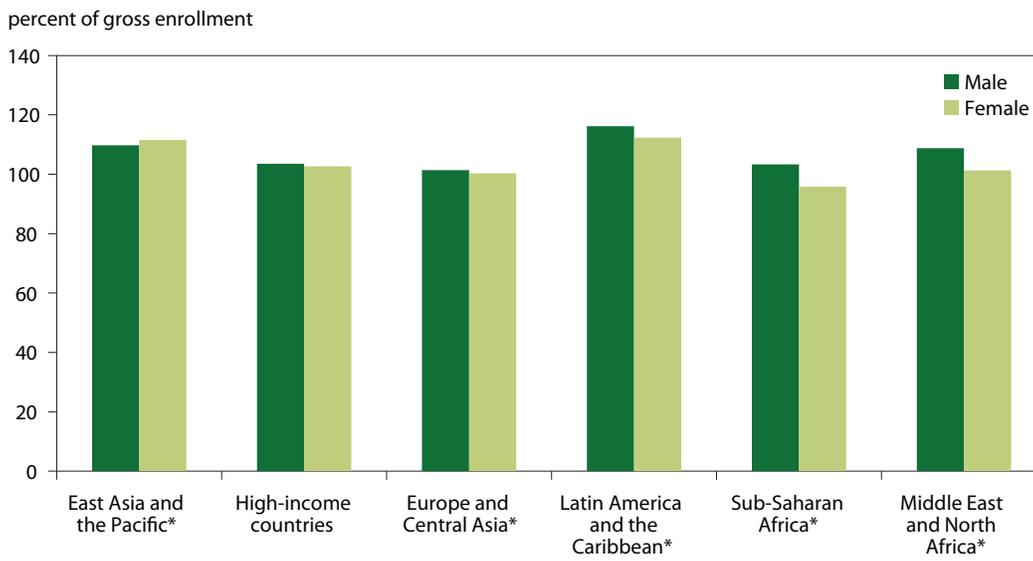
As shown in figure 1, gender parity has largely been achieved in primary education worldwide, but in many areas of the world, particularly Middle East and North Africa, Sub-Saharan Africa, and South Asia, girls continue to face barriers to quality schooling (figure 2).

In the developing world, a gender gap persists in secondary education and disparities are greatest at the university level.¹³ If participating in sports helps to keep girls in school and to do better in traditionally male and potentially high compensation areas such as science, adding sports to the educational agenda can net significant gains. Accessing the educational gains seen in the United States can help developing countries multiply the effect of efforts to achieve gender parity in education.¹⁴

13. Of the 130 million children who are out of school, 70 percent are girls. According to the World Bank's 2011 *World Development Indicators*, 20 percent of the world's women remain illiterate as of 2011, compared with 12 percent of males. Girls have a 13 percent illiteracy rate, nearly twice that of male youth.

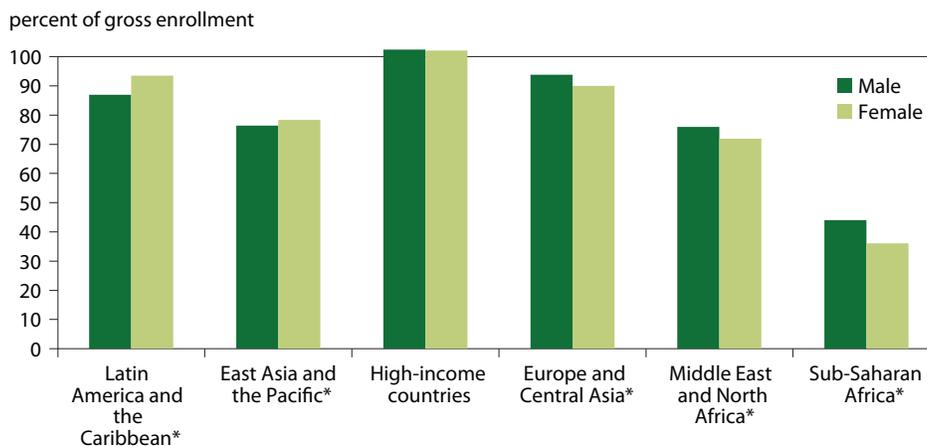
14. Giving girls equal access to education is clearly a sound economic choice. David Dollar and Roberta Gatti (1999) find that low investment in educating women is an inefficient economic choice. Their econometric evidence demonstrates that societies that do not invest in girls pay for this preference with lower growth and reduced income. Andrew Mason and Elizabeth King (2001) provides evidence suggesting that countries that offer women the same

Figure 1 Primary school enrollment, 2010



Source: World Bank, *World Development Indicators*.

Figure 2 Secondary school enrollment, 2010



Source: World Bank, *World Development Indicators*.

Health and Safety

Women and girls are more likely than men and boys to be subject to sexual violence, be involved in sex work, and contract HIV/AIDS. Playing sports has been shown to boost girls' and

women's health outcomes, particularly by encouraging lifestyle choices that avoid unhealthy behaviors. A quote from Xiomara, a 17-year-old football player participating in Asociación Bogotá Colombia, one of the programs reviewed in box 1, illustrates this:

quality education as men can gain as much as one and a half percentage points of economic growth over countries that do not. Robert Barro (2012) shows female school attainment, particularly years of female primary school, to have a highly significant positive effect on countries' long-term economic growth. An expansion in female relative to male attainment can be seen as an improvement in the political and social institutions that nurture economic growth.

And what has football done for me? Well a lot of things because it helps me to forget things that are sad and all the problems that are occurring. Also it prevents me from getting into the many problems we have in this country. For example, becoming pregnant at my age

or getting into prostitution or something like that. It helps me avoid problems. And also I am having a lot of fun. Football is really good for me.

While anecdotal, this example speaks to many studies documenting a relationship between better health and lower rates of teen pregnancy among girls who participate in sports. Sports can also help girls feel more physically secure, both by providing them with self-confidence and by encouraging them to interact in a safe setting with males. The Mathare Youth Sports Association program in Kenya, for example, allows girls the opportunity to coexist with males in public spaces where girls would otherwise not go due to social stigma and physical security concerns.

Labor Force Participation

Gender disparities in schooling are compounded in the labor force. While women have, across the board, made strides in their labor force participation, they are still more likely than men to work as unpaid family laborers, as agricultural workers, or in the informal economy.¹⁵ The World Bank (2013) estimates that nearly half of the global productive potential of the female population remains unutilized compared with 22 percent for men. Women also tend to be more concentrated in jobs characterized by low pay, long hours, and oftentimes informal working arrangements. Even within the sectors where women dominate, they hold a lower proportion of upper managerial jobs.

If participating in athletics boosts girls' future earnings, as indicated in the US case, this would have strong positive results for women—and also for the country. Recent World Bank models predict that increasing women's salaries through an "equal work, equal pay" policy ensuring that women earn a wage fully reflective of their value added could add up to 0.2 percentage points to a country's annual growth rate (Canuto 2013; Agénor and Canuto 2012a, 2012b). Providing opportunities for girls to participate in sports can help them garner the 7 percent sports premium in wages mentioned earlier.

Denying girls the opportunity to participate in athletics also limits their future ability to realize their potential. In Saudi filmmaker Haifaa al-Mansour's film *Wadjda*, a 10-year-old girl wants nothing but a bicycle to race her best friend, Abdullah, a boy. The bicycle represents opportunity, freedom, and power, all of which are denied to Wadjda because she is a girl. Allowing girls the same opportunities as boys to ride that bicycle can have

a positive impact on their lives and thus produce greater gains for the country.

Leadership

One component of the Millennium Development Goals is increased equity in women's leadership roles, operationalized in terms of representation in national parliaments. Currently no region is on track to achieve this goal (figure 3), although some regions have made significant progress. Latin America has come closest to achieving the goal of 30 percent, with women holding roughly one-quarter of seats in national parliaments. This represents a gain of 10 percent over women's representation at the turn of the century. Developing Europe and Central Asia, Middle East and North Africa, and East Asia and the Pacific have made modest gains, but none had reached the 20 percent level in 2012.

Bolstering women's participation in sports increases their involvement as leaders in the private and public sectors.

A growing body of literature links participation in sports by girls with increased success as leaders. Many powerful female leaders—in both the political and corporate world—have robust sports backgrounds. Both the first female president of Brazil, Dilma Rousseff, and the first female president of Chile, Michelle Bachelet, who will soon take office for the second time, played volleyball in high school. Mexican Senator Ana Guevara is an Olympic silver medalist in the 400 meters. Former US Secretary of State Hillary Clinton played several sports including basketball, soccer, and softball. Former US National Security Adviser and Secretary of State Condoleezza Rice was a competitive figure skater and tennis player, and the first female US secretary of state, Madeleine Albright, participated in field hockey, rowing, swimming, and tennis at Wellesley College. PepsiCo CEO Indra Nooyi played cricket in India and later baseball in the United States. Ellen Kullman, CEO of DuPont, played college basketball at Tufts University. Weili Dai, cofounder of Marvell Technology Group, played semi-pro basketball in China. The list goes on.

Bolstering women's participation in sports increases their involvement as leaders in the private and public sectors. Judi Browne Clarke, now the diversity director for the National Science Foundation's Bio/computational Evolution in Action Consortium at Michigan State University, who won a silver medal in the 400 meters hurdles at the 1984 Olympics, writes

15. The UNDP notes a 25 percent difference in the employment-to-population ratio of men and women in 2012.

Figure 3 Percent of female parliamentarians, 2012

* = developing only

Source: World Bank, *World Development Indicators*.

that “the participation of women and girls in sport directly challenges gender stereotypes and discrimination, and therefore can be a platform for promoting gender equality and the empowerment of women and girls. This can, and ultimately will, reshape attitudes toward women’s capabilities as leaders and decision-makers, especially in traditional male domains.... I would not be the person I am today without the skills, training, and self-confidence I gained from my participation in sports.” Sports can energize a society, yet in many countries, women and girls do not have access to it.

Corporate research reveals a positive impact of sports participation on women’s leadership potential. A recent survey commissioned by EY has linked women in senior management positions to experience with sports, finding that 96 percent of women in C-level suites played sports, 55 percent at a university level.¹⁶ Moreover, female excellence in sports—whether in a community or at the elite Olympic level—can both create positive trailblazing role models and provide women and girls with the confidence to succeed, thereby building a virtuous cycle. A McKinsey survey (Borisova and Sterkhova 2012) indicates that companies with three or more women in senior management positions scored better on a number of success criteria than companies with no women. A Credit Suisse (2012) study shows that companies with women on their management boards tend to do better than those that do not, particularly in difficult economic environments. Companies seem to be taking note: In 2005, only 73 percent of US companies and 41 percent of

global companies had at least one woman on their board of directors. By 2012 the numbers had climbed to 86 percent of US companies and 59 percent globally.

Studies underscore that professional women overwhelmingly feel that participation in sports helped them be more confident. This mirrors research done with girls: The Women’s Sports Foundation has shown that girls and women who play sports have higher levels of confidence (Sabo et al. 1998, Women’s Sports Foundation 1993).

CONCLUSIONS AND RECOMMENDATIONS

In a recent speech at Georgetown University, former Secretary of State Hillary Clinton presented women’s access as one of the challenges of the 21st century: “When women are excluded and marginalized, we all suffer: We miss out on their experience, their knowledge, their skills, their talents.” She called on policymakers to “[give] women the tools and resources to break through barriers...to fully participate in their governments, economies and societies.”¹⁷ Access to sports should be a prominent part of policymakers’ gender equity toolkit.

For the first time in the history of the Olympics Games, every National Olympic Committee sent female athletes to the 2012 London Olympic Games. While this is a milestone, not all countries who sent female athletes to the Games allow all girls access to sports. Some countries continue to limit

16. “Survey ties female athletes to executive roles,” *USA Today*, July 3, 2013, www.usatoday.com/story/sports/2013/07/03/survey-ties-female-athletes-executive-leadership-roles/2487665.

17. Hillary Clinton, speech at Georgetown University’s annual Hillary Rodham Clinton Awards for Advancing Women in Peace and Security, February 25, 2014, www.georgetown.edu and www.politico.com/story/2014/02/hillary-clinton-gender-equality-103945.html?hp=15.

access, denying them the potential benefits elaborated in this Policy Brief. The case for promoting girls' sports participation is compelling. Access to sports can empower girls and translate educational gains into higher education and employment success, which can have multiplier effects on the economy. A number of recommendations and goals emerge from the evidence and stories.

First, countries should take steps to increase opportunities for girls to participate in sports, such as providing a safe place for girls to play, funding programs to encourage them to play, and enacting initiatives that will change attitudes towards their participation in sports. While Title IX provides the best evidence of the benefits of increasing girls' participation in sports, nonlegislative steps can also work to bolster girls' access to sports.

By sponsoring girls' sports in developing countries, local and international companies can gain a loyal customer base for their related products.

One way of providing a safe place to play and encouraging girls to do so is by incorporating physical education programs into the primary and secondary school curriculums and training teachers in gender sensitivity. By mainstreaming sports into schools, policymakers will reach a large segment of the target population. Teachers should be trained to encourage girls to participate and to treat athletic participation as part of the school requirements. Educators in developing countries are often already overstretched, but the opportunity cost of not involving girls in sports is too high.

Another important element is to give girls equal access to facilities, equipment, and mentors. This will help reduce the opportunity cost of their time, as they continue to shoulder much more nonwork obligations, particularly in the household, in many parts of the world. While the Title IX experience in the United States predicts that in the short term there will be some resentment at rebalancing sports' budgets to give girls facilities that are as good as those for men, doing so will elevate the perceived prestige of sports, attracting more girls, more potential for excellence, and thus more success. In the Indian case, world class women athletes have noted their frustrations that resources are always first channeled to men's sports, with girls receiving men's castoffs, and facilities and equipment for women's sports have always been of lower quality. This has been compounded by a lack of leadership and a proper motivating

system. It is important to invest in sport facilities, equipment, and spaces that girls and women feel comfortable accessing. As gender equity programs are introduced into sports, it is important to take into account the situation in developing countries. Some countries have much farther to go than others. It is also important to recognize that one size does not fit all. What makes sense for one region or one group will not necessarily bear out in another place or time. How gender operates in a community should always be part of a preliminary assessment.

Countries should exploit the talent that they have by showcasing the achievements of their elite athletes. Examples from Brazil, Ethiopia, and India point to the impact of recognized athletes on girls' interest in and confidence with sports. Derartu Tulu, who started running in her elementary school, has been a strong advocate of keeping girls in school. Marta Vieira da Silva, who played on the boys' team at her school as there were no teams for girls, has increased the profile of the sport in Brazil and helped make soccer an acceptable and desirable pursuit for girls.

The world of sports has taken note, sponsoring programs to stimulate girls' participation. The number of women in leadership roles is notoriously low in many of these organizations. Promoting the participation of women in leadership roles could have a positive demonstration effect.

The private sector should also take note of this growing market, which, if fostered, could bring even greater gains. By sponsoring girls' sports in developing countries, local and international companies can gain a loyal customer base for their related products. In the long term they will be part of a program that can stimulate greater growth and thus more robust markets.

At the international level, more data needs to be collected on girls' participation in sports. Little data exist on participation rates in countries outside of the United States, which makes it difficult to conduct rigorous analysis on the impact of girls' participation in sports. In order to justify adding girls' sports programs to their education or sports budget, policymakers need to be able to quantify the benefits. International organizations could help: Tools such as the Organization for Economic Cooperation and Development's Social Institutions and Gender Index, the UNDP Gender Inequality Index, and the World Economic Forum's Global Gender Gap Index explicitly recognize the impact of discriminatory social institutions on gender inequality and social outcomes. These tools could add to their explanatory value by adding access to opportunities in sports in their toolkit.

While much of the evidence on girls' sports participation is preliminary or anecdotal, it is clear that girls benefit from engaging in sports and net the same positive gains available to boys who do so. Bridging the gap in girls' sports participation will expedite and enhance countries' gender equity gains.

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