

CHAPTER 4

The Gender Inequality Index Through the Prism of Social Innovation

Vanina Farber and Patrick Reichert

l Introduction

Gender inequality has been, and still is, one of the most debated issues in contemporary society. Promoting gender equality and empowering women in the socio-economic arena are therefore core policy priorities and business issues in countries around the world. To this end, gender-sensitive statistics are critical pieces of information that enable governmental policy-makers and private-sector practitioners to make decisions. Gender-sensitive statistics ensure data collection on specific issues that disproportionately affect women in society and the workplace. These indicators help to benchmark the progress made and inform strategies

V. Farber (⋈) · P. Reichert (⋈)

Elea Center for Social Innovation, International Institute for Management Development, Lausanne, Switzerland

e-mail: Vanina.Farber@imd.org

P. Reichert

e-mail: Patrick.Reichert@imd.org

to realize gender equality and the empowerment of women and girls throughout the world.

To measure gender inequality, the United Nations Development Programme (UNDP) created the Gender Inequality Index (GII) in 2010 to replace its two predecessors, the Gender-related Development Index (GDI) and the Gender Empowerment Measure (GEM). The GII measures gender inequalities across three important aspects of human development: (1) reproductive health measured by maternal mortality ratio and adolescent birth rates; (2) empowerment, measured by the share of parliamentary seats occupied by females and educational attainment at the secondary level by gender; and (3) economic opportunity measured by the labour force participation rates of females and males (UNDP, 2019).

According to the GII website, the index "sheds new light on the position of women in 160 countries; it yields insights in gender gaps in major areas of human development. The component indicators highlight areas in need of critical policy intervention and it stimulates proactive thinking and public policy to overcome systematic disadvantages of women" (UNDP, 2019). Although imperfect, the advantage of producing a single measure to capture gender inequality has several implications for the coordinated efforts of various actors, including international public and non-profit bodies, national and local governments and businesses in the private sector.

As globalization continues to increase the complexity of international economic relations, countries not only compete with each other using traditional tools of economic diplomacy such as attracting foreign-direct investment, negotiating market access for their national companies or attempting to protect domestic markets through trade barriers but also face increasing sway from non-state actors in economic policy debates (Saner & Yiu, 2003). At the same time, countries are deepening their cooperation for rule setting (e.g. WTO, ITU) and regional economic integration (e.g. NAFTA, EU, FTAA). Along these lines, the United Nations (UN) 2030 Agenda for the Sustainable Development Goals (SDGs) is an important political consensus document declaring the intention of UN Member States to work collectively towards sustainable development. Given that the UN estimates an additional \$2.5 trillion a year of investment is needed to achieve the goals in developing countries alone (UNCTAD, 2014), the 2030 Agenda encourages dialogue and collaboration between the private sector, civil society and governmental

bodies to address the most serious challenges to sustainable development facing humanity today (UN General Assembly, 2015). Introduced as one of the 17 core objectives (Goal 5: Gender Equality), reducing gender inequality can also serve as an effective foreign policy tool in the frame of International Economic Diplomacy.

In short, the 2030 SDG Agenda offers a framework for building global resilience to meet some of the significant challenges facing the world today, such as gender equality, and the GII provides policy-makers and practitioners a tool to assess the progress being made. The implementation of effective projects and responses to gender gaps also requires the disaggregation of the GII into its sub-components. As a result, gender data needs to be analysed based on the specific purposes and issues that are under consideration of government policy-makers and practitioners. Wicked problems such as gender inequality require multilateralism, and all tools within the diplomatic toolbox should be made available: diplomacy, partnerships, mediation, political dialogue, financing and global governance (Carius et al., 2018). As scholars in social innovation, our aim in this chapter is to highlight successful examples of projects and entrepreneurial approaches that have helped in reducing gender inequality around the world.

In the chapter, we delve into the GII and its components. We review some criticism that has been levied towards the GII and identify other measures and indices that have been developed to capture gender inequality. We illustrate how the GII informs concrete actions that empower women and reduce gender-based discrimination and inequality. To conclude, we offer a discussion of how social innovation can help government, non-profit and business actors move towards the 2030 SDG goal of gender equality.

2 Construction of the Gender Inequality Index (GII)

To understand whether progress is being made towards the policy objective of gender equality, relevant indicators and monitoring are required. This task is surprisingly difficult, not only due to conceptual complexities and deficient data but also since many dimensions of gender inequality do not lend themselves to quantitative measurement (Gaye et al., 2010). Since there is no universally accepted measure of gender inequality, most

studies focus on specific elements of gender inequality to measure gaps in health, education, labour force participation and political activity.

At the Fourth World Conference on Women in 1995, the UNDP created the GDI and the GEM as first attempts to develop a comprehensive measure of gender inequality. However, most of the indicators to construct the GDI and GEM were ultimately found to be more suitable for developed countries and several indicators were not available in developing countries due to data constraints (Bardhan & Klasen, 1999, 2000; Dijkstra, 2002, 2006; Dijkstra & Hanmer, 2000; Klasen, 2006; Schüler, 2006). As a result, the UNDP made several improvements to both indices that eventually led to the creation of the Gender Inequality Index (GII) in 2010 (Gonzales et al., 2015). In the process, the new GII came to replace the GDI and GEM indices as the primary measure of gender inequality.

Gathering quality data at the global level introduces important tradeoffs between data relevance and geographical coverage. Despite these constraints, the GII designers were able to identify relevant indicators for a reasonably large set of countries (138 countries in 2010) that cover most regions of the world (Permanyer, 2013).

The GII is a composite measure of gender inequality across three dimensions: reproductive health, empowerment and economic opportunity (or labour market). Indicators were selected based on their conceptual and practical relevance, data reliability, international comparability, reasonable country coverage and frequency of availability (Gonzales et al., 2015). The index uses five indicators across these dimensions, shown graphically in Fig. 1 (UNDP, 2019). Reproductive health indicators are captured by the maternal mortality ratio and the adolescent fertility rate. Empowerment is also measured by two indicators: (1) female and male shares of parliamentary seats, and (2) educational attainment at the secondary level (% of females and males aged 25 and older). Finally, economic opportunity is captured by a single indicator, i.e. labour force participation (UNDP, 2019).

The GII calculation method does not report absolute development achievement, but rather assesses a country's gender achievement and distance from the baseline of gender equality (Gaye et al., 2010). Ideal outcomes are set at zero for the adverse reproductive health outcomes (i.e. adolescent fertility and maternal mortality rates) and at parity with male achievements across the education, political and economic measures. According to the GII's development team, "the score can thus be interpreted as characterizing where a country lies in reference to normative

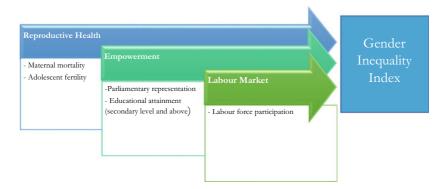


Fig. 1 Gender inequality index

ideals for key indicators of women's health, empowerment, and economic status" (Gave et al., 2010, p. 9).

GII values range between 0 and 1: values closer to 1 indicate greater gender inequality. While not directly mapped to the Human Development Index (HDI), higher GII values can be interpreted to indicate a loss in human development (Gaye et al., 2010). Below each dimension of the index is explored in more detail.

2.1 Reproductive Health

Reproductive health is an important dimension to evaluate individual well-being levels that are typically absent in other UNDP composite indices such as the HDI, the Human Poverty Index (HPI), the GDI and the GEM. Reproductive health is captured by two measures: maternal mortality and adolescent fertility.

Maternal mortality. The maternal mortality ratio (MMR), defined as the number of women who die from pregnancy-related causes while pregnant or within 42 days of pregnancy termination per 100,000 live births, captures a leading cause of death and disability among women of reproductive age in developing countries. The data are estimated with a regression model using information on the proportion of maternal deaths among non-AIDS deaths in women ages 15–49, fertility, birth attendants and GDP. Current global estimates of maternal mortality suggest that

more than 500,000 women die each year because of complications related to childbirth (UNICEF, 2008).

Adolescent fertility. Since women that have children at such young ages see their health and future economic opportunities diminished, the GII captures the risk of childbearing among adolescent women using the adolescent fertility rate (AFR), defined as the number of births per 1000 women aged 15–19.

Adolescence is a period of key transitions in life within a short period of time. Chief among these transitions for many girls is the start of sexual activity, marriage and childbearing. Concerns about adolescent childbearing include its association with heightened health risks for mothers and their infants and lower educational attainment and increased risk of poverty among women who become mothers during adolescence.

Sexual activity at an early age, before girls have adequate information on potential health risks, self-protection skills or access to reproductive health services, puts girls at an elevated risk of sexual and reproductive health and childbearing problems. Furthermore, young women are particularly vulnerable to sexual violence and coerced sex (Andersson et al., 2012; Song & Ji, 2010), unintended and unwanted pregnancy and abortion (Gómez et al., 2008; Murray et al., 2006). The start of childbearing in adolescence is closely tied to early marriage. Adolescent females who marry early are likely to participate in arranged marriages, to marry older men, to have less decision-making power and communication with their husbands and to be in polygamous unions (Santhya et al., 2010). Marriage can also exert pressures and expectations upon adolescents, including the expectation of immediate pregnancy upon marriage. Adolescents who marry early are also less likely to use contraceptives to delay a first pregnancy (Santhya et al., 2010) and are generally less likely than unmarried adolescents to use modern contraceptives (Blanc et al., 2009).

2.2 Empowerment

The women's empowerment movement has gained widespread momentum since the 1994 International Population Conference held in Cairo and has been gradually incorporated into the everyday parlance of national and international institutions. Although there are a number of critical elements related to empowerment, such as violence against women (inside and outside of the home), data availability and the lack

of internationally consistent and comparable measures make empowerment difficult to measure (Gaye et al., 2010). As a result, the GII focusses on two widely available and important indicators: parliamentary representation and educational attainment.

Parliamentary representation. The political arena has historically been discriminatory to women across the world throughout all levels of government. Although measures in this area are admittedly sparse and provide a relatively crude measure of women's access to levers of power, estimates for parliamentary representation at the national level are suggestive of women's visibility in political leadership and society more generally (Permanyer, 2013). The measure represents the extent to which women can hold high offices and is measured by the percentage of parliamentary seats in a single or lower chamber held by women. While this measure has the broadest country coverage, it excludes political participation at the community and local levels.

Educational attainment. Education is widely perceived as an indicator of the status of women and perhaps even more importantly, as an agent for the empowerment of women. Although the gap between boys and girls is closing for secondary education, substantial differences in graduation rates persist across many countries (Duflo, 2012). Education, especially higher levels of attainment, fosters empowerment since it is associated with an individual's capacity to reflect, question and take action concerning their life circumstances. Educated women are thought to be more likely to engage in rewarding career options, use their voices in public debate and/or care for their health and that of their family. As such, education is particularly important in strengthening the agency of women (Permanyer, 2013). Educational attainment is measured as the percentage of people who completed education at the secondary level (female and male).

2.3 Labour Market

Labour force participation rate. To measure economic activity, the GII uses gender-specific labour force participation rates. This measure has come to replace the problematic gender-specific earned income component that was used both in the GDI and GEM, which were imputed based on questionable assumptions that led to misleading international comparisons (Bardhan & Klasen, 1999). While imperfect, the measurement of

the labour force participation rate is much more reliable. One important caveat of using labour force participation rates is that it ignores the unpaid work contributions of women, which can be substantial in many economies (Gaye et al., 2010).

2.4 Criticism of the GII and Alternative Gender Inequality Measures

The GII is not without criticism. Notably, the GII integrates indicators that compare men and women with other indicators that pertain only to women. As a result, the health status of men is completely disregarded in the evaluation of gender inequality levels measured by the GII. Even if the GII designers claim that a value of 1 must be interpreted as the ideal achievement of MMR and AFR to attain gender equality, the practical implication is that men's health is artificially fixed at the highest possible level (Permanyer, 2013). Indeed, as illustrated in Permanyer (2013), countries with high MMR and AFR are strongly associated with lower life expectancies of men. It's therefore likely that the inclusion of men's health status variables would narrow the gender gaps observed in the GII. This argument does not diminish the importance of reproductive health variables, but rather emphasizes that the omission of men's health variables inevitably penalizes countries with high MMR and AFR scores (which also have lower levels of GDP per capita).

Other indices have also emerged from international organizations in recent years that attempt to measure gender inequality across countries. Although the GII is preferable to alternatives such as the GDI in which one of the main components is imputed rather than observed, other widely recognized indices propose a range of potential indicators that inform the gender inequality debate (Table 1).

The Global Gender Gap Index (GGGI) was created in 2006 by the World Economic Forum. The index covers four domains (economy, education, health and politics) through 14 indicators. Values range between 0 and 1 and higher scores indicate more unequal gender relations. Index values may be interpreted as a percentage that reveals how much of the gender gap has been closed in a given country. As of the 2018 report, data was available for 149 countries (WEF, 2018).

The Social Institutions and Gender Index (SIGI) was developed in 2010 using the Gender and Institutions Database by the OECD. The index covers five categories: family code, physical integrity, son preference,

Table 1 An overview of gender inequality indices and their indicators

Gender Inequality Index (UNDP)	Global Gender Gap Index (WEF)	Social Institutions and Gender Index (OECD)	
Reproductive health	Economic participation and opportunity	Family code	
Maternal mortality	Labour force participation*	Early marriage	
Adolescent fertility	Ratio of wages for similar work	Polygamy	
Empowerment	Ratio of earned income	Parental authority	
Educational attainment (secondary and above)*	Ratio of legislators, senior officials and managers	Inheritance	
Parliamentary representation*	Ratio of professional and technical workers	Physical integrity	
Labor Market	Educational attainment	Female genital mutilation	
Labour force participation*	Ratio of literacy rate	Violence against women	
	Ratio of net primary school enrolment	Son preference	
	Ratio of net secondary school enrolment	Missing women	
	Ratio of gross tertiary school enrolment	Civil liberties	
	Health and survival	Freedom of movement	
	Sex ratio at birth	Freedom of dress	
	Ratio in healthy life expectancy	Ownership rights	
	Political empowerment	Access to land	
	Ratio of seats in parliament*	Access to bank loans	
	Ratio of ministerial level positions	Access to property	
	Ratio of years with a female head of state (last 50 years)		

Note *denote overlap with other indices

civil liberties and ownership rights. These five domains cover a total of 12 indicators. They concern both formal institutions—rights and laws—and informal institutions—social and cultural practices. Each of the five categories is equally weighted but in-category weights differ due to the nonlinearity of indicators. Like the GGGI, values range from 0 to 1 and higher scores indicate more unequal gender relations. As of the 2019 report, data was available for 120 countries (OECD, 2019).

As illustrated in Table 1, three of the five GII indicators overlap with the GGGI. A recent study comparing these gender indices found that country rankings tend to have considerable overlap at the top and bottom but vary considerably in terms of indicator overlap. Methodological differences concern variation in indicator weighting, capping and aggregation of categories (Van Staveren, 2013). These differences lead the author to suggest that the GII is particularly well-suited to measure outcomes of various gender equality improvements across and within countries. In the next section, we assess GII outcomes and identify some of the innovative solutions driving the trend towards gender parity.

3 View and Applications

In this section, we examine the GII and its sub-components in detail and highlight several applications that stakeholders have developed in recent years to improve gender equality throughout the world. All analysis is based on publicly available source data downloaded from the UNDP Human Development Reports (http://hdr.undp.org/en/data). We cluster countries by region based on The World Bank classification (World Bank, 2019).

To avoid bias in the interpretation of the data, we report both absolute and percentage change. In short, an indicator with a large absolute change may not necessarily have a large relative change and vice versa. Hence in analysing relative change figures for different groups, it would be useful to also look at the absolute change or the initial value from which the changes were computed, to reach a more balanced conclusion on how the indicators have changed over time.

3.1 GII Empirical Overview

Of the 122 countries for which the necessary data was available to generate a GII score for the years 1995 and 2017, the GII global average has been reduced from 0.47 to 0.33, a reduction of 29.7% (see Table 2). As illustrated by Fig. 2, with the exception of Papua New Guinea, every country has made some improvement over the 22-year time-frame. According to the GII, the most gender-equal countries in 2017 were Switzerland, Denmark and Sweden/Netherlands (tied for third). In contrast, the bottom three countries were Papua New Guinea, Mali and Central African Republic.

Table 2 GII by region

Region	n	1995 average	2017 average	Absolute change	Percentage change
East Asia and Pacific	12	0.48	0.36	(0.12)	-25.9
Eastern Europe and Central Asia	22	0.39	0.21	(0.18)	-46.4
Latin America and Caribbean	20	0.51	0.38	(0.12)	-24.4
Middle East and North Africa	11	0.58	0.36	(0.21)	-36.8
Western Europe and Other Developed	22	0.17	0.08	(0.09)	-53.5
South Asia	7	0.67	0.46	(0.20)	-30.3
Sub-Saharan Africa	25	0.65	0.54	(0.11)	-17.0
Global GII	122	0.47	0.33	(0.14)	-29.7

Note Table constructed by authors based on source data from the UNDP Human Development Reports n = number of countries

As shown in Table 2, on a percentage basis, Western Europe & Other Developed countries (i.e. United States, Japan, Australia, Canada and New Zealand) have made the most improvements, lowering gender inequality by 53.5% on average. In absolute terms, the Middle East and North Africa (MENA) and South Asia regions have made the most progress towards gender equality during the observed time period, reducing gender inequality by 0.21 and 0.20, respectively.

Country performance is highlighted in Table 3. The top three performers in terms of absolute reduction in gender inequality are United Arab Emirates, Turkey and Kuwait. By contrast, the bottom three included Syria, Thailand and Papua New Guinea. The top three countries by percentage change during the observed period include Slovenia, South Korea and Cyprus, while the bottom three remained the same as in the absolute change case (see Table 3).

Despite marginal improvements in recent years, results from the GII illustrate that gender inequality has been an enduring issue for both emerging markets and developed economies. Current estimates suggest

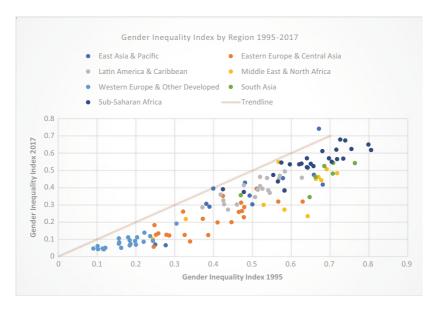


Fig. 2 Gender Inequality Index 1995–2017 (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

that at the current rate of change, the global gender gap will take 108 years to close; economic parity remains some 202 years off (Cann, 2018). Given the slow rate of progress to date, the 2030 SDG objective of gender parity is likely going to be difficult to achieve.

The SDG goals serve as a useful framework to categorize and describe the world's greatest challenges and their fulfilment depends on multisector partnerships involving government, the private sector and civil society. The United Nations estimates an additional \$2.5 trillion a year of investment is needed to achieve the goals in developing countries (UNCTAD, 2014). As a result, development aid and public-sector support alone are likely inadequate to meet the SDG 2030 goals. Instead, the application of novel solutions that change the underlying dynamics of society to create a more level playing field of incentives to innovate, educate and invest is therefore likely to play a large role in transforming gender dynamics and helping to achieve gender parity. In this vein, social innovation provides one potential avenue to leapfrog the current pace of change and kickstart rapid systemic change.

Table 3 Top and worst performing countries

Top and worst performers (country)	1995 average	2017 average	Absolute change	Percentage change
Top 3				
performers				
(Absolute				
Change)				
United Arab Emirates	0.64	0.23	(0.41)	-64.0
Turkey	0.63	0.32	(0.31)	-49.8
Kuwait	0.58	0.27	(0.31)	-53.8
Bottom 3				
performers				
(Absolute				
Change)				
Syria	0.57	0.55	(0.02)	-3.9
Thailand	0.40	0.39	(0.01)	-1.8
Papua New	0.67	0.74	0.07	10.1
Guinea				
Top 3				
performers				
(Percentage				
Change)	0.25	0.05	(0.10)	70.0
Slovenia	0.25	0.05	(0.19)	-78.0
South Korea	0.28	0.06	(0.21)	-77.3
Cyprus	0.34	0.09	(0.26)	-75.0
Bottom 3				
performers (Percentage				
Change)				
Syria	0.57	0.55	(0.02)	-3.9
Thailand	0.40	0.39	(0.02) (0.01)	-3.9 -1.8
Papua New	0.40	0.74	0.07	$\frac{-1.6}{10.1}$
Guinea	0.07	U./ I	0.07	10.1

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports

We follow van Wijk et al. (2019, p. 889) who define social innovation as "the agentic, relational, situated, and multilevel process to develop, promote, and implement novel solutions to social problems in ways that are directed toward producing profound change in institutional contexts ... who view social innovation as embedded and self-reflective, and that

it may be coordinated and collaborative, or that it may be the emergent product of accumulation, collective bricolage and muddling through daily work."

Often, social innovation takes the form of applying novel market solutions to global social and environmental problems by creating or improving products, services, processes, business models and markets to more effectively and efficiently respond to unmet societal needs (Nicholls & Murdock, 2012). The value created accrues primarily to society as a whole rather than private individuals and focusses on actions that have the potential for systemic transformation (Phills et al., 2008).

Social innovation embodies a mindset driven by purpose, openness, partnership, innovation and accountability to develop solutions that allow excluded people to participate in the economy while conserving and replenishing natural capital (Moore et al., 2014).

What has gender equality got to do with social innovation? The rapid development and diffusion of innovation, including digital technologies, are challenging the systems and capacity of traditional societal institutions. The testing and scaling of innovation and technology require agile thinking, continuously learning from research and constant adaptation. How can we better harness socially innovative ideas and methods to advance gender equality? In this section, we explore this question by looking at specific interventions that pertain to GII indicators and tie them to three dimensions of gender equality: (1) resources, (2) attitudes, and (3) power.

3.2 Reproductive Health

3.2.1 Mother Mortality

The GII data indicate that the average rate of mother mortality has decreased from 341.3 deaths per 100,000 live births to 169.5 deaths over the 1990–2015 timeframe, a reduction of 50.3%. Compared to the trendline in Fig. 3, nearly every country reduced the incidence of mother morality from 1990 to 2015.

In absolute numbers, South Asian and Sub-Saharan African countries made the biggest strides over the 1990–2015 timeframe (Table 4). At the regional level, South Asia transitioned from an average of 624.1 deaths per 100,000 live births to 161.4, corresponding to an impressive reduction of 462.7 deaths per 100,000 births in the 25-year timeframe. Similarly, the Sub-Saharan African country average improved from an

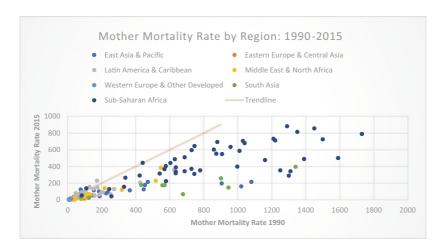


Fig. 3 Mother mortality rate by region 1990–2015 (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

Table 4 Mother mortality rate by region

Region	n	1995 average	2017 average	Absolute change	Percentage change
East Asia and Pacific	23	283.0	91.5	(191.6)	-67.7
Eastern Europe and Central Asia	31	43.9	18.8	(25.1)	-57.1
Latin America and Caribbean	30	139.5	87.4	(52.1)	-37.4
Middle East and North Africa	20	129.2	64.8	(64.4)	-49.8
Western Europe and Other Developed	22	10.2	6.7	(3.5)	-34.7
South Asia	9	624.1	161.4	(462.7)	-74.1
Sub-Saharan Africa	47	886.0	482.0	(404.0)	-45.6
Global MMR	182	341.3	169.5	171.8	50.3

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports n= number of countries

initial average of 886.0 deaths per 100,000 live births to 482.0 over the same duration.

By country, the top three performers in terms of absolute reduction in mother mortality are Sierra Leone, Eritrea and Rwanda. By contrast, the bottom three included Bahamas, Tonga and Guyana. The top three countries by percentage change during the observed period include Maldives, Belarus and Kazakhstan, while the bottom three remained the same as in the absolute change case (see Table 5).

Table 5 Top and worst performing countries (Mother mortality rate)

Top and worst performers (country)	1995 average	2017 average	Absolute change	Percentage change
Top 3				
performers				
(Absolute				
Change)	2.00	10/0	(3.250)	40.0
Sierra Leone	2630	1360	(1270)	-48.3
Eritrea	1590	501	(1089)	-68.5
Rwanda	1300	290	(1010)	-77.7
Bottom 3				
performers (Absolute				
Change)				
Bahamas	46	80	34	73.9
Tonga	75	124	49	65.3
Guyana	171	229	58	33.9
Top 3	1/1	229	30	33.9
performers				
(Percentage				
Change)				
Maldives	677	68	(609)	-90.0
Belarus	33	4	(29)	-87.9
Kazakhstan	78	12	(66)	-84.6
Bottom 3			· /	
performers				
(Percentage				
Change)				
Guyana	171	229	58	33.9
Tonga	75	124	49	65.3
Bahamas	46	80	34	73.9

Note Table constructed by authors based on source data from the UNDP Human Development Reports

With 1360 mothers dying per 100,000 live births, Sierra Leone has the highest MMR in the world. According to the latest estimates from 2015, 1 in 17 mothers in Sierra Leone has a lifetime risk of death associated with childbirth (Mason, 2016). Although Sierra Leone still has the highest MMR worldwide, the country has made tremendous progress since 1990, when the MMR of 2630 deaths per 100,000 births was nearly double the current value. To further reduce the MMR and achieve the SDG 2030 target of less than 70 deaths per 100,000 live births, a wide range of actors have been engaged to create equitable access to high-quality care by skilled staff during pregnancy and childbirth.

International bodies working in partnership to tackle the issue include UNICEF and the European Union. With EU funds, UNICEF has been supporting the training health workers and increasing their capacity. The support further invests in the provision of equipment and supplies that are needed to deliver quality health care and improve maternal and newborn health services. The programme is also establishing a network or care centres to facilitate the shift away from Traditional Birth Attendants (TBAs), typically senior women from the community, who are not skilled to address the major killers of mothers (Mason, 2016). To this end, the partnership is providing financial support for doctors, including obstetricians and gynaecologists, to undertake further studies in nearby Ghana to further develop skills and knowledge in the birth delivery process and post-natal care. Finally, the programme also intends to build basic health infrastructure by funding the construction of 16 facilities, 5 of which will be dedicated for Basic Emergency Obstetrical and Neonatal Care (BEmONC) (Mason, 2016).

A project from Concern Worldwide, an international NGO, also takes a pragmatic approach to tackle the crisis in Sierra Leone. Since 2014, Concern Worldwide, with funding from the Bill and Melinda Gates Foundation, has trained more than 200 TBAs and rebranded them as MNHPs (maternal and new-born health promoters) (Young, 2016). Rather than delivering babies in isolation, MNHPs are trained to counsel mothers on prenatal care, check for danger signs and refer at-risk mothers to health-care facilities. The programme also included a complementary business model to incentivize MNHPs in their new roles. Half of the MNHPs received business training and a loan in the form of a start-up basket of health and baby products, valued at approximately USD30, to sell during their home visits (Concern Worldwide, 2016). During monthly meetings, MNHPs made loan payments and had the opportunity to purchase more

products to build their businesses. An initial evaluation of the programme suggests positive effects on three post-delivery outcomes: breastfeeding initiation, post-natal care for the mother and post-natal care for the infant. The programme also indicates that providing a business case for MNHPs and incentivizing MNHP visits are more likely to refer women showing signs of risk to health facilities (Concern Worldwide, 2016).

3.2.2 Adolescent Fertility Ratio

At the global level, GII data indicate that the average rate of adolescent fertility has decreased from 80.4 births per 1000 women aged 15–19 to 46.9 births over the 1990–2016 timeframe, corresponding to a reduction of 41.7%. As illustrated in Fig. 4, nearly every country has reduced the incidence of adolescent fertility over the timeframe.

Table 6 reports changes in AFR by region. The largest reduction at the regional level (in both absolute terms and on a percentage basis) came from South Asia, where the AFR fell from 121.2 to 37.1 (a reduction of 69.4%). In absolute terms, Sub-Saharan Africa reported the second largest reduction in AFR, from 141.4 in 1990 to 94.7 in 2017. Regardless

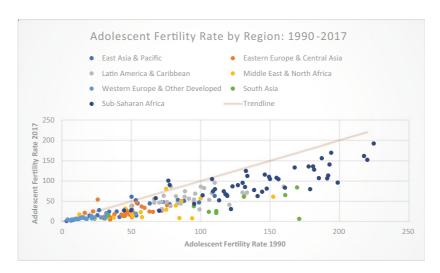


Fig. 4 Adolescent fertility rate by region 1990–2017 (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

Table 6 Adolescent fertility rate b	ov region
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Region	n	1990 average	2017 average	Absolute change	Percentage change
East Asia and Pacific	24	47.5	28.7	(18.8)	-39.7
Eastern Europe and Central Asia	31	44.7	21.0	(23.6)	-52.9
Latin America and Caribbean	31	93.0	57.3	(35.7)	-38.4
Middle East and North Africa	20	59.4	24.7	(34.7)	-58.4
Western Europe and Other Developed	22	18.4	8.1	(10.2)	-55.6
South Asia	9	121.2	37.1	(84.1)	-69.4
Sub-Saharan Africa	48	141.4	94.7	(46.7)	-33.0
Global Adolescent Fertility Rate	185	80.4	46.9	(33.6)	-41.7

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports n = number of countries

of starting point, every global region reduced the AFR by at least one-third over the 1990–2017 timeframe, illustrating the problem's global reach and need for continued support to ensure the 2030 target to ensure universal access to sexual and reproductive health-care services.

By country, the top three performers in terms of absolute reduction in adolescent fertility are Maldives Gabon and Gambia. By contrast, the bottom three included Lesotho, Somalia and Azerbaijan. The top three countries by percentage change during the observed period include Maldives, Oman and Saudi Arabia while the bottom three are Somalia, Malta and Azerbaijan (see Table 7).

Reducing adolescent fertility and addressing the multiple factors underlying it are essential for improving sexual and reproductive health and the social and economic well-being of adolescents. Underlying factors typically include early marriage, the timing and context of first sex, contraceptive use and education. Development goals emphasize the reduction

 Table 7
 Top and worst performing countries (Adolescent fertility rate)

Top and worst performers (country)	1990 average	2017 average	Absolute change	Percentage change
Top 3				
performers				
(Absolute				
Change)	157.0	~ 0	(3.25.5)	0.4.4
Maldives	171.3	5.8	(165.5)	-96.6
Gabon	199.1	95.3	(103.8)	-52.1
Gambia	179.2	79.2	(100.0)	-55.8
Bottom 3				
performers				
(Absolute				
Change) Lesotho	77.7	89.5	11.8	15.2
		89.5 100.1	23.4	30.5
Somalia	76.7 25.7	100.1 53.5	23.4 27.8	108.2
Azerbaijan	25./	55.5	27.8	108.2
Top 3				
performers (Percentage				
Change)				
Maldives	171.3	5.8	(165.5)	-96.6
Oman	93.9	7.1	(86.8)	-92.4
Saudi Arabia	84.7	7.8	(76.9)	-90.8
Bottom 3	01.7	7.0	(70.7)	70.0
performers				
(Percentage				
Change)				
Somalia	76.7	100.1	23.4	30.5
Malta	12.4	16.6	4.2	33.9
Azerbaijan	25.7	53.5	27.8	108.2

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports

of early childbearing, the expansion of access to reproductive health and investing in the human capital of youth, especially girls.

Given the complexity of adolescent fertility, social innovations to reduce the incidence of adolescent fertility have emerged from a wide range of actors through a range of implementation strategies. To combat sexual violence against women at a global scale, the Center for Women's Global Leadership (CWGL) launched the 16 Days of Activism Against Gender Violence in 1991, a campaign that has since run every year from

25 November, the International Day for the Elimination of Violence against Women, to 10 December, Human Rights Day (Thompson, 2017). In the first 20 years alone, more than 3700 organizations have participated across 164 countries (Thompson, 2017). The campaign aims to complement the local and national actions and campaigns and change attitudes at a more global, systemic level, while contributing to a global feminist solidarity around a shared goal to end violence against women.

3.3 Empowerment

3.3.1 Parliamentary Representation

Globally, the GII data indicate that women have increased their percentage of parliamentary seats from an average of 15.6% in 2005 to 21.4% in 2017, an increase of 5.8 absolute percentage points equivalent to growth of 36.9% over the 12-year timeframe (see Table 8). Although female participation in country-level politics has increased substantially

 Table 8
 Parliamentary representation by region (reports percentage of women in parliament)

Region	n	2005 average	2017 average	Absolute change	Percentage change
East Asia and Pacific	25	9.8	14.1	4.3	43.4
Eastern Europe and Central Asia	29	14.2	20.8	6.6	46.4
Latin America and Caribbean	33	18.3	25.1	6.7	36.8
Middle East and North Africa	17	6.8	14.9	8.1	118.2
Western Europe and Other Developed	26	26.2	31.5	5.3	20.3
South Asia	9	11.9	15.0	3.1	25.6
Sub-Saharan Africa	46	15.8	21.1	5.3	33.8
Global Female Parliamentary Representation	185	15.6	21.4	5.8	36.9

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports n = number of countries

when aggregated, progress is far from universal as 32 countries (nearly one-fifth of the 185 countries on which data is available) saw the percentage of women in parliament decrease over the time period (see Fig. 5).

Table 8 reports parliamentary representation by region. Aggregation at the regional level suggest that Western Europe and Other Developed countries have the highest absolute participation of women in parliament, on average making up 31.5% of representatives. Latin American countries are not far behind, with 25.1% on average. On a percentage basis, MENA, Eastern Europe & Central Asia and East Asia & Pacific regions have made the most progress with increases of 118.2, 46.4 and 43.4%, respectively.

The use of gender quotas appears to be an important mechanism to increase the participation of women in national parliaments. An interesting case is that of the Western Balkans, illustrated graphically in Fig. 6. Since the early 2000s, throughout the Western Balkans, gender quotas require political parties to include at least 30% women in their lists of

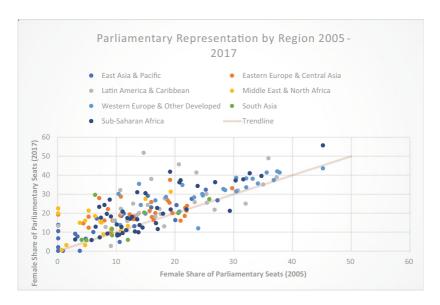


Fig. 5 Parliamentary representation by region 2005–2017 (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

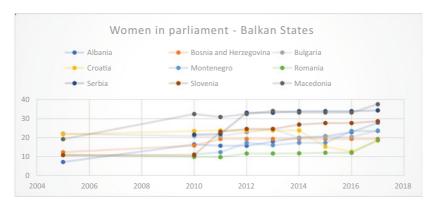


Fig. 6 Parliamentary representation in Balkan States (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

candidates (40% in Macedonia & Bosnia and Herzegovina), although the quotas are not always strictly followed (Duhaček et al., 2019). Although representation does not automatically imply that gender equality and women's rights are promoted and defended, it does appear that women in the Western Balkans have more decision-making power and influence than ever before, as their representation in parliaments has grown.

In terms of visibility, the European Parliament (EP) has repeatedly drawn attention to the situation of women in the Western Balkans. In 2008, the EP adopted a resolution, stressing the importance of NGOs and women's organizations in finding adequate solutions and contributing to the democratic processes in the region (Lilyanova, 2018). Additionally, the EP called on the European Commission to ensure that its policy for strengthening Western Balkan NGOs should be particularly focussed on the empowerment of women's participation in civil society, even advancing a 2013 resolution that called for measures to increase awareness through the media, public campaigns and education programmes to eliminate gender stereotypes and promote women's active participation in all spheres of life (Lilyanova, 2018).

The three countries with the highest female participation in parliament include Rwanda, Bolivia and Cuba, which have rates of 49% or more. Top performers by absolute change and percentage change are reported in Table 9. By country, the top three performers in terms of absolute reduction in parliamentary representation are Bolivia, Nicaragua and Nepal.

Top and worst performing countries (parliamentary representation)

Top and worst performers (country)	2005 average	2017 average	Absolute change	Percentage change
Top 3 performers (Absolute				
Change)				
Bolivia	14.7	51.8	37.1	252.4
Nicaragua	20.7	45.7	25.0	120.8
Nepal	6.4	29.6	23.2	362.5
Bottom 3 performers (Absolute Change)				
Grenada	32.1	25.0	(7.1)	-22.1
Seychelles	29.4	21.2	(8.2)	-27.9
Liechtenstein	24.0	12.0	(12.0)	-50.0
Top 3 performers (Percentage Change)				
United Arab Emirates	0.1	22.5	22.4	22,400.0
Saudi Arabia	0.1	19.9	19.8	19,800.0
Kyrgyzstan	0.1	19.2	19.1	19,100.0
Bottom 3 performers (Percentage Change)				
Vanuatu	3.8	0.1	(3.7)	-97.4
Papua New Guinea	0.9	0.1	(0.8)	-88.9
Haiti	9.1	2.7	(6.4)	-70.3

Note Table constructed by authors based on source data from the UNDP Human Development Reports

By contrast, the bottom three included Grenada, Seychelles and Lichtenstein. The top three countries by percentage change during the observed period include United Arab Emirates, Saudi Arabia and Kyrgyzstan while the bottom three are Vanuatu, Papua New Guinea and Haiti.

The South American country of Bolivia offers another particularly successful example of gender quotas. Bolivia has increased its female

parliamentary representation from 14.7% in 2005 to 51.8% in 2017. Origins of this seismic shift began with the passing of the "Quotas Act" passed in March 1997, which established an obligation for political parties to include women candidates for at least 30% of elective posts. The measures were formally adopted in The Political Parties Act (1999), which states the same principle of affirmative action in paragraph 4 of Article 19, "...the parties shall establish a quota of at least thirty percent women on all the party's decision-making levels and as regards the candidates for representative office." As Bolivia adopted a new constitution in 2009, a new provision formalized and guaranteed the principle of parity and alternation between male and female candidates in national, departmental, municipal and judicial electoral processes. The 2009 Constitution enshrined these progressive values from the point of view of gender and ethnicity, leading to unprecedented female participation in the political system.

From 1982 to 2009, only 83 of 910 deputies (9%) and only 9 of 182 senators (5%) were elected women (UNDP, 2014). In 1993, prior to the introduction of the electoral quotas, women representation reached a historical high of just under 9%. In 1997, with the application of the 30% quota of women on candidate lists, women's participation rose to 13 incumbents and 28 substitute deputies, or 11.5% of the parliament. By 2009, under the parity and alternation principles, over 30% of the parliament (both chambers) was composed of women, which has continued to the present day where gender equality (at least in terms of representation) has been achieved.

3.3.2 Educational Attainment

Globally, the GII data indicate that the gender gap related to secondary education has been reduced from 6.3% in 2000 to 3.6% in 2017, a decrease of 43.2% over the 17-year timeframe. Although these figures illustrate substantial progress in evening the playing field between men and women in terms of educational attainment, more work is needed to ensure universal access to secondary education. As of 2017, only 62.6% of women and 66.2% of men had completed some secondary education.

Figure 7 illustrates how the gender gap has changed for countries from 2000 to 2017. To put the gender gap in perspective, each observation (i.e. size of the bubble) is scaled by the total educational achievement within a given country. For countries on the left side of the y-axis, the rate of female secondary education outpaced that of their male counterparts

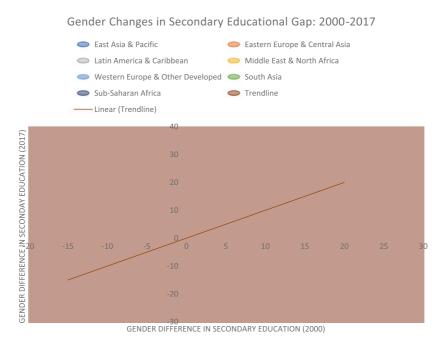


Fig. 7 Education gender gap (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

in the year 2000. Similarly, for countries below the x-axis, women educational rates were higher than male educational rates for the year 2017. Most countries fall into the upper right quadrant of the graph, illustrating that a significant gender gap still exists at the global level, although most countries fall below the trendline, indicating that progress has been made over the 2000–2017 time period.

Results at the regional level indicate that Latin America & Caribbean and Western Europe & Other Developed countries have the lowest gender gap in educational outcomes (Table 10). Indeed, Latin America even shows higher educational outcomes for women relative to men in 2017. To put gender differences in perspective, the total educational achievement is also presented in Table 10 (a maximum score of 200 indicates that 100% of women and 100% of men attain some secondary education). In terms of progress in reducing the gender gap, the MENA, East Asia & Pacific and Eastern Europe appear to have made the most

Table 10 Education gap by region

Region	n	2000 average	2017 average	Absolute change	Percentage change	Total educational achievement
East Asia and Pacific	18	7.0	3.0	(4.1)	-58.0	127.46
Eastern Europe and Central Asia	26	6.7	2.8	(3.9)	-58.4	184.20
Latin America and Caribbean	27	1.1	(0.7)	(1.8)	-159.6	121.39
Middle East and North Africa	18	8.1	2.0	(6.1)	-75.3	117.46
Western Europe and Other Developed	23	4.4	1.1	(3.2)	-73.9	178.54
South Asia	8	11.1	12.5	1.4	12.6	98.04
Sub-Saharan Africa	32	9.1	8.6	(0.5)	-5.9	69.36
Global Education Gap	152	6.3	3.6	(2.7)	-43.2	128.85

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports n= number of countries

progress on an absolute basis, with absolute reductions in the gender gap ranging from 3.9 to 6.1%. On a percentage basis, Latin American & Caribbean, MENA and Western Europe and Other Developed countries have made the most progress, reducing the gender gap by 159.6, 75.3, and 73.9%, respectively (Table 11).

By 2017, six countries (Austria, Canada, Estonia, Finland, Iceland and Luxembourg) had achieved universal secondary educational outcomes for both men and women (i.e. 100% of boys and girls acquire at least some secondary education). Furthermore, during the observation period, 31 countries were able to achieve gender parity in terms of secondary educational achievement. Countries with the largest educational gender gap today, all with a gap of more than 20%, include: DRC Congo, Togo, Afghanistan, India, Turkey, Liberia and Pakistan.

Table 11	I alagram formas		~~~ h	
Table II	Labour force	participation	gap t	y region

Region	n	1990 average	2017 average	Absolute change	Percentage change	Total labour force partic ipation
East Asia and Pacific	22	22.5	18.2	(4.3)	-19.0	130.58
Eastern Europe and Central Asia	31	19.4	16.9	(2.5)	-12.7	116.70
Latin America and Caribbean	29	36.5	24.6	(11.8)	-32.5	130.80
Middle East and North Africa	20	54.0	45.7	(8.3)	-15.4	105.69
Western Europe and Other Developed	22	22.8	11.1	(11.7)	-51.3	123.36
South Asia	9	50.5	41.7	(8.7)	-17.3	117.32
Sub-Saharan Africa	47	19.0	13.2	(5.8)	-30.6	134.75
Labour Force Participation Gap	180	28.2	21.1	(7.2)	-25.4	125.00

 $\it Note$ Table constructed by authors based on source data from the UNDP Human Development Reports n= number of countries

One of the most challenging times for students is puberty, when the body goes through multiple changes as it makes the transition to adult-hood. These developments can be accompanied by the added pressure of cultural expectations for starting a family life. A 2014 United Nations Educational, Scientific and Cultural Organization (UNESCO) report estimates that one in ten girls in Sub-Saharan Africa misses school during their menstrual cycle (UNESCO, 2014). By some estimates, this amounts to 20% of a given school year. Worse still, many girls drop out of school altogether once they begin menstruating (Sommer, 2010).

As a result, students (and young women in particular) need access to information on hygiene and sanitation. The information that students often receive is selective and shaped by taboos. In many cases, the education sector avoids the issue by considering it a private matter or a problem to be addressed within the family. It may come as no surprise then to learn

that over 300 million women in India do not use sanitary pads and that 71% of girls in the country report having no knowledge of menstruation before their first period (Dasra & USAID, 2014).

In this context, Mumbai-based Aakar Innovations was established in 2010. Driven by a mission to provide access to affordable, biodegradable sanitary pads and menstrual health education to women and girls in rural India, Aakar developed India's first certified 100% compostable sanitary pad (Aakar, 2019). The sanitary pads are manufactured by women self-groups who then also distribute them among other women in the village. Aakar also raises awareness and intends to boost confidence, ease pain, save lives and increase the social and economic opportunities for girls and women. Their business model works as a platform integrator by selling machines to women Self Help Groups and ensuring the timely availability of raw materials at the low cost and best prices. Aakar also has a non-profit arm that engages with villages to generate community awareness, build the capacity of village micro-entrepreneurs and ensure distribution to the last mile.

3.4 Lahour Market

3.4.1 Labour Force Participation

Women have been steadily increasing their participation in economic affairs and the workplace. Globally, GII data indicate that the gender gap related to labour force participation has been reduced from 28.2% in 1990 to 22.1% in 2017, a decrease of 25.4% over the timeframe. Although these figures illustrate the rising role of women in the workforce, critical measures such as compensation and activity in the informal sector are not captured by the GII indicator. With that caveat, as of 2017, 52% of women and 73% of men were active in the labour force as of 2017.

Figure 8 illustrates country-level changes for the gender gap related to labour force participation between 1990 and 2017. To put the gender gap in perspective, each observation (i.e. size of the bubble) is scaled by the total labour force participation within a given country. For countries on the left side of the y-axis, the rate of women in the labour force outpaced that of their male counterparts in the year 1990. Similarly, for countries below the x-axis, the labour force participation of women was higher than men in 2017. Most countries fall into the upper right quadrant of the graph, illustrating that a significant gender gap still exists at the global

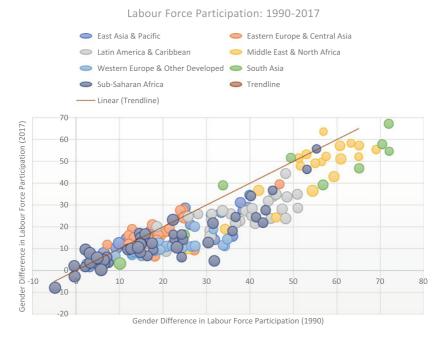


Fig. 8 Labour force participation gender gap (*Note* Figure constructed by authors based on source data from the UNDP Human Development Reports)

level, although most countries fall below the trendline, indicating that progress has been made over the 1990–2017 time period.

Aggregation at the regional level suggests that Western Europe & Other Developed countries and Sub-Saharan Africa have the lowest gender gap in terms of labour force participation, with gaps of 11.1 and 13.2%, respectively. The highest gender gaps in workforce exist in MENA and South Asia, with 2017 averages of 45.7 and 41.7%, respectively. On a percentage basis, Western Europe & Other Developed countries, Latin America & Caribbean and Sub-Saharan Africa regions have made the most progress with decreases of 51.3, 32.5, and 30.6%, respectively, from 1990 to 2017.

At the country level, only three countries achieved gender parity in labour force participation: Mozambique, Burundi and Rwanda. By contrast, 15 countries (all from South Asia and MENA) reported a gender

gap of 50 percentage points or more for labour force participation. Syria, Afghanistan and Yemen reported the highest gender gaps.

One company trying to change this paradigm in the Arab world is Glowork, a start-up that integrates women into the workforce. Started in 2011 by Khalid Alkhudair, a former KPMG auditor, Glowork is attempting to break down barriers about the types of jobs for women. Leading these changes can result in pushback from more conservative parties in Saudi Arabia. In 2010, a year before starting Glowork, Alkhudair advised a client to hire 11 cashiers at Panda supermarkets in Jeddah (Glowork, 2019). This led to a prominent religious cleric calling for a boycott against the stores. Although women working as cashiers is now a more common sight in Saudi Arabia, Glowork also has focussed on "virtual offices" that allow women to work from home, a benefit in linking rural areas to the labour market (Glowork, 2019).

Integrating women into the workforce is also a considerable challenge in even the most developed economies. A common barrier to increasing women participation in the workforce is childbirth and early childcare, where women are much more likely to take time off to raise children. To help women "relaunch" their careers, Anne Zacharias created iRelaunch in 2007. The company provides career re-entry strategies for professionals returning to work after a career break. Similar to Glowork, iRelaunch serves as a bridge between professionals looking to re-enter the workforce and companies looking for qualified workers. The company also facilitates access to career coaches and experienced resume writers and has built a supportive online community where job seekers encourage each other and provide advice and potential leads. iRelaunch only charges job seekers for its "Return to Work Roadmap" programme, a five-phase programme that offers a structured step-by-step guide to re-entering the workforce (iRelaunch, 2019).

4 Discussion

In this chapter, we have examined one measure of the progress being made towards gender equality, the UNDP's Gender Inequality Index. We examined the theoretical underpinnings of the GII's sub-components and how these indicators are practically constructed. We then illustrated some of the shortcomings of the GII and highlighted two additional indices that inform the debate on gender inequality. Finally, we illustrated where gender inequality has been reduced according to GII measures and

offered some examples of concrete actions that are attempting to reduce gender inequality.

In terms of improving the index, we believe the GII should drop (absolute) "women-only" indicators (i.e. MMR and AFR) and only include (relative) "men-versus-women" indicators. As already covered in our criticism of the GII, we argue that the inclusion of MMR and AFR penalize poorer countries where health outcomes are worse for both men and women. Thus, we suggest, in line with Benería and Permanyer (2010) and Klasen and Schüler (2011), to replace MMR and AFR with the gender-specific life expectancies at birth—a widely used indicator in previous global gender inequality assessments. Realizing that reproductive health conditions affect women and men differently, it is a conceptual and methodological challenge to identify and construct gender-specific variables that can easily be integrated into gender inequality indices.

Overall, the GII indicates that gender inequality is being reduced, albeit too slowly to achieve the current 2030 SDG targets of gender parity. Of the 122 countries for which the necessary data was available to generate a GII score for the years 1995 and 2017, the GII global average was reduced by 29.7%, from 0.47 to 0.33. Performance across each subindicator also showed measurable progress to the goal of gender equality, with considerable progress being made with respect to the reproductive health indicators of mother mortality and adolescent fertility.

For each indicator, we identified some key social innovations taking place that aim to reduce gender inequality. These innovations sometimes operate through activist and political action, such as the imposition of gender quotas to increase the political power of women in national governments. Other times, social innovations may stem from bottom-up approaches, such as the start-up ventures that aim to reintegrate women into the workplace or empower women to take control over their financial situations. Social innovations can also originate from the integrated actions of development agencies with local communities, such as the re-tooling and training of Traditional Birth Attendants who now offer women in Sierra Leone modern medical advice and can refer women to well-equipped medical facilities in case of any problems during pregnancy or post-natal care.

Finding solutions to achieve the 2030 goal of gender parity requires collaboration and dialogue between many actors. We hope that this chapter has illustrated a few of the ways that these stakeholders are coming together to organize responses to gender inequality. We believe

that social innovation provides several tools for public bodies to engage civil society and the private business sector, which ultimately can crowd-in resources that would otherwise be unavailable to tackle global challenges such as gender inequality. Rather than a focus on traditional economic diplomacy instruments such as large-scale development projects, trade tariffs or foreign-direct investment, we suggest that seeding and scaling local changemakers and social entrepreneurs can serve as an additional economic diplomacy tool that change local attitudes and behaviours, create access to improved health services and influence gender paradigms that prohibit the economic and political engagement of women.

Gender equity is an intrinsic dimension of human development. Women and girls represent half of the world's population and, therefore, also half of its potential. If girls and women are systematically denied freedoms and opportunities, our societies will never reach their full human potential. Additionally, empowering women also has been linked to greater economic prosperity and development. Although gender equality has now been at the forefront of the global agenda for some decades, further investments in women and girls are required to promote long-term opportunities for growth prospects and human development.

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