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Gender Disparity under the Law and Women's Well-Being

ROSEMARIE FIKE

FRASER
INSTITUTE





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The most economically free countries are also the ones with the most equitable treatment of men and women under the law.

1.0

Introduction

Economists since Adam Smith (1776/1981) and John Stuart Mill (1859/2012) have been pointing to economic freedom as a necessary factor in fostering human flourishing. Economic freedom, the extent to which individuals can make their own economic decisions, is key to economic and social progress.

Hundreds of academic studies have shown that economic freedom leads to higher rates of economic growth, higher levels of income, increased trust and honesty in government, protection of civil liberties, reductions in poverty, and improvements in health and educational outcomes (Hall and Lawson, 2013). Unfortunately, in many countries, not all members of society have equal access to institutions that protect economic freedom. For example, formal legal restrictions in many countries prevent women from owning property, engaging in voluntary trade, and operating businesses.

In 2016, the construction of the Gender Disparity Index was first discussed in a chapter, *Gender Disparity in Legal Rights and Its Effects on Economic Freedom* (Fike, 2016), in the Fraser Institute's annual report, *Economic Freedom of the World*. As of 2017, the index published in *Economic Freedom of the World* has incorporated the Gender Disparity Index to adjust its economic freedom index to account for the differential legal treatment of women.¹

This publication provides data showing the extent to which men and women across the world enjoy equal economic rights, and how adjusting for gender disparity affects the scores and rankings in the index of *Economic Freedom of the World*. In addition, it examines whether increased gender equality under the written legal and regulatory codes is associated with improvements on measures of well-being for women. Where possible, the data for men are also included to provide a comparison.

1. For a detailed explanation of the Gender Disparity Index and its categories and subcomponents, see *Adjusting for Gender Disparity in Economic Freedom and Why It Matters* (Fike, 2017).

2.0

The Gender Disparity Index

The Gender Disparity Index (GDI) captures the degree to which women around the world have the same legal rights as men and adjusts the economic freedom score to reflect any discrepancy. The Gender Disparity Index employs data from *Women, Business, and the Law 2016* (World Bank, 2015), which tracks legal and regulatory barriers imposed on women that limit their ability to participate freely in formal economic activity. These data, which were released for the first time in 2008, are updated every two years to incorporate legal and regulatory reforms.

The Gender Disparity Index includes 41 variables covering the period from 1995 to 2016.¹ Each of these variables captures a distinctive dimension of a woman's ability to participate freely in the formal economy. They are broadly classified under the five categories described on [page 3](#).

1. The most recent data available for calculating the index in the 2019 edition of *Women and Progress, Gender Disparity under the Law and Women's Well-Being*, are from 2016. Since the World Bank releases its report every other year, each report is used to calculate the GDI for two consecutive years. Therefore, *Women, Business and the Law 2016: Getting to Equal* (World Bank, 2015) was used to construct the GDI scores for 2016 and 2015.



The Five Categories of the Gender Disparity Index

FREEDOM OF MOVEMENT

The ability to choose where to live is an essential right that enables women to travel to a different location in order to pursue new opportunities, or even to escape an undesirable family situation at home. In many countries, a woman's ability to move freely both within her country, or to obtain a passport or other type of identification necessary to travel abroad, is severely restricted. This category captures whether women in a particular country have the same legal freedom to travel as men.

PROPERTY RIGHTS

Property rights are perhaps the most fundamental prerequisite for economic prosperity. Owning property, making decisions about its usage, capturing any streams of revenue that result from it, and bearing the opportunity costs of mismanaging it, provides powerful incentives that help allocate resources where they are most valued and gives the property owners the means to better their own lives. Countries that do not recognize women's rights to own or inherit property deny women the means to improve their lives; as a result, those countries lose out on the value these women could contribute to the economy.

FINANCIAL RIGHTS

In some parts of the world, women are unable to open a bank account or obtain a loan without the permission of a spouse or male relative. This category captures such differences between the legal access to financial institutions available to men and women. Limits on a woman's financial independence make it difficult for women to undertake business ventures, to save in order to create a financially secure future, or simply to have access to their own money. Further, financial independence is another essential aspect of economic freedom that provides women with the means to work towards an exit plan if they are in an undesirable family situation.

FREEDOM TO WORK

This category measures the extent to which men and women have equal freedom to choose whether to obtain formal employment, the type of employment they wish to pursue, the hours they want to work, whether to open a business or enter into a voluntary contract with another individual. In some countries, women are required to obtain the explicit permission of their husband before they begin to pursue work outside the home. Participation in market transactions provides individuals with a means to improve their well-being by generating value for others. When people are free to choose how to employ their time and efforts in the labor market, they have much more direct control over their destiny. When they are denied such decisions, there is very little they can do to influence the direction of their lives.

LEGAL STATUS

In some countries, a woman's testimony in court does not carry the same weight as a man's, and women are unable to initiate court proceedings without the permission of a husband or male relative. Further, there are some countries where women are legally obligated to obey their husbands and can be charged with disobedience if they go against their husband's wishes. This category captures whether women have the same legal personhood as men in a particular country. When a woman is legally considered to be less of a person than a man, this reduces the control women have over their own lives and makes it more difficult for a woman to use the formal legal system, for example, to escape an abusive or violent situation.

TABLE 1

COUNTRIES WITH NO GENDER DISPARITY UNDER THE FORMAL LAW, 2016

| | | | |
|----------------|-----------|-------------|----------------|
| Armenia | Georgia | Luxembourg | Slovak Rep |
| Australia | Germany | Malta | South Africa |
| Austria | Greece | Mexico | Spain |
| Belgium | Hong Kong | Namibia | Sweden |
| Cambodia | Hungary | Netherlands | Switzerland |
| Canada | Iceland | New Zealand | Taiwan |
| Cape Verde | Ireland | Norway | Timor-Leste |
| Denmark | Italy | Paraguay | United Kingdom |
| Dominican Rep. | Laos | Peru | United States |
| El Salvador | Latvia | Portugal | Uruguay |
| Estonia | Liberia | Romania | Venezuela |
| Finland | Lithuania | Serbia | Zambia |

Formal restrictions on women's rights in each of these areas represent restrictions upon their economic freedom that can have severe consequences for the well-being of women, and the overall prosperity of society. As such, these are the components included in the Gender Disparity Index (GDI). Since the GDI is derived from formal legal and regulatory codes, this measure does not capture social norms, religious customs, and other informal rules. Even when the formal legal institutions treat men and women equally, women in some countries face informal barriers that limit their economic freedom. In such cases, the Gender Disparity Index will not fully account for the gender discrimination that takes place, and the adjusted economic freedom score will still overstate the level of economic freedom women have in practice.

TABLE 2

GLOBAL AVERAGE GDI SCORES, 1970 – 2016

| Year | Global Average GDI Score |
|------|--------------------------|
| 1970 | 0.7374 |
| 1975 | 0.7588 |
| 1980 | 0.7727 |
| 1985 | 0.8046 |
| 1990 | 0.8307 |
| 1995 | 0.8411 |
| 2000 | 0.8673 |
| 2005 | 0.8863 |
| 2010 | 0.9054 |
| 2016 | 0.8709 |

The Gender Disparity Index shows scores between 1.00 (no legal gender disparity in any of the variables used to construct the index; table 1) and 0.00 (legal gender disparity in every variable used to construct the index). For the year discussed in this study, 2016, GDI scores range from 0.41 (Saudi Arabia) to 1.00 (48 countries received this score).

The global average score for the Gender Disparity Index increased from 0.74 in 1970 to 0.90 in 2010 (table 2). This indicates that the legal status of women has improved in many societies in the past several decades. In fact, a World Bank Report (Hallward-Driemeier, Hasan, and Rusu, 2013) found that over half of the formal barriers to women's rights that were in place in 1960 had been removed by 2010. However, between 2010 and 2016 the global average score for the Gender Disparity Index decreased from 0.90 to 0.87, mainly as a result of the increase in the data available for a greater number of components after 2010.

From 1970 to 1990, the countries with the 15 lowest GDI scores were predominantly African countries, with several countries from the Middle East (Saudi Arabia, Bahrain, Iran, and Jordan), Asia (Nepal and Indonesia) and South America (Paraguay and Brazil) making the list (table 3a). Starting in 1995, however, Middle Eastern and North African countries begin to dominate the list of countries with the greatest gender disparity (table 3b). By 2016, all 15 countries with the lowest GDI scores were from this region. While the GDI scores of several of these countries have increased over the past few decades, movement towards gender equality under the law has been more pronounced in regions such as South America and Sub-Saharan Africa.

TABLE 3A

COUNTRIES WITH THE LOWEST GENDER DISPARITY INDEX SCORES, 1970-1990

| 1970 | | 1975 | | 1980 | | 1985 | | 1990 | |
|----------------|------|----------------|------|----------------|------|----------------|------|----------------|------|
| Lesotho | 0.00 | Lesotho | 0.00 | South Africa | 0.00 | South Africa | 0.00 | South Africa | 0.00 |
| South Africa | 0.00 | South Africa | 0.00 | Zimbabwe | 0.00 | Benin | 0.11 | Benin | 0.11 |
| Zimbabwe | 0.00 | Zimbabwe | 0.00 | Benin | 0.11 | Lesotho | 0.11 | Lesotho | 0.11 |
| Benin | 0.11 | Benin | 0.00 | Lesotho | 0.11 | Rwanda | 0.17 | Niger | 0.29 |
| Rwanda | 0.17 | Rwanda | 0.17 | Rwanda | 0.17 | Namibia | 0.25 | Congo, Dem. R. | 0.33 |
| Spain | 0.22 | Spain | 0.22 | Namibia | 0.25 | Niger | 0.29 | Mauritania | 0.33 |
| Namibia | 0.25 | Namibia | 0.25 | Niger | 0.29 | Congo, Dem. R. | 0.33 | Namibia | 0.33 |
| Niger | 0.29 | Niger | 0.29 | Congo, Dem. R. | 0.33 | Mauritania | 0.33 | Saudi Arabia | 0.41 |
| Austria | 0.33 | Congo, Dem. R. | 0.33 | Mauritania | 0.33 | Paraguay | 0.33 | Morocco | 0.44 |
| Congo, Dem. R. | 0.33 | Mauritania | 0.33 | Paraguay | 0.33 | Saudi Arabia | 0.41 | Bahrain | 0.54 |
| Indonesia | 0.33 | Paraguay | 0.33 | Saudi Arabia | 0.41 | Morocco | 0.44 | Cameroon | 0.56 |
| Mauritania | 0.33 | Saudi Arabia | 0.41 | Morocco | 0.44 | Bahrain | 0.54 | Indonesia | 0.56 |
| Paraguay | 0.33 | Morocco | 0.44 | Spain | 0.44 | Angola | 0.56 | Iran | 0.56 |
| Saudi Arabia | 0.41 | Mozambique | 0.44 | Bahrain | 0.54 | Brazil | 0.56 | Jordan | 0.56 |
| Morocco | 0.44 | Bahrain | 0.54 | Angola | 0.56 | Burkina Faso | 0.56 | Madagascar | 0.56 |
| | | | | Brazil | 0.56 | Cameroon | 0.56 | Mozambique | 0.56 |
| | | | | Burkina Faso | 0.56 | Iran | 0.56 | Nepal | 0.56 |
| | | | | Cameroon* | 0.56 | Jordan** | 0.56 | Syria | 0.56 |

*Cote d'Ivoire, Iran, Jordan, Madagascar, Mozambique, Nepal, Senegal, Switzerland, and Syria also scored 0.56 in 1980.

** Madagascar, Mozambique, Nepal, Senegal, and Syria also scored 0.56 in 1985.

TABLE 3B

COUNTRIES WITH THE LOWEST GENDER DISPARITY INDEX SCORES, 1995-2016

| 1995 | | 2000 | | 2005 | | 2010 | | 2015 | | 2016 | |
|----------------|------|----------------|------|----------------|------|-------------------|------|----------------|------|----------------|------|
| South Africa | 0.00 | Benin | 0.11 | Niger | 0.29 | Saudi Arabia | 0.41 | Saudi Arabia | 0.41 | Saudi Arabia | 0.41 |
| Benin | 0.11 | Niger | 0.29 | Congo, Dem. R. | 0.33 | Jordan | 0.48 | Syria | 0.46 | Sudan | 0.46 |
| Niger | 0.29 | Congo, Dem. R. | 0.33 | Lesotho | 0.33 | Iran | 0.52 | Jordan | 0.49 | Syria | 0.46 |
| Congo, Dem. R. | 0.33 | Lesotho | 0.33 | Mauritania | 0.33 | Bahrain | 0.54 | Kuwait | 0.49 | Jordan | 0.49 |
| Lesotho | 0.33 | Mauritania | 0.33 | Saudi Arabia | 0.41 | Kuwait | 0.59 | Unit. Arab Em. | 0.51 | Kuwait | 0.49 |
| Mauritania | 0.33 | Saudi Arabia | 0.41 | Bahrain | 0.54 | Oman | 0.59 | Bahrain | 0.54 | Unit. Arab Em. | 0.51 |
| Namibia | 0.33 | Bahrain | 0.54 | Cameroon | 0.56 | Syria | 0.59 | Egypt | 0.54 | Bahrain | 0.54 |
| Saudi Arabia | 0.41 | Cameroon | 0.56 | Iran | 0.56 | Unit. Arab Em. | 0.59 | Cameroon | 0.59 | Egypt | 0.54 |
| Morocco | 0.44 | Iran | 0.56 | Jordan | 0.56 | Qatar | 0.62 | Congo, Dem. R. | 0.59 | Cameroon | 0.59 |
| Bahrain | 0.54 | Jordan | 0.56 | Madagascar | 0.56 | Yemen, Rep. | 0.62 | Iran | 0.59 | Congo, Dem. R. | 0.59 |
| Cameroon | 0.56 | Madagascar | 0.56 | Mali | 0.56 | Mauritania | 0.66 | Mauritania | 0.61 | Iran | 0.59 |
| Indonesia | 0.56 | Mali | 0.56 | Yemen, Rep. | 0.56 | Malaysia | 0.67 | Oman | 0.61 | Iraq | 0.59 |
| Iran | 0.56 | Mozambique | 0.56 | Kuwait | 0.59 | Central Afr. Rep. | 0.69 | Qatar | 0.62 | Mauritania | 0.61 |
| Jordan | 0.56 | Nepal | 0.56 | Oman | 0.59 | Congo, Dem. R. | 0.69 | Yemen, Rep. | 0.63 | Oman | 0.61 |
| Madagascar | 0.56 | Syria | 0.56 | Unit. Arab Em. | 0.59 | Swaziland | 0.69 | Niger | 0.65 | Qatar | 0.62 |
| Mozambique | 0.56 | Yemen, Rep. | 0.56 | | | | | | | | |
| Nepal | 0.56 | | | | | | | | | | |
| Syria | 0.56 | | | | | | | | | | |

3.0

Adjusting the Index in *Economic Freedom of the World* for Gender Disparity

The index published by the Fraser Institute in *Economic Freedom of the World* (EFW) measures the level of economic freedom in countries around the world using 42 distinct variables rated on a scale of 0 (least free) to 10 (most free). The variables used to measure economic freedom are grouped under five areas.

Area 1: Size of Government

As government spending, taxation, and the size of government-controlled enterprises increase, government decision making is substituted for individual choice and economic freedom is reduced.

Area 2: Legal System and Property Rights

Protection of persons and their property is a central element of both economic freedom and civil society. This element of economic freedom provides an incentive for people to use resources efficiently by allowing them to capture the benefits of doing so.

Area 3: Sound Money

Inflation erodes the value of wages and savings; in other words, the property of persons. Sound money is thus essential to protect property rights by maintaining the purchasing power of the assets people own. Additionally, when inflation is both high and volatile, it becomes difficult for individuals to plan for the future and enter into long-term contracts, adding an unnecessary element of uncertainty in the economy.

Area 4: Freedom to Trade Internationally

Individuals should be able to buy from and sell to each other freely, not only in their own nation but in any nation. International trade expands the scope of the market and enables us to divide our labor more extensively with people in other countries and discover our comparative advantages. This cooperative discovery process makes goods and services more affordable and increases the standards of living for all parties involved.

Area 5: Regulation

This area measures the limits on economic freedom caused by excessive regulation. Governments may also develop a burdensome regulatory environment that limits an individual's ability to engage in voluntary transactions. Regulations restrict

our freedom to buy and sell domestically, gain credit, hire or work for whom you wish, or freely operate your business.

The EFW index provides a convenient relative ranking of countries from least economically free to most. Adjusting for gender disparity under the law alters these rankings and thus presents a clearer picture of how much economic opportunity exists in some countries. Since unequal treatment under the law is predominantly a rule-of-law issue, the Gender Disparity Index is applied only to Area 2: Legal System and Property Rights, using the following formula:

$$\text{Gender-Adjusted Area 2 score} = [\text{GDI score} \times \text{Area 2 score} + (\text{Area 2 score})]/2$$

After the gender-adjusted score for Area 2 is calculated, the EFW summary score is calculated by taking an average of all five Area scores.¹ This process does not drastically alter the summary scores for most countries: 48 countries treat men and women equally under the formal legal and regulatory code. Thus, their Gender Disparity Index is equal to 1.0 and both their Area 2 scores and overall EFW scores do not show a downward adjustment. An additional 72 countries show slight decreases of less than 0.10 in their summary EFW score. So, for 120 of the 162 countries in the dataset, the scores in the EFW index for 2016 (Gwartney, Lawson, Hall, and Murphy, 2018) were barely altered by the gender adjustment.

1. For a detailed discussion of how the gender-adjustment process works, see Fike, 2017.

TABLE 4
COUNTRIES WITH THE LARGEST DECREASE IN RANK AFTER THE GENDER ADJUSTMENT, 2016

| Country | Gender Disparity Index | Unadjusted Rank in Economic Freedom of the World | Adjusted Rank in Economic Freedom of the World | Change in Rank |
|----------------|------------------------|--|--|----------------|
| Unit. Arab Em. | 0.51 | 12 | 37 | -25 |
| Jordan | 0.49 | 18 | 42 | -24 |
| Saudi Arabia | 0.41 | 83 | 103 | -20 |
| Qatar | 0.62 | 19 | 38 | -19 |
| Kuwait | 0.49 | 73 | 90 | -17 |
| Bahrain | 0.54 | 14 | 30 | -16 |
| Kazakhstan | 0.74 | 57 | 69 | -12 |
| Oman | 0.61 | 78 | 89 | -11 |
| Malaysia | 0.67 | 69 | 79 | -10 |
| Azerbaijan | 0.72 | 97 | 106 | -9 |
| Swaziland | 0.69 | 100 | 108 | -8 |
| Egypt | 0.54 | 139 | 147 | -8 |
| Vietnam | 0.78 | 105 | 112 | -7 |
| Russia | 0.74 | 80 | 87 | -7 |
| Belarus | 0.73 | 116 | 123 | -7 |
| Mauritania | 0.61 | 129 | 136 | -7 |
| Senegal | 0.68 | 119 | 125 | -6 |
| Benin | 0.66 | 129 | 134 | -5 |
| Costa Rica | 0.87 | 29 | 33 | -4 |
| Mongolia | 0.87 | 44 | 48 | -4 |
| Tunisia | 0.80 | 117 | 121 | -4 |
| Morocco | 0.76 | 111 | 115 | -4 |
| Yemen, Rep. | 0.63 | 113 | 117 | -4 |
| Sudan | 0.46 | 149 | 153 | -4 |

For a quarter of countries, primarily in the Middle East and North Africa, the gender adjustment results in a substantial decrease in the EFW score and downgrades their position in the EFW rankings. Twelve countries saw deductions in EFW score of 0.20 points or higher, and the EFW score of an additional 30 countries decreased between 0.10 and 0.19 points.

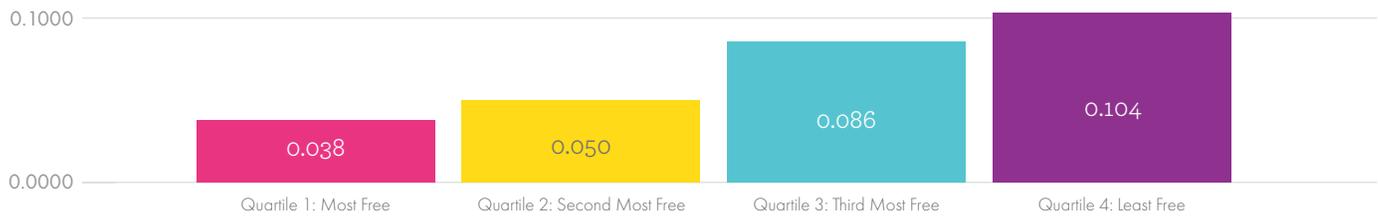
Table 4 provides a list of the largest decreases in the EFW rankings for 2016, the most recent year, as a result of adjustment by the Gender Disparity Index. The group of countries appearing in table 4 is similar to the list of countries in the last column of table 3b. The largest decreases in EFW rankings takes place for countries in the Middle East. Three countries in the region fell by 20 ranks or more: United Arab Emirates by 25 positions; Jordan, by 24; and Saudi Arabia, by 20. Qatar, Kuwait, Bahrain, and Oman along with two Asian countries, Kazakhstan and Malaysia, make up the group with the second most pronounced decrease in EFW rankings, between 10 and 19 positions.

An important question to ask is whether there is a relationship between greater economic freedom and greater gender

equality. The average difference between the unadjusted scores and the adjusted scores are sorted into quartiles based on unadjusted scores from most to least free in figure 1. The figure shows that the most economically free countries (before accounting for gender disparity) have the least amount of gender disparity under the law since they also have the smallest average difference between their scores as adjusted for gender disparity and their unadjusted EFW scores. On average, countries with unadjusted economic freedom scores in the top quartile have a 0.038-point difference between their gender-disparity-adjusted and unadjusted scores. This average difference steadily increases when moving through each quartile: Quartile 2 (0.050); Quartile 3 (0.086); and Quartile 4 (0.104). Again, this indicates that greater economic freedom and greater gender equality under the law tend to go hand in hand.

FIGURE 1

DIFFERENCE BETWEEN UNADJUSTED EFW SCORES AND EFW SCORES ADJUSTED FOR GENDER DISPARITY IN 2016, SORTED BY UNADJUSTED EFW SCORE QUARTILES





When people are free to choose how to employ their time and efforts in the labor market, they have much more direct control over their destiny.

4.0

Gender Inequality under the Law and Measures of Well-Being

Next, we examine whether women have superior economic and social outcomes in societies with greater gender equality under the law as measured by the Gender Disparity Index. The measures of well-being examined are organized into four categories:

- 4.1** labor market outcomes;
- 4.2** health outcomes;
- 4.3** educational outcomes;
- 4.4** other outcomes.

Countries are first sorted into four groups according to the level of gender equality present. Groups are not of equivalent size, as many countries have identical GDI scores. Natural breaks in the data were used to determine the groupings.

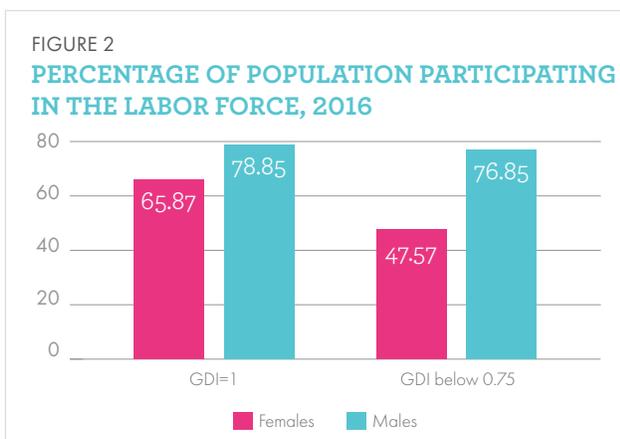
- Group 1:** GDI score = 1, indicating formal legal equality between the economic rights of men and women (48 countries);
- Group 2:** GDI score between 0.90 and 0.99, indicating a slight formal legal disparity between the economic rights of men and women (45 countries);
- Group 3:** GDI score between 0.75 and 0.89, indicating a moderate formal legal disparity between the economic rights of men and women (32 countries);
- Group 4:** GDI score below 0.75, indicating a severe formal legal disparity between the economic rights of men and women (37 countries).

In graphs that follow, countries with gender equality under the law (GDI score = 1) consistently have measures of well-being that indicate greater human flourishing than countries with the most pronounced gender disparity under the law (GDI score below 0.75).

The measures of well-being are all obtained from the database in the World Bank's *World Development Indicators*. There is a strong relationship between greater economic freedom as measured by the EFW index and increased gender equality under the law (figure 1). There is also a well-documented relationship between greater economic freedom and improvements on a wide variety of measures of human flourishing (Hall and Lawson, 2013). The relationship between gender equality and many measures of well-being is confounded by the relationship between gender equality and economic freedom. For this reason, the following figures should be considered illustrative, suggesting productive areas for future research into the additional impact that gender inequality under the law might have on economic and social outcomes. When possible, the data are shown for both men and women in order to examine whether a lack of gender disparity reduces the gap between men's and women's well-being.

4.1: Labor Market Performance

Figure 2 indicates that greater gender equality under the law corresponds to greater female participation in the labor force. As GDI scores decrease, so does the female labor-force participation rate: there is an 18 percentage-point difference in labor-force participation rates of women in the lowest GDI group (47.57%) and those in the top GDI group (65.87%). Interestingly, there is no discernible correlation between the male labor-force participation rate and gender equality, as the male participation rate stays fairly consistent across all GDI groups (between 76.85% and 78.85%). Consequently, the gap in labor force participation between men and women widens as gender equality decreases, from 12.97 percentage points in the top GDI group to 29.28 percentage points in the lowest GDI group.



Women working in vulnerable occupations, those that lack explicit or implicit employment contracts, are more likely to lack decent working conditions and tend to be more susceptible to the effects of an economic downturn. Women living and working

in countries with gender equality under the law are less likely to be employed in a vulnerable occupation (22.95%) as women living in countries with severe gender inequality (42.59%) (figure 3). Likewise, the percentage of men employed in vulnerable occupations is much lower in the top GDI group (23.35%) than in the bottom GDI group (37.92%).

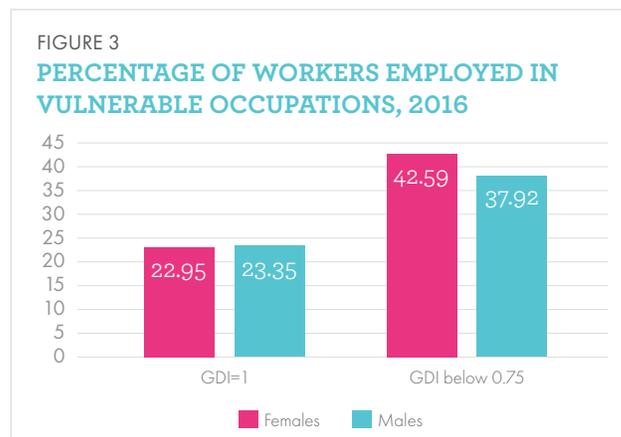
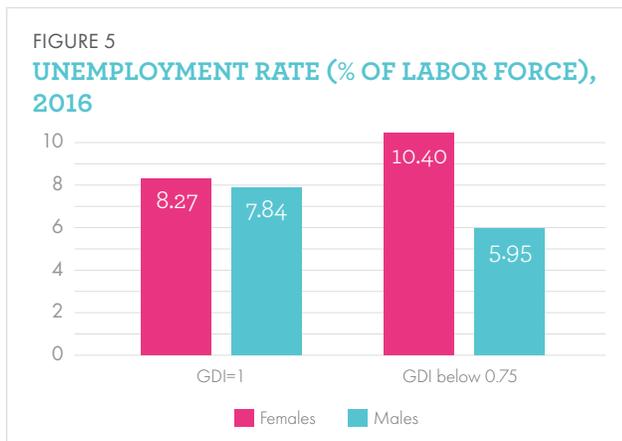


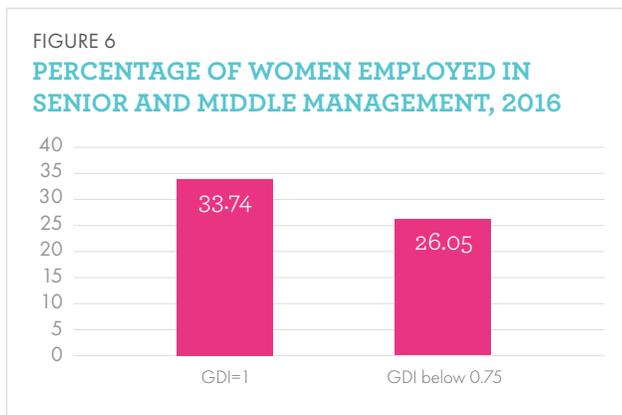
Figure 4 examines another measure of the labor market that captures the extent to which workers have the security of an employment contract that ties their payment to the amount of labor they provide instead of the revenue of their organization. Like the workers in figure 3, individuals with such employment arrangements are less susceptible to economic fluctuations. Women living in countries in the top GDI group are on average nearly 20 percentage points more likely (74.86%) to have a wage or salary contract than women in countries in the bottom GDI group (55.88%). The data for men provides a similar result: only 58.14% of men in the bottom GDI group have a wage or salary contract compared to 71.67% of men in the top GDI group. Interestingly, women in countries with no gender disparity under the law are more likely (74.86%) to have wage or salary contracts than men (71.67%).



An important measure of the health and robustness of a country's labor market is its unemployment rate. Figure 5 examines whether gender equality under the law is associated with lower rates of unemployment. The results indicate that women living in countries that treat men and women equally under the law have an 8.27% unemployment rate, on average, while women in countries in the lowest GDI group have an average unemployment rate of 10.40%. In both GDI groups, men have a lower unemployment rate than women. However, it is notable that the difference between the unemployment rate of women and that of men is much narrower in the top GDI group than it is for countries with significant gender disparity.

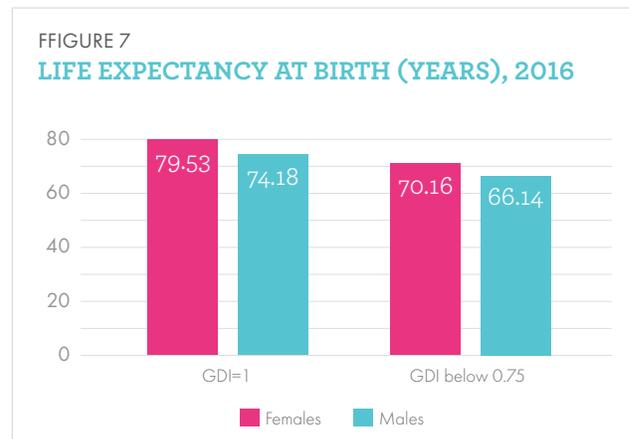


Finally, figure 6 shows the relationship between gender equality under the law and the percentage of employed females who hold senior or middle management positions. There is a strong positive relationship between gender equality and greater representation of women in management. This relationship is consistent with the view that formal gender disparity under the law impedes women's ability to advance in their careers. In fact, 33.74% of employed women living in countries with gender equality under the law hold such management positions, compared to only 26.05% of their employed counterparts living in countries with pronounced gender inequality under the law.



4.2: Health and Life Expectancy

Next, the report explores measures of well-being that capture the health of a country's population. What is, perhaps, the most basic measure of health, life expectancy, is examined in figure 7. This figure indicates that both men and women have longer life expectancies in countries with gender equality under the law. Women can expect to live almost nine additional years in countries with gender equality under the law than those living in countries belonging to the lowest GDI group. For men, the result is about eight additional years. This is likely because countries with greater gender equality are largely countries that also have higher levels of economic freedom and are thus more prosperous. Interestingly, the gap between male and female life expectancy steadily increases (in favor of women) as GDI scores increase. Women live 4.47 years longer than men in the lowest GDI group and this gap increases to 5.35 years longer than men in the highest GDI group. This pattern suggests that gender equality is associated with additional improvements in women's life expectancy.



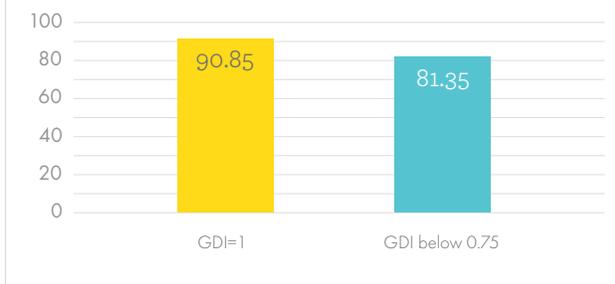
Not only are men and women expected to live longer in countries that embrace gender equality, but babies are far more likely to survive past birth. Figure 8 shows that the infant mortality rate in countries in the top GDI group is only 11.64 deaths per 1,000 live births, whereas this number increases to 30.84 deaths per 1,000 live births in the lowest GDI group. This figure suggests a fairly strong inverse relationship between gender equality under the law and infant mortality rates. However, this relationship may largely be driven by the fact that countries with greater gender equality are also those with greater economic freedom, and not by gender equality alone.

FIGURE 8
INFANT MORTALITY RATE (PER 1,000 LIVE BIRTHS), 2016



In addition to being more likely to survive their births, children born in countries that embrace gender equality under the law are more likely to receive immunizations. Figure 9 shows the immunization rates for measles among children ages 12–23 months for the top and bottom GDI groups. This figure shows that children living in countries in the top GDI group are about 10 percentage points (90.85%) more likely to receive a measles vaccine than those living in countries in the bottom GDI group (81.35%). Again, this relationship may be driven by the different levels of economic freedom present in these countries and not solely by the difference in gender equality.

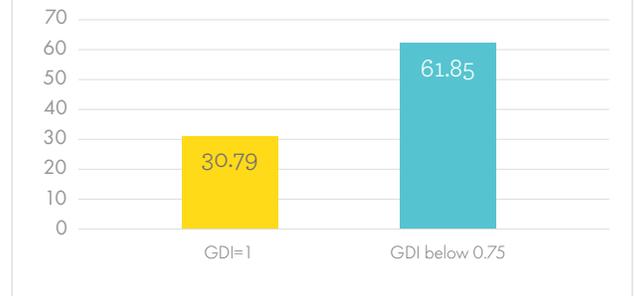
FIGURE 9
IMMUNIZATION RATE FOR MEASLES AS A PERCENTAGE OF CHILDREN 12–23 MONTHS, 2016



Finally, equal access to economic rights provides women with a more expansive set of options in choosing the kind of life they might like to live. For this reason, granting women equal access to economic rights is likely to raise the opportunity cost of having children at a young age. Figure 10 explores the relationship between gender equality under the law and the adolescent fertility rate. Adolescent females living in countries that treat men and women equally under the law are less likely to become mothers in their teens. The average fertility rate for adolescent

females in countries in the top GDI group is only 30.79% compared with 61.85% for those living in countries with the most pronounced gender differences under the law. However, it is once again important to remember that the same pattern exists when examining the relationship between economic freedom and adolescent fertility rates.

FIGURE 10
ADOLESCENT FERTILITY RATE (BIRTHS PER 1,000) WOMEN AGES 15–19, 2016

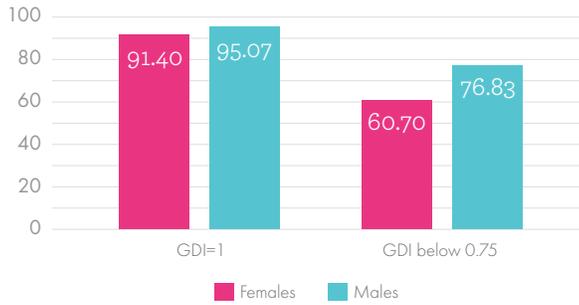


4.3: Educational Attainment

This section examines the relationship between gender equality under the law and the incentive to acquire human capital—that is, an education. When women are permitted to participate in economic activity fully, the returns to investing in education are expected to be higher. Further, since fully including women in economic activity expands the scope of the market and increases the potential gains from trade available throughout the economy, one would expect higher returns to educational investments for men as well.

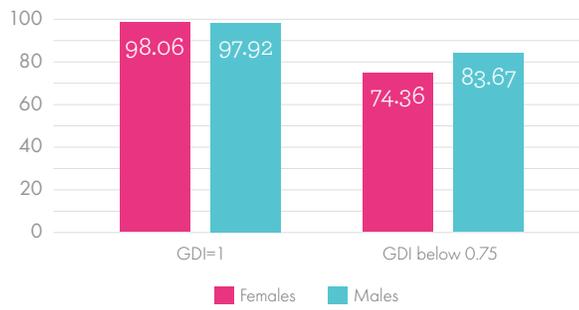
Figure 11 examines the relationship between gender equality under the law and adult literacy rates. For both men and women, there is a positive correlation between GDI scores and the adult literacy rate. The difference between literacy rates of adults living in countries that treat men and women equally under the law and those that have pronounced gender disparity is much more significant for women (91.40% compared to 60.70%) than it is for men (95.07% compared to 76.83%). Another notable pattern is that the gap between the literacy rates of men and women is much narrower in the top GDI group (where there is a 3.67 percentage-point difference) than in the bottom group (a 16.13 percentage-point difference).

FIGURE 11
ADULT LITERACY RATE (%), 2016



The results for the youth literacy rates of men and women, as depicted in figure 12, show a strikingly similar pattern. While youth literacy rates are on average higher than that of adult men and women and across both GDI groups, the positive relationship between GDI score and literacy rates remains. The gap between the literacy rates for boys and girls also narrows as GDI scores increase. For youths living in countries that treat men and women equally under the law, the average literacy rate for girls is 98.06% and for boys, 97.92%. For those living in countries with the most pronounced gender disparity, the rate for girls is only 74.36% and for boys, 83.67%.

FIGURE 12
YOUTH LITERACY RATE (%), 2016



Finally, figure 13 examines whether gender equality under the law has any relationship to the percentage of youths (aged 15–29 years) who are not actively engaged in some formal human-capital formation—education, employment, or training. This figure indicates that countries that treat men and women equally under the law have far fewer youths not investing in education, employment, or training (12.71% for boys and 15.55% for girls) than countries in the bottom GDI group (14.87% for boys and 25.24% for girls). Interestingly, the percentage of

the male youth population not in education does not vary much across GDI groups, suggesting that gender disparity under the law does not significantly alter the decision to cultivate such skills in boys. Not granting women equal access to economic rights does, however, significantly alter the decision to invest in acquiring those skills for girls. This makes sense, as limiting women’s access to economic rights lowers the return for these types of investments as it reduces women’s opportunity to put these skills to use in the labor market.

FIGURE 13
PERCENTAGE OF YOUTH NOT IN EDUCATION, EMPLOYMENT, OR TRAINING, 2016



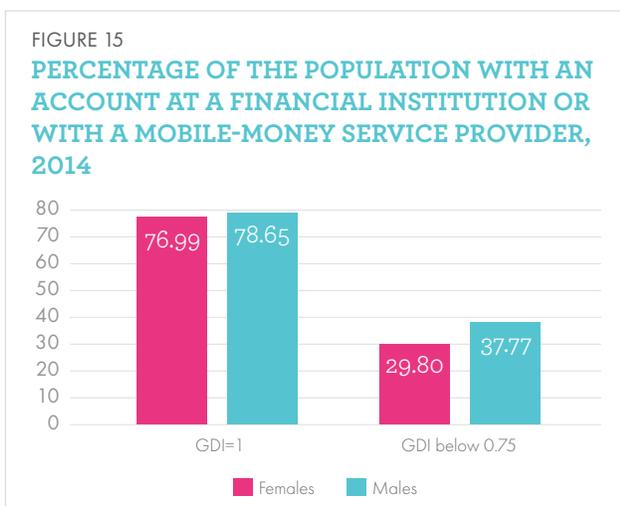
4.4: Access to Wealth and Financial and Political Institutions

Figure 14 depicts the relationship between GDI scores and GDP per capita. GDP per capita, on average, is \$30,012.17 for those living in countries that treat men and women equally under the law. For those living in countries with the greatest degree of gender disparity under the law, GDP per capita, on average, is only \$17,408.14. This relationship is consistent with the view that denying women economic opportunities reduces a society’s capacity for wealth. Empirical estimates of the losses to GDP per capita as a result of gender inequality are as high as 14.0% to 15.5% of GDP for OECD countries, and slightly higher for developing countries (Cuberes and Teignier, 2014).

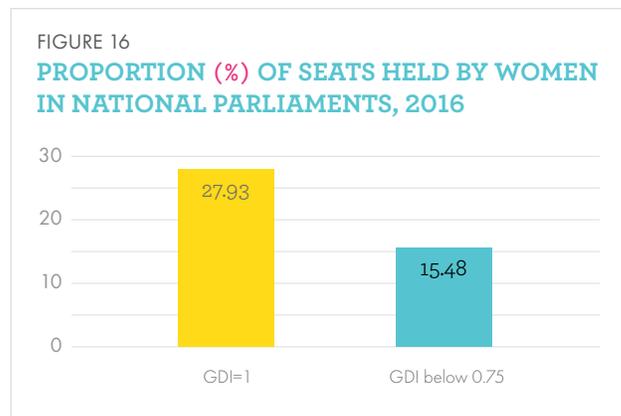
FIGURE 14
GDP PER CAPITA, 2016, IN PPP, CONSTANT 2011 INTERNATIONAL DOLLARS



Access to financial institutions provides a means for women to work towards their personal financial goals. Countries with higher levels of gender equality under the law provide both men and women with greater access to financial institutions. Figure 15 measures the percentage of the population with an account at a financial institution for the top and bottom GDI groups. The percentage of account ownership by both men and women decreases as gender equality under the law decreases. In countries that treat men and women equally under the law, 76.99% of women and 78.65% of men have their accounts at financial institutions. In countries in the bottom GDI group, only 29.80% of women and 37.77% of men have such accounts. Notably, the difference between male and female account ownership becomes more pronounced as gender disparity under the law increases.



Finally, we examine whether gender disparity under the law and female representation in government have any notable relationship. Figure 16 shows the proportion of seats held by women in national parliaments, on average, in the top and bottom GDI groups. There is a greater proportion of women holding parliamentary seats in countries that treat men and women equally under the law (27.93%) than in countries in the bottom GDI group (15.48%). The existence of gender quotas in many countries may complicate the relationship between GDI score and this particular outcome.





In countries where men and women are treated equally under the law, the average youth literacy rate is high.

5.0

Concluding Remarks

This report provides a brief overview of the Gender Disparity Index that is used to adjust Area 2, Legal System and Property Rights of the index published in *Economic Freedom of the World*. As a result of this gender adjustment, the EFW index now accounts for the fact that some countries place additional legal and regulatory barriers on the economic activities of women, providing estimates of economic freedom that give a more complete picture of the experience of the entire population, women as well as men.

This gender adjustment results in no material change in the overall summary score of most of the countries measured by the EFW index. For many countries in the Middle East and North Africa and a handful of other countries, however, this adjustment results in a notable downgrading of their economic freedom scores.

Examining the patterns in the gender disparity data leads to optimistic conclusions. First, the changes in the global average gender-adjustment scores indicate that parity under the law has generally been on the rise since 1970. Throughout this time, movements towards greater gender equality have been made—even in the places where gender discrimination is the most pronounced.

In addition, the examination of the data presented in the section 4.0 indicates that greater gender disparity under the law is associated with worse performance across a wide variety of measures of human flourishing. For example, women living in countries that treat men and women equally under the law are more likely to participate in the labor force and work for wages and are less likely to be unemployed or to be employed in vulnerable occupations than women living in countries with legal gender disparity.

In countries that have greater gender equality, health outcomes are more favorable. Women live longer, infant mortality rates are lower, a greater percentage of children are vaccinated, and there are fewer adolescent pregnancies.

Women living in countries that treat men and women equally under the law also have more favorable educational outcomes than women living in countries with pronounced gender disparity. Both youth and adult women have higher literacy rates and a much smaller percentage of young adult women forgo investments in education, formal training, or on-the-job employment training.

One additional observation that can be made from analyzing this data is that, for many measures of well-being, particularly labor-market outcomes, there is not much difference between the outcomes for men in places with gender equality under the law and those living where there is a severe legal gender disparity. This suggests that outcomes for men are not drastically affected by laws that place additional barriers between women and participation in markets. This result makes sense, as the legal barriers in question constrain the choices of only part of the population—the women.

In addition, the differences between the outcomes for men and women are far less pronounced, on average, in the countries that treat men and women equally under the law than in countries

in the bottom GDI group. The inequality between men's and women's well-being is higher (in favor of men) in places where gender disparity under the law is most pronounced. However, the results of many variables suggest that an economy encumbered by limitations on women's economic freedom might have a negative impact on the whole population. For instance, per-capita GDP is significantly higher in countries that treat men and women equally under the law than in countries with even slight disparate treatment of men and women.

These results are consistent with the view that excluding certain groups of people from fully exercising their freedom to choose how best to improve their own station in life harms society as a whole as we do not get to share in the benefits of their economic contributions. In the language of Adam Smith, we miss out on the ability to divide our labor with excluded populations and we forgo potential economic gains that would result from these exchanges. These potential opportunity costs make it well worth considering the benefits of removing the restrictions on women's economic rights that exist in many countries across the world.



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