



Women's Economic Empowerment
Research Initiative

20-7 Gendered Laws and Women in the Workforce

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ABSTRACT

This paper provides the first global look at how gender discrimination by the law affects women's economic opportunity and charts the evolution of legal inequalities over five decades. Using the World Bank's newly constructed Women, Business and the Law database, it documents large and persistent gender inequalities, especially with regard to pay and treatment of parenthood. The paper finds positive correlations between more equal laws pertaining to women in the workforce and more equal labor market outcomes, such as higher female labor force participation and a smaller wage gap between men and women.

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I INTRODUCTION

One of the most salient and pervasive forms of gender discrimination is the unequal treatment of women and men by the law. Until recently, women did not have the right to vote in most countries. In many parts of the world, women are still not allowed to participate in certain professions. In the United Kingdom, until 2003 the law on rape postulated that, in effect, a man who had sex with a woman believing that it was consensual had to be acquitted, even if there were no reasonable grounds for this belief.¹

Examples of gendered laws abound. What has been missing is a complete picture of the relative severity and evolution of legal gender discrimination around the world. The World Bank's newly compiled Women, Business and the Law (WBL) database aims to fill this knowledge gap. It measures equality of economic opportunity under the law between men and women in 190 economies, over the 50 years since 1970.

The purpose of this paper is twofold. First, it provides a description of the WBL database, which the World Bank will update annually and make publicly available (at <https://wbl.worldbank.org/en/resources/data>). Second, it presents a series of stylized facts about legal gender discrimination across the world. Some of these facts may be known in qualitative terms; this paper quantifies them in a way that facilitates comparisons across space and time, allowing progress (or regression) to be tracked. The paper documents the persistence of large gaps between the legal treatment of men and women despite the tremendous progress made in the past five decades.

Other facts are new to the literature, to our knowledge. For instance, the paper shows that across the globe, women are most disadvantaged by the law when it comes to the compensation they receive and to their treatment once they have children. It also shows that the pace of reforms has varied not only across countries but also across aspects of women's employment experience. Legal reforms affecting women's ability to work outside the home were fast-paced across the world. In contrast, the passage of laws guaranteeing equal pay and equal treatment in pensions was much slower. The paper documents positive correlations between improvements in the law and both female labor force participation and the narrowing of the wage gap between men and women.

Legal discrimination is only one of many sources of gender imbalances. The passage of better laws does not guarantee that these laws will be enforced, especially in countries with social norms disadvantaging women's participation in the formal economy. The focus is on laws because they are actionable in the short run, in contrast to norms and attitudes, which may take longer to change. In future research, it would be interesting to link the measures of women's legal treatment in the WBL database to measures that capture women's actual economic agency and investigate the relationship between de jure and de facto female empowerment.

Section 2 provides a brief description of the WBL database. Section 3 documents a series of stylized facts for the 190 countries and 50 years in our sample. Section 4 concludes.

¹ This was updated in the Sexual Offences Act 2003 (Sexual Offences Act 2003, Part 1, Section 1), which replaced the earlier 1956 Act.

II DESCRIPTION OF THE DATABASE

The WBL dataset focuses on legislation that may affect a woman's access to employment and entrepreneurial activity; it does not cover legal gender discrimination across all aspects of a woman's life. Information on the legal environment in each economy is collected through collaboration between legal experts at the World Bank and local experts, including lawyers, judges, civil society representatives, and public officials. More than 10,000 legal experts contribute to the WBL project.

Scope of the Database

The database attempts to capture inequality in legislation throughout the duration of a woman's working life, from the time she can enter the labor force through retirement. Issues chosen for inclusion in the index are based on their associations with measures of women's economic empowerment as well as a review of the economic literature, as presented in Roy (2019). Thirty-five legislative issues are aggregated into the following eight indicators:²

- 1 *Mobility*: This indicator examines constraints on women's freedom of movement. Laws assessed under this indicator include laws governing a woman's right to choose where to live, obtain a passport, and travel outside her home and country. In some economies, the law explicitly states that the husband has the right to choose where a married couple lives. For example, Article 153 of Senegal's family code states that "the choice of the marital home belongs to the husband; the woman is required to live there with him, and he is obliged to receive her." In contrast, in Rwanda, the law states that "the marital domicile is at the place mutually agreed on by the spouses" (Rwanda, Law No. 32/2016 Governing Persons and Family, Art. 55). Similarly, in some economies, when a woman applies for a passport, she must obtain permission from her spouse or provide additional documentation, such as a marriage certificate—conditions that are not imposed on male applicants. Several studies—including Demirguc-Kunt, Klapper, and Singer (2013); Islam, Muzi, and Amin (2019); and Htun, Jensenius, and Nelson-Nuñez (2019)—suggest that the topics covered under this indicator are associated with women's economic outcomes.
- 2 *Workplace*: This indicator analyzes laws affecting a woman's decision to work. It considers whether restrictions on women's ability to get a job are in place and whether legislation bans discrimination in employment and sexual harassment in the workplace and whether there are associated penalties or civil remedies for violations. The absence of provisions banning discrimination in employment based on gender is considered a restriction in the WBL Index. An example of legislation specifically outlawing such discrimination is Australia's 1984 Sex Discrimination Act, which states that "it is unlawful for an employer to discriminate against a person on the ground of the person's sex, sexual orientation, gender identity, intersex status, marital or

2 Table A.1 in the appendix provides the full list of the 8 indicators and 35 legislative issues underlying them.

relationship status, pregnancy or potential pregnancy, breastfeeding or family responsibilities” (Sex Discrimination Act, 1984, No. 4, Compilation No. 38). Laws that affect women’s decisions to work and their salaries have also been shown to have impact (see Zabalza and Tzannatos 1985; Hallward-Driemeier and Gajigo 2015; and Amin and Islam 2015).

- 3 *Pay*: This indicator includes items such as whether legislation mandates equal remuneration for work of equal value and whether women are subject to work-related restrictions that are not imposed on men. Failure to explicitly mandate equal remuneration for work of equal value per the standard set by the International Labor Organization (ILO)—by, for example, mandating the less rigorous standard of “equal pay for equal work”—is counted as a restriction in the WBL Index. An example of good practice in this area is Chapter 226 of the Employment Act of Kenya, which states that “an employer shall pay his employees equal remuneration for work of equal value.” An example of legislation that does not pass the bar set by the ILO is Jamaica’s Employment (Equal Pay for Equal Work) Act. Passed by parliament in 1975, the act mandates equal pay for equal work, a lower bar than that established by the ILO. The literature shows that night work and job restrictions are negatively associated with female employment (see Zveglic and Rodgers 2003 and Ogloblin 1999, 2005).
- 4 *Marriage*: Issues covered under this indicator include whether a woman is legally obliged to obey her husband; whether she can legally be the head of her household; and legislation on domestic violence, divorce, and the right to remarry. An example of legislation stating that a woman must obey her husband is Article 316 of the Family Code of Mali, which stipulates that “the wife owes obedience to her husband and the husband owes protection to his wife.” Article 58 of Jordan’s 2001 Civil Status Code states that “the husband is the head of the household.” Research from 143 economies shows a negative relationship between restrictions on women’s rights within their households and female labor force participation (Gonzales et al. 2015).
- 5 *Parenthood*: This indicator covers the provision and administration of paid maternity leave, legislation on paternity and parental leave, and the treatment of pregnant workers. Positive scores are awarded to economies that mandate that a minimum of 14 weeks of paid maternity is available for female employees and economies in which the government administers 100 percent of maternity leave benefits. Positive scores are also awarded for the mandating of paternity or parental leave (in the case of parental leave, it must be available to both parents). Some research suggests that maternity leave may affect women’s employment decisions, although results have been inconclusive (see Berger and Waldfogel 2004 and Bailey et al. 2019).
- 6 *Entrepreneurship*: This indicator assesses constraints to women starting and running a business. It includes legislation mandating nondiscrimination in accessing credit as well as laws that govern women’s ability to sign a contract, register a business, and open a bank account. Legislation from the Maldives provides a good example of how nondiscrimination in credit access can be mandated under the law. Section 23 of the Maldives’ Gender Equality Act of 2016 states that “it is the responsibility of financial service administrations to ensure that men and women have equal access to

financial services and facilities.” Restrictions on a woman’s ability to sign a contract, register a business, or open a bank account include situations in which a married woman is required to obtain her husband’s permission to do so. Research shows that laws that enable women to sign a contract or open a bank account are associated with higher female labor participation (Gonzales et al. 2015).

- 7 *Assets*: This indicator covers property ownership rights, inheritance rights (for both children and surviving spouses), authority over assets during marriage, and the valuation of nonmonetary contributions. Situations in which the husband administers property or the legal capacity of men and women is unequal are counted as restrictions in the WBL methodology. The literature shows that improved property rights for women are linked to increased female labor supply (see the cross-country study by Gonzales et al. 2015 and the study on India by Heath and Tan 2019).
- 8 *Pensions*: This indicator captures the equalization of retirement ages (with full and partial benefits, as well as the mandatory retirement age) and whether periods of absence from employment caused by childcare count toward pension benefits. The WBL Index considers no discrimination to occur if the language in the relevant legislation makes no reference to gender. For example, Section 12-B of the Social Security Act of the Philippines states that “a member who has paid at least one hundred twenty (120) monthly contributions prior to the semester of retirement . . . shall be entitled for as long as he lives to a monthly pension.” In this example, the reference to “a member” implies no discrimination by gender. In contrast, Article 51 of the Social Security Law of Brazil states that old-age pensions are payable starting at 65 for men and 60 for women. In relation to pension benefit accrual during periods of childcare, an example of good practice can be found in Jordan, where maternity leave is considered an effective period of service for pension calculation. Research has shown that in China, early retirement for women reduces their relative welfare (Lee, Zhao, and Zou 2017). Several country-specific studies show that increases in retirement ages are associated with increased female labor supply (see Staubli and Zweimüller 2013 on Austria; Atalay and Barrett 2015 on Australia; and Cribb, Emmerson and Tetlow 2016 on the United Kingdom).

The index omits some factors that affect women’s behavior and outcomes indirectly:

- It does not capture laws that affect women before they decide to enter the workforce (e.g., laws related to the accumulation of human capital, such as laws on school-leaving age).
- It does not consider reproductive rights, because it focuses on laws that discriminate between men and women and laws on reproductive rights intrinsically treat men and women differently.
- It does not include affirmative action measures, such as quotas.
- It measures laws on the books, not implementation of the law. Implementation may be imperfect because of weak enforcement or legal capacity, factors that vary across countries and over time.

- It excludes factors other than the law that affect women's opportunity, including social and cultural norms, the economic environment, and infrastructure.

The advantage of focusing on legislation is that it provides an objective measure of the environment in which women live and work and facilitates comparison across countries.

Data Collection and Score Calculation

Data are collected by sending out questionnaires to more than 2,000 respondents who are experts in various aspects of the law, including family, labor, and criminal law. Respondents include lawyers, judges, academics, and members of civil society organizations in the 190 economies covered by the index.

Respondents complete written questionnaires and provide references to the relevant legislation.³ A team of legal experts at the World Bank then verifies that the responses to the questionnaires are in agreement with legislative texts. This process involves researching constitutions, codes, laws, statutes, rules, regulations, and procedures. The process is repeated annually.

In order to facilitate comparability across economies, the WBL methodology makes a number of assumptions, which include the following:

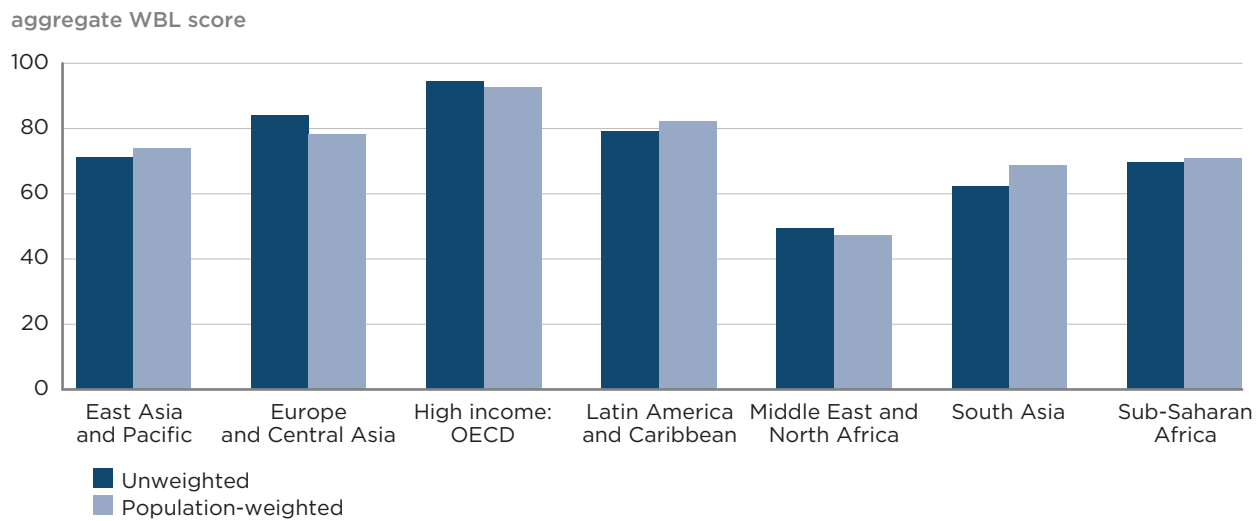
- Because maternity leave benefits within a country can vary depending on the number of children a woman has, the methodology assumes that each woman has only one child.
- Some legislation may vary by location within an economy (in the United States, for example, some relevant legislation is set at the state level). The methodology assumes that the hypothetical woman in question resides in the main business city in each economy.
- Legislation can differ by subgroup within a country's population. The WBL Index captures the law that applies to the most populous group. Restrictions on minority groups can thus be missed.

The *WBL 2020* report outlines the strengths and limitations of the WBL methodology (World Bank 2020).

The indicator-level scores are obtained by calculating the unweighted average of the four or five binary questions within that indicator and scaling the result to 100. The overall index scores are then calculated by taking an unweighted average of the eight indicators, with 100 representing the highest possible score. For example, Afghanistan received a score of just 50 out of 100 on the Mobility indicator in 2019, because women face legal restrictions in two of the four legislative issues covered (women in Afghanistan cannot travel outside their home or choose where to live in the same way as men). On the Pay indicator, women face legal restrictions in only one of the four issues covered; Afghanistan therefore receives a score of 75 on this indicator. Based on an unweighted average of the eight indicators, the WBL Index score for Afghanistan is 38.1.

³ Further details are provided in the online appendix.

Figure 1
Index of gender equality before the law, by region, 2019



OECD = Organization for Economic Cooperation and Development

Source: Authors' calculations based on data from the Women, Business and the Law (WBL) database and population data from the World Bank's *World Development Indicators* (WDI) database.

III. STYLIZED FACTS: FIFTY YEARS OF UNEVEN PROGRESS

Stylized fact 1: A woman in the average country has three-quarters the rights of a man

In 2019 the average WBL score was 75.2, indicating that in the average country, women are accorded about three-quarters the number of rights as men in the areas covered by the index. The population-weighted average is similar (74.4). In eight countries—Belgium, Canada, Denmark, France, Latvia, Luxembourg, Iceland, and Sweden—no legal differences were evident. At the other end of the spectrum, unequal treatment under the law remains a significant obstacle for women living in Sudan, the West Bank and Gaza, and the Republic of Yemen. All of these economies received scores of less than 30. In some economies with large populations, gender equality is well below the global average. For example, Bangladesh and Pakistan received scores of 49.4 points in 2019. These figures mean that the roughly 180 million women living in these countries have about half the rights of men in the areas covered by the index.

Variation in the legal rights of women varies widely by region (figure 1). Equality of economic opportunity across gender is highest in high-income OECD economies, where the average score is 94.7 points, and lowest in the Middle East and North Africa (MENA) region, where the average score is 49.6 points. Although the WBL data show that women's rights are increasing in income level, the economics literature has not reached consensus about the expected relationship between women's rights and development. Fernández (2014) presents a theoretical model in which the relationship between per capita income and reform is nonmonotonic. Her theoretical analysis shows that men have less to gain from legal systems that favor patriarchy when economies are poorer. However, Fernández's calibration of the model to US data shows no robust relationship between reform of patriarchal property rights and per

capita income. Doepke, Tertilt, and Voena (2012) note that the causation in the relationship between women's rights and development can go in both directions. They outline how the expansion of women's economic rights and political rights increases investments in human and physical capital and social welfare. Geddes and Lueck (2002) and Doepke and Tertilt (2009) show how technological change and economic development can drive reform. According to the model of Geddes and Lueck (2002), when women have relatively few property rights, their provision of effort at work may be suboptimally low, which has a negative impact on household income; the penalty associated with suboptimal effort on the part of female workers grows as their opportunities in the labor market increase. Doepke and Tertilt (2009) present an alternative argument, in which men begin to favor more rights for women out of concerns for the welfare of their daughters and because women's rights are associated with increased investments human capital. In their model, economic development, driven by human capital, and women's rights reinforce one another.

Stylized fact 2: Women are most severely penalized when it comes to laws related to having children and getting paid

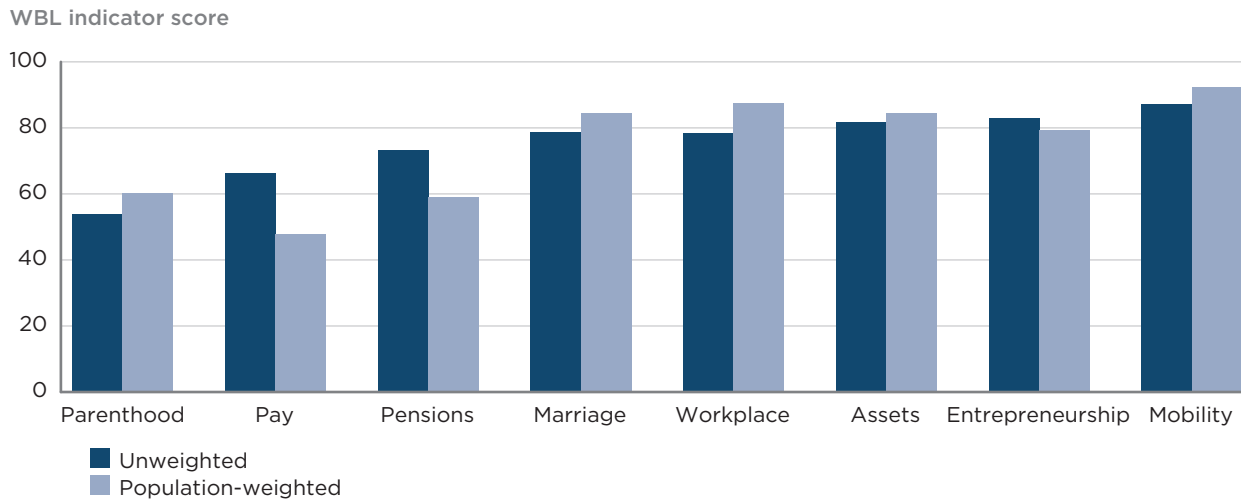
The aggregate WBL Index masks some interesting differences across the eight topics covered (figure 2). In 2019 women faced the greatest inequality in laws related to having children. Gender inequality was lowest for freedom of movement (Mobility). The rankings depend on whether weighted or unweighted scores are used. When country scores are weighted by population, women are most severely penalized when it comes to laws related to their compensation. This finding reflects the fact that women are severely discriminated against in some countries with very large populations, such as China and India, which both scored only 25 out of 100 possible points on this indicator in 2019.

The regional averages for each topic (summarized in table A.2, in the appendix) show some interesting patterns. In high-income OECD economies, the average score is high for all topics; laws related to getting paid show the greatest degree of inequality but nonetheless receive a score of 89.8. There is more variation in other regions. Europe and Central Asia, for example, has high average scores, but economies in this region have significant room for improvement in laws that affect the size of a woman's pension.

Stylized fact 3: The last five decades have seen tremendous progress, but the pace of reform has differed across regions

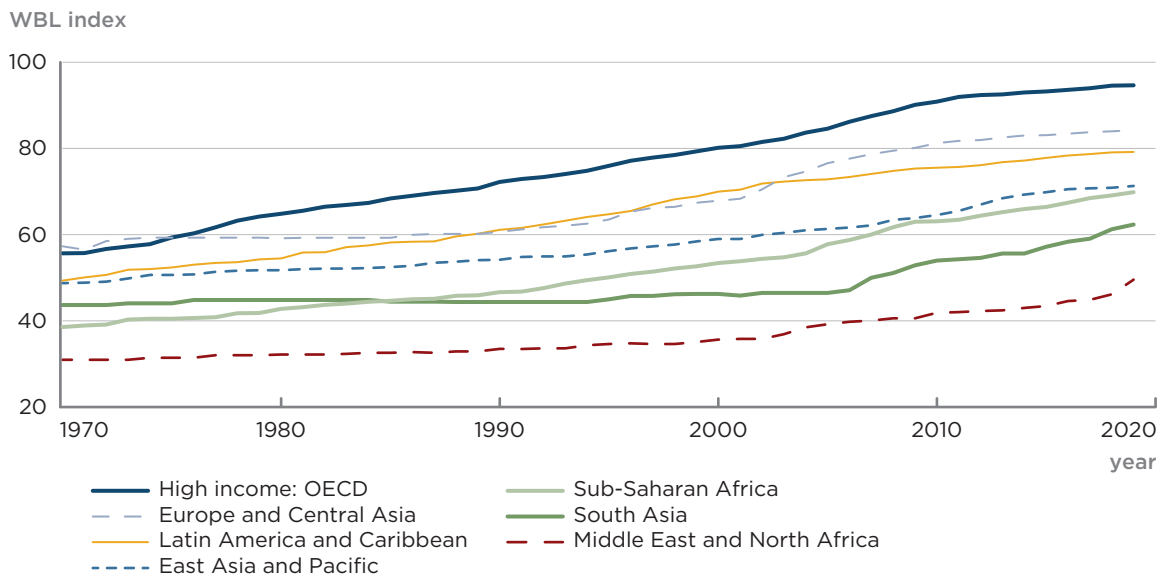
The unweighted global average WBL score increased from 46.5 points in 1970 to 75.2 in 2019, but different regions made progress toward legal gender equality at different paces. High-income OECD economies are now at the top of the ranking. In contrast, in the 1970s, women in the Europe and Central Asia (ECA) region faced fewer legal gender restrictions than their OECD counterparts (figure 3). The lower level of restrictions that faced women in the ECA region is likely related to the Communist past of many countries in the region. Communist countries liberalized family law in the 20th century to allow women to participate in the workforce and to constrain the influence of religion (see Htun and Weldon 2011). Regional average scores in the Latin America and Caribbean (LAC) and East Asia Pacific (EAP) regions were very close in 1970. But economies in LAC,

Figure 2
Index of gender equality before the law, by indicator, 2019



Source: Authors' calculations based on data from the Women, Business and the Law (WBL) database and population data from the World Bank's World Development Indicators (WDI) database.

Figure 3
Index of gender equality before the law, by region, 1970-2020

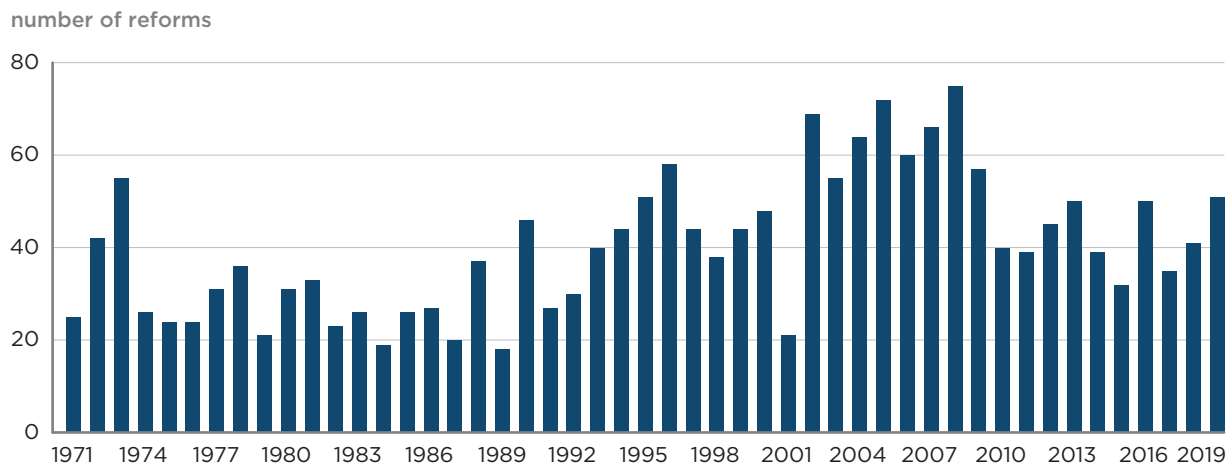


OECD = Organization for Economic Cooperation and Development

Source: Women, Business and the Law (WBL) database.

which were influenced by early movements toward reform in Europe (Htun and Weldon 2011) made greater progress toward legal gender equality. In 1970 South Asia had fewer legal gender restrictions than Sub-Saharan Africa; by 2019 the average WBL score was nine points lower in South Asia than in Sub-Saharan Africa.

Figure 4
Number of reforms to gender equality laws, 1971–2019



Note: Data are unweighted by country size.

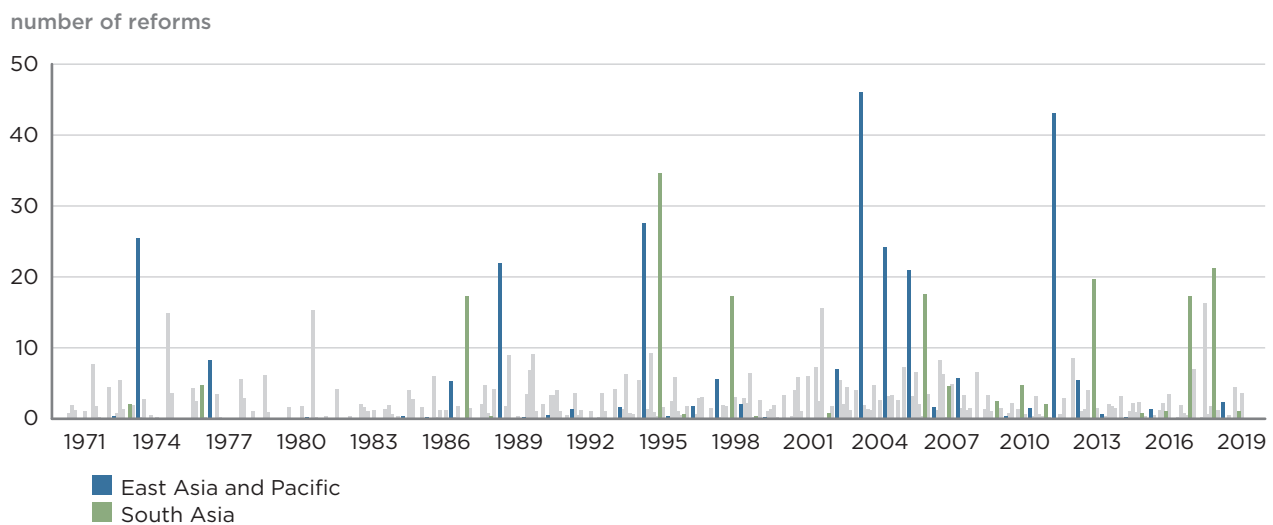
Source: Authors' calculations based on data from the Women, Business and the Law (WBL) database.

Figure 3 also illustrates the slow progress in the MENA region, where the overall index increased by less than four points between 1970 and 1995. The subsequent 25 years (1995–2019) showed greater progress, with the average score increasing by almost 15 additional points, but the level of inequality before the law remains high. The fact that women in the MENA region have historically been, and continue to be, subjected to the highest level of legal gender discrimination cannot be explained entirely on the basis of compliance with Sharia (Islamic law). Several authors (including Mashhour 2005, Ross 2008, and Barlas 2019) argue that it is patriarchal cultures, not Islamic law, that often lie behind gender inequality. Mashhour (2005) cites Tunisia as an example of how gender equality in the family sphere can be incorporated within the bounds of Sharia. With a WBL score of 70 in 2019, Tunisia's score is considerably above the MENA average of 49.6.

An alternative way of charting progress toward gender equality is to count the number of changes that have been made to the laws in each economy. For each of the 35 aspects of gender equality covered by the WBL, we count a reform as occurring every time a legal restriction formerly placed on women is removed. For example, in Afghanistan, the response to the question “Can a woman apply for a passport in the same way as a man?” changed from “No” to “Yes” between 2015 and 2016. This change is counted as one positive reform in Afghanistan in 2016. Aggregating all such changes across the globe reveals that the peak year for reform was 2008, when 75 reforms were made (figure 4).

The top reforming region was Sub-Saharan Africa, where 28 reforms were implemented. This finding partly reflects the fact that it is the region with the largest number of economies. The years 2005 and 2008 enjoyed particularly large numbers of reform. A likely driver of reform in Africa during this period was the African Union's adoption of the Maputo Protocol, which guarantees wide-ranging equal rights to women. The protocol includes 30 of the 35 aspects covered by the WBL Index. Other potential drivers of reform include international

Figure 5
Number of reforms to gender equality laws by region, weighted by population, 1971–2019



Note: Grey bars indicate number of reforms in the other regions.

Source: Authors' calculations based on data from the Women, Business and the Law (WBL) database and population data from the World Bank's *World Development Indicators* (WDI) database.

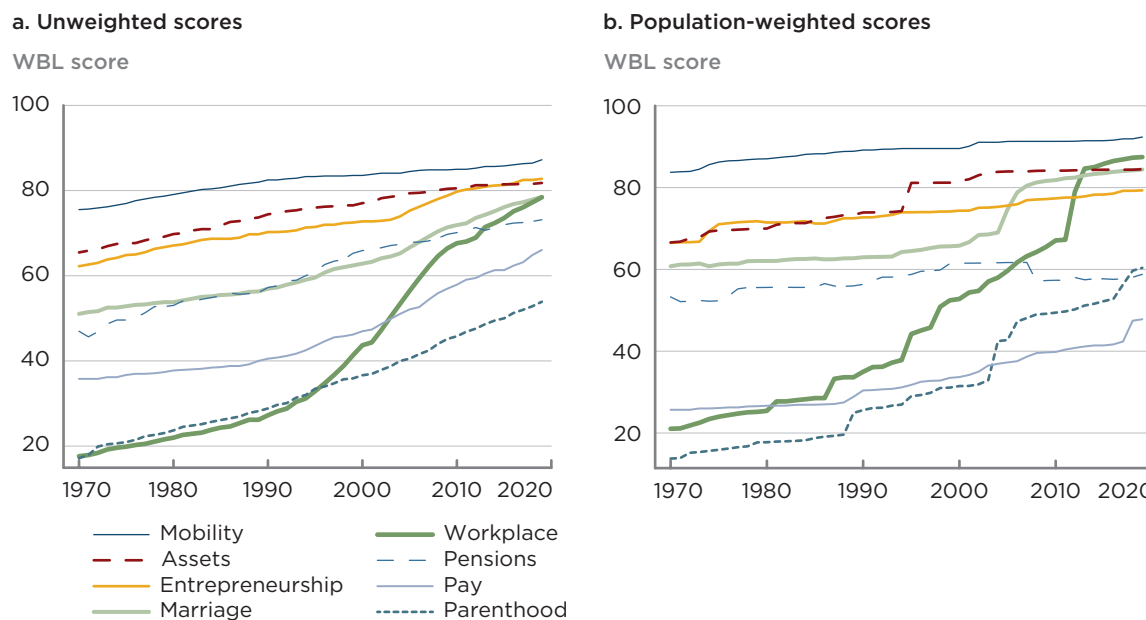
treaties and conferences, such as the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW) in 1979 and the United Nation's Fourth Conference on Women in 1995.

When reforms are weighted by population, the East Asia and Pacific (EAP) and South Asia regions stand out (figure 5). EAP enjoyed a large spike in 1974, as a result of seven changes made in Indonesia that year. Large spikes also appear in EAP in years in which China implemented at least one reform. Spikes emerge in South Asia in years in which India adopted one or more reforms. The WBL data for 1995 capture new legislation in India equalizing property inheritance rights between sons and daughters and between surviving spouses.⁴ Equalizing property rights between men and women in South Asia may have important implications. Agarwal (1994) highlights the role of land rights in determining gender ideologies, the balance of power within the household, and women's ultimate well-being in the region.

Other factors may drive reform on an economy-by-economy basis. Agarwal (2005) notes that various parties were behind the passage of India's 2005 Hindu Succession (Amendment) Act, which reformed several gender inequalities that had existed under the 1956 Act. A bill incorporating more limited reform was passed into a more significant act through "concerted efforts made by individuals and groups committed to women's rights, land rights, and human rights, through memorandums, deposition and lobbying; the openness of the Standing Committee on Law and Justice to Civil Society inputs; the support of some lawyers and MPs," she writes, which "contributed to the shift from the limited 2004 Bill to the wide-ranging 2005 Act."

4 A reform was made via the Maharashtra Amendment to the Hindu Succession Act; the state of Maharashtra is where Mumbai, India's main business city, is located.

Figure 6
WBL indicators, 1971-2019



Source: Authors' calculations based on data from the Women, Business and the Law (WBL) database and population data from the World Bank's World Development Indicators (WDI) database.

The push to reform can also come from bilateral organizations. For example, the Millennium Challenge Corporation worked with the government of Lesotho to introduce legislation allowing married women to make their own economic decisions. The US Agency for International Development (USAID) worked with the Egyptian government to develop legislation that would designate sexual harassment as a crime. The European Bank for Reconstruction and Development supported reform that lifted certain job-related restrictions that had been placed on women in Kazakhstan. (For a discussion of these reforms, see World Bank 2019.)

Stylized fact 4: The pace of reform varies across indicators

The workplace indicator displays the fastest pace of reform, both when reforms are unweighted and when they are weighted by population (figure 6). The Mobility and Assets indicators, both of which start from a relatively high base, display the slowest pace of reforms. The Pay indicator also displays a slow pace of reform, despite starting from a relatively low base. Legal reform also progressed at a slow pace on the Pension indicator. In fact, when the scores are weighted by population share, there was some regression in the laws that affect the size of a woman's pension in the second half of the 2000s. This drop reflects the introduction of different mandatory retirement ages for men and women that China introduced in 2008 (before 2008 China had no mandatory retirement age).⁵

5 Labor Contract Law of the People's Republic of China of 29 June 2007, Art. 44(2) http://www.gov.cn/fifg/2007-06/29/content_669394.htm (accessed on November 11, 2019).

The differing pace of reforms across indicators suggests that countries may display differing degrees of resistance to granting women equal rights under the law in different areas and that economic factors may motivate reforms. For example, the rapid pace of reforms on the Workplace indicators suggests that progress in this area may have been motivated by the desire to better integrate women in the labor force during a time of rising demand for labor. Goldin (1988) discusses how demographic changes in the United States in the 1920s and 1930s caused a labor market squeeze that contributed to the decline of the “marriage bar” in the 1950s, which had restricted married women’s employment opportunities. In a second paper (Goldin 1991), she notes that attitudes toward and policies on women’s work changed when the supply of labor from younger unmarried women dropped and that of educated, older, married women increased.

Doepke, Tertilt, and Voena (2012) note that traditions that discriminate against women may be rooted in economic motivations. They cite the work of Cheung (1972) and Bossen et al. (2011), who discuss the economic rationales that may be behind the traditional practice of binding women’s feet in China. They also highlight research by Alesina, Giuliano, and Nunn (2011a, 2011b) showing the long-term impact of historical agricultural practices in shaping attitudes toward gender roles.

Although the WBL data do not cover social norms, there are grounds for believing that the changes the index does capture may help change them. Aldashev et al. (2012) discuss the interplay between social norms and the formal legal system, presenting a model in which progressive changes in the law can change customs in the same direction by exerting a “magnet effect.” They provide examples from Senegal of how a law changed behavior in the presence of a changing economic climate and from India of how a change in the law resulted in a change in custom because community elders wanted to be seen as “fair and just.” Through an example from Côte d’Ivoire, they illustrate how moderate changes in the law can change behavior by preventing the backlash that more radical changes can cause.

Stylized fact 5: Legal gender equality is correlated with women’s outcomes in the labor market

Results from ordinary least squares (OLS) regressions show that a higher score on the WBL Index is correlated with better labor market outcomes, as measured by participation of women in the nonagricultural labor market and the wage gap between men and women (table 1). Although one cannot attribute causality to these results, they do suggest that where women face less discrimination under the law, they also enjoy more favorable outcomes in the labor market.

Table 1
Correlation between the WBL index and women's outcomes in the labor market

Item	Labor force participation	Gender wage gap
WBL index	0.0458 (0.0097)	-0.0796 (0.0315)
Constant	36.4576 (0.7837)	16.8837 (2.9747)
Number of observations	5,324	1,001

WBL = Women, Business and the Law

Note: All regressions include economy and year fixed effects; standard errors are reported in parentheses. For labor force participation, the outcome variable is the female labor force participation rate in the nonagricultural sector. The focus is on the nonagricultural sector because almost all employment in agriculture in developing economies is informal and hence not directly influenced by legislation.

Sources: Labor force participation data come from two sources: national estimates and modeled estimates from the International Labour Organization (ILO). National estimates span a longer time horizon, but for some economies they are unreliable and have many gaps in the series. For this reason, national estimates were used only for the 32 high-income OECD economies; modeled ILO estimates were used for all others. Data on the gender wage gap are from two sources: the ILO and the Organization for Economic Cooperation and Development (OECD). ILO data measure the difference between the mean earnings of men and the mean earnings of women, expressed as a percentage of the earnings of men; OECD data are similarly calculated but use median, as opposed to mean, earnings. OECD data were used where possible; ILO figures were used for countries and years for which OECD data were not available.

IV. CONCLUSIONS

This paper overviews the recently compiled, 50-year panel WBL database. It highlights the differences between countries and regions and charts changes in gender equality over time. It shows that women still face legal gender discrimination across multiple domains. The level of legal discrimination is particularly onerous in some highly populated countries, restricting economic opportunities for a very large number of women.

We hope this study will serve as the first step of a rich research program on the impact of laws on women's economic opportunity. Many questions come to mind. First, this paper provides a picture of global de jure discrimination; it does not speak to de facto discrimination. Future research could try to relate our measures of legal inequalities to measures of actual women's empowerment.

Second, this study documents positive correlations between legal reforms and labor market outcomes. The causation could go either way, however. To figure out which way it operates, researchers could systematically examine the origins of laws and causes of reforms at a global scale to identify which factors—growing enlightenment, pressure from the international community, demand for labor, or a combination of the above—lead to more equal laws.

Third, the descriptive results presented here suggest that countries are relatively quick to pass laws that are associated with higher female labor force participation but substantially more resistant to enacting reforms related to equal pay. This finding suggests that economic motives may play an important role in the treatment of women by the law. Future research could examine the causal impact of legal reform on women's economic empowerment and well-being.

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APPENDIX A

ADDITIONAL DATA DETAILS

Table A.1
Indicators and topics covered by the World Bank's Women, Business and the Law (WBL) index

1. Mobility

1. Can a woman choose where to live in the same way as a man?
2. Can a woman travel outside her home in the same way as a man?
3. Can a woman apply for a passport in the same way as a man?
4. Can a woman travel outside the country in the same way as a man?

2. Workplace

5. Can a woman legally get a job or pursue a trade or profession in the same way as a man?
6. Does the law mandate nondiscrimination in employment based on gender?
7. Is there legislation on sexual harassment in employment?
8. Are there criminal penalties or civil remedies for sexual harassment in employment?

3. Pay

9. Does the law mandate equal remuneration for work of equal value?
10. Can women work the same night hours as men?
11. Can women work in jobs deemed hazardous, arduous, or morally inappropriate in the same way as men?
12. Are women able to work in the same industries as men?

4. Marriage

13. Is a married woman not legally required to obey her husband?
14. Can a woman legally be "head of household" or "head of family" in the same way as a man?
15. Is there legislation specifically addressing domestic violence?
16. Can a woman obtain a judgment of divorce in the same way as a man?
17. Do women have the same rights to remarry as men?

table continues

Table A.1
Indicators and topics covered by the World Bank's Women, Business and the Law (WBL) index (continued)

5. Parenthood

18. Is there paid leave of at least 14 weeks available to women?

19. Does the government pay 100% of maternity leave benefits or parental leave benefits (where maternity leave is unavailable)?

20. Is there paid paternity leave?

21. Is there paid parental leave?

22. Is dismissal of pregnant workers prohibited?

6. Entrepreneurship

23. Does the law prohibit discrimination by creditors based on sex or gender in access to credit?

24. Can a woman legally sign a contract in the same way as a man?

25. Can a woman legally register a business in the same way as a man?

26. Can a woman legally open a bank account in the same way as a man?

7. Assets

27. Do men and women have equal ownership rights to immovable property?

28. Do sons and daughters have equal rights to inherit assets from their parents?

29. Do female and male surviving spouses have equal rights to inherit assets?

30. Does the law grant spouses equal administrative authority over assets during marriage?

31. Does the law provide for valuation of nonmonetary contributions?

8. Pensions

32. Are the ages at which men and women can retire with full pension benefits equal?

33. Are the ages at which men and women can retire with partial pension benefits equal?

34. Is the mandatory retirement age for men and women equal?

35. Does the law establish explicit pension credits for periods of childcare?

Table A.2
Average regional score for each WBL indicator, 2019

Region	WBL indicator							
	Mobility	Workplace	Pay	Marriage	Parenthood	Entrepreneurship	Assets	Pensions
East Asia and Pacific	89.0 (16.3)	68.0 (34.3)	67.0 (21.3)	86.4 (20.6)	35.2 (32.3)	82.0 (11.5)	76.8 (27.5)	66.0 (25.9)
Europe and Central Asia	99.0 (5.0)	85.0 (22.8)	66.0 (31.4)	96.8 (7.5)	80.0 (16.3)	93.0 (11.5)	100.0 (0.0)	54.0 (23.6)
High-income OECD	100.0 (0.0)	97.7 (9.8)	89.8 (18.9)	95.0 (11.4)	90.0 (12.4)	95.3 (9.9)	98.8 (7.1)	90.6 (16.5)
Latin America and Caribbean	92.2 (13.4)	76.6 (30.4)	69.5 (20.8)	88.8 (14.3)	45.0 (26.9)	82.8 (13.4)	98.1 (5.9)	80.5 (20.8)
Middle East and North Africa	52.5 (38.0)	58.8 (40.0)	37.5 (27.5)	33.0 (27.0)	33.0 (25.4)	80.0 (10.3)	43.0 (13.4)	58.8 (28.4)
South Asia	90.6 (18.6)	84.4 (18.6)	46.9 (38.8)	70.0 (26.2)	30.0 (10.7)	71.9 (16.0)	55.0 (20.7)	50.0 (23.2)
Sub-Saharan Africa	82.3 (21.9)	76.0 (30.1)	62.5 (30.1)	67.5 (30.5)	44.6 (22.7)	72.4 (21.4)	73.3 (24.9)	80.2 (24.7)

OECD = Organization for Economic Cooperation and Development

Note: Standard deviations in parentheses.

Additional Details on How the Data Are Coded

Coding is performed by a team of two dozen World Bank legal analysts, based on uniform questionnaires on family, labor, and criminal law.⁶ The questionnaires, built with the assistance of legal experts from the US Library of Congress, cover all relevant laws and regulations pertaining to the stature of women in the workforce. They include the constitution, labor code, commercial code, family law, pension law, and myriads of regulations.

The coding starts with a desk review by World Bank legal analysts, who code laws available online, in the US Library of Congress, and through World Bank country offices in the official language of the country. Based on this desk review, initial country questionnaires are filled in.

As a second step, the filled-in questionnaires are sent to legal experts in every country, using World Bank country offices, as well as law firms that provide information on labor law and pension law to the World Bank's Doing Business project. In total, 2,100 lawyers from private law firms and nongovernmental

6 The three questionnaires used by the WBL team can be downloaded from the WBL website. They cover family (<http://pubdocs.worldbank.org/en/358681576005481315/WBL-Family-Survey-2020.pdf>), labor (<http://pubdocs.worldbank.org/en/512981576005478930/WBL-Labor-Survey-2020.pdf>), and criminal law (<http://pubdocs.worldbank.org/en/812251576005483131/WBL-Violence-Against-Women-2020.pdf>). All questionnaires accessed on February 17, 2020.

organizations complete the questionnaire each year. These in-country lawyers look for gaps in the desk-review analysis, provide missing or newly adopted laws, and comment on existing interpretations in the questionnaires.

As a third step, the World Bank's WBL team compiles a full questionnaire, taking into account the contributions of in-country lawyers. It conducts conference calls to clarify outstanding issues. The contents of these calls are transcribed and serve as additional coding information.

The last coding step involves senior members of the WBL team spot-checking the work of the legal analysts. These checks are recorded and presented to the manager of the team for final review.



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