Women’s Economic Participation and the Impact of Regulatory Barriers

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Acronyms

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<th>Acronym</th>
<th>Description</th>
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<tr>
<td>ECOA</td>
<td>United States Federal Equal Credit Opportunity Act</td>
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<td>FLFP</td>
<td>Female Labor Force Participation</td>
</tr>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>ILO</td>
<td>International Labor Organization</td>
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<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
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<tr>
<td>MENA</td>
<td>Middle East and North Africa Region</td>
</tr>
<tr>
<td>MLFP</td>
<td>Male Labor Force Participation</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>UK</td>
<td>United Kingdom</td>
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<tr>
<td>US</td>
<td>United States</td>
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<tr>
<td>WBL</td>
<td>World Bank Women, Business, and the Law Database and Report</td>
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<td>WHO</td>
<td>World Health Organization</td>
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Summary

Many countries seek to improve women’s economic participation with the introduction of target-ed laws and regulations. The impact of these reforms appears significant, although the support-ing evidence is stronger in some areas than others. This insight paper considers the impact of legal discrimination and the absence of protective legislation on women’s economic outcomes, namely employment and earnings. It also explores the various pathways or channels through which laws and regulations affect those outcomes. An understanding of those mechanisms is important to the effective design and implementation of gender equal and gender sensitive laws and policies. A survey of the literature uncovered five key pathways (Figure 1) that individually and in combination can help structure and improve the understanding of how legal reform impacts women’s employment and earnings. The available literature offered more causal evidence in some reform areas, namely property rights, retirement, and divorce laws, than in others. Empirical evidence from the remaining areas (childcare leave policies, occupational segregation, legal capacity within marriage) still establishes significant and strong associations, especially in the first area, between the studied legal reforms and women’s economic outcomes. Findings reported in the area of legal protections from violence and discrimination remain limited and inconclusive. There is a significant gap in the literature in terms of studies covering certain reforms in developing countries which undermines the generalizability of the findings. The paper concludes that although legal reform is not enough to bring about change, it is a critical first step in initiating social change and promoting women’s economic participation and women’s employment in the formal sector.
FIGURE 1. - Key findings on the effect of legal reforms on women’s economic outcomes

Legal Reform (lifting barriers and establishing legal protections)

- **Balancing work life and family responsibilities**
- **Reducing occupational segregation**
- **Improving access to property rights & finance**
- **Shifting intra-household bargaining power**
- **Reducing power imbalances in the private & professional spheres**

- **Incentivizes women to join and/or return to the job market**
- **Improves women’s employment opportunities for women in certain sectors**
- **Improves women’s business ownership (also their intra-household bargaining power)**
- **Enables women to make decisions to work outside the home and have control over their earnings**
- **Improves financial inclusion and prospects**

Legal protections from violence and discrimination in the private and professional spheres

- **Improved women’s employment**
- **Reduced gender wage gap**

Policies mandating paid maternity, paternity, and parental leaves administered by the government

Legislation lifting restrictions on women’s work at night and in certain industries and jobs

Legislation enabling women’s access to property and finance

Legislation granting women equal legal capacity within marriage, (to move freely, to make decisions, and to undertake legal transactions)

Legislation improving access to property rights & finance

Balancing work life and family responsibilities

Reducing occupational segregation

Improved women’s employment

Reduced gender wage gap

Improving access to property rights & finance

Shifting intra-household bargaining power

Improves financial inclusion and prospects

Baluancing work life and family responsibilities

Reducing occupational segregation

Improved women’s employment

Reduced gender wage gap

Improving access to property rights & finance

Shifting intra-household bargaining power

Improves financial inclusion and prospects

Legal protections from violence and discrimination in the private and professional spheres

Balancing work life and family responsibilities

Reducing occupational segregation

Improved women’s employment

Reduced gender wage gap

Improving access to property rights & finance

Shifting intra-household bargaining power

Improves financial inclusion and prospects

Legal protections from violence and discrimination in the private and professional spheres
Introduction

Women’s participation in the labor market is associated with a wide range of economic development outcomes through contributing to total household income and affecting intra-household bargaining outcomes (Heintz 2006). Women typically invest a higher proportion of their income, relative to men, in their families and communities, improving children’s nutrition, health, and school attendance (Organisation for Economic Co-operation and Development – OECD - 2010). It is no surprise that gender gaps in entrepreneurship and labor force participation are significantly associated with reduced per capita income (Cuberes and Teigner 2012). Such gaps also impede economic growth as highlighted by a growing body of literature (International Monetary Fund - IMF - 2013). According to a 2018 World Bank study that examines the economic cost of gender inequality, countries are losing $160 trillion in human capital wealth due to differences in lifetime earnings between women and men. The figure is about twice the value of gross domestic product (GDP) globally (World Bank 2018). A McKinsey report finds that if all countries match the progress toward gender parity of the fastest-improving country in their region, as much as $12 trillion could be added to global GDP by 2025. Considering a “full potential” scenario, if women played the same role in labor markets as men, as much as $28 trillion could be added (McKinsey 2018).

An IMF paper (Ostry et al. 2019) suggests that the barriers to female labor force participation, which include legal discrimination, are equivalent to an additional tax rate of 53 percent on women’s labor income in the Middle East and North Africa (MENA) region, 32 percent in South Asia, and 25 percent in Latin America and Caribbean, compared to 4 percent in Europe and Central Asia. Removing those barriers would improve welfare in the average MENA country by 16.4 percent, and fully equalizing male and female labor force participation could increase its GDP by about 64 percent. Gender equal labor force participation could increase the GDP of the average country in South Asia by 30 percent and the average country in Latin America and Caribbean by 23 percent (Ostry et al. 2019).
Although more women are present in the labor market than at any other time in history, indicating the progress that has been made over the past few decades, their presence remains well below men’s. In 2014, female labor force participation (FLFP) was 54 percent for the median OECD country, which is 14 points below male labor force participation (MLFP). FLFP was 49 percent for the median middle-income country (26 points below MLFP), and 64 percent for the median low-income country (13 points below MLFP) (IMF 2018). Moreover, women are still concentrated in low-paid, unstable, and poor-quality employment (Heintz 2006).

The increase in labor force participation is commonly explained by demographic drivers such as improvements in female education and declining fertility, in addition to government expenditure policies including maternity leave and child benefits as well as tax policies. The impact of gendered legal restrictions on women’s economic outcomes has been less explored (IMF 2015). However, there is a growing body of work addressing this topic especially since the World Bank Group launched its Women, Business, and the Law (WBL) database and report. The database provides data about discriminatory laws and regulations in 190 economies, structured around eight indicators or topics and 35 legal data points. The topics, with the corresponding data points, aim to reflect the legal barriers that a woman faces throughout her professional life, including mobility restrictions (Mobility), unsafe and discriminatory workplaces (Workplace), occupational segregation (Pay), limited decision-making capacity within marriage (Marriage), lack of adapted childcare leave policies (Parenthood), limited property rights and access to finance (Assets and Entrepreneurship), and unequal pension rights (Pension). Hyland et al. (2020) report results from ordinary least squares regressions showing that a higher score in the WBL index is correlated with better labor market outcomes, as measured by the participation of women in the non-agricultural labor market and the wage gap between men and women. While the authors do not attribute causality to these results, they do suggest that where women are faced with less discrimination under the law, they also enjoy more favorable outcomes in the labor market.

This insight paper considers how laws can hinder or enable women’s economic participation, supported by a review of the literature. It first aims to survey the impact of legal discrimination and the absence of protective legislation, as identified by the WBL topics, on women’s economic outcomes including employment and earnings. Second, it aims to uncover the various channels through which laws and regulations affect those outcomes. An understanding of those mechanisms is important to the effective design and implementation of gender equal and gender sensitive laws and policies. The paper complements and builds on existing literature reviews, mainly Roy (2019), with the ultimate objective to inform gender policy related work carried out by either international organizations, governments, or local civil societies.

The literature covered consists mainly of empirical studies published in peer-reviewed journals and, to a lesser extent, reports and papers published by international organizations such as the OECD and IMF. Most empirical studies on the subject focus on measuring the impact of legal barriers and reforms on women’s outcomes without much attention to the mechanisms underpinning this interaction. Reports and papers published by international organizations provide further description of the pathways through which laws affect women’s outcomes in addition to qualitative insights about the impact of legal barriers.
The survey of the literature uncovered five different pathways, or impact channels, (Figure 1), that are used to structure this paper. While the paper considers each of the pathways identified separately, it is important to note that these are not mutually exclusive; legal reform in one area could lead to economic outcomes for women through multiple channels. It is no surprise that three out of the five pertain to gender power relations, reflecting the patriarchal nature of societies in which women are more likely to face legal barriers that undermine their economic participation.

1. **Balancing work life and family responsibilities**: Policies mandating paid maternity, paternity, and parental leaves administered by the government allow women to better balance work and family responsibilities and incentivize them to join and/or return to the job market. Despite the mixed evidence, the literature overall supports the positive effects of childcare leave policies on women’s employment and earnings.

2. **Reducing occupational segregation**: Lifting restrictions on women’s work, at night and in certain industries and jobs, reduces occupational segregation and improves women’s access to the job market as opportunities available to them increase. The literature supports the negative effects of these barriers on women’s earnings and employment. However, it lacks empirical studies on the impact of their removal.

3. **Improving access to property rights and finance**: Women’s access to finance is undermined by both weak property rights and discrimination in access to credit. The literature supporting the importance of women’s access to property rights is abundant and conclusive despite some unintended consequences related to the rise of marital discord and conflict. Prohibiting gender-based discrimination in access to credit is also associated with a positive impact on women’s financial inclusion despite the limited evidence.

4. **Shifting intra-household bargaining power in favor of women**: Granting women equal legal capacity within marriage, relative to men, (to move freely, to make decisions within the household, and to undertake legal transactions) shifts the intra-household bargaining power in their favor. This shift enables them to make decisions to work outside the home, increase their earnings prospects, and have control over their earnings. The evidence, although limited in certain areas, is conclusive. Additionally, there is little to no evidence related to the impact of the valuation of non-monetary contributions during marriage and remarriage laws on women’s economic outcomes. On the other hand, child marriage is identified as a barrier that negatively affects these outcomes.

5. **Reducing power imbalances in the private and professional spheres**: Legal protection from violence and discrimination in the private and professional spheres empowers women socially and professionally by providing them with legal recourse and shifting the gender power balance. Equal pension rules for men and women mitigate the “deferred earnings discrimination” and increase female labor supply. While many studies explore the impact of antidiscrimination legislation and equal pension rules on women’s economic outcomes, the impact of anti-violence legislation on these outcomes is left unexplored. The literature emphasizing the economic cost of domestic violence and sexual harassment is abundant though, which ultimately suggests that preventing these forms of violence would mitigate their economic effects. Evidence around the impact of antidiscrimination legislation is mixed, pointing to some adverse effects.

The final section of the paper addresses the impact of gender-related legal reforms on informality and women’s participation in the economy. The conclusion summarizes the literature, highlights gaps, especially regarding the generalizability of the findings, and raises questions for further research. It also provides further insights into how different topics interrelate and what it takes for legal reform to bring about real change. A table summarizing all the empirical studies reviewed for the paper is available in Annex A. This illustrates the scale of impact of each studied reform or treatment and the methods used.
Methodology

This paper is a literature-based study, informed mainly by empirical studies published in peer-reviewed journals, international organizations’ reports, and a few unpublished manuscripts. Approximately 100 resources were consulted. Half of these reported on original empirical research, using either quasi-experimental or non-experimental research designs. Theoretical papers and secondary materials, such as literature reviews and descriptive reports, accounted for the remainder.

All the world’s regions are represented. However, regions are not represented proportionally. The majority of studies related to childcare leave, domestic violence, and gender-based discrimination focus on the global North. Studies on family law reforms, including women’s access to property, focus on the global South, especially South Asia and Sub-Saharan Africa. When necessary, some historical background and the current situation are provided for context.

The paper complements and builds on existing literature reviews, mainly Roy (2019) which was used as a starting point. All the resources covered by Roy (2019) were consulted and further information about the studies, such as the components of reform and scope of impact are reported. Resources used in those studies were also consulted to expand the literature surveyed. Further studies were identified by conducting desk research, especially to cover areas that are not sufficiently addressed by Roy (2019) including gender discrimination in pay and access to credit. Additionally, Roy (2019) provides some discussion of mechanisms linking women’s legal rights with their outcomes. However, this discussion remains brief and limited to women’s intra-household bargaining power. Channels mediating the impact of gender equal laws on women’s economic outcomes may be more clearly observed by departing from the WBL constructed categories/indicators. Legal provisions belonging to different indicators make better sense if clustered together. The paper uncovers five impact channels suggesting a different way of clustering and examining legal reforms.
Childcare leave policies: Balancing work life and family responsibilities

Policies mandating paid maternity, paternity, and parental leaves administered by the government allow women to balance work life and family responsibilities and incentivize them to join and/or return to the job market. Despite the mixed evidence, the literature overall supports the positive effects of childcare leave policies on women’s employment and earnings.

Childcare leave policies have a positive effect on women’s participation in the labor force. Lack of childcare leave provisions and other work-life balance measures coupled with uneven access to childcare options negatively affect women’s employment patterns (OECD 2014). A study conducted in Egypt and Jordan shows that in both countries women working in the public sector one year before marriage are much less likely to drop out of the labor force after marriage than those working in the private sector. The authors explain this variation by the fact that the public sector offers better work-life balance through more generous leave policies and more generous pension and retirement benefits (Sayre & Hendy 2016).

Generous maternity leave policies could also have an adverse effect on women’s outcomes, especially when the employer bears their cost. Employers who directly pay for maternity leave benefits and do not pay for any form of paternity leave for men may choose not to hire women or to pay them less (OECD 2014, OECD 2017, WBL 2020). It has also been shown that as parental leave is more likely to be taken by women, it can lead employers to discriminate against them especially for positions that require costly qualification and training periods (Mandel and Semyonov 2005). Policies that provide both paternity and maternity leaves and make the former mandatory have the advantage of not encouraging discrimination and help shift the underlying gender norms about care, in addition to increasing the likelihood of mothers returning to the job market (World Bank 2012).

Employment before pregnancy matters for women. Berger and Waldfogel (2004) find that pre-birth employment in the U.S. is “an extremely strong predictor” of earlier return to work. Women who were employed during pregnancy go back to work more quickly after birth than women who were not. Also, women in pre-birth jobs with leave coverage are more likely to
return to work quickly than women without leave coverage. In their study investigating the effects of family leave coverage on women’s job retention in the United States (US), United Kingdom (UK) and Japan, Waldfoogel et al. (1999) find that such coverage increases the likelihood of women returning to work after childbirth in the three countries. The increase is estimated at 16 percent in the UK, 23 percent in the US, and 73 percent in Japan.

**Paid maternity leave positively impacts female employment and the impact is even greater if the government covers the leave cost.** Amin et al. (2019) highlight the empirical evidence related to the effects of maternity leave on female employment in developing countries. The authors focus on a large cross-section of countries and account for the substantial variation across them in who bears the cost of maternity leave, the government or the employer. They find, using firm-level survey data for 66 developing countries, that women are more likely to return to work if the law mandates paid maternity leave. They identify a positive and statistically significant relationship between the length of paid maternity leave and the proportion of female workers in the private sector. According to their most conservative estimate, an increase of one week of paid maternity leave is associated with a 2.6 percentage points increase in the share of female workers in a firm. This relationship is much larger when it is the government that pays for maternity leave instead of the employer.

**In Nordic and other developed countries, generous maternity leave policies may have negatively impacted female labor force participation.** While the mentioned studies show a positive association between maternity leave and a higher probability of return to work after childbirth, others show that generous childcare leave policies could negatively impact women’s economic outcomes. This is seen, for example, in the following studies:

Ronsen and Sundstrom (2002) show that despite women entitled to paid parental leave in Nordic countries having a much higher overall employment entry rate during the first three years following birth than non-eligible women, very long parental leave entitlements could negatively impact their careers and earnings and may preserve an unequal division of household labor as they prolong women’s career breaks.

Lalive and Zweimüller (2009) show that an Austrian reform increasing the duration of parental leave from one year to two years significantly reduced mothers’ return to work. Levels of employment and earnings decrease in the short run but not in the long run. In Germany, major expansions in leave coverage also reduced post-birth employment rates among women in the short run but not in the long run. Those expansions consisted of extending maternity leave benefit periods from 8 weeks to 6 months, and then gradually to 18 months (Ludsteck and Schonberg 2014). The expansion in Canadian paid family leave from 25 to 50 weeks is associated with decreases in returns to work in the year after birth. This change is concentrated among economically advanced women (Hanratty and Trzcinski 2009).

Ruhm (1998) highlights the positive effect of parental leave reforms on female employment and wages from 1969 to 1993 in nine EU countries. The analysis indicates that “short periods of paid entitlement around three months lead to a 3 to 4 percent rise in female employment rates, with little effect on wages, while longer entitlements of more than nine months lead to negligible additional impact on employment but sizeable negative impacts of about 3 percent on female wages.” Olivetti and Petrongolo (2017) explain that there are caveats to a causal interpretation of these results due to endogeneity: omitted variables such the implementation of other family friendly policies (i.e., subsidized childcare) among other factors (Olivetti and Petrongolo 2017).

**Childcare leave available to fathers may also positively affect women’s economic outcomes; the benefits of such leave are stronger in developing countries.** Goldin et al. (2017) show, using census data to explore career evolution 14 years after leaving school, that the gender earnings gap expands over the lifecycle. The gap for college graduates between 26 and 39 years old expands by 34 log points, 80 percent of which occurred during the first 7 years. About 44 percent of this gap is due to “disproportionate shifts by men into higher-earning positions, industries, and firms” and about 56 percent to “differential advances by gender within firms”. Widening is even greater for married individuals, especially women with children, as mothers experience less internal advancement (Goldin et al. 2017). Leave policies, including leave available to fathers, could help to address this gap by increasing the chances for women to return to work after childbirth and allowing for a more equitable share of childcare responsibilities between mothers and fathers. Arnarson and Mitra (2010) find that following the major changes introduced by the Icelandic Act on Maternity/Paternity and Parental Leave (2000), including longer paid leave of 3 months allocated to fathers, the labor market opportunities for women increased. As more men in Iceland take paternity leave and devote more time to childcare, women work longer hours and enter high-paying occupations that demand time and fewer interruptions.
The legislation also reduces possible discrimination by employers against women of child-bearing age (Amarston and Mitra 2010). Using data for 53 developing economies, Amin et al. 2016 find a positive correlation between mandated paternity leave and female employment in private firms. As per their conservative estimate, an increase of 6.8 percentage points in the share of women workers for a typical firm is associated with mandating paternity leave.

Parental leave, or leave available to both mothers and fathers, may encourage a more equitable division of childcare related tasks and responsibilities among parents and therefore promote women’s professional success. Blau and Kahn (2013) find that parental leave policies are associated with a higher increase in female labor force participation in most OECD countries. Lack of parental leave in the US led to the drop in the US’s rank from sixth among the 22 OECD countries in 1990 to seventeenth in 2010 in terms of female labor participation. The expansion of family-friendly policies in many OECD countries explains 29 percent of the decrease in US women’s labor force participation relative to these countries (Blau and Kahn 2013). In a study covering the Quebec Parental Insurance Plan (QPIP), Patnaik (2019) provides a “first comprehensive causal analysis of the short- and medium-term consequences of a policy aiming to promote paternity leave”. QPIP is a system of parental leave benefits introduced in Quebec in 2006 that sought to boost fathers’ participation in parental leave. Using time diary from the 2005 and 2010 rounds of Canada’s General Social Survey, the author analyses the impact of the reform on both mothers’ and fathers’ participation in market and non-market activities (the sum of housework and childcare). The findings show that mothers experience “impressive gains” if exposed to QPIP. Conditional on being employed, they spend 80 minutes more physically at the workplace (increase of 44 percent from baseline) and are 5.4 percentage points more likely to be full-time employed (increase of 7 percent from baseline) compared with mothers who experienced their last birth prior to the reform. The analysis also finds that exposed fathers spend 37 minutes longer in nonmarket work, per day (increase of 23 percent from baseline). The author concludes that a clear pattern of reduced sex specialization has emerged as fathers’ participation in parental leave increased following the reform (Patnaik 2019). Parental leave still does not exist in most low and middle-income countries which explains the lack of strong empirical research covering these economies.

While the above studies show that leave allocated to fathers positively affects women’s labor market outcomes, others find no such impact. These studies (Cools et al. 2015, Rege and Solli 2013, and Ekberg et al. 2013) examine the effects of the introduction of one-month paternity leave in Norway and Sweden. They conclude that the paternity leave reform had little if any effect on gender gaps in wages and employment. It may be the case, as suggested by Cools et al. (2015), that 4 weeks of paternity leave may not be considered enough time to really impact long run outcomes.

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BOX 1 - Summary of findings: Balancing work life and family responsibilities

The literature provides mixed evidence about the effects of childcare leave policies available to both mothers and fathers on women’s employment outcomes. First, there is strong evidence that maternity leave increases the likelihood of women returning to work after childbirth, especially for those who were employed before pregnancy. However, extensive maternity leave policies have also led to reducing women’s employment and earnings in some cases. These effects, though, were only observed in the short run. An important question for future research is how long paid maternity leave should be before it starts having an adverse effect on women’s economic outcomes. Second, the literature shows that in most cases leave available to fathers, either in the form of paternity or parental leave, positively affects women’s labor supply and earnings. Guaranteeing paid leave to fathers along with incentives to use it can help recognize and redistribute unpaid care work and shift the traditional gender roles, allowing the fathers to be more involved in supporting their children’s early development and the mothers to allocate more time to paid labor. However, some studies show little to no effect in this regard and raise a question on the “optimal” duration that would lead to positive impact. The limited literature covering developing country experiences undermines the overall conclusions about the effects of childcare leave policies on women’s economic outcomes.
Labor restrictions and occupational segregation

Lifting restrictions on women's work at night, and work in certain industries and jobs reduces occupational segregation and improves women's access to the job market as opportunities available to them increase. The literature supports the negative effects of these barriers on women's earnings and employment. However, it lacks empirical studies exploring the impact of their removal.

Most job restrictions prohibiting women’s access to certain sectors, or from doing jobs deemed hazardous, arduous, or morally inappropriate, or certain jobs requiring night shifts are due to legacy legislation initially intended to protect women. Many western African labor laws, for instance, still mirror the former federation of French West Africa's 1954 ordinance restricting women's night work and access to certain industries. Many Commonwealth economies still have restrictions that can be traced back to the UK's Mines and Collieries Act of 1842. A remnant of the 1932 Soviet Union Law could be seen in the lengthy list of job restrictions for women in many Eastern European countries. Portuguese and Spanish legacy legislation restricting women’s work in many sectors including mining, electricity, and construction, has also shaped the labor law and regulations in many former colonies (WBL 2018).

Such restrictions are supported by obsolete international norms. The International Labor Organization (ILO) had endorsed restrictions on women's employment in multiple conventions in the past. However, given the unintended adverse outcomes of such laws on women’s employment, the ILO has revised its safety standards, shifting them away from the view that women need special protection and towards the view that safety measures should apply to all workers regardless of sex (OECD 2017). Restrictions on women’s work at night are underpinned by the same safety rationale. In 2017, the ILO abrogated Convention No. 4 - Night Work (Women), 1919 and Convention No. 41 - Night Work (Women) (Revised), 1932. Prior to this, the ILO qualified the two conventions as obsolete and invited States parties to consider denunciation. In 1990, it adopted the Night Work Convention, 1990 (No. 171), calling for protection of both women and men working at night. Additionally, the ILO qualified its Convention No. 45 - Underground Work (Women), 1935 prohibiting women from working in certain jobs as obsolete. The organization

invited governments to denounce it and give favorable consideration to the ratification of Convention No. 176 - Safety and Health in Mines, 1995, which shifts the emphasis from a specific category of workers to the safety and health protection of all mineworkers regardless of gender. The ILO recommends providing equal protection for both men and women and restricting special protection measures to pregnant and breastfeeding women only (Paul 2004).

Despite recommendations that special protection measures for women should relate only to pregnancy and breastfeeding, many countries still restrict women’s participation in some industries and jobs. Provisions prohibiting women working in certain industries and occupying certain jobs still exist in 89 of the 190 economies around the world covered by WBL 2020. Restrictions on women’s night work still exist in 26 economies, most of which are found in the MENA. In Egypt for instance, women are banned from working from 7 p.m. to 7 a.m., in Jordan and Tunisia from 10 p.m. to 6 a.m., in Algeria between 9 p.m. and 5 a.m., and in Libya from 8 p.m. to 7 a.m. (OECD 2017).

Job and industry restrictions on women can be replaced with a risk-based approach to occupational health. Building upon a critical review of the health hazards/risks attributed to restricted jobs in Azerbaijan for instance, a World Bank working paper (2020) finds that over 70 percent of the 674 restrictions in force lack evidence-based justification. The remainder of restrictions typically involve working with lead, mercury, and other compounds with the potential to harm an unborn fetus. The review highlights that risks of this kind would be better managed through substance-specific regulations around safe-handling practices and provides examples of these regulations and practices addressing women’s reproductive health within an occupational health context. The review also recommends repealing Ordinance #170 in its entirety, that imposes industry restrictions on women, and implementing instead a risk-based approach to occupational health, ensuring that workplace hazards are accounted for adequately, elsewhere in Azerbaijan’s Occupational Safety and Health (OSH) framework (World Bank 2020).

Restrictions on women’s night work and access to certain jobs and industries are associated with negative economic outcomes. WBL (2016) finds that restrictions on the industries where women can work, and the type of jobs they can occupy lower their earning potential relative to men’s. The female to male ratio of estimated earned income drops by 12 percentage points in economies with at least one industry restriction compared to those with none. This makes sense given that many of the jobs prohibited for women are in highly paid industries, such as mining and manufacturing (WBL 2016). An OECD report confirms that mining is one of the most lucrative industries in Egypt and Jordan. Prohibited from working in these sectors, women are excluded from some high paid positions and are not able to gain the necessary work experience to become entrepreneurs in those fields (OECD 2017).

Empirical studies also support the negative effects of such legal prohibitions on women’s earnings and employment. Ogloblin (2005) points out the negative correlation between restrictions on women’s access to certain jobs and gender wage differential in Russia. She finds that women’s monthly earnings are 62 percent of men’s and that job segregation by gender accounts for about three quarters of this differential. She notes the need for making labor market legislation more consistent with a market economy. Using a natural experiment framework, Zveglich & Rodgers (2003) find that Taiwan’s 1984 Labor Standards Law, containing provisions that restrict women’s working hours, has a negative impact on women’s actual hours worked and employment. In an empirical study covering over 59,000 firms and 94 economies, Islam et. al (2018) find that the legal systems that allow women to work during night hours in the same way as men are associated with an increase of 4.1 percentage points in the probability of having a female top manager.

Restrictions on women’s night work and access to certain jobs and industries confine them to low-paid and low-skilled sectors. Provisions limiting or prohibiting access to certain professions and occupations create occupational segregation confining women to certain sectors that are generally low-skilled and low paid (agriculture workers, textile workers, teachers, nurses, social workers, public sector employees, informal jobs, etc.). Restrictions on the types of occupations and tasks available to women and their work at night reduce opportunities available to them and may more generally discourage employers from hiring and promoting them (OECD 2014, OECD 2017). OECD studies (OECD 2012, OECD 2014, OECD 2017) attribute women’s concentration in low-paid and low-skilled sectors to cultural gender perceptions. Cultural perceptions about what types of jobs are appropriate for women affect their employment patterns regardless of legal restrictions. The latter, however, play a significant role in sustaining those perceptions. Cultures are dynamic and fluid; they change and evolve over time due to different fac-

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Eliminating barriers preventing women from entering certain sectors or occupations has positive effects on economic outcomes. The World Development Report has found that removing such barriers increased output per worker by 13 to 25 percent in some countries (WDR 2012). It could also accelerate women’s participation in employment and in higher paying jobs. Two decades after Chile repealed legal restrictions on women working in the mining sector, in 2018 women represented 8 percent of the labor force in the mining sector. Similarly, in South Africa, two decades after opening up the mining sector to women, they made up 13 percent of the mining labor force in 2016, including 15 percent of senior management. In both cases, legal reforms were accompanied by policies to encourage, recruit, and enable women to enter and remain in the profession (USAID 2018).

BOX 2 - Summary of findings: Reducing occupational segregation

Legal restrictions prohibiting women’s night work or access to certain sectors or jobs deemed dangerous are due to legacy legislation initially intended to protect women. They are also supported by old and now obsolete ILO norms. In most cases, those restrictions are unjustified and associated with a set of negative economic outcomes for women’s employment and earnings. Additionally, many reports published by international organizations conclude that restrictions on women’s night work and access to certain jobs and industries confine them to low-paid and low-skilled sectors and that eliminating the restrictions have positive effects on women’s economic outcomes.

There is limited empirical evidence, however, on the effects of such reform. The literature lacks empirical studies evaluating the impact of removing these legal barriers on women’s employment and earnings. This gap in the literature could be explained by the presumed direct link between lifting restrictions on women’s work in certain sectors and jobs and female labor supply. Systematically opening up job sectors to women increases the opportunities available to them; the impact may be considered obvious. However, reforms happen in different contexts and may not always lead to the same outcomes. Empirical studies would isolate the impact of the reform and highlight the role of other variables, such as enabling policies or social norms, in promoting or undermining the success of the reform. The question merits further investment and research.
Access to finance and the role of property rights

Women’s access to finance is undermined by both weak property rights and discrimination in access to credit. The literature supporting the importance of women’s access to property rights is abundant and conclusive despite some unintended consequences resulting from challenging traditional gender roles. Prohibiting gender-based discrimination in access to credit is also associated with a positive impact on women’s financial inclusion despite the limited evidence.

Women’s access to finance is disproportionately low around the world and is affected by their access to property rights. Many studies provide evidence for the existence of a global gender gap in access to finance (Aterido, Beck, & Iacovone, 2013; Demirguc-Kunt, Klapper, & Singer, 2013; Muravyev et al., 2009). As per the 2018 Global Findex Database, women represent the majority of unbanked adults and are less likely to save formally. In Sub-Saharan Africa for instance, 37 percent of women have a bank account, compared with 48 percent of men. Women are also more likely to be excluded from the formal financial sector in countries where laws and social norms discriminate against them in terms of access to property. They are more likely to be financially included when they have equal and secure access to land and non-land assets use, control, and ownership. A study covering 141 economies shows that the female-to-male ratio reflecting the gender inclusion gap in the use of financial services in general drops by 30.7 percentage points when women are not guaranteed the same property rights as men. It drops by 66.3 percentage points for holding a credit card and 33.3 percentage points for holding a debit card (Morsy and Youssef 2017).

Access to immovable property is key to access to finance, particularly to pledge collateral for securing bank loans. Persha et al. (2017) find that a second wave of land certification process in Ethiopia is associated with a 10 percent increase in the likelihood of households (both male-headed and female-headed) taking out any credit for farming purposes, and a small increase in the average amount of credit obtained. In Ethiopia, land cannot be used as collateral in the formal sense. However, land certification may play that role informally by providing a signal that “the borrower is attached to a place and likely committed to improving his or her productivity on that land, and perhaps conveying capacity and ability for repayment”. The land certification is
also shown to have led to an “11 percent average increase in the likelihood of female-headed households (and a 12 percent average increase in the likelihood of widows) feeling more secure about entering into credit-based business transactions when the transactions occur with a holder of a land certificate” (Persha et al. 2017). In a study assessing the impact of India’s land-allocation and registration program in West Bengal, that made wives sole or joint-titleholders with husbands, Santos et al. (2014) report increased access to credit among beneficiaries. The average household in the program is 12 percent more likely to report taking out a loan from a formal bank and 88 percent more likely to use a loan for agricultural purposes than a household not in the program. The authors also find that compared to their peers who do not benefit from the program, women in households within the program are: “(1) 12 percent more likely to be involved in decisions to take loans from self-help groups or microfinance institutions; (2) 12 percent more likely to be involved in decisions on whether to purchase productive assets; (3) 9 percent more likely to be involved in decisions related to food purchase and consumption; and (4) more likely to be involved in decisions about the family land” (Santos et al. 2014).

Equal legal access to property rights is positively associated with women’s business ownership and ability to pursue economic opportunities. Islam et al. (2018) find that laws granting married men and women equal ownership rights are associated with an increase of 4.4 percentage points (significant at close to the 1 percent level) in the probability of having a female top manager and an increase of 6.9 percentage points (significant at the 5 percent level) for having a female firm owner. Access to property is also associated with higher women’s labor force participation, although effects on countries vary by level of income. The effects of property rights related reforms are almost always stronger in middle- and upper-level-income countries as shown by Hallward-Driemeier et al. (2013). At the median income of the study sample, an increase of income of one standard deviation would raise women’s labor force participation 2.1 percentage points higher for countries with equal inheritance for wives and husbands than countries where wives do not have the same inheritance rights. The effects of closing the gender gap in property and inheritance rights are strongest for girls’ primary enrollment. They are positive across all levels of country income although they tend to be lower as income rises. At the 25th percentile of income, for example, countries that give sons and daughters equal inheritance rights have on average a 6.4 percentage point higher ratio of girls to boys in primary enrollment (Hallward-Driemeier et al. 2013). Access to property rights, including equal inheritance rights, shifts the intra-household power dynamic in favor of women, allowing them to make decisions for themselves to work outside the home and providing them with the necessary collateral to obtain loans (Hallward-Driemeier & Gajigo, 2015).

Access to property is also associated with broader outcomes, interconnected with women’s access to finance and their economic empowerment. Other pathways may explain the impact of property right reforms on women’s economic outcomes. Mishra and Sam (2016) show that land ownership plays an important role in empowering women in Nepal, by enhancing their household bargaining power in the areas of own healthcare, major household purchases, and visiting family or relatives. The three variables are used as proxies to measure intra-household bargaining power. The results indicate two major findings. First, the authors report that women who own land are 13.91 and 38.3 percentage points more likely to have the final say in their healthcare decisions using the probit (uncorrected endogeneity) and CMP-IV (corrected endogeneity) models respectively. Similarly, the probability of women having the final say in decisions regarding visits to family or relatives is 9.95 percentage points higher when they own land, according to the more conservative model (Mishra & Sam, 2016). In Vietnam, the change in the land law, in 2000, to allow joint titles has led to a steady expansion in women’s land entitlements. Granting women either sole or joint titles to land has increased their business activity (Kabeer 2012). Using a 13-year longitudinal panel from rural Tanzania, Peterman (2011) finds that improving women’s property and inheritance rights are significantly associated with women’s employment outside the home, self-employment, and earnings.

Inheritance reform supports women’s asset ownership, their age of marriage, and the duration of their education. In India, the Hindu Succession Act amendment to grant daughters and sons equal inheritance rights, is positively associated with women’s asset endowment and their socio-economic outcomes, namely greater access to land, higher age of marriage, and higher educational attainment. While the Act was amended nationally in 2005, some southern states had amended it earlier. The states of Maharashtra and Karnataka amended the Act in 1994, allowing for the passage of enough time for Deininger et al. (2010) to estimate the impact of this legislative change using data from 2006. The authors find that although the reform was not effective in fully eliminating inequalities in access to land, it significantly increased women’s likelihood to inherit it. Females whose fathers died after the 1994 reform are 22 percentage points more likely to inherit land than those whose fathers died before 1994. Females who married after 1994, but whose fathers died after 1994 have a significantly higher age at marriage, by 0.54 years, than females who married before 1994, reducing the pre-reform av-

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erage marriage age difference between men and women of 3.36 years. On educational attainment, girls who started their elementary education after the amendment had 0.3 years more elementary schooling than the older cohort. In order to put those results into perspective, the authors note that programs such as school meals and conditional cash transfer schemes in developing countries have been shown to lead to program effects in the range of 0.1 to 0.6 years of additional schooling. They conclude that despite the latent educational effect of inheritance reform, “the large estimated effects, together with the limited cost of such reform imply that changing inheritance legislation is a potent mechanism to improve not only women’s asset ownership but also human capital accumulation by the next generation” (Deininger et al. 2010).

Inheritance reform also supports greater independence for women and the possibility of their accessing better paid jobs. Heath and Tan (2018) show that the Hindu Succession Act reform positively affected female labor supply through the channel of “autonomy”, as proxied by the woman’s say in household decision-making, freedom of movement, and access to a bank account. The Act led to statistically significant increases of 6.6 percentage points in the probability that a woman has say in household decisions, 8.2 percentage points in the probability that a woman can go to the market alone, 6.9 percentage points in the probability that a woman can go to a health facility alone, 8.3 percentage points in the probability that a woman can travel outside the village alone, and 3.9 percentage points in the probability a woman has access to a bank account. The reform also increased women’s labor supply into high-paying jobs outside the home. The likelihood of a woman working all year instead of occasionally increased 5.7 percentage points, and to work for cash instead of no pay or for in kind payment, 6.1 percentage points (Heath and Tan 2018).

Women’s access to property rights may also have negative consequences. Despite its positive impact on women’s economic outcomes and social empowerment, India’s inheritance reform was also shown to have negative unintended consequences. As concluded by Roy (2019), gender progressive legislation could have such consequences in developing countries, especially in the presence of structural inequalities that interact to perpetuate the status quo. The author explains that in order to circumvent the law, some parents disinherit their daughters by “gifting” their share of land to their sons. However, they also generally “compensate” their daughters through higher dowries or more education (Roy 2015). India’s inheritance reform is also associated with higher female infant mortality and feticide; the increased cost of daughters that take away some of the economic benefits of sons, gives parents an incentive to decrease their investment in the health of their daughters or reduce their own fertility (Rosenblum 2015). The reform has also led to a rise in marital conflict leading to a higher suicide rate. As explained by the study, “increased opportunities for women can accentuate tensions and marital discord within households, by challenging traditional roles, increasing the importance of negotiation, and raising the potential for conflict” (Anderson and Genicot 2015).

In addition to unequal property rights, women’s financial inclusion may also be undermined by discrimination. Women’s lack of access to property rights, and therefore to a set of economic empowerment factors including collateral, is not the only factor undermining their access to finance. Women also face greater difficulty, relative to men, in obtaining credit due to discrimination (Muravyev et al., 2009). In the MENA region for instance, access to loans among women-owned formal small and medium enterprises is less than 6 percent (Rockefeller Foundation 2013). In many MENA countries, banks ask for the husband’s co-signature, “even if he lacks the financial resources or is not involved in the venture,” to make sure that “the woman’s actions do not interfere with the wishes of the family or her husband” (Chamlou 2008). These practices occur even though banking laws do not discriminate against women borrowers. Adopting legal provisions prohibiting discrimination based on sex in access to credit would reduce such practices by providing women with legal recourse to complain and remedy discrimination when it happens.

Legislation prohibiting gender-based discrimination in access to credit is associated with a positive impact on women’s access to finance. In the United States, Ladd (1982) shows that the Federal Equal Credit Opportunity Act (ECOA) may have had a favorable impact on women’s ability to obtain mortgage funds, at least in the two states covered by the study, New York and California. ECOA was originally enacted in 1974 to prohibit lending discrimination based on sex and marital status. It was amended in 1976 to further prohibit lending discrimination based on “race, color, religion, national origin, age, the receipt of public assistance income, or exercising one’s rights under certain consumer protection laws.” Data on sex and marital status of loan applicants in New York were not available until 1977, when state law required state-chartered banks to collect such data. Data from 1977 were then used for both states. Discriminatory practices by mortgage lenders against women in those states, which appeared in their appraisal practices increasing the size of the
down-payment required, their differentially high denial probabilities, and their higher interest rates and loan fees, were all impacted positively after the adoption of ECOA. In California for instance, data shows that in 1977 female applicants were charged interest rates that were 0.02 to 0.04 percentage points higher than those for comparable male-female applicants (joint application). This differential disappeared in 1978. Women also faced higher loan fees than men, which was not the case in 1978. Moreover, properties of women were undervalued in 1977 in all areas covered by the study; the scope of the practice (number of areas where it was reported) declined in 1978 (Ladd 1982).

Formally prohibiting gender-based discrimination in access to credit is associated with outcomes that go beyond women’s increased access to loans. WBL data show that more women have formal accounts at financial institutions and debit cards in their own names in economies where gender-based discrimination in access to credit is prohibited by the law (WBL 2018). Focusing on 94 emerging and developing economies, Islam et al. (2018) find that laws prohibiting gender-based discrimination by creditors are associated with an increase of 4.1 percentage points in the probability of having a female firm owner and an increase of 2.4 percentage points in the probability of having a female top manager. It is important to recall that other legal rights that go beyond the aspects measured by the WBL index and their “strength” are also relevant to access to finance. Morsy and Youssef (2017) focus on the institutional and regulatory level and demonstrate that the gender gap in access to loans, use of debit cards, and use of bank accounts for work purposes decline with stronger legal rights, referring to “the degree to which collateral and bankruptcy laws protect the right of borrowers and lenders and thus facilitate lending.”

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**BOX 3 - Summary of findings: Improving access to property rights and finance**

Women’s access to finance is undermined by both weak property rights and discrimination in access to credit. Evidence supporting the importance of women’s access to property rights is abundant and conclusive despite some unintended consequences. The literature addresses women’s property rights both as key to accessing finance, specifically to pledge collateral for securing bank loans, and as a means for social and economic empowerment more generally.

Equal legal access to property rights is positively associated with women’s ownership of business and labor force participation. It is also associated with broader outcomes, interconnected with women’s access to finance and their economic empowerment. Access to property rights, through inheritance among other means, shifts the intra-household power dynamic in favor of women allowing them to make decisions for themselves and their children. It may also have some negative consequences as it challenges traditional gender roles and increases the importance of negotiation which may accentuate tensions and raise the potential for conflict.

In addition to weak property rights, women’s financial inclusion may also be undermined by other factors, namely discrimination. Prohibiting gender-based discrimination in access to credit is associated with a positive impact on women’s access to loans and other financial services. It is also associated with a greater likelihood of women being top managers and business owners. The literature supporting these conclusions is, however, limited. It lacks empirical studies measuring the impact of reforms prohibiting gender-based discrimination in access to credit. A possible area of research would be to explore such impact, there are cases of reform around the world that would provide for a natural experiment context. Lastly, the literature covers further factors that reduce the gender gap in access to loans, namely the strength of collateral and bankruptcy laws, which may be another area for further investigation.
Legal capacity within marriage: Shifting intrahousehold bargaining power

Granting women equal legal capacity within marriage, relative to men, (to move freely, to make decisions within the household, and to undertake legal transactions) shifts the intrahousehold bargaining power in their favor. This shift enables them to make decisions to work outside the home, increase their earnings prospects, and have control over their earnings. The evidence, although limited in certain areas, is conclusive. Additionally, there is little to no evidence related to the impact of the valuation of non-monetary contributions during marriage and remarriage laws on women’s economic outcomes. On the other hand, child marriage is identified as a barrier that negatively affects these outcomes.

Married women are more likely to be the target of legal discrimination. Although most countries have adopted principles of gender equality in their constitutions, discriminatory provisions that undermine married women’s agency to benefit from economic activities persist in many national family and civil legislations. Child marriage exacerbates the effects of those provisions as it further undermines women’s agency. One explanation underpinning the legal restrictions imposed on married women could be the role of social norms and customary and religious laws, which will be addressed later in this section. Those norms and laws are reflected for instance in restrictions on married women’s freedom to move and make decisions on an equal footing to men in many MENA economies. Legacy legislation is another reason for such discrimination. Many Sub-Saharan family laws, for instance, still mirror the 1958 French Civil Code that restricted women’s ability to choose where to live, be a head of household, pursue a profession, and open a bank account. The Spanish Civil Code from 1960 and the common law principle of marital power also still apply in some countries, such as Equatorial Guinea and Eswatini, preventing women from giving consent to enter into a contract, register a business, or open a bank account. These provisions and others, applying to married women only, undermine women’s legal capacity within marriage by limiting their freedom of movement, their decision-making capacity within the household, and their capacity to undertake legal transactions, and therefore their intra-household bargaining power, as shown by the literature covered in this section. Each of these elements is key to women’s economic participation and economic empowerment more generally. Golla et al. (2011) note that, “to have power and agency to benefit from economic activities, women need to have the ability to make and act on decisions and control resources and profits.”
Child marriage negatively affects women's labor force participation and earnings. The United Nations International Children’s Emergency Fund estimates the total number of girls married under the age of 18 at 12 million every year. Savadogo and Wodon (2018) suggest that in 15 countries, child marriage leads to a loss in earnings for women in adulthood of nine percent. Child marriage has a direct impact on girls’ educational attainment and fertility, which in turn affects their expected earnings and labor force participation (Savadogo and Wodon 2018). Another study found that ending child marriage would generate an additional $7.6 billion in Nigeria and $4.7 billion in Bangladesh in increased earnings and productivity (Wodon et al. 2017).

Women’s mobility is key to their economic participation and empowerment. Freedom of movement may be taken for granted in many places, at least from a legal perspective. However, legal provisions limiting women’s freedom to decide where to live and travel still exist in approximately 30 percent of the world economies (WBL 2020). Mobility is a necessary precondition for accessing income and resources and hence for empowering women both economically and socially. An ILO report notes that due to mobility constraints, only a small share of women entrepreneurs in the MENA region benefits from advisory or business development services (ILO 2018). Htun et al. (2019) find that provisions on women’s legal capacity including their ability to move are “by far the strongest predictor of the share of women with bank accounts, the share of women who participate in firm ownership, and female labor force participation.”

Women’s ability to travel freely is positively associated with their access to economic opportunities. Islam et al. (2018) show that the probability of a firm having a female owner is significantly higher when the law ensures that a married woman can travel outside her home in the same way as a man. They conclude that freedom of independent travel is positively correlated with the ownership of business by women. More generally, restrictions on mobility or interactions outside the home may limit women’s access to finance (International Finance Corporation 2011). In Pakistan, women’s weak bargaining position, manifested among other things in limited mobility, hamper their movements for business purposes and access to finance (Goheer 2003).

Restrictions on women’s ability to work outside the home in the same way as men are shown to affect their bargaining position in the household and therefore their ability to pursue economic opportunities. This finding is highlighted by Hallward-Driemeier and Gajigo (2015) in a study evaluating the impact of family law reform in Ethiopia. The reform was adopted in 2000, removing the ability of a spouse to deny permission for the other to work outside the home. It also introduced the requirement of both spouses’ consent in the administration of marital property and raised women’s minimum age of marriage. The reform was not initially adopted nationwide, but only in certain regions and cities. Using two nationally representative household surveys, one in 2000 just before the reform and one five years later, the authors find that where the reform had been enacted women were more likely to work outside the home, work in paid and full-time jobs, and in occupations that employ more educated workers. They highlight that “the relative increase in women’s participation in these activities was 15-24 percent higher in areas where the reform was carried out, the magnitude of the impact is significant too” (Hallward-Driemeier and Gajigo 2015).

The ability to choose where to live is another important aspect of mobility and is positively associated with women’s financial inclusion. It is shown that gender gaps in financial inclusion are higher where married women cannot choose where to live in the same way as men, with women having less access than men to bank accounts and less capacity to borrow from a financial institution (WBL 2018). A similar finding was reported in a study by Demirguc-Kunt et al. (2013) covering 98 developing countries and including also women’s capacity to save. It is important to note that mobility restrictions may also apply to non-married women and may go beyond the aspects measured by WBL. In Jordan, guardians (generally fathers or, in their absence, any other male relative) can decide on a woman’s travel and place of residence until the age of 30, a “right” that could be extended if a daughter is considered “untrustworthy” by court order (OECD 2017). In Mauritania, while the law allows a man to travel outside the country with his children without having to obtain the mother’s consent, it requires women to obtain consent from the father, in his capacity of legal guardian, to be able to travel internationally with her children.

In addition to restricted mobility, limited decision-making capacity within the household is another aspect of women’s unequal legal capacity within marriage and is associated with negative economic outcomes. Many countries still have laws that restrict women’s decision-making capacity within the household and subject it to the husband’s wish by designating him the sole head of household, granting him alone the unilateral right to divorce, allowing him to object to his wife’s work, or/and requiring the wife to obey him. Such laws restrict women’s autonomy and undermine their right to choose for themselves. They are often associated with nega-
tive economic outcomes in terms of access to financial services. Demirguc-Kunt et al. (2013), using individual-level data from 98 developing countries, find that in countries where married women cannot get a job in the same way as men, women are less likely to have formal accounts, savings, or credit. Similarly, in countries where married women cannot be the head of their household and are required to obey their husbands, women are also less likely to use formal financial products. The use of formal credit by women is very low in countries with such laws (Demirguc-Kunt et al. 2013).

Greater decision-making capacity within the household is associated with women’s improved economic outcomes. Hallward-Driemeier et al. (2013) show in their analysis that measures of greater legal capacity, which include recognition of women as heads of household, are associated with improved employment outcomes. In the absence of gender restrictions on the head of household status, women are more likely to participate in the labor force and more likely to move out of agricultural employment in favor of wage employment (Hallward-Driemeier et al. 2013). Gonzales et al. (2015) find that legal capacity related provisions, including allowing women to be head of household and obtain a job in the same way as men, are related to a statistically significant decrease in the gender gap in labor force participation. They show that the legal right for women to be head of household coupled with more equal inheritance rights are associated with a larger decline in gender gaps in labor force participation in developing and emerging economies of around 4.6 percentage points.

Restrictions on women’s legal capacity are also associated with negative human capital outcomes, which are closely linked to macroeconomic outcomes. Hallward-Driemeier et al. (2013) show that the legal restriction on women being head of household is positively associated with infant mortality and that the effect of closing such a gap is stronger at lower levels of country income. At the 25th percentile of income, granting women the same legal right as men to be head of household is associated on average with a decline in infant mortality of 9.3 deaths per 1000 live births; at the 10th percentile the decline is 12.3 (Hallward-Driemeier et al. 2013).

Lastly, spouses’ capacity to dissolve marriage is also an important indicator of the intra-household power dynamic and may, under certain circumstances, lead to higher women’s labor participation. Unequal access to divorce limits women’s decision-making capacity, may trap them in relationships of dependency, and, by extension, undermines their access to income and property. Unequal rights to divorce can have negative effects on women’s intra-household bargaining power and jeopardize their financial security when a divorce is finalized (WBL 2020). Gray (1998), in an impact assessment study of 1970s changes in divorce laws in the US, finds that the adoption of unilateral divorce laws, “allowing either spouse to end a marriage simply by claiming that it has broken down,” are associated with an increase in women’s labor participation. However, this is only true in states with equitable-distribution property laws (community-property jurisdictions). The author highlights the importance of marital property laws in determining how unilateral divorce, compared to mutual-consent divorce, shifts intra-household bargaining power. The author explains that household power dynamic is sensitive to the distribution of wealth and earning power within its members. What each of the spouses can potentially attain from divorce is a leverage he or she has in the overall bargaining process. It does not necessarily mean the probability of divorce increases. Lastly, the author supports his argument by referring to data from the CPS and Census suggesting that “a wife’s labor supply is an increasing function of her bargaining position within marriage” (Gray 1998). Therefore, the possibility for women to make a divorce decision unilaterally, on the same grounds as men, increases their labor supply in states with community-property jurisdictions. In another study assessing the impacts of introducing unilateral divorce laws in the US, Stevenson and Wolfers (2006) find results indicating a large decline in domestic violence for both men and women in states that adopted the law.

The possibility to account for non-monetary contributions at the dissolution of marriage may also affect the intra-household bargaining process. The bargaining power model underlying Gray’s (1998) argument may be used to explain the role of laws providing for the valuation of spouses’ non-monetary contributions at the dissolution of marriage. Just like equitable-distribution property laws, provisions mandating the valuation of non-monetary contributions during marriage is a leverage that either spouse may have in the overall bargaining process. Such laws shift the intra-household bargaining power in favor of women in countries where they are the ones who assume the bulk of care responsibilities. In those countries, married women are therefore more likely to participate in the labor force when the law allows for valuation of non-monetary contributions. It is also important to highlight that community-property regimes systematically account for non-monetary contributions. Separate property regimes, on the other hand, can penalize women who do not earn an income during marriage as these regimes do not recognize property accumulated during the marriage, to which the spouses may have contributed non-financially, as subject to division (OHCHR 2013).

Restrictions on married women’s decision-making capacity within the household are most prevalent in the MENA
region. They also exist in some Sub-Saharan African countries and few economies in East Asia and the Pacific. However, all twenty MENA economies, except for Malta, have at least one of the four restrictions measured by WBL: unequal rights to be head of household, to divorce and remarry, and the requirement on women to obey their husbands. More than half have at least three of these restrictions. In eleven countries, the law requires the wife to obey her husband and in nine economies, the role of “head of household” is granted to the husband only (WBL 2020). Throughout the region, subsidies such as housing allowances and parental benefits are frequently allocated to men who are seen and designated by the law as heads of household (Coleman 2015). In connection with the head of household principle, the law may prohibit women from working outside the home without their husband’s permission or if their work is deemed to harm the family interest (WBL, 2020). Such provisions provide a clear idea of the power dynamics inside the household and the limited negotiation power women have within marriage due to restrictive legislation.

These restrictions may emanate from social and/or religious norms. However, it would be useful to address them as legal barriers first. The literature often points to the role of social norms as barriers to women’s economic participation in the MENA region (World Bank 2013, OECD 2014, Coleman 2015, OECD 2017, and ILO 2018). While it is true that restrictions may emanate from social norms, the fact that they are also formalized in those countries’ laws should not be overlooked. As such, one study explores whether it would be useful to address them as legal barriers first. Majbouri (2017) proposes an econometric model exploring the impact of family law on women’s economic participation in MENA and shows that Islamic family law and oil and gas rents matter jointly. Per capita oil and gas rents reduce female labor force participation rates in countries applying Islamic family law more than others. Oil and gas rents increase the ratio of male to female wages and therefore men’s intra-household bargaining power. Men have more say in household decisions including who can work outside the home. However, this increase in men’s bargaining power is more likely to affect women’s economic participation when labor market institutions and laws allow men to make such decisions. When laws are equal, rents are less likely to affect women’s economic participation despite the increase in male bargaining power (Majbouri 2017).

Related to women’s legal capacity within marriage is also their ability to undertake certain legal transactions in the same way as men. In Lesotho, until 2006, the law regarded married women as minors; it limited their capacity to enter into contracts, start a business, and register property, among other things. The husband, at his own discretion, had to sign employment contracts on his wife’s behalf. Before 2016, the Democratic Republic of Congo had one of the most restrictive family codes for women’s agency and economic participation. Among other restrictions, married women could not sign contracts, accept employment, or open bank accounts without their husband’s permission (USAID 2018).

Equal rights to open a bank account, register a business, and sign a contract are associated with improved female employment and entrepreneurship. Drawing on a WBL panel data set covering 143 economies from 1960 to 2010, Gonzales et al. (2015) find that in addition to restrictions on women’s rights to inheritance and property, legal impediments to undertaking economic activities, including opening a bank account and signing a contract, are strongly associated with larger gender gaps in labor force participation. In many cases, the gender gaps caused by these restrictions also have a negative impact on GDP (Gonzales et al. 2015). The ability to register a business in the same way as men is also positively correlated with women’s economic participation. It is associated with an increase of 13.3 percentage points in the probability of having a female firm owner (Islam et al. 2018). Similarly, Field et al. (2019) find that by having access to bank accounts and using them to deposit earned income, rural women in India increased their labor supply in the public and private sectors. In this study, women who were provided bank accounts and training on how to use them and had their wages directly deposited into those accounts (instead of the male household head’s - the status quo) significantly increased labor supply by 0.16 standard deviation units one year after the treatment. Women who participated in the experiment, and their husbands, became more accepting of female work. Households with initially lower levels of female work and stronger norms against it saw a higher concentration of these effects. Labor supply significantly increased by 0.21 standard deviation units among “socially constrained” women, who are “less likely to work, less empowered, and their husbands are more likely to subscribe to norms against female work.” These women worked more in the long run and became more empowered. According to the authors, “these patterns are consistent with models of household decision-making in which increases in bargaining power from greater control over income interact with, and influence, gender norms” (Field et al. 2019).
BOX 4 - Summary of findings: Shifting intra-household bargaining power in favor of women

Women’s legal capacity within marriage is curtailed by restrictions affecting three areas: freedom of movement, decision-making capacity within the household and the capacity to undertake legal transactions. Legal impediments in those areas affect women’s economic outcomes by undermining their intra-household bargaining power. Additionally, there is little to no evidence related to the impact of the valuation of non-monetary contributions during marriage and remarriage laws on women’s economic outcomes. On the other hand, child marriage is identified as a barrier that negatively affects these outcomes.

Restrictions on married women’s ability to move and work outside the home in the same way as men are shown to affect their ability to pursue economic opportunities. Removing those barriers is associated with improved women’s employment and entrepreneurship. Removing restrictions on women’s ability to choose where to live is positively associated with higher financial inclusion. These conclusions, however, are supported by a limited number of empirical studies. Measuring the impact of reforms improving women’s mobility is a key area for further research.

Limiting decision-making capacity within the household is another aspect of women’s unequal legal capacity within marriage. This is reflected in provisions designating the husband as sole head of household, granting him alone the unilateral right to divorce, allowing him to object to his wife’s work, or/and requiring the wife to obey him. These restrictions are associated with negative economic outcomes in terms of women’s access to finance and labor force participation. Removing them may lead to improved women’s employment and human capital outcomes. The literature highlights that restrictions on married women’s decision-making capacity may emanate from social and/or religious norms, but that it would be useful to address them as legal barriers first. Empirical evidence related to the impact of unequal divorce and the legal requirement for women to obey their husbands remains limited. Further research is needed to investigate these two aspects. The impact related to the valuation of non-monetary contributions at the dissolution of marriage is yet to be explored.

Related to women’s legal capacity within marriage is also their ability to undertake certain legal transactions in the same way as men. Existing restrictions with respect to opening a bank account, registering a business, and signing a contract apply to married women only. Granting women equal capacity to undertake these transactions is positively associated with their employment and entrepreneurship. The literature related to this area is limited, though. One explanation could be the very low number of countries with such restrictions. Women’s capacity to sign a contract for instance is currently limited in only two countries. Empirical studies to evaluate the impact of removing such barriers are still possible, especially in the existence of natural experiment contexts such as the Democratic Republic of Congo and Lesotho.
Legal protections from violence and discrimination in employment: Reducing gender power imbalances

Legal protection from violence and discrimination in the private and professional spheres empowers women socially and professionally by providing them with legal recourse and shifting the gender power balance. Equal pension rules between men and women mitigate the “deferred earnings discrimination” and increase female labor supply. While many studies explore the impact of antidiscrimination legislation and equal pension rules on women’s economic outcomes, the impact of anti-violence legislation on these outcomes is left unexplored. The literature emphasizing the economic cost of domestic violence and sexual harassment is abundant though, which ultimately suggests that preventing these forms of violence would mitigate their economic effects. Evidence around the impact of antidiscrimination legislation is mixed, pointing to some adverse effects.

Gender based violence and discrimination are the manifestation of unequal gender relations. Feminist theory posits that societal-level power imbalances within patriarchal societies create structural factors that work directly or indirectly to validate a male-dominated social order and family structure that often result in men exercising power and control over women in several ways, one of which is violence (Antai 2011). Ensuring a violence-free and discrimination-free environment within family and work is important to ensuring women’s social and economic empowerment. Women around the world are disproportionately affected by violence both in the private and professional spheres. Global estimates by the World Health Organization (WHO) indicate that 1 in 3 women worldwide has experienced physical and/or sexual violence in her lifetime. Women are also much more likely than men to be victims of sexual harassment, the latter being “a manifestation of power relations” which are often not in favor of women. They are more likely to be affected by discriminatory practices in different areas of work, which is another manifestation of power relations, both from a gender perspective and a hierarchical one.

6  http://hrlibrary.umn.edu/svaw/harassment/explore/3causes.htm
Violence against women undermines their earnings, their financial inclusion, and employment outcomes. Most of the violence experienced by women around the world is perpetrated by intimate partners. Thirty percent of women who have been in a relationship report that they have experienced some form of physical and/or sexual violence by their intimate partner. Globally, as many as 38 percent of murders of women are committed by a male intimate partner (WHO 2020). A literature study shows that, due to factors including gender-based violence, women are less likely to generate significant proportions of household income or to control or contribute to household financial decision-making (Hughes et al. 2015). Demirguc-Kunt et al. (2013) find that in economies where there is a high prevalence of violence against women, women are less likely to have formal accounts, savings or credit. Domestic violence is associated with high economic costs to both the employers and employees. It results in increased employee turnover, high rates of absenteeism, time off work to deal with legal proceedings, and healthcare needed for the victims. The loss in individual employee productivity leads to greater overall organizational losses in productivity (Reeves et al. 2007). It also incurs a cost to the economy in general. Intimate partner violence costs the US economy $12.6 billion on an annual basis - 0.1 percent of GDP - compared to 1.6 percent of GDP in Nicaragua and 2.0 percent of GDP in Chile (WHO 2020). In Egypt, the cost of domestic violence was estimated at least $208 million in 2015 and possibly as high as $780 million (UNFPA 2015). Legal protection measures, although not sufficient on their own, may act as a deterrent by establishing civil or criminal sanctions against perpetrators. They also enable women to seek help and protection (UNSD, 2015).

Domestic violence legislation plays both a preventive and a deterring role. Dugan (2003) shows in an empirical study covering the 50 states of the US that domestic violence laws reduce the chances of domestic violence and may deter potential offenders from harming family and partners as well. She also uncovers other channels through which domestic violence legislation can lead more cases into the criminal justice system: increased public awareness and an enhanced perception of protection. Moreover, results point out that police officers are more likely to arrest a perpetrator if domestic violence is legally established as a serious offense (Dugan 2003). In a similar study covering the US, Cook et al. (2019) examine changes in incidents of intimidation and assault between intimate partners across states with and without mandatory arrest laws, and under circumstances of unemployment. They find that while mandatory arrest laws are not a single solution to domestic violence, their efficacy is strongest in times of economic stress. They show that these laws are most effective to mitigate intimate partner violence resulting from rising rates of unemployment. However, the mitigating effects of such laws disappear under severe economic crisis. (Cook et al. 2019).

Mandatory arrest laws reduce the chances of domestic violence, but they also lower the probability of reporting. Iyengar (2009) finds that mandatory arrest laws actually increased intimate partner homicides in the US due to decreased reporting by victims, as victims are less willing to report an incident if their abuser will be arrested. This is not contradictory with the findings mentioned earlier as Dugan (2003) also reports that while households in states that mandate arrest are less likely to suffer from spousal violence, police in those states are less likely to discover an incident due to decreased reporting. Mandatory arrest laws therefore have a deterrent function which reduces the chances of domestic violence but also lowers the probability of reporting, which may escalate the level of violence creating a heightened emotional environment where the perceived cost of being detained is undermined. Sherman (1992) concludes that “the efficacy of arrest depends heavily on the perpetrators’ perceived cost of being detained.”

Sexual harassment affects women’s employment and career trajectory. Multiple studies highlight the effects of sexual harassment on women’s economic advancement and security (Newman 1995, Shaw et al. 2018). Studies highlight the issue of sexual harassment and violence as a safety concern that may hinder women’s participation in the economy, especially with the lack of security infrastructure in public transportation in certain countries (OECD 2014, OECD 2017). In a report on the challenges on youth employment in Egypt, the authors highlight “how fears of workplace harassment discourage many women from joining the labor force, especially in smaller workplaces and in less traditional jobs” (Gatti et al. 2013). In North Africa, nearly a quarter of women report the threat of abuse, discrimination, and sexual harassment as being the main reason for remaining outside the labor force (ILO 2018). Using in-depth interviews and longitudinal survey data, McLaughlin et al. (2017) examine the effect of sexual harassment for women in their early career in the US. They find that sexual harassment increases financial stress, an effect that could be largely attributed to precipitating job change. The latter, a common response among victims, can significantly alter women’s career attainment. Legislation addressing sexual harassment in the workplace could prevent or mitigate those effects and improve women’s economic outcomes. WBL (2018) finds that women are more likely to have majority ownership in firms in economies where such legislation exists.

Gender-based discrimination in employment takes multiple and overlapping forms and may affect women’s hire-
ing, promotion, retention, and remuneration. Discrimination is defined by ILO's Convention No. 111 on discrimination in employment and occupation as including "any distinction, exclusion, or preference made on the basis of race, color, sex, religion, political opinion, national extraction, or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation; [...]" 7 Women continue to face discrimination on the basis of their gender in almost every aspect of employment, including hiring, remuneration, benefits and promotion. In many cases, their access to job opportunities is restricted on the basis of their reproductive role, due to them being mothers or caregivers to other dependents, or of a childbearing age (ILO 2011). Relative to remuneration, recent estimates indicate that globally women are paid 77 cents for every dollar earned by men (UN Women). Pregnancy discrimination is also found to be prevalent in many countries as shown by the literature review conducted by Salihu et al. (2012) and covering the UK, US, Canada, and the European Union. A survey of employees suggested that "pregnant women were seen as a liability in the workforce that causes undue stress to the employer".

Antidiscrimination legislation, covering employment and pay, is positively associated with women's employment and earnings. In a study covering 53 developing countries, Amin & Islam (2016) find a strong positive relationship between the existence of a legal provision prohibiting gender-based discrimination in hiring practices and women's employment relative to men. Mandating a non-discrimination law is associated with an increase of 5 percentage points in women's employment. The relationship is even bigger in richer countries and among relatively smaller firms (Amin & Islam 2016). Similarly, antidiscrimination legislation has been found to have a positive and significant association with both relative earnings and relative employment of women in the UK. The Equal Pay Act, requiring equal pay for the same or like work or work of equal value by men and women, was passed in 1970. Its application was delayed until the end of 1975 to allow employers time for adjustment. At the same time, around the end of 1975, the Sex Discrimination Act, requiring equal employment opportunities for men and women, was also passed. Zabalza and Tzanantos (1985) find that due to the anti-discrimination legislation including these Acts, relative employment of women increased by more than 17 percent and relative pay by about 15 percent between 1970 and 1980, everything else being equal.

While antidiscrimination legislation is positively associated with women's promotion and earnings, it may also negatively affect their employment. Eberts and Stone (1985) explore the effect of the Equal Employment Opportunity Act implemented in the 70s in the US. The authors use longitudinal data from thousands of individual educators from Oregon and New York states to investigate gender differences in promotions to administrative positions and the impact of the legislation. They conclude that "in the early 1970s female teachers were significantly less likely to be promoted than similarly qualified male teachers, but by the late 1970s [after the adoption of the legislation] the difference is no longer significant. In addition, index measures of apparent discrimination declined significantly by close to half." In a study exploring the effects of US anti-discrimination legislation – the Equal Pay Act and Equal Employment Opportunity Act - on women's employment and earnings Neumark & Stock (2001) find mixed results. They find evidence that sex discrimination/equal pay laws increased the relative earnings of black and white females, but at the same time reduced their relative employment. It is important to note that unlike the UK Equal Pay Act, the US Equal Pay Act only accounts for equal and similar work and not "work of equal value".

Establishing the equal remuneration for work of equal value principle may help to address wage discrimination. The principle was set out in the ILO’s Equal Remuneration Convention, 1951 (No. 100). 8 The Principle was called for in Sustainable Development Goal (SDG) target 8.5 within the framework of the United Nations 2030 Agenda for Sustainable Development. 9 Equal pay for equal or similar work provisions do not address situations where men and women perform different jobs, using different skills, and involving different working conditions, but which are nevertheless jobs of equal value. Paragraphs 672–681 of the ILO’s General Survey on the fundamental Conventions (2012) 10 explain the importance and the scope of the concept of “work of equal value” for enabling a comparison of different jobs since, because of historical attitudes and stereotypes regarding women’s aspirations, preferences, and capabilities, women and men do not occupy the same jobs. The Report Committee explains that "the concept of 'work of equal value' is fundamental to tackling occupational sex segregation in the labor market, which exists in almost every country, as it permits a broad scope of comparison, including, but going beyond equal remuneration for 'equal', 'the same' or 'similar' work, and also encompasses work that is of an entirely different nature, which is nevertheless of equal value." Only 88 out of 190 economies covered by WBL 2020 have established this concept in their respective legislations, most of which are quite recent and have not been followed by

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Unequal pension rules between men and women result in deferred earnings discrimination. Ogloblin (2002) points out, speaking of Russia, that “no discussion of the gender pay gap […] can be complete without taking into account the lower legal retirement age for women.” This is true for any discussion of gender wage gap, not only in Russia but in any economy where women are made to retire earlier than men. Unequal retirement ages affect women not only during their professional life, by undermining their chances of getting promoted and making better earnings, but also after their careers end by reducing the size of their pensions compared to men’s. Pensions may be viewed as “deferred labor earnings” (Ogloblin 2002). Granting women equal opportunities to access income after their careers end is as important as during their career.

Early age retirement policies undermine women’s economic outcomes. Current early age retirement policies in China and elsewhere, may be well-intentioned and aim to “relieve” women from work earlier and provide them with more years of pension. However, the adverse consequences of such policies on women should not be ignored. Women should be allowed to make their own decisions, which may very well go against what the legislators intend for them as showcased below by the Swiss example. In addition to women losing several years of contributions and therefore receiving lower pensions, women’s earlier retirement age may also influence recruitment decisions and limit access to top-level positions (OECD 2017, OECD 2014).

Differences in retirement ages between men and women affect the period they spend in the job market and therefore the size of their respective pensions. In China, among people aged 60 and older, women receive about half the amount of men’s social pensions. Zhao and Zhao (2018) find that “about three-quarters of the deficit in women’s pensions is explained by their lower likelihood of receiving occupational pensions, and one-third is due to smaller benefits when they do receive them. Among pension recipients, nearly one-third of the gap is explained by women’s fewer years of employment and lower salaries.” In a similar vein, Lee et al. (2019) find that China’s mandatory retirement law requiring women to retire 5 years earlier than men reduces welfare for women. Equalizing retirement ages for men and women can generate a welfare gain for both (Lee et al. 2019).

Increasing women’s retirement age to equalize it with men’s, reduces the deferred gender wage gap and increases female labor supply. In another study, Ogloblin (2005) shows that given the longer life expectancy of women, compared to that of men, the difference in retirement ages has an even more sizeable impact on women’s deferred earnings. In Russia, the legal retirement age is 55 for women and 60 for men while life expectancy is 73 for women and 62 for men. An average woman is therefore expected to be on a pension for 18 years and an average man for 2 years. Accounting for this increases the ratio of female to male lifetime earnings per month of work to 78 percent (Oglobin 2005). Moreover, increases in retirement ages for women are shown to be associated with increased female labor supply in many country specific studies (Staubli and Zweimüller 2013 on Austria; Atalay and Barrett 2015 on Australia; and Cribb et al. 2016 on the UK). The Swiss pension system reform of 1995 is also a relevant example. The reform equalized the full retirement age and set it at age 65 for both men and women at inception. Lalive and Staubli (2014) find that a one-year increase in full retirement age delays market exit by 0.51- 0.66 years and increases the claiming age of retirement benefits by 0.41-0.55 years. It is important to note that the established full retirement age was not mandatory but an eligibility condition for claiming the full old age pension (Lalive and Staubli, 2014). The study’s results are reflective of women’s preference to work longer and delay their claim for pension when they can.

Another relevant aspect of pension systems, which also affects the size of women’s deferred earnings, is childcare pension credits. If unaccounted for, childcare responsibilities can affect women’s pension rights. Women are more likely to take time out of work to care for children. This can reduce their working life, their contribution records, and the earnings used to compute pension entitlements, undermining the size of their pension. To offset employment interruptions, some pension systems establish care credits to account for periods of absence due to childcare in pension benefits (WBL 2018).
BOX 5 - Summary of findings: Reducing power imbalances in the private and professional spheres

While many studies emphasize the economic cost of domestic violence and sexual harassment, there is no evidence pointing to a direct connection between legal protections against these forms of violence and women’s economic outcomes. Studies show that violence against women undermine their earnings, their financial inclusion, and employment outcomes. Anti-violence legislation plays both a preventive and a deterrent role by reducing the chances of domestic violence, although it may also lower the probability of reporting. These findings ultimately suggest that addressing domestic violence may reduce violence and hence improve women’s economic outcomes. Similarly, studies highlight the negative effects of sexual harassment on women’s employment and career trajectory. However, there is no empirical evidence related to the impact of protective legislation on mitigating these effects. Exploring the empirical association between legal protections addressing domestic violence and sexual harassment and women’s economic outcomes is a possible area for research.

Many studies explore this relationship in reference to legislation addressing gender-based discrimination in employment and wages. While antidiscrimination legislation is positively associated with women’s employment, promotion, retention, and earnings, it may also negatively affect their hiring. This could be explained by the employers’ apprehension of a higher risk of discrimination allegations if discriminatory practices are already in place. Further research is needed to confirm this assumption and determine whether possible adverse effects of anti-discrimination legislation are associated with specific contexts and variables. Further research is also needed to explore and isolate the impact of prohibiting wage discrimination through the principle of equal remuneration for work of equal value on women’s earnings. Evidence is lacking in this regard as the existing studies do not differentiate between equal pay legislations that account for work of equal value and those whose scope is limited to equal or similar work.

Lastly, the literature covers “deferred earnings discrimination”, which results from unequal pension rules between men and women. Studies show that early retirement age policies reduce women’s pension and labor supply as they make them spend less time in the job market. Increasing women’s retirement age to equalize it with men’s reduces this gap. Another relevant aspect of pension systems, which also affects the size of women’s deferred earnings, is childcare pension credits.
Informal employment among women remains a significant challenge around the world. In South Asia, 95 percent of female employment is concentrated in the informal sector. It is 89 percent in Sub-Saharan Africa and 59 percent in Latin America and the Caribbean. In the Arab region, women constitute 61.8 percent of workers in the informal sector. The informal sector is not covered by labor laws, which leaves its workers, especially women, exposed to many aspects of vulnerability including low pay, unsafe working conditions, and lack of social benefits such as pension and paid sick leave (OECD 2018, UN Women 2016).

Gender equality laws encourage women’s employment in the formal sector. A recent World Bank study shows, using linear regressions, that more women are employed in the formal sectors where there are fewer gender inequalities in the law. A higher WBL index score is associated with more waged and salaried female workers and fewer women in vulnerable employment, as classified by the International Labor Organization (WBL 2021).

Some labor laws may encourage informality through the exclusion of certain categories of workers and types of work from their protection coverage. The Egyptian and Lebanese labor laws, for instance, exclude domestic workers and women in agriculture from their coverage. The Tunisian labor law covers employees working in agriculture but excludes domestic workers (OECD 2017). Micro-vendors, mostly women, are often chased and harassed by the police in Cambodia. The unregulated activities of micro-businesses are sometimes confused with illegal activities as they are not covered by labor legislation (ILO 2006). Migrants represent another category of workers that are often not covered by labor legislation, as in the case of Vietnam where female migrants make up a large proportion of the informal market and lack basic social protection.

Laws affect not only women in the formal economy but also in the informal one, which has an even greater scope. By treating women and men in the formal job market equally and covering categories of workers that are likely to be found in the informal sector, laws may prompt the shift to formality of a significant number of female employees. The coronavirus pandemic and the subsequent economic recession have confirmed once again the negative effect of informality on women; the latter must disproportionately bear the economic brunt of the crisis. By moving to the formal sector, female employees not only benefit from better protection and work conditions, they are also empowered as they are given voice and representation through trade unions and other formal channels.
Is legal reform enough to bring about change?

The short answer is no.

Successful legal reform is contingent on a set of factors including enforcement mechanisms and a favorable social context. In an attempt to advance the scholarship that explores the relationship between law and social and economic progress, Lee (2017) presents a general theory that explains the mechanisms by which law impacts development. These “regulatory impact mechanisms” are interrelated and influence one another; they are comprised of three categorical elements:

1. **Regulatory design:** “concerns how optimally a law is designed to achieve its regulatory objectives”. Factors that determine the effectiveness of regulatory design include accounting for a particular development objective, effective institutional arrangements such as accountability and enforcement mechanisms, and socioeconomic conditions on the ground. This aspect suggests the need for a thoughtful and sensible law-making process concerned with the achievement of expected policy outcomes.

2. **Regulatory compliance:** refers to “the conduct of the general public in complying with law; law would not be effective without compliance by the general public.” This highlights the importance of a supportive public opinion and a favorable social context.

3. **Quality of implementation:** “assesses the degree to which a state meets the requirements of law and undertakes the mandates under the latter to fulfill its objectives”. This element is determined by two outstanding factors, state capacity and political will.
Enforcement mechanisms and social context seem to be the common denominators underlying the above mechanisms. These factors jointly determine the effectiveness of regulatory design and compliance, and the quality of implementation. The eradication of footbinding in China is a great example of how the two factors interplay with each other.

Both legal reform and advocacy to shift public opinion and social norms were needed to end footbinding in China. Footbinding lasted for 1000 years in China but ended in a single generation. From the mid-seventeenth century and up until the mid-nineteenth century, efforts to end the practice by the Manchu conquerors through legal abolition and penalties failed. In 1874, the first anti-footbinding society was founded, ushering in an era of civil society activism. The society introduced the effective pledge technique inspired from the American prohibitionist pledge to abstain from alcohol. Society members pledged “not to bind daughters nor let sons marry bound women.” More societies were created later in different cities and an increasing number of members were acquired. They “propagandized the disadvantages of footbinding in Chinese cultural terms, promoted pledge associations, and subtly conveyed international disapproval of the custom.” By 1908, leading Chinese public opinion shifted in favor of opposing footbinding. In 1912, a decree was issued by the Nationalist Revolution to ban the practice; the decree was effective in many locales (Gerry 1996). In 1915, fines were levied from government inspectors on those who continued to bind their feet. Contrary to the 1912 decree, previous legal abolition and penalties failed to reduce the scope of the practice and ultimately end it, because they were not supported by public opinion. Legal measures alone will not eliminate certain harmful practices. Advocacy to shift public opinion, informed by an “educational and integrationist” approach, has resulted in greater and speedier successes (Wilson 2012).

While some legal reforms, especially those associated with entrenched social norms, may need a longer time and a shift in public opinion to yield a real change, other reforms can have an immediate positive impact on the lives of many women around the world. In Bulgaria, Gergana Ivanova became the first woman to serve in the National Guards’ Unit and stand in front of the Presidency in 2012, two years after the Ordinance No. 14 of 18 October 2005 of the Ministry of Defense was reformed. Before 2010, only men were allowed in such a position. The restriction was repealed following a gender discrimination case against the Ministry of Defense filed by two female students. In Saudi Arabia, restrictions on women travelling abroad were lifted in 2019. Saudi women over the age of 21 are now able to obtain a passport on their own and travel abroad without a male guardian’s permission. On the other side of the Persian Gulf, Iran’s “Lady Goal”, Niloufar Ardalan, missed the Asian Cup because her husband refused to grant her permission to travel abroad as required by Iranian law.

To bring about change and pave the way for the necessary reforms to promote women’s economic participation around the world, governments and civil societies need to work together. It is of utmost importance to initiate regional and national dialogues around laws and regulations affecting women’s participation in the economy and adapt them to existing social realities and the need for economic growth. The latter cannot be achieved if half of the population is left out. Women’s economic participation is indispensable to the recovery of the global economy from the effects of the COVID-19 pandemic. Removing legal barriers that currently undermine this participation and establishing enablers should be a priority on policy makers’ agendas, especially in regions where the pandemic is expected to have greater impacts on women. The pandemic is expected to result in the loss of 1.7 million jobs in the Arab region for instance, including approximately 700,000 jobs held by women, which is proportionally high and significant given the initially low FLFP, the lowest in the world (ESCWA 2020). There is a pressing need for comprehensive strategies to address the situation, legal reform is a necessary but not sufficient condition for effective change.
Conclusions and insights about legal reform

The gender legal gap is estimated by WBL at 25 percent globally, which means that women have only three quarters of the rights men are entitled to. This gap is the result of discriminatory provisions against women and the absence of legal protections in many national legislations around the world, especially in developing economies. Legal barriers hinder women’s economic participation in many ways and undermine their human capital.

Legal reforms may affect women’s outcomes through different channels. Laws may enable women’s economic participation, by allowing them to balance work life and family responsibilities, have access to a non-segregated job market, have access to finance and property rights, improve their intrahousehold bargaining power, or by reducing gender power imbalances in the private and professional spheres. These pathways are not mutually exclusive, and reforms can impact women’s economic outcomes through multiple channels simultaneously. Additionally, many reforms are interrelated and so are the different topics covered by WBL. Restrictions related to women’s mobility for instance are underpinned by the limited legal capacity of women within marriage and lead to negative outcomes with respect to access to finance. Property rights are both an enabler resulting in stronger rights in terms of access to finance and an end in themselves leading ultimately to the social and economic empowerment of women.

Evidence supporting the impact of laws on women’s economic outcomes is stronger in some areas than others, namely in the areas of childcare leave policies and property rights. In both areas however, the literature points to the existence of unintended negative consequences. Childcare leave policies have positive effects on women’s employment and earnings as they allow them to balance work life and family responsibilities and incentivize them to join and/or return to the job market. Extensive periods of leave, however, may in the short run have adverse effects on these outcomes. The evidence is also strong around property rights given the abundant and conclusive literature and the relevance of property rights not only to women’s access to finance but also to human capital outcomes. However, negative unintended consequences, such as the rise of conjugal discord and violence, may result from shifting the power balance between men and women when granting the latter equal property rights. Another legal aspect related to women’s access to finance is the legal protection from discrimination by creditors in access to credit. The literature covering this aspect is limited but concludes that prohibiting gender-based discrimination in access to credit is associated with a positive impact on women’s financial inclusion.
The review of the literature suggests that women’s equal legal capacity within marriage can improve their intra-household bargaining power, although evidence is sporadic. Women’s legal capacity within marriage affects their freedom of movement, their decision-making capacity within the household, and their ability to undertake legal transactions. While it is important to explore and isolate the effect of legal restrictions in each of these areas, accounting for the interconnectedness of these restrictions and addressing them as one block undermining the legal capacity of married women merits further research and may yield stronger findings. Additionally, there is little to no evidence related to the impact of the valuation of non-monetary contributions during marriage and remarriage laws on women’s economic outcomes. On the other hand, child marriage is identified as a barrier that negatively affects these outcomes.

The empirical literature on the impact of removing labor restrictions for women’s employment and earnings is limited. Empirical evidence exists on the negative effects of these barriers for women’s earnings and employment but there is less on the impact of repealing them, although reports published by international organizations provide some clear evidence in this regard. This may be because of a presumed direct link between lifting restrictions on women’s work in certain sectors and jobs and female labor supply. However, further research is needed to identify whether legal reform is enough to improve women’s labor participation in the industries in question.

There is little to no evidence on the impact of legal protections against violence and discrimination in employment on women’s economic outcomes. Evidence supporting the positive impact of equal pension rules is strong. While many studies explore the impact of antidiscrimination legislation and equal pension rules on women’s economic outcomes, the impact of anti-violence legislation on these outcomes is left unexplored. The literature emphasizing the economic cost of domestic violence and sexual harassment is abundant though, which ultimately suggests that preventing these forms of violence would mitigate their economic effects. Further research is needed to confirm this conclusion. There is also little evidence supporting the impact of ‘equal remuneration for work of equal value’ legislation as opposed to legislation accounting only for the same or similar work. Evidence around the impact of antidiscrimination legislation is mixed pointing to some adverse effects. The channel through which legal protections against violence and discrimination in employment impact women’s economic outcomes is not straightforward. Some studies, however, refer to enabling women to seek help and shifting the gender power balance as possible channels. Feminist literature on violence and discrimination confirms the role of gender power imbalances in initiating and perpetuating violence and discrimination.

The available literature offered more causal evidence in some reform areas, namely property rights, retirement, and divorce laws, than in others. The reviewed empirical papers used various methodologies that fall under two major categories: quasi-experimental identification approaches describing causal effects, and non-experimental approaches exploring simple relations between the variables studied. Further details about each paper are provided in Annex A. While not seeking to review the strengths and weaknesses of methodologies used in the cited studies, it is important to highlight the distinction between associations and causal estimates with respect to each of the reform areas. For example, many of the studies covering childcare leave policies, namely those exploring the impact of major expansions in parental leave policies and paternity leave quotas on women’s employment and return to work, used quasi-experimental research designs, including difference-in-difference and regression discontinuity. The findings pointed to the existence of negative causal effects of generous parental leave on women’s outcomes and mixed causal effects of paternity leave quotas. The remaining studies in this area, however, established positive associations between childcare leave policies and women’s economic outcomes; with no causal relationship inferred. The use of quasi-experimental designs was most obvious and conclusive in papers exploring the impact of women’s property rights. Findings using difference-in-difference, inverse probability weighting, and instrumental variables established evidence of causal relationships between women’s land rights and their economic outcomes. Causal evidence was also reported in most of the papers cited with respect to legal reforms increasing women’s retirement age. Oaxaca–Blinder-style decomposition, difference-in-difference, and regression discontinuity were the quasi-experimental identification approaches used in these papers. Lastly, although only two studies on the effects of divorce laws were reviewed, their findings of positive causal effects between unilateral divorce laws, enabling women to make a divorce decision on the same grounds as men, and women’s labor supply and the decline of domestic violence, respectively, are worth reiterating, considering the identification approach that underpinned them. Findings reported in the area of legal protections from violence and discrimination remain limited and inconclusive. Most findings reported in the remaining reform areas (occupational segregation and legal capacity within marriage) did not indicate causal effects. Instead, most papers reviewed used various regression methods establishing significant and strong associations between
the studied legal reforms and women’s economic outcomes. Two factors may explain the lack of quasi-experimental identification approaches in the surveyed literature in these areas. First, this type of reform does not easily lend itself to quasi-experimental settings due to the difficulty to establish control groups. Second, there is a lack of data in the contexts where these barriers are most relevant, which may have limited the number of studies.

There is a significant gap in the literature in terms of studies covering certain reforms in developing countries, especially in the areas of childcare leave policies and legal protection against violence and discrimination, which undermines the generalizability of the findings. One explanation could be the absence of certain provisions, such as parental leave or equal pay for work of equal value, from the laws of these countries. Another driver of these uneven empirical insights is due to data limitation (lack of gender segregated data and data about certain topics) in developing countries. Although these reforms do not easily lend themselves to empirical settings, further research is needed to acquire a better understanding of their impact on women in developing economies especially, where discriminatory laws often still prevail. The generalizability of the current empirical findings regarding certain reforms remains to be tested in these settings. Further insights about the generalizability of the empirical findings reported in the paper may be inferred from Annex A.

The literature also highlights that legal reform is not enough to bring about change. Although legal reform is a critical first step in initiating social change and promoting women’s economic participation, it is not enough to uphold genuine progress. The latter requires both enforcement and advocacy efforts to shift public opinion for people to desire and accede to change. The eradication of footbinding in China is a great example of the interplay between legal reform and evolving social norms opposing a long-lasting harmful practice. Gender legal and economic inequality is not only a concern from the perspective of national welfare as shown by the present paper, but also and more importantly a concern for justice and human rights. As Nobel Prize economist Ester Duflo points out, “continuous policy commitment to equality for its own sake may be needed to bring about equality between men and women.”
Bibliography


Annex A: Summary of studies: Reforms and treatments that impacted women’s economic outcomes

The following table summarizes the empirical studies reviewed for this paper, including the methods used, to better illustrate the scale of impact and key takeaways of each studied reform or treatment.
<table>
<thead>
<tr>
<th>Country</th>
<th>Author(s)</th>
<th>Reform/Treatment</th>
<th>Variable directly changed</th>
<th>Scale of impact 18</th>
<th>Research methods</th>
<th>Takeaway</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S.</td>
<td>Berger and Waldfogel (2004)</td>
<td>Maternity leave</td>
<td>Return to work</td>
<td>In weeks 13 through 52 after childbirth, mothers with leave coverage had a 68.8% greater risk of return to work compared to mothers without leave coverage.</td>
<td>Cox proportional hazards models</td>
<td>Pre-birth employment is “an extremely strong predictor” of earlier return to work. Women in pre-birth jobs with leave coverage were more likely to return to work quickly than women without leave coverage.</td>
</tr>
<tr>
<td>UK, U.S., Japan</td>
<td>Waldfogel et al. (1999)</td>
<td>Maternity leave</td>
<td>Return to work</td>
<td>The likelihood of women returning to work increased by: 16% in the UK, 23% in the US, and 73% in Japan.</td>
<td>Probit models</td>
<td>Maternity leave coverage increased the likelihood of women returning to work after childbirth in the studied countries.</td>
</tr>
<tr>
<td>66 developing countries</td>
<td>Amin et al. (2019)</td>
<td>Maternity leave</td>
<td>Proportion of female workers in the private sector</td>
<td>An increase of one week of paid maternity leave was associated with a 2.6 percentage points increase in the share of female workers in a firm.</td>
<td>Ordinary Least Squares regression</td>
<td>There is a positive and statistically significant relationship between the length of paid maternity leave and the proportion of female workers in the private sector. This relationship is much larger when the government paid for maternity leave rather than the employer.</td>
</tr>
<tr>
<td>Nordic countries (Finland, Norway and Sweden)</td>
<td>Ronsen and Sundstrom (2002)</td>
<td>Parental leave</td>
<td>Women’s employment entry</td>
<td>Mothers who were entitled to maternity leave resumed employment much faster than other mothers. The impact was largest in Sweden where the employment risk of entitled mothers was more than double the risk of non-entitled ones. As the number of months of paid leave increased, the relative employment entry risks of entitled mothers diminished in all countries. In Finland, the initially high employment entry risk for entitled mothers largely disappeared when the paid leave was prolonged beyond 7 to 8 months for full-time entry after second birth and part-time entry after first birth.</td>
<td>Cox proportional hazards models</td>
<td>Very long parental leave entitlements could negatively impact women’s careers and earnings and may preserve an unequal division of household labor.</td>
</tr>
<tr>
<td>Austria</td>
<td>Lalive and Zweimüller (2009)</td>
<td>Parental leave</td>
<td>Women’s return to work</td>
<td>Treated mothers were significantly less likely than control group mothers to have returned to work three years after giving birth and the difference was quantitatively large: An additional 10 of 100 mothers had not returned to work within three years after the 1990 birth (reform year). This difference in return to work shrinks over time but a significant three-percentage point difference still remained even after ten years. Although treated mothers worked about one month per year less during the first three years after giving birth, there were no long-run employment differences between treated and controls. During months 37–120 after birth, average employment was the same for the two groups. Treated mothers earned about three euros less (than control group mothers) from working on the average day of the three first post birth years.</td>
<td>Linear regressions/linear probability models</td>
<td>Reform increasing the duration of parental leave from one year to two years significantly reduced mothers’ return to work. Levels of employment and earnings decreased in the short run but not in the long run.</td>
</tr>
</tbody>
</table>

18 The table does not fully reflect the findings of each study. Please consult the studies for a comprehensive account of each intervention’s impact.
Reform 1 increased both the job protection and maternity benefit periods from 2 to 6 months after childbirth. This lowered the share of mothers who had returned to work by the third month after childbirth by 30.5 percentage points. Reforms 2 and 3 increased the job protection period from 6 to 10 months and the maternity benefit period from 6 to 10 and from 6 to 22 months after childbirth, respectively. This led to a decline of similar magnitude in the probability that the mother had reentered the labor market by month 7 after childbirth (27.5% and 30.3%). Reform 4 extended the job protection period from 18 to 36 months and left the maternity benefit period unchanged at 18 months after childbirth. This caused a reduction in the share of mothers who had returned to work by month 19 after childbirth of 9.6 percentage points. Reform 5 raised the maternity benefit period from 18 to 24 months and left the job protection period unchanged at 36 months after childbirth. This led to a somewhat lower reduction in the share of mothers who had gone back to work by month 24 after childbirth (5.8%).

In the long run, reforms 1, 2, 4, and 5 slightly reduced the probability that the mother had gone back to work by months 52 and 76 after childbirth by about 1–2 percentage points. Reform 3, which extended the maternity benefit period beyond the job protection period, had a stronger negative impact on the mother’s return decision and lowered the probability that she had reentered the labor market by months 52 and 76 after childbirth by 4.5 and 3.8 percentage points, respectively.

Reform 1 lowered the number of months the mother has worked through month 7 after childbirth by 1.091 months, compared to only 0.495 month through month 76 after childbirth. Reforms 2, 4, and 5 led to a somewhat larger decline in maternal employment 76 months after childbirth of 0.951 month, 1.101 months, and 1.094 months, respectively. Reform 3 caused the strongest reduction in maternal employment: the number of months the mother has been employed through the first 16 and 76 months after childbirth decreased by 1.548 and 2.839 months, respectively.
<table>
<thead>
<tr>
<th>Country</th>
<th>Authors</th>
<th>Intervention</th>
<th>Outcome Measure</th>
<th>Methodology</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Hanratty and Trzcinski (2009)</td>
<td>Parental leave</td>
<td>Women's return to work</td>
<td>Ordinary least squares regressions</td>
<td>No evidence that the paternity-leave allocation of parents' labor supply</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>Log-linear model/difference-in-difference design</td>
<td>The paternity leave reform had little if any effect on gender gaps in wages and employment. 4 weeks of paternity leave may not be considered enough time to really impact long run outcomes. There is no evidence that paternity leave counters the traditional allocation of parents' labor supply.</td>
</tr>
<tr>
<td>OECD countries</td>
<td>Blau and Kahn (2013)</td>
<td>Parental leave</td>
<td>Female labor force participation</td>
<td>Linear regression analyses</td>
<td>Parental leave policies were associated with a higher increase in female labor force participation in most OECD countries. The lack of such policies explained the US's relative deterioration of women's labor force participation.</td>
</tr>
<tr>
<td>Quebec/Canada</td>
<td>Patnaik (2019)</td>
<td>Parental leave (seeking to boost fathers' participation)</td>
<td>Women's employment entry</td>
<td>Sharp regression discontinuity design</td>
<td>Mothers experienced impressive gains when father's participation in parental leave was boosted. A clear pattern of reduced sex specialization emerged as fathers' participation in parental leave increased following the reform.</td>
</tr>
<tr>
<td>Norway</td>
<td>Cools et al. (2015)</td>
<td>Paternity leave quota (leave available to fathers)</td>
<td>Women's employment Fathers' work hours and earnings</td>
<td>Difference-in-difference model</td>
<td>The paternity leave reform had little if any effect on gender gaps in wages and employment. 4 weeks of paternity leave may not be considered enough time to really impact long run outcomes. There is no evidence that paternity leave counters the traditional allocation of parents' labor supply.</td>
</tr>
<tr>
<td>Norway</td>
<td>Rege and Solli (2013)</td>
<td>Paternity leave quota</td>
<td>Mothers' labor supply</td>
<td>Difference-in-differences model</td>
<td>No evidence that the paternity-leave quota affected mothers' labor supply.</td>
</tr>
<tr>
<td>Country</td>
<td>Authors</td>
<td>Event</td>
<td>Description</td>
<td>Method</td>
<td>Results</td>
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<tr>
<td>Sweden</td>
<td>Ekberg et al. (2013)</td>
<td>Paternity leave quota</td>
<td>Fathers taking parental leave decreased from 54% to 18% due to the reform. The share of fathers using approximately 1 month of parental leave increased from 9% to 47%. The average amount of parental leave taken by fathers increased by roughly 50%. No evidence that fathers who took more parental leave increased their share in childcare. No strong effects for mothers’ or fathers’ employment. No significant wage effect for mothers or fathers.</td>
<td>Ordinary least squares regression</td>
<td>There is no evidence for substantial labor market effects of the reform for mothers or fathers.</td>
</tr>
<tr>
<td>Russia</td>
<td>Ogloblin (2005)</td>
<td>Job segregation by gender</td>
<td>Job segregation by gender was responsible for 76.3% of the gross differential in monthly earnings and 73.0% of the gross differential in the effective long-run wages. Accounting for the difference in retirement ages between men and women increased the ratio of female to male lifetime earnings per month of work to 78%.</td>
<td>Heckman model/ two-step method/Oaxaca-Blinder-Neumark method</td>
<td>There was a negative correlation between restrictions on women’s access to certain jobs and the gender wage differential in Russia. The effect was more sizeable accounting for the difference in retirement ages between men and women.</td>
</tr>
<tr>
<td>Taiwan</td>
<td>Zveglich &amp; Rodgers (2003)</td>
<td>Working-hours restrictions</td>
<td>A 6.1% decline in actual hours worked due to the legal restrictions, which corresponded to a decline in an average workweek of about 2.5 hours.</td>
<td>Difference-in-difference model</td>
<td>Policies designed to protect female workers had controversial effects on labor market outcomes. Taiwan’s 1984 Labor Standards Law, containing provisions that restricted women’s working hours, had a negative impact on women’s actual hours worked and employment.</td>
</tr>
<tr>
<td>94</td>
<td>Islam et. al. (2018)</td>
<td>Legal gender disparities in: Night-hours work Ownership rights Obtaining finance Registering a business Mobility rights</td>
<td>Probability of having a female firm owner Probability of having a female top manager</td>
<td>Laws allowing women to work the same night hours as men were associated with an increase of 4.1 percentage points in the probability of having a female top manager (significant at the 1% level). Laws granting married men and women equal ownership rights were associated with an increase of 4.4 percentage points (significant at the 1% level) in the probability of having a female top manager and an increase of 6.9 percentage points (significant at the 5% level) for having a female firm owner. Laws prohibiting discrimination by creditors against women in access to finance was associated with an increase of 4.1 percentage points (significant at the 5% level) in the probability of having a female firm owner compared with an increase of 2.4 percentage points (significant at the 10% level) for having a female top manager. The ability to register a business in the same way as men was associated with an increase of 13.3 percentage points (significant at the 1% level) in the probability of having a female firm owner. The ability to travel outside the home was associated with an increase of 24.3 percentage points (significant at the 1% level) in the probability of having a female firm owner.</td>
<td>Probit and ordinary least squares regressions</td>
</tr>
</tbody>
</table>
| 98 developing countries | Demirguc-Kunt, Klapper, & Singer (2013) | Legal restrictions on women to pursue a job, be head of household, make decisions without having to obey the husband, choose where to live, and receive inheritance | Women's financial inclusion (owning a bank account, having savings at a formal institution, accessing credit) | In countries where married women face no legal restrictions to work outside the home, women were 16.2% more likely to own a bank account and 25.4% more likely to have savings at a formal institution.  
In countries where women could be head of household, women were 9.6% more likely to own a bank account, 23.8% more likely to have savings at a formal institution, and 7.8% less likely to use informal credit.  
In countries where married women could choose where to live, women were 13.6% more likely to own a bank account and 26.9% more likely to have savings at a formal institution.  
In countries where married women were required by the law to obey their husbands, women were 20.9% less likely to own a bank account and 10.4% more likely to use informal credit.  
In countries where women (daughters and surviving spouses) had equal inheritance rights, they were 8.9% and 8.7% (respectively) more likely to own a bank account.  
In countries with high prevalence of violence against women (measured by the existence of specific legislation and the percentage of women being beaten by their partners), women were 19% less likely to own a bank account, 64.5% less likely to have savings at a formal institution, and 37.8% less likely to have access to credit. | Multivariate regression analysis/probit model/multinomial logit model/ordinary least squares regressions | In countries where women faced legal restrictions in their ability to work, head a household, make decisions without having to obey the husband, choose where to live, and receive inheritance, women were less likely to own an account, relative to men, as well as to save and borrow.  
The level of violence against women and the incidence of early marriage for women, contributed to explaining the variation in the use of financial services between men and women.  
In economies where there was a high prevalence of violence against women and child marriage, women were less likely to have formal accounts, savings, or credit. |
| 141 economies | Morsy and Youssef (2017) | Women's equal access to property rights | Financial inclusion (holding a debit card, holding a credit card) | Female-to-male ratio reflecting the gender inclusion gap in the use of financial services in general dropped by 30.7 percentage points when women were not guaranteed the same property rights as men. It dropped by 66.3 percentage points for holding a credit card and 33.3 percentage points for holding a debit card. | Weighted least squares model | Women's access to equal property rights relative to men was key to their access to finance. |
| Ethiopia | Persha et al. (2017) | Land certification (women's access to immovable property) | Access to credit | Land certification in Ethiopia was associated with a 10% increase in the likelihood of households (both male-headed and female-headed) taking out any credit for farming purposes, and a small increase in the average amount of credit obtained.  
The land certification was also shown to have led to an 11% average increase in the likelihood of female-headed households (and a 12% average increase in the likelihood of widows) feeling more secure about entering into credit-based business transactions when the transactions occurred with a holder of a land certificate. | Difference-in-Difference design | Land certification played an important role in promoting women's access to credit. |
<table>
<thead>
<tr>
<th>Location</th>
<th>Authors</th>
<th>Program</th>
<th>Methodology</th>
<th>Findings</th>
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</thead>
<tbody>
<tr>
<td>India (West Bengal)</td>
<td>Santos et al. (2014)</td>
<td>Land-allocation and registration program</td>
<td>Propensity score-weighted regression models</td>
<td>The average household participating in the program was 12% more likely to report taking out a loan from a formal bank and 88% more likely to use a loan for agricultural purposes than a household not in the program. Women in households within the program were: (1) 12% more likely to be involved in decisions to take loans from self-help groups or microfinance institutions; (2) 12% more likely to be involved in decisions on whether to purchase productive assets; (3) 9% more likely to be involved in decisions related to food purchase and consumption; and (4) more likely to be involved in decisions about the family land. The share of the family land over which they were involved in decisions increased by 15% for how to use the land, 14% for what to grow on it, and 11% for whether to sell produce from it.</td>
</tr>
<tr>
<td>100 countries</td>
<td>Hallward-Driemeier et al. (2013)</td>
<td>Women’s inheritance rights, Women’s ability to make decisions (including the ability to open a bank account and be head of household)</td>
<td>Panel regression/ Linear regression model</td>
<td>Equal inheritance rights were associated with higher women’s labor force participation and girls’ education although effects on countries varied by level of income. Women’s ability to be head of household was associated with a higher female labor force participation and lower infant mortality. Women’s ability to open a bank account without her husband’s permission was associated with a higher female labor force participation.</td>
</tr>
<tr>
<td>Country</td>
<td>Author(s)</td>
<td>Legal Reforms Implemented</td>
<td>Women's Employment Participation</td>
<td>Panel/Regression Models</td>
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<tr>
<td>Ethiopia</td>
<td>Hallward-Driemeier &amp; Gajigo, (2015)</td>
<td>Family law reform</td>
<td>A relative increase in women's labor force participation in reforming areas, 15–24% higher than in non-reforming areas.</td>
<td>Panel regressions</td>
</tr>
<tr>
<td>Nepal</td>
<td>Mishra and Sam (2016)</td>
<td>Women's land ownership</td>
<td>Women who owned land were 13.91 and 38.3 percentage points more likely to have the final say in their healthcare decisions. The probability of women having the final say in decisions regarding visits to family or relatives was 9.95 percentage points higher when they owned land.</td>
<td>Probit (uncorrected endogeneity) and CMP-IV (corrected endogeneity) models</td>
</tr>
<tr>
<td>Tanzania</td>
<td>Peterman (2011)</td>
<td>A set of legal reforms improving women's property and inheritance rights (WPIR)</td>
<td>In a scenario in which there were no improvements in WPIR, the predicted average rate of employment outside the home was 8.83 percent, as compared to a predicted average rate of 24.18 under a scenario in which all communities moved from low to high WPIR. The rate of self-employment under improvements in WPIR was 2.1 times the rate under no improvements, and the gross earnings with improvements were 3.80 times the level without improvements. In communities with high WPIR, women's predicted average individual savings were 1.35 times the predicted average amount in communities with low WPIR.</td>
<td>Linear probability models / ordinary least squares regressions / Inverse probability weighting</td>
</tr>
<tr>
<td>India (states of Maharashtra and Karnataka)</td>
<td>Deininger et al. (2010)</td>
<td>Equal inheritance rights for daughters</td>
<td>Females whose fathers died after the 1994 reform were 22 percentage points more likely to inherit land than those whose fathers died before 1994. Females who married after 1994, but whose fathers died after 1994 had a significantly higher age at marriage, by 0.54 years, than females who married before 1994, reducing the pre-reform average marriage age difference between men and women of 3.36 years. Girls who started their elementary education after the amendment had 0.3 years more elementary schooling than the older cohort.</td>
<td>Linear probability model</td>
</tr>
<tr>
<td>Country</td>
<td>Authors</td>
<td>Year</td>
<td>Society Impacts</td>
<td>Methods</td>
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<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>India</td>
<td>Heath and Tan (2018)</td>
<td>Equal inheritance rights for daughters</td>
<td>Decision making capacity, Freedom of movement, Access to a bank account, Regular and paid employment</td>
<td>The Act led to statistically significant increases of 6.6 percentage points in the probability that a woman had a say in household decisions, 8.2 percentage points in the probability that a woman could go to the market alone, 6.9 percentage points in the probability that a woman could go to a health facility alone, 8.3 percentage points in the probability that a woman could travel outside the village alone, and 3.9 percentage points in the probability a woman had access to a bank account. The likelihood of a woman working all year instead of occasionally increased 5.7 percentage points, and to work for cash instead of no pay or for in kind payment, 6.1 percentage points.</td>
</tr>
<tr>
<td>India</td>
<td>Rosenblum (2015)</td>
<td>Equal inheritance rights for daughters</td>
<td>Female infant mortality and feticide</td>
<td>The reform was estimated to cause a 0.32 percentage point increase in a girl’s probability of death.</td>
</tr>
<tr>
<td>United States (California and New York)</td>
<td>Ladd (1982)</td>
<td>Prohibiting discrimination based on sex and marital status in access to credit</td>
<td>Women’s access to credit</td>
<td>In California, data showed that in 1977 female applicants were charged interest rates that were 0.02 to 0.04 percentage points higher than those for comparable male-female applicants (joint application). This differential disappeared in 1978.</td>
</tr>
<tr>
<td>15 countries</td>
<td>Savadogo and Wodon (2018)</td>
<td>Child marriage</td>
<td>Women’s earnings and labor force participation</td>
<td>Child marriage led to a loss in earnings for women in adulthood of nine%. The gains in earnings from ending child marriage, considering only the women who married early, ranged from 1.44% to 15.60% of baseline yearly earning spending on the country. The gains in earnings or expected productivity for women as a whole ranged from 0.49% to 4.58% of base earnings depending on the country. When including men as well, the gains in the population’s earnings ranged from 0.17% to 1.68% of the wage bill.</td>
</tr>
<tr>
<td>171 countries</td>
<td>Htun et al. (2019)</td>
<td>Restrictions on women’s legal capacity (limiting their ability to make decisions regarding money, travel, work, property, and children)</td>
<td>Women owning a bank account, Owning a firm, Participating in the labor force</td>
<td>Restrictions on women’s legal capacity led to a reduction of: 0.78 percentage points in the percentage of women owning a bank account. 2.24 percentage points in the percentage of women participating in firm ownership. 2.97 points in female labor force participation.</td>
</tr>
<tr>
<td>Region</td>
<td>Study</td>
<td>Policy/Outcome</td>
<td>Methodology</td>
<td>Conclusion</td>
</tr>
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<td>-------------------------</td>
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</tr>
<tr>
<td>143 countries</td>
<td>Gonzales et al. (2015)</td>
<td>Women’s legal capacity</td>
<td>Panel regressions</td>
<td>The legal right for women to be head of household coupled with more equal inheritance rights were associated with a decline in gender gaps in labor force participation in developing and emerging economies of around 4.6 percentage points. The removal of legal restrictions on married women to access property, open a bank account, sign a contract, initiate legal proceedings without their husband’s permission, get a job, be head of household, individually led to a reduction of between around 2 and 3 percentage points in the gender gap in labor force participation.</td>
</tr>
<tr>
<td>United States</td>
<td>Gray (1998)</td>
<td>Unilateral divorce laws</td>
<td>Difference-in-difference, probit, and bivariate probit models</td>
<td>The possibility for women to make a divorce decision unilaterally, on the same grounds as men, increased their labor supply in states with community-property jurisdictions.</td>
</tr>
<tr>
<td>United States</td>
<td>Stevenson and Wolfers (2006)</td>
<td>Unilateral divorce laws</td>
<td>Ordinary least squares regressions/difference-in-difference</td>
<td>The adoption of unilateral divorce laws was associated with a large decline in domestic violence for both men and women.</td>
</tr>
<tr>
<td>Middle East and North Africa (MENA)</td>
<td>Majbouri (2017)</td>
<td>Per capita oil and gas rents/ Family law</td>
<td>Simple linear regression</td>
<td>When laws are gender equal, rents are less likely to affect women’s economic participation despite the increase in male bargaining power.</td>
</tr>
<tr>
<td>India</td>
<td>Field et al. (2019)</td>
<td>Access to bank accounts</td>
<td>Double-lasso regressions</td>
<td>Having access to bank accounts and using them to deposit earned income, rural women in India increased their labor supply in the public and private sectors.</td>
</tr>
<tr>
<td>United States</td>
<td>Dugan (2003)</td>
<td>Domestic violence laws</td>
<td>Logistic regressions</td>
<td>Domestic violence laws reduced the chances of domestic violence and may have deterred potential offenders from harming family and partners as well. Police officers were more likely to arrest a perpetrator if domestic violence was legally established as a serious offense, but this may also have lowered the level of reporting.</td>
</tr>
</tbody>
</table>
| Location       | Authors                         | Year     | Legislation/Meaning                                                                 | Outcome/Findings                                                                                                                                                                                                 | Methodology                                                                 | Notes                                                                 
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<tbody>
<tr>
<td>United States</td>
<td>Cook et al.</td>
<td>2019</td>
<td>Mandatory arrest laws (in case of domestic violence)</td>
<td>Starting around 4.75% unemployment, mandatory arrest was seen to begin to suppress intimidation incidents with an increasing effect. However, as unemployment exceeded 8.5%, the mitigating effect of the policy disappeared.</td>
<td>Negative binomial regression model</td>
<td>Mandatory arrest laws effective to mitigate intimate partner violence resulting from rising rates of unemployment. However, the mitigating effects of such laws disappeared under severe economic crisis.</td>
</tr>
<tr>
<td>United States</td>
<td>Iyengar</td>
<td>2009</td>
<td>Mandatory arrest laws</td>
<td>Occurrence of domestic violence Starting at around 4.75% unemployment, mandatory arrest was seen to begin to suppress intimidation incidents with an increasing effect. However, as unemployment exceeded 8.5%, the mitigating effect of the policy disappeared.</td>
<td>Difference-in-indifference</td>
<td>Reporting declined by 4.5 percentage points in mandatory arrest states (about 12%) and 2.8 in recommended arrest law states (about 7%). Mandatory arrest laws were responsible for an additional 0.8 murders per 100,000 people. This corresponds to a 54% increase in intimate partner homicides.</td>
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<tr>
<td>53 developing countries</td>
<td>Amin &amp; Islam</td>
<td>2016</td>
<td>Antidiscrimination legislation (employment)</td>
<td>Women's employment entry Mandating a non-discrimination law is associated with an increase of 5 percentage points in women's employment.</td>
<td>Ordinary least squares regressions</td>
<td>There was a strong positive relationship between the existence of a legal provision prohibiting gender-based discrimination in hiring practices and women's employment relative to men.</td>
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<tr>
<td>Britain</td>
<td>Zabalza and Tzannatos</td>
<td>1985</td>
<td>Antidiscrimination legislation (Equal pay for work of equal value and equal employment opportunities for men and women)</td>
<td>Women's employment and pay Due to the anti-discrimination legislation in the UK, relative employment of women increased by more than 17% and relative pay by about 15%.</td>
<td>Linear regressions</td>
<td>Antidiscrimination legislation had a positive and significant association with both relative earnings and relative employment of women in the UK.</td>
</tr>
<tr>
<td>United States (Oregon and New York)</td>
<td>Eberts and Stone</td>
<td>1985</td>
<td>Equal Employment Opportunity Act</td>
<td>Female teachers' promotion to administrative positions In the early 1970s female teachers were significantly less likely to be promoted than similarly qualified male teachers. After the adoption of the legislation the difference was no longer significant. Index measures of apparent discrimination declined significantly by close to half.</td>
<td>Multivariate logit model</td>
<td>The Equal Employment Opportunity Act contributed to the decline of discrimination in promotion and apparent discrimination present in the early 1970s.</td>
</tr>
<tr>
<td>United States</td>
<td>Neumark &amp; Stock</td>
<td>2001</td>
<td>Equal Pay Act and Equal Employment Opportunity Act</td>
<td>Women's employment and pay Employment rate of black females fell by .032 due to sex discrimination/equal pay legislation. Employment rate of white females fell by .039 due to sex discrimination legislation. Earnings of black females increased by 4.1% due to sex discrimination/equal pay legislation. Earnings of white females increased by 1.2% in non-south states due to sex discrimination law.</td>
<td>Difference-in-indifference-in-difference</td>
<td>Sex discrimination/equal pay laws increased the relative earnings of black and white women, but at the same time reduced their relative employment.</td>
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<tr>
<td>China</td>
<td>Zhao and Zhao</td>
<td>2018</td>
<td>Unequal retirement ages</td>
<td>Women's pension About three-quarters of the deficit in women's pensions was explained by their lower likelihood of receiving occupational pensions, and one-third was due to smaller benefits when they did receive them. Among pension recipients, nearly one-third of the gap was explained by women's fewer years of employment and lower salaries.</td>
<td>Oaxaca–Blinder-style decomposition Ordinary least squares and probit regressions</td>
<td>Differences in retirement ages between men and women affected the period they spent in the job market and therefore the size of their respective pensions.</td>
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<tr>
<td>Country</td>
<td>Author(s)</td>
<td>Policy Measure</td>
<td>Labor Market Outcome</td>
<td>Methodology</td>
<td>Additional Notes</td>
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<tr>
<td>China</td>
<td>Lee et al. (2019)</td>
<td>Unequal retirement ages</td>
<td>Welfare gains for women and men</td>
<td>Linear regressions</td>
<td>China's mandatory retirement law requiring women to retire 5 years earlier than men reduced welfare for women. Equalizing retirement ages for men and women could generate a welfare gain for both.</td>
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<tr>
<td>Austria</td>
<td>Staubli and Zweimüller (2013)</td>
<td>Early retirement age (ERA) increase</td>
<td>Female labor supply</td>
<td>Ordinary least squares regressions</td>
<td>Increases in retirement ages for women are associated with increased female labor supply.</td>
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<tr>
<td>Australia</td>
<td>Atalay and Barrett (2015)</td>
<td>Women's retirement age increase</td>
<td>Female labor supply</td>
<td>Difference-in-difference Linear probability model</td>
<td>Increases in retirement ages for women were associated with increased female labor supply.</td>
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<tr>
<td>United Kingdom</td>
<td>Cribb et al. 2016</td>
<td>Early retirement age (ERA) increase</td>
<td>Female labor supply</td>
<td>Multinomial probit models/ Ordinary least squares/ Linear probability models</td>
<td>Increases in retirement ages for women were shown to be associated with increased female labor supply.</td>
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</tr>
<tr>
<td>Switzerland</td>
<td>Lalive and Staubli (2014)</td>
<td>Equal retirement ages</td>
<td>Women's labor market exit</td>
<td>Regression discontinuity design (RDD)</td>
<td>Raising women's retirement age delayed their exit from the labor market.</td>
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