

## Legal Institutions and Women's Employment

Mohammad Amin and Asif Islam

**T**his note explores the role of legal institutions in influencing women's employment in private firms in developing countries. Both a holistic and specific approach to legal institutions is adopted. Regarding the former, the relationship between the overall number of gender-based legal disparities on employment is documented. With regards to the latter, specific aspects are considered such as mandating laws prohibiting discrimination along gender lines in hiring practices, legal provisions of maternity leave that guarantee women an equivalent position to the one held earlier upon return from maternity leave, and legal provisions of paternity leave. The findings suggest that the legal environment matters, and laws that are more favorable towards women are associated with a sharp increase in their job prospects.

### Introduction

Institutions play a significant role in shaping economies. They set the rules of engagement in society and they are man-made (North, 1990). Thus, what are the consequences when legal institutions discriminate on the basis of gender by treating women less favorably? What is the impact of laws such as those related to maternity and paternity leave on women's well-being? These questions have grown in importance given mounting evidence of negative outcomes associated with gender inequality and less favorable treatment of women (see for example, Abu-Ghaida and Klasen, 2004; Klasen and Lamanna, 2009).

In this note, we explore the relationship between women's employment in the private sector in developing economies and the overall number of gender-based legal disparities. We further delve into how women's employment is related to particular aspects of the legal code such as laws mandating non-discrimination in hiring practices along gender lines, laws related to maternity leave which guarantee women an equivalent position to the one held earlier and mandated length of paternity leave. We measure women's employment using firm-level surveys conducted in over 50 developing countries collected by the World Bank's Enterprise Surveys (ES) between 2006 and 2015. This involves data from over 30,000 firms. The ES cover private sector firms in the formal (registered) manufacturing and services sector of the economies. Sampling weights are provided in the survey to

ensure that the sample is nationally representative of the non-agricultural and non-financial formal private economy.<sup>1</sup> The measure of women's employment used throughout the note equals the share of workers at the firm that are women. Data on all the laws or legal variables considered are taken from the Women, Business and the Law project (WBL; 2010 values) of the World Bank. It should be noted that the results presented below are in the nature of correlations or associations. Hence, while they are suggestive of underlying causal relationship, more work is required to ascertain or reject the suggested causality.

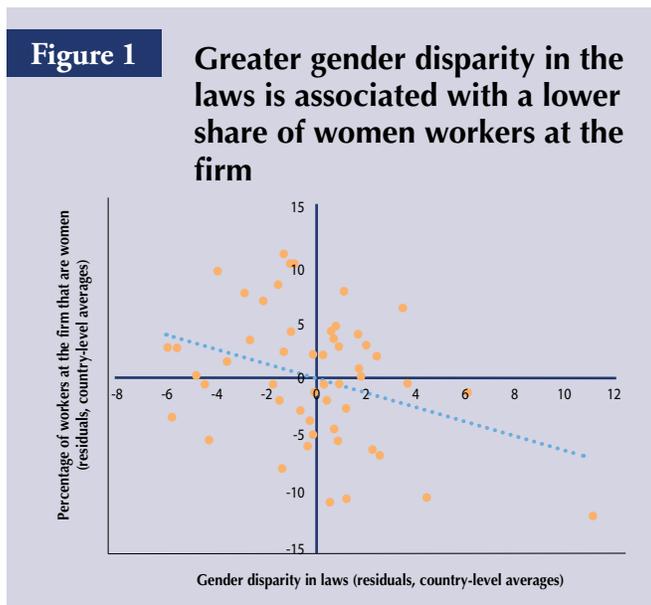
### Overall gender disparity in the laws is associated with a lower share of women workers

Gender-based differences in laws are pervasive, implying less favorable treatment of women relative to men. The disparities cover various aspects of economic and non-economic activity. For example, gender disparity exists in laws related to the hiring of workers, inheritance rights, applying for a passport, obtaining loans from banks, etc. Collectively, these various elements of the law define the overall institutional environment for women relative to men.

A composite measure of the overall institutional environment is a useful starting point and a good benchmark for assessing the relationship between gender disparity in the laws and economic outcomes such as women's employment. Using information on 39 different laws from WBL in terms

of how they treat women relative to men, we construct a composite measure of gender disparity in the laws. For this, each law is coded as a dummy variable equal to 1 if a gender disparity in the law exists and 0 otherwise. Note that the presence of gender disparity implies less favorable treatment of women relative to men. We take the sum over the 39 dummy variables which indicates the number of laws in the country with gender disparity. The 39 laws covered are specific in nature and span the areas of accessing institutions, using property, getting a job, going to court, and taxes. Some examples include: Are there tax deductions or credits specific to men? Can non-pregnant and non-nursing women do the same jobs and men? Do unmarried men and unmarried women have equal ownership rights to property? As mentioned above, for women's employment, we use ES data from 33,826 firms in 53 developing countries.

The results show that greater gender disparity in the laws is strongly correlated with lower women's employment. On the conservative side and for the 39 laws covered, removing gender disparity in a given single law is associated with an increase of 0.63 percentage points in the share of women among total workers at the firm (against a mean value of 33 percent women workers). Alternatively, for a country such as Jordan that has highest number of laws favoring men over women - 23 out of 39 laws - removing gender disparity from all the 23 laws is associated with an increase in the share of women workers at the firm by over 14 percentage points. These findings hold even after accounting for differences in various firm and country characteristics that could affect women's employment (figure 1).<sup>2</sup>



Source: Enterprise Surveys and Women, Business and the Law.  
 Note: The graph is a partial scatter plot obtained after accounting for differences in various firm and country characteristics listed in endnote 2. For expositional reasons, country-level averages of the residuals are shown although the negative relationship shown holds even at the firm-level.

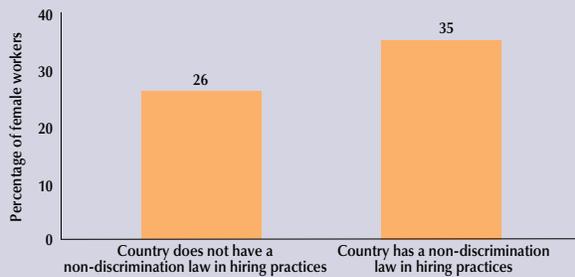
## Does mandating a non-discrimination clause in hiring practices matter for women's employment?

Under competitive markets, gender-based differences in the labor market are unlikely, as any firm with a "taste" for discrimination will face higher costs, and thus be eliminated by the competition (Becker, 1971). However, gender differences in the labor market have persisted, potentially suggesting the uncompetitive nature of the labor market or creating room for alternative theories. These other theories fall under preference-based explanations, monopsony models, and job matching models. Under preference-based models, women are under-represented in the labor market because of their preferences (such as having children) which affect their productivity relative to men. Under the monopsonist model, a single employer has bargaining power in the labor market and thus pays wages according to the mobility of labor. If women workers are less mobile than male workers, they may remain underrepresented in the labor market. Job matching models posit a poor matching between available jobs and female vs. male job applicants. If none of the above theories hold, pure gender discrimination is said to prevail (Ginther, 2006). In this scenario, a law mandating non-discrimination in hiring practices against women (henceforth, non-discrimination law) has the potential to improve women's employment prospects. Of course, adequate enforcement mechanisms must exist for the law to have any impact.

Using ES data, Amin and Islam (2015) explore the relationship between the presence of a non-discrimination law and women's employment in over 14,000 manufacturing firms. According to WBL, two conditions have to be met for a country to have the non-discrimination law or clause: (a) the clause has to explicitly mention the word sex or gender; (b) the clause has to explicitly refer to the hiring process and not just discrimination in general, and not just discrimination in the workplace once employment is already obtained.

What are our findings? On average 35 percent of workers in a firm are women in developing countries with a hiring non-discrimination law in contrast to 26.4 percent in developing countries without a hiring non-discrimination law (figure 2). In a more detailed analysis accounting for several firm and country characteristics,<sup>3</sup> mandating a non-discrimination law is associated with an increase of 5 percentage points in women's employment. This positive association is stronger among the relatively richer countries, smaller firms and countries with a larger proportion of women over the whole population.

**Figure 2** Mandating a non-discrimination law is associated with a greater proportion of women workers



Source: Enterprise Surveys and Women, Business and the Law.  
 Note: The figure shows firm-level average values across countries.

### Paternity leave and women’s employment

Governments have grappled with policies to improve women’s job market prospects. Recently, the spotlight has been turned on paternity leave. Two articles (Fortune, February 2015<sup>4</sup> ; New York Times, Nov 2014<sup>5</sup>) have highlighted potential benefits of paternity leave, including better job prospects for women. However, the discussion on paternity leave is restricted to developed countries. Do paternity leave laws exist in developing economies? If so, can we uncover any relationship with employment outcomes?

The formal empirical literature suggests two mechanisms for the impact of paternity leave on employment of men and women. First, employer attitudes may change. That is, if a particular position requires investment in job training, employers may discriminate against hiring women anticipating frequent absences due to child birth and child rearing activities. However, if paternity leave allows men to spend more time outside employment, assuming considerable uptake of paternity leave, this may limit discrimination against women. Second, Becker (1985) indicated significant changes in household’s time allocation can be achieved by minor changes in initial conditions. Therefore, changing the allocation of labor via paternity leave could change the trajectory of women’s labor allocation in the market. Empirical evidence on the impact of paternity leave on women’s employment is mixed. For example, while Amarson and Mitra (2010) find a positive impact in Iceland, other studies find no such impact (see for example, Cools et al. 2015).

Based on Amin et al. (2016), we provide new evidence on the issue for a cross-section of 33,308 firms in 53 developing countries. According to the WBL, there are 22

countries in the sample under study that mandate paternity leave while the remaining 31 do not. The empirical results reveal that paternity leave does matter. That is, the share of women workers at the firm is much higher in countries that have a paternity leave law vs. the rest (figure 3). This relationship survives even after accounting for differences in various firm, industry and country characteristics.<sup>6</sup>

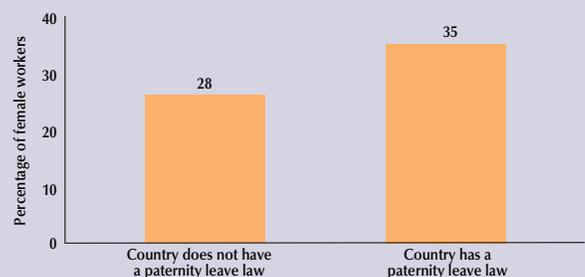
### Women’s employment and laws guaranteeing return to an equivalent position after maternity leave

There is a fairly large body of work analyzing the impact of maternity leave days on women’s job prospects. However, the length of maternity leave is not the only issue for women. They may also worry about laws guaranteeing a return to a position equivalent to the one they held before going on maternity leave (henceforth, equivalent position law). In fact, it is conceivable that maternity leave may have a much larger positive impact on women’s decision to join the labor market when it is combined with an equivalent position law (confirmed below).

Several countries have adopted an equivalent position law. The impact of an equivalent position law on women’s employment may vary depending on what channels dominate. On one hand, the law may result in fewer women opting to abandon their careers after having children. Since they do not have to resort to lower positions after absence from the job market, continuity in the professional career is preserved, thereby maintaining the labor supply of women. On the other hand, ceteris paribus, employers may not necessarily discriminate, but they are likely to hire fewer women due to the inflexibility induced by the equivalent position law as well as the potential depreciation of skills of returning mothers (Schonberg and Ludsteck 2014).

Formal empirical analysis on the relationship between

**Figure 3** The share of women workers at the firm is higher in countries that have a paternity leave law



Source: Enterprise Surveys and Women, Business and the Law.  
 Note: The figure shows firm-level average values across countries.

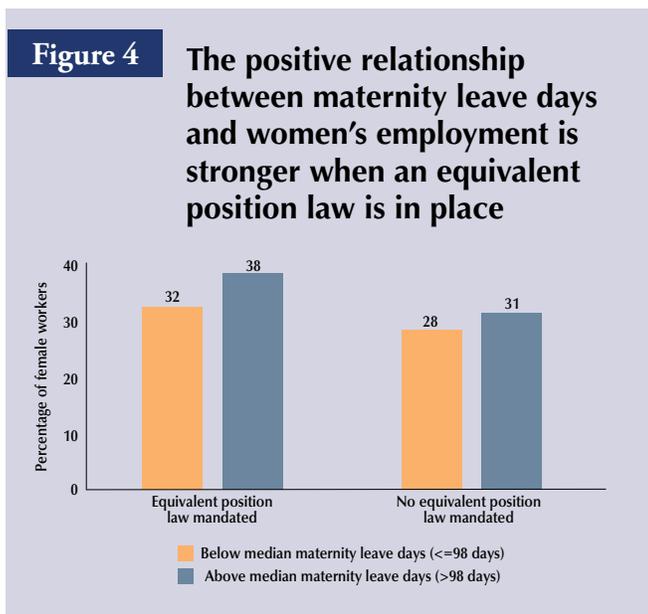
women's employment and an equivalent position law is limited and largely restricted to developed countries. The evidence that is available shows mixed results (see for example, Klerman and Lebowitz 1999, Baker and Milligan 2008).

We provide new insights on the possible link between women's employment and an equivalent position law for a large cross-section of 33,703 firms in 53 developing countries. Out of 53 countries in the sample, 31 have mandated an equivalent position law while the remaining have not.

We find that the share of women workers in the firm is much higher in countries that have mandated an equivalent position law than in countries that have not mandated the law. A conservative estimate suggests an increase of 4.1 percentage points in the proportion of women workers associated with the law. This is a large increase given that on average, women workers comprise 32 percent of all workers. The positive relationship between women workers and an equivalent position law survives even after accounting for differences in various firm and country characteristics that could affect women's employment.<sup>7</sup>

As suggested above, the impact of maternity leave on women's employment may be enhanced when an equivalent position law is also mandated. The data do not reject such a possibility. Figure 4 illustrates the point. That is, while more maternity leave is positively associated with women's employment, the association is much stronger when an equivalent position law is also in place.

The legal environment consisting of various laws and its treatment of men and women can have a significant impact on women's employment prospects. This note provides supportive new evidence for a large cross-section of private firms in over 50 developing countries. Both the overall legal environment and disparities in specific laws involving hiring, paternity leave, and maternity leave seem to matter in that women's employment is higher when these laws are more favorable towards women.



Source: Enterprise Surveys and Women, Business and the Law.  
 Note: The figure shows firm-level average values across countries.

## Notes

1. Detailed information on sampling methodology is available at [www.enterprisesurveys.org](http://www.enterprisesurveys.org).
2. These characteristics as follows: firm characteristics include firm-size and age, industry dummy (industry fixed effects), exporting status, foreign ownership, gender of the top manager, presence of at least one female owner, provision of training to workers, and if there were losses due to crime in the last year; country characteristic include GDP per capita level and its growth rate, proportion of women in total population, fertility rate, primary and secondary gross enrollment rate of women relative to men, religious affiliation, share of agriculture and manufacturing in total value added, and proportion of population with access to sanitation.
3. The firm and country characteristics include firm size, sector, female ownership, business environment quality, level of development, education, proportion of women in parliament, and also an overall measure of gender disparity in laws in case we are capturing the effects of other laws.
4. <http://fortune.com/2015/02/01/paternity-leave/>
5. [http://www.nytimes.com/2014/11/09/upshot/paternity-leave-the-rewards-and-the-remaining-stigma.html?\\_r=0](http://www.nytimes.com/2014/11/09/upshot/paternity-leave-the-rewards-and-the-remaining-stigma.html?_r=0)
6. These characteristics are listed in endnote 3.
7. See endnote 3 for these characteristics.

## References

- Abu-Ghaida, Dina, and Stephan Klasen, (2004), "The Costs of Missing the Millennium Development Goal on Gender Equity." *World Development*, 32(7), 1075–1107.
- Amin, Mohammad, and Asif Islam (2015), "Does Mandating Nondiscrimination in Hiring Practices Influence Women's Employment? Evidence Using Firm-Level Data," *Feminist Economics* 21(4): 28-60
- Amin, Mohammad, and Asif Islam and Alena Sakhonchik (2016), "Does paternity leave matter for female employment in developing economies? Evidence Using Firm-Level Data," *Applied Economics Letters* 23(165): 1145-1148.
- Arnanson, Bjorn Thor, and Aparna Mitra (2010), "The Paternity Leave Act in Iceland: Implications for Gender Equality in the Labour Market," *Applied Economics Letters* 17(7): 677-680.
- Baker, Michael and Kevin Milligan (2008), "How Does Job-Protected Maternity Leave Affect Mothers' Employment?" *Journal of Labor Economics* 26(4): 655-691.
- Becker, G. S. (1971), "The Economics of Discrimination," 2nd edition. Chicago: University of Chicago Press.
- Becker, Gary S., (1985). "Human capital, effort, and the sexual division of labor." *Journal of Labor Economics* 3, 33–58.
- Cools, Sara, Jon H. Fiva, Lars J. Kirkeboen (2015), "The Casual Effects of Paternity Leave on Children and Parents," *Scandinavian Journal of Economics* 117(3): 801-828.
- Ginther, D. K. (2006), "The Economics of Gender Differences in Employment Outcomes in Academia," In Biological, Social, and Organizational Components of Success for Women in Science and Engineering: Workshop Report. Committee on Maximizing the Potential of Women in Academic Science and Engineering. The National Academies Press, Washington, DC. 99-112.
- Klasen, Stephan and Francesca Lamanna (2009), "The Impact of Gender Inequality in Education and Employment on Economic Growth: New Evidence for a Panel of Countries," *Feminist Economics*, 15:3, 91-132.
- Klerman, Jacob Alex, and Arleen Leibowitz (1999), "Job Continuity among New Mothers," *Demography* 36(2): 145-155.
- North, Douglas (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge.
- Schonberg, Uta, and Johannes Ludsteck (2014), "Expansions in Maternity Leave Coverage and Mother's Labor Market Outcomes after Childbirth," *Journal of Labor Economics* 32(3): 469-505.

The Enterprise Note Series presents short research reports to encourage the exchange of ideas on business environment issues. The notes present evidence on the relationship between government policies and the ability of businesses to create wealth. The notes carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this note are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.