



# Labor market regulations for women: are they beneficial?

*Labor market regulations specific to female workers are common in developing countries. What are the labor market effects of maternity benefits and working-hour restrictions for women? And does such legislation offer female workers the protection it promises?*

This note considers the impacts on female workers of two forms of labor market regulations common in developing countries: mandated maternity benefits and working-hour restrictions for women. Anecdotal evidence suggests that maternity benefits are unpopular with employers. For example, in Mexico, there are numerous accounts of women being required to undergo pregnancy testing as a condition of employment in *maquiladoras* (Human Rights Watch 1996, 1998). In China, there are many reports of rural migrant women being fired from jobs in export processing and other industries when they marry or become pregnant (CASS 1995; Huang 1999). In both countries, employers point to the extra cost associated with maternity benefits as the reason for these practices. But it is unclear how such benefits affect women's labor market outcomes, and whether there are conditions under which maternity leave does not result in such discriminatory behavior.

Many developing countries also have working-hour restrictions specific to female workers. Such restrictions are usually motivated by concerns for women's health and safety (see, for example, reports on the harmful effects of excessive overtime work in China's export processing industries, such as Pan 2002). But this type of legislation may negatively affect female labor market outcomes because it constrains women's working options. As with maternity leave, the full impacts of such regulations need to be clarified.

## Maternity benefits

Maternity benefits allow working mothers to recover from childbirth and to care for their newborn infants. But when these benefits are financed by employers, they raise the cost of female labor. Such benefits generally include employment protection during a specified period of absence and some level of cash benefits (to compensate women for lost earnings), and sometimes medical benefits as well. Virtually all OECD countries and most developing countries have some form of maternity leave provision, with varying levels of cash and medical benefits, lengths of post-natal leave, and financing mechanisms.

What is the expected impact of maternity benefits on female wages and employment? Employers are expected to respond to mandated employer-financed maternity benefits by reducing the wages they offer to eligible women by the amount of the expected cost of the mandate (Summers 1989). If female workers value the benefits, they will accept a lower wage in return for the benefits. Thus wages are unambiguously lower in the short run. Over time, however, maternity benefits may lead to stronger labor force attachment and increased investment in the firm-specific human capital of female workers. The resulting increase in productivity can lead to higher wages, offsetting the initial reduction in wages caused by maternity benefits (Waldfogel 1998).

Maternity benefits can therefore result in increased, decreased, or unchanged levels of

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female employment, depending on employers' and female workers' relative perceptions of the costs and value of maternity benefits. Over time, job protection during maternity leave may help women maintain favorable job matches and avoid the cost of searching for alternative employment—increasing the likelihood that female employment rates will rise (Waldfogel 1998). The expected effect of maternity benefits on female working hours depends on two opposing effects. To qualify for (higher) benefits, women may increase their hours prior to taking maternity leave. On the other hand, women's working hours upon returning to work from maternity leave could fall if women work fewer hours to have more time with their children (Zveglic and Rodgers 2003).

Empirical studies from OECD and developing countries have generally found that maternity leave has negative or insignificant effects on female wages, while the effects on female employment have been found to be mostly positive. Many studies have examined the impact of maternity benefits on female wages. Gruber (1994) found that U.S. state legislation mandating insurance providers to cover pregnancy and childbirth (with premiums paid by employers) led women's wages to fall by the full cost of providing benefits. In contrast, Zveglic and Rodgers (2003) found that the introduction of maternity leave benefits had no significant effect on female wages in Taiwan (China). Ruhm (1998), using data from nine European countries, found that the duration of benefits matters: paid leave of up to three months had little effect on women's wages, but paid leave of nine months reduced hourly wages by 3 percent. If the same relationship holds in developing countries, maternity leave would likely result in lower wages. This is because many developing countries—particularly transition economies—allow maternity leave of up to six months (ILO 1998).

The effects of maternity benefits on female employment have been found to be mostly positive. For example, Zveglic and Rodgers (2003) found a 4.5 percent increase in women's working hours and a 2.5 percentage point increase in women's employment

rate as a result of the introduction of maternity leave provisions in Taiwan (China). Similarly, Ruhm (1998) found that both short and extended maternity leave increased women's employment rates in nine European countries by 3–4 percent. Winegarden and Bracy (1995) also found that maternity leave provisions in industrial countries are associated with higher labor force participation rates for young women. On the other hand, Gruber (1994) found that the introduction of mandated medical benefits covering pregnancy and childbirth did not have a significant impact on female employment rates in the United States.

In situations where employers are unable to adjust wages in response to maternity leave mandates (for example, due to equal pay legislation), they may substitute male workers for female workers instead (Gruber 1994). An abundant supply of labor might make substitution for female workers relatively easy, which may partly explain the anecdotal practices in Mexico and China cited earlier.

The evidence on the impacts of maternity benefits highlights the importance of cost sharing between employers, employees, and government. Cost sharing is likely to reduce discrimination and dampen negative wage effects by redistributing some of the costs of maternity leave from women and employers to families and society as a whole.

Cost sharing can be undertaken in a variety of ways. First, the costs of maternity benefits can be shared equally between employers and the social security system. The administrative costs of this approach can be significant in developing countries. Nonetheless, some developing countries—such as Costa Rica and Thailand—have been successful in instituting this kind of cost sharing for maternity benefits. Second, private medical insurance coverage can be expanded to pay for the medical benefits that may accompany maternity leave provisions. Although this approach increases the medical insurance premiums paid by families, it reduces the costs incurred solely by women and employers (World Bank 2001). Third, maternity leave provisions may have broader social benefits (such as reduced early childhood mor-

tality rates; Ruhm 2000) that could justify contributions from general revenues or payroll taxes.

## Sex-specific working-hour restrictions

Many countries have introduced working-hour restrictions for female workers to protect their health and safety and to allow time for their responsibilities as wives and mothers. But such restrictions may negatively affect women's labor market outcomes. In the 19<sup>th</sup> century such regulations, together with occupational bans on female workers, were among the first labor market laws to be introduced in Europe. But during the 20<sup>th</sup> century restrictions on female workers were increasingly deemed discriminatory, and most industrial countries abandoned such legislation. Working-hour restrictions for women can take two forms: prohibitions on night work by women and lower overtime limits for women than for men. Both types of restrictions continue to be prevalent in developing countries (Nataraj and others 1998; Hijab and Fawzi El-Solh 2003).

How are working-hour restrictions (night or overtime) for women likely to affect the labor market? Such restrictions will reduce female workers' working hours. Because total labor demand will remain the same—and as long as male labor supply is not perfectly elastic—the reduction in women's working hours will increase wage rates for both men and women. Employers will substitute men's hours for women's in production, increasing men's average working hours. As male earnings (hours times wage) rise, the level of male employment will increase as well. The effect on the level of female employment will depend on the combined effect on earnings of reduced working hours and increased wages (Landes 1980; Zveglic and Rodgers 2003).

There are few studies of the labor market effects of working-hour restrictions in developing countries. Zveglic and Rodgers (2003) used data from Taiwan (China) to assess the impact of working-hour restrictions on the female labor market. In 1984, Taiwan (China) introduced the Labor Standard Law,

which prohibited night work by women (from 10 p.m. to 6 a.m.) and limited women's overtime to 2 hours a day and 24 hours a month. (Men's overtime was limited to 3 hours a day and 46 hours a month.) Zveglic and Rodgers used differences in coverage of the labor law between industrial sectors and demographic groups (men, women) to identify the impact of working-hour restrictions. They found that once the labor law was enforced, the working-hour restrictions reduced women's working hours by 6.1 percent, reduced women's employment rate by 0.9 percentage points, and had no immediate significant effect on female wages.

Restrictions on night work by female workers are usually motivated by a desire to avoid their exploitation in export-oriented industries (Politakis 2001). But many of the countries prohibiting night work by women also have statutory work hours and overtime limits that apply to both women and men. If enforced, these regulations can protect male and female workers from unlimited overtime and exploitation. Additional restrictions on night work by women can then be eliminated, as they discriminate against women. By limiting employers' flexibility, any overtime limits are expected to have labor market effects. But if overtime limits are of the same magnitude and are equally binding for women and men, they will not affect male and female workers differently.

## Policy implications

The evidence above suggests that maternity benefits and working-hour restrictions for female workers have opposite effects on female employment. Working-hour restrictions specific to women can lower their working hours and employment rates. To prevent these adverse effects, policymakers should consider eliminating sex-specific working-hour restrictions and protect male and female workers through overtime limits that apply equally to both sexes.

In contrast, mandated maternity benefits can have a positive effect on female employment rates and may increase women's attachment to the labor force. The potential negative wage effects and discrimination due

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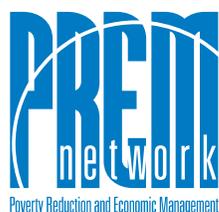
to employer-financed maternity leave provisions can be mitigated through cost sharing between employers, employees, and government, and by limiting maternity leave to 12–16 weeks (in line with recommendations by the International Labour Organization).

### Further reading

- CASS (Chinese Academy of Social Sciences Research Group). 1995. "Studies of Female Workers: Migration for Work and Development of the Countryside and Peasants." *Sociological Studies* 4 (in Chinese).
- Gruber, J. 1994. "The Incidence of Mandated Maternity Benefits." *American Economic Review* 84 (3).
- Hijab, N., and C. Fawzi El-Solh. 2003. "Laws, Regulations and Practices Impeding Women's Economic Participation in the MENA Region." World Bank, Gender and Development Group, Washington, D.C.
- Huang, X. 1999. "Divided Gender, Divided Women: State Policy and the Labour Market." In J. West and others, eds., *Women of China—Economic and Social Transformation*. New York: St. Martin's Press.
- Human Rights Watch. 1996. "No Guarantees—Sex Discrimination in Mexico's Maquiladora Sector." New York. [<http://hrw.org/press/08/mexicomag96.htm>].
- . 1998. "A Job or Your Rights—Continued Sex Discrimination in Mexico's Maquiladora Sector." New York. [<http://hrw.org/reports98/women2>].
- ILO (International Labour Organization). 1998. "Maternity Protection at Work." *World of Work* 24 (April).
- Landes, E. 1980. "The Effect of State Maximum-Hours Laws on the Employment of Women in 1920." *Journal of Political Economy* 88 (3).
- Nataraj, S., Y. van der Meulen Rodgers, and J. E. Zveglic. 1998. "Protecting Female Workers in Industrializing Countries." *International Review of Comparative Public Policy* 10.
- Pan, P. P. 2002. "Few Protections for China's New Laborers." *The Washington Post*, 13 May.
- Politakis, G. P. 2001. "Night Work of Women in Industry: Standards and Sensibility." *International Labour Review* 140 (4).
- Ruhm, C. 1998. "The Economic Consequences of Parental Leave Mandates: Lessons from Europe." *Quarterly Journal of Economics* 112 (1).
- . 2000. "Parental Leave and Child Health." *Journal of Health Economics* 19 (6).
- Summers, L. 1989. "Some Simple Economics of Mandated Benefits." *American Economic Review* 79 (2).
- Waldfoegel, J. 1998. "Understanding the 'Family Gap' in Pay for Women with Children." *Journal of Economic Perspectives* 12 (1).
- Winegarden, C. R., and P. Bracy. 1995. "Demographic Consequences of Maternal-leave Programs in Industrial Countries: Evidence from Fixed-effects Models." *Southern Economic Journal* 61 (4).
- World Bank. 2001. *Engendering Development*. A Policy Research Report. New York: Oxford University Press.
- Zveglic, J. E., and Y. Rodgers. 2003. "The Impact of Protective Measures for Female Workers." *Journal of Labor Economics* 21 (3).

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