

Gender Ratios and Female Labor Market Outcomes: Evidence from large-scale Mexican Migration *

Emily Conover, Melanie Khamis and Sarah Pearlman

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1 Long Abstract

The natural ratio of men to women is estimated to be approximately one to one. However, sex-selective abortion, infanticide, diseases, famines, violence, wars, incarceration and migration can alter this ratio and lead to *missing men* or *missing women*. The relative scarcity of men or women with respect to the other gender has important consequences on economic and social outcomes, such as the marriage and labor markets, and in decisions regarding investments in human capital and fertility.

The relative scarcity of men, due to wars, violence and incarceration has effects on female marriage prospects and labor force participation. Women are less likely to marry and have children, while at the same time out-of-wedlock child bearing increases (Abramitzky et al. 2011; Charles and Luoh 2010). The evidence on female labor force participation and labor market outcomes is less clear: Acemoglu et al. (2004) find increases in labor force participation of women in the US after WWII while Goldin (2001) finds a lower effect on female employment.

*Conover: Hamilton College, econover@hamilton.edu; Khamis: Wesleyan University and IZA, mkhamis@wesleyan.edu; Pearlman (corresponding author): Vassar College, sapearlman@vassar.edu .

Changes in gender ratios, henceforth a lower ratio of men to women, and the subsequent changes in female labor market outcomes such as labor force participation, types of employment and occupations need to be documented further, in particular in the context of developing countries.

In this paper, using large-scale migration of Mexican men to the US as a shock to the gender ratio, we investigate the effects of a lower male-female gender ratio in the female labor market.¹ This migration affected states and cohorts differently, where working age men were more likely to migrate abroad. Following Raphael (2013) we exploit the variation over time and across Mexican states in the gender ratio to identify the effect on female labor force participation and labor market outcomes. In particular, we explore whether women were able to break into occupations that traditionally have had a higher male participation, as fewer men are around to work in these occupations. Recent literature on gender in the labor market in Mexico by Juhn et al. (2013, 2014) document changes in occupations for Mexican females due to trade liberalization, where females increased employment and wage shares in blue-collar jobs but not in white-collar jobs.

Using data from the Mexican census from 1960 to 2000,² we first document variation in international migration and gender ratios across states. In a regression of gender ratios on a measure of international migration we find evidence that the percentage of households that have an international migrant is negative and significant at the 1 percent level. Thus changes in the gender ratio are related to the large-scale migration of Mexican males.

Moreover, in the labor market we find a significant and negative relationship between changes in the gender ratio and female self-employment and white-collar jobs. This implies that as the proportion of men declines, the proportion of women in self-employment and white-collar jobs increases. Finally, we create an occupation segregation index, following Beller (1985), and find some indication of a positive relationship between the changes in gender ratio and this segregation index. This indicates that as the male-female gen-

¹For direct effects of migration on the Mexican labor market see Chiquiar and Hanson 2005 and Mishra 2007.

²We have not included 2010 due to the economic crisis, which resulted in return migration.

der ratios decline, occupations become less segmented by gender, suggesting that women may be moving into occupations previously dominated by men as men become more scarce.

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2 References

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