

# Gender Wage Gap in Japan and Taiwan: A Comparative Study of Low-fertility East Asian Countries

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## Abstract

This study examines differences in the factors of the gender wage gap in Japan and Taiwan. According to the World Economic Forum (2017) and the National Statistics of the Directorate-General of Budget, Accounting and Statistics under the Executive Yuan (2017), the gender wage gap in Japan is larger than that in Taiwan. Wage equality between women and men for similar work (converted to female-to-male ratio) is 0.67 in Japan and 0.84 in Taiwan. However, despite the similar ratios of female-to-male labor force participation between Japan (0.78) and Taiwan (0.76), the gender wage gap does not shrink easily, especially in Japan.

Japanese female workers find it difficult to enhance their careers, especially after having children, and this difficulty also negatively affects the childbirth decision of women who want to continue to work. On the other hand, most female workers continue to work even after they get married or give birth in Taiwan, and this is a reason the gender wage gap in Taiwan is smaller than that in Japan. Nevertheless, for reasons that have not yet been sufficiently examined, the gender wage gap still exists in Taiwan. In addition, the mechanism of low fertility is different from Japan.

This study uses the Blinder-Oaxaca decomposition method and two types of micro data: one from the Japan Household Panel Survey/Keio Household Panel Survey (JHPS/KHPS) 2004-2016 from the Panel Data Research Center (PDRC) at Keio University and another from the Panel Study of Family Dynamics (PSFD) 1993-2016 from the Research Center for Humanities and Social Sciences in Academia Sinica. The Blinder-Oaxaca decomposition method is widely used in studies related to wage gaps by sex and race. This method divides the wage differences into the “explained” and “unexplained” parts. The explained part refers to the differences that can be accounted for by productivity characteristics and type of work, such as education level, work

experience, employment type, occupation, and industry. On the other hand, the unexplained part, which is often regarded as a measure for discrimination, refers to the residual part that cannot be accounted for by such differences in wage determinants. This method enables us to reveal which factors widen the wage difference.

The results of the Blinder-Oaxaca decomposition show that the hourly wage differences between women and men (male wage – female wage) is 0.232 in Taiwan (for which the ratio of the explained part is 3%) and 0.581 in Japan (for which the ratio of explained part is 53%). We also find that the positive impact of tenure on the gender wage gap is large in Japan. The coefficient of the explained part is 0.082 in Japan and only 0.0153 in Taiwan. These results mean that Japanese female workers find it difficult to increase their work experience because of career interruptions for marriage or childbirth. The magnitudes of the wage penalty for marriage and childbirth are important factors to explain the gender wage gap. For Taiwan, another significant variable in the explained part is number of employees. Its coefficient is smaller than that of tenure and the significance level is 10 % so that we cannot conclude clearly the effect of number of employees increases the gap. In Japan, many variables widen the gender wage gap. The significant variables in the explained part are educational attainment, employment status, occupation, and number of employees. This result means that Japan still faces many problems that widens the gap.

We also observe a significant negative impact of childbirth on the decision to continue working in Japan and Taiwan. In addition, a wage penalty for childbirth exists in both Japan and Taiwan. The results of the quantile regression show that for Taiwan, the impact of the wage penalty is significantly larger only in the low-wage group, and for Japan, there is also a statistically significant negative effect on wage in almost wage groups. Thus, to shrink the gender wage gap, different approaches are needed in Japan and Taiwan. For Japan, it is necessary to establish an environment where women can continue to work, especially for high-wage earners, and for Taiwan, it is necessary to decrease the wage penalty of having children for low-wage earners.

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