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Gender pay gap of public-private sectors in the Iranian Labor Market: decomposition approach based on Tobit model with instrumental variable

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EXTENDED ABSTRACT

INTRODUCTION

one of the important indicators of measuring the development of any country is the situation of females in each country. Overview of the status and income of females compared with males, it is clear that females are the most vulnerable parts of the population. In the last four decades, Iranian females have become half of the country's university graduates, but according to labor force statistics in 2017, the participation rate of females was 16%, relative to the participation rate of 64.5% male. According to the data of urban household income and expenditure survey in 2017, there is an increase in female's hourly wages relative to men, despite the small difference between the level of education of male and female, and the phenomenon of the gender pay gap in the Iranian labor market. This study aims to address the most fundamental and obvious inequality, namely wage inequality, and determine how much of this wage inequality is due to discrimination and how much is due to the characteristics of human capital. In many cases, in the discussion of pay gap, we face censored data, which requires the estimation of a Tobit model; Because in the presence of censored data, ordinary least squares method will lead to inconsistent parameters and misleading results. Investigating the pay gap with a developed model of the Oaxaca



decomposition method using Tobit models, is the pivotal issue in this research which has not been discussed in previous studies.

METHODOLOGY

As stated, the purpose of this article is to investigate the fact that by controlling factors such as the level of education, occupational group, and age, there is still a clear discrimination between the wages of men and women in the labor market. Therefore, this study aims to address the most fundamental and obvious inequality, namely wage inequality, and determine how much of this wage inequality is due to discrimination and how much is due to the characteristics of human capital.

According to theoretical studies, the technique of estimating the wage inequality has been estimated in two forms, the Ols and the definition of dummy variable, and the of Oaxaca and Blinder decomposition. This study attempts addition to OLS model, Provide accurate estimates of the gender pay gap with the help of the censored Tobit model in Iran labor market.

FINDINGS

The results of the study of the gender wage gap of the censored Tobit model show that the wage inequality is positive between men and women. A positive wage inequality means an increase in the gender wage gap to the loss of women. According to the results of the estimation of the models, with the increase in the level of education, significantly the wages of men and women increase. Because women have a higher educational attainment rate than men, wage increases for women are greater than for men. The results show, if is considered data censoring, the educational attainment of men and women significantly decreases. The impact of considering data censoring is much higher on educational attainment for women than men. Also, the private sector has a larger share of employment, but the wage gap in this sector is greater than in the public sector. The results show that potential experience follows an inverted u-shaped pattern. That is, people intermediate levels of potential experience have the highest wage compared to the two ends of the spectrum. In this study, due to the possibility of endogeneity of experience variable, an instrumental variable has been used as a substitute for work experience.

CONCLUSION

According to the available image of the censored data, the method of estimating the Conventional gender pay gap is biased and does not provide reliable results. This study attempts addition to OLS model, Provide accurate estimates of the gender pay gap with the help of the censored Tobit model in Iran labor market. Due to the indigenous of the experience, has been used the Tobit model with an instrumental variable. According to the results, with ignored the bias of censored data, is overestimated the part of the gender pay gap (GPG) attributable to gender differences in observed endowments and part of the GPG is due to that the same endowment generates different returns for male and female workers.

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