

## Abstract

### Study on Minimum Wage Changes and Male and Female Wage Earners: Discussion on Industries and Regions

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Minimum wage policy is a vital means for low wage earners in the labor market and leaves a significant impact on ways of addressing wage inequality. As female employees take up a greater portion of low paying jobs than their male counterparts do, the wage policy is impactful to women workers. Recent minimum wage increases have invited more discussions to implementation methods, including subminimum by industries or regions. The wage scheme would bring either positive outcomes or negative depending on to which group an employee belongs. This is why thorough pre- and post-research are in need. This study investigates what impact the minimum rate by regions and industries would leave to male and female workers. It also

examines the need of living cost support to more vulnerable households, including of a single female parent, by shedding light on how the wage policy would offer impacts to living costs calculation and reflection, in order for the level of such costs to be taken into account in policy-making process.

For those purposes, the study analyzes “Regional Employment Survey” collected by National Statistics Office of the recent six years. In addition, it examines the “Household Income and Expenditure Survey” of the Statistics Korea to conduct analysis on living costs by type of household, including unmarried single, one parent, and female breadwinner.

The findings of this study show as follows. First, the average hourly rate of 2018 has increased by about 24.5% compared with that of 2013. For the same period, while that average rate of male employees went up 22.0%, that of female ones climbed more to 31.3%. Yet, the hourly rate difference between genders in 2018 widened to KRW 5,089, compared with that of in 2013, KRW 4,862. Regarding wage distribution, women take up a greater portion than men do at the first through the fourth decile. But from the fifth and above, the portion of men outnumbers that of women. Particularly, the gender gap at higher income deciles of the seventh decile through the 10th is whopping. As the first and the second decile go under the influence of minimum wage, such income rise can be understood as the outcome of the wage policy. Wage differences between males and females at different deciles are evident. The rate of female workers’ wage to their counterparts at the first decile was only 78.0% in 2018. To speak on the absolute amount of wage itself, however, there was a dramatic gap between genders, as evidenced by the fact that the labor income of women employees at the sixth decile was smaller

than that of male one of the third decile in 2018.

Secondly, Ulsan provided the biggest average labor income, followed by Seoul, Daejeon, and Gyeonggi. Jeju was the region where employees earned the smallest. Though with high average income levels, Ulsan showed a big gender gap. In 2018, females in the region earned only 58% of incomes that males made. In the same year, among industries, the electricity/gas/steam and the water supply presented the biggest average incomes to their employees. They are followed by the financial and insurance, the extraterritorial organizations and bodies, and the professional scientific and technical, all of which handed out fatter paycheck to who they hired. On average, wage ratios have been improved. It seems that wage difference between genders has a more direct influence to wages by industry than by region.

Thirdly, in 2018, the rate of those who were paid below minimum wage was around 19.3%, and the number has been on continuous rise as the wage floor went up. Gender-wise, the proportion is 12.4% for men and 28.0% for women. For the same year, approximately 24.8% of employees would be the target of the minimum wage policy; while men consist of 26.1%, women occupy an astounding 35.8%. Regarding policy influence, most industries saw gender gap widening. This is largely because higher portions of female employees tend to work at low-paying jobs than males do.

Fourth, gender wage gap has narrowed down in a piecemeal manner, but the hourly rate difference still stands at 32.2%. The rate of minimum wage rise does not seem to have a consistent relevance with wage ratio. Yet, the recent dramatic hikes of minimum wage considerably reduced wage gap. The income disparity based on hourly rates has been being reduced, but the

disparity calculated on monthly basis has worsened. This can be explained as a combined effect of working hours and their impact on employment, and others.

Then, the study analyzes the impact of minimum wage on the relative distribution of hourly wage. The regression analysis, built with the dependent variable that reflects quantile wage gaps in comparison with median wage, exhibits that the impact of minimum rate policy application significantly mitigates the difference in all quantile ranges except the fourth and the sixth. While examining gender effect, the study uncovers that for males, if the application rate goes up, the relative wages at the first and the second decile recorded a significant increase. But at other deciles the two did not change significantly. For females, the relative wages at the second and the third decile significantly increased. Yet at the seventh through the ninth, the wages significantly decreased. Applying minimum hourly rates showed varying impacts depending on gender distribution. When those rates rise, they leave impacts on lower deciles for males. Yet, they give relatively even effects to all deciles as a whole; still bigger wage decreases at higher deciles. The application rates do not provide a same effect to genders because of the current wage distribution.

The investigation on minimum wage differentiation which is under discussion among the seven industries is as follows. For the male employees group, the minimum wage application brought significant wage increases to the first and the second decile only. The seven industries saw relative wages polarize, making wage improvement take place at lower and higher deciles. For the female employees group, unlike its counterpart, the application

significantly impacted the second and the third decile, but also higher deciles. It can be said that the application relatively evenly influenced women wage earners as a whole. Analysis on the seven business fields reveals that the minimum wage application produced a clear improvement to each of wage distributions of those businesses.

Examination on living costs can be summarized as below. For households led by single female breadwinners who nurture minors, they mostly spend their income on raising their children. The status of 'married' in the Korean labor market does not usually ensure diverse job offers. In addition, they commonly have to care their kids, which hinders them from landing a job. The exploration into unmarried single households and single female ones shows there was no meaningful difference in wage distribution when their incomes were averaged by the number of household members. But there was a difference in living costs expenditure between the groups. As there are more family members, single female households saw actual living costs incur at greater amounts, and such expenditures are more likely to be related to child rearing, compared with unmarried single households. Spending on grocery and education, among others, are identifiers that tell whether a household is unmarried single ones or not. What is problematic here is that such expenses are essential and incur regularly.

The findings of the study are as below. First, the minimum wage increase, planned for mostly lowly paid employees, leaves a positive impact on women. The minimum wage policy is conceived to elevate low-paid worker's relative income to higher levels and thus to reduce wage income disparity. But if the policy system is selectively adopted by region and industries, its effect

could be limited, particularly leaving more restrictions on female employees. Second, though the wage increases gave a positive impact to women's wages, they did not effectively tackle income disparity by gender, one of the most serious problems faced by female employees. Recent minimum wage increases and consequential wage elevations among workers have not led to the elimination of wage difference by gender. This is largely because the policy introduction does not guarantee anticipated effects, depending on the industries in which an employee is involved and the regional gender distribution. Third, as minimum wage increases expand the scope of those who are paid below the legal wage guideline, the wage gap among those hired broadens. At the same time, as the wage policy can impact other income groups than the lowest one, it can affect such wage earning groups with small deviations, particularly females, and can block incomes of females at higher quantiles from growing. Fourth, changing household compositions and ways of supporting family members are in need of consideration. In that regard, efforts of taking living costs of the socially vulnerable other than unmarried single households into account are needed as a way to secure evidence which deems necessary where living costs matter. For starters, single female households with minors should have priority in the process of further costs analysis, and, in doing so, the meaning of the social protection that the minimum wage policy provides should be properly materialized into those households.