

The Comparison of Gender Wage Gap in South Korea and Norway

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Abstract:

In recent decades, gender inequality has always been a significant topic. According to the UNDP, most of the countries are making efforts to reduce gender wage gap. However, there is still a huge gender pay gap in many countries. Existing research primarily explores the factors that have resulted in gender pay gap in different regions. However, there was not any prior research explored the differences of gender gap between Korea and Norway. Therefore, using the database in 2020, this paper researches the difference of gender wage gap in two countries: Norway and South Korea. It also compares the relationships between age, education background, occupation, job duration, and gender wage gap in these two countries. The study finds that there are many differences between these two countries' gender wage gap, not only on the size of workers' gender wage gap, but also on the relation between gender wage gap and factors that could influence gender wage gap.

Keywords: Gender inequality; gender wage gap; Norway; South Korea.

1. Introduction

In modern society, gender inequality has become to a significant topic. The United Nation has classified gender equality as one fundamental human right and established corresponding organizations such as Equal Pay International Coalition (EPIC) to handle the corresponding affairs [1]. Moreover, other international organizations are also tracing the gender equality process in member countries.

Under this background, the gender wage gap issue was exposed under public view. According to the data from UNDP, most of the countries are taking efforts on reducing gender wage gap. However, there is still a huge gender pay gap in several countries. The

gender wage gap in different countries also varies significantly. For example, according to the data from the Organization for Economic Co-operation and Development (OECD), in 2018, Nordic countries have been leading the way of gender wage equality [2]. Among them, Norway is a typical country. By 2019, Norway female's average monthly wage is 87.6 percent of male's wage, which is at the leading level in OECD countries [2]. However, the situation in South Korea is much worse than Norway. South Korean female's average monthly wage is 65.9 percent of male's wage, which is 21.7 percent lower than Norway [2].

Prior research explores the factors that influenced

gender pay gap. Blau and Khan have developed the relationship between “work-related” factor and gender pay gap and demonstrated that work-related factors could influence gender pay gap [3]. Furthermore, Qutami found that culture could also influence gender wage gap [4]. Some countries would have cultures that encourage female workers to be stay-at-home mom after they give birth to their child, which could decrease their monthly wage, such as South Korea. Bai refined the definition of “work-related” factor [5]. She added occupational segregation into the “work-related” factors. Besides, Jannike’s (2023) research also developed the relationship between education and gender wage gap and demonstrated the relationship between gender wage gap and education background by using Norway’s example [6]. A stronger educational background often accompanied by lower gender wage gap.

2. The Gender Pay Gap in Norway and South Korea

There are also many papers that study gender wage gap in South Korea and gender wage gap in Norway. In the research that researched Norwegian gender wage gap, Dehli’s (2020) research showed that the educational background contributes to decreasing gender wage gap significantly [7]. The situation in South Korea is much more complicated. South Korea has a larger gender wage gap than other OECD countries [2]. It also has more compli-

cated impact factors. Palley (1990) noted that Confucian values could influence gender wage gap, by encouraging woman to be wives and mothers, and man are encouraged to be workers [8]. South Korean female workers are also facing barriers on job opportunity seeking.

However, there was not any prior research explored the differences of gender gap between Korea and Norway, two countries that developed under different background, and delved the differences in factors influencing the gender wage gap between Norway and South Korea. Therefore, this paper intends to compare the gender wage gap in two countries and compare the difference of factors that affected gender wage gap, using the database in 2020. There are lots of factors are influencing South Korea’s gender wage gap. However, this study cannot analyze all the factors through quantitative research method. Therefore, this paper would mainly analyze the following factors: age, occupation, job duration, and education background.

2.1 Gender Wage Gap in South Korea

According to the data from OECD, the gender wage gap of South Korea in 2020 had already reached 31.5 percent, which is 8.8 percent higher than the second place in OECD countries [2]. It seems obvious that gender wage gap is a serious problem in South Korea. In this passage, the gender wage gap will decompose into education, age, job duration and education background. The data below are from KLIPS [9].

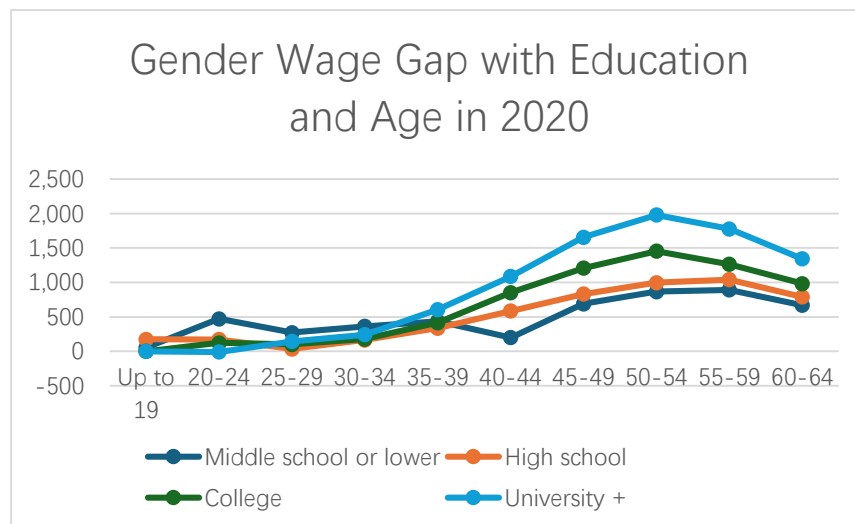


Fig. 1 Education, age and gender wage gap

Figure 1 shows the wage condition of male and female, and the gender wage gap with education and age. On the one hand, gender wage gap in middle school education background workers does not have a crystal trend; On the other hand, the gender wage gap of the workers who have

high school education background or higher could affected by educational background. The higher educational background implies higher gender wage gap in middle-aged workers.

Meanwhile, the gender wage gap in South Korea all

shows obvious trend among 40+ years old workers—the gender wage gap increased from 40 to 54 years old, then decreased. However, there is not a clear trend among the

workers younger than 40 years old. This implies that the age and education could both affect gender wage gap.

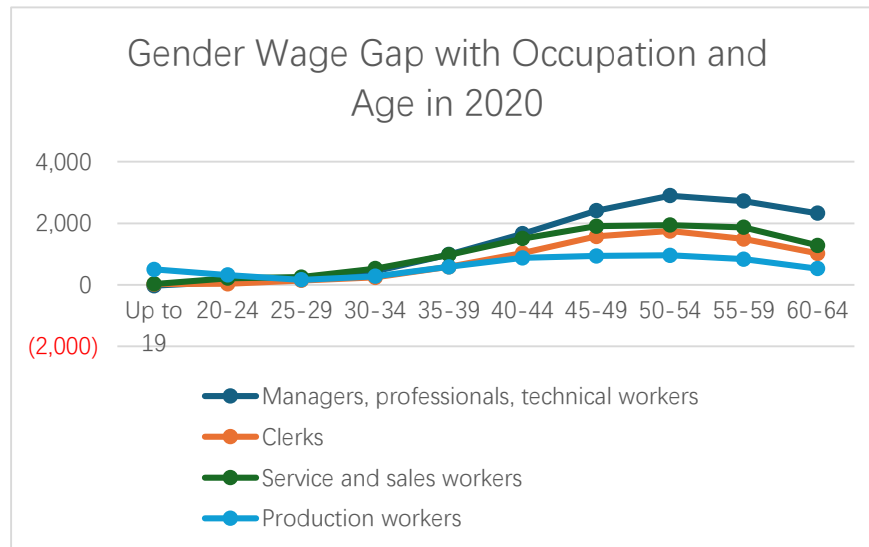


Fig. 2 Occupation and gender wage gap

In Figure 2, it shows that Occupation could also affect gender wage gap. According to the plot above, the significant trend is shown among 30-34 years old workers and above, which managers and technical workers would have

the highest gender wage gap, service and sale workers at the second place, clerks at the third place, and the production workers at the last place.

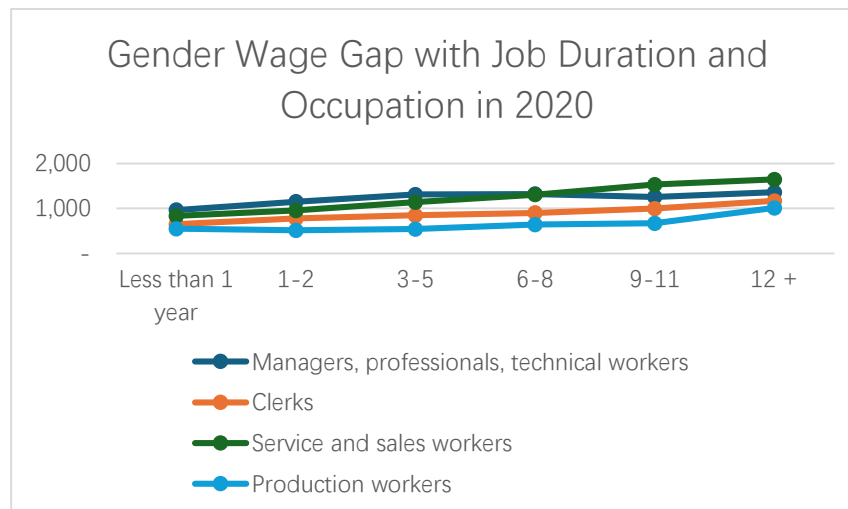


Fig. 3 Job duration and gender wage gap

Figures 3 and 4 show the gender wage gap in 2020 with job duration and other factors. Obviously, unlike age factor, the job duration did not affect gender wage gap

seriously, at least does not affect gender wage gap in a significant direction or trend.

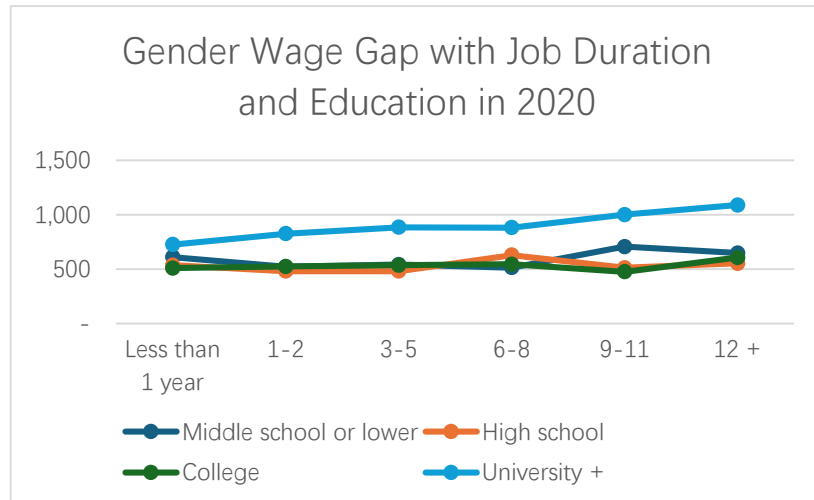


Fig. 4 Job duration, education, and gender wage gap

2.2 Gender Wage Gap in Norway

The situation in Norway is much better than South Korea. According to OECD, Norway only has 4.8 percent of gender wage gap—which reached a high standard among

OECD countries. Following the method used in the analysis of South Korea, this part will analyze the influence of age, occupation, job duration, and education on gender wage gap in Norway. The data below comes from Statistics Norway [10].

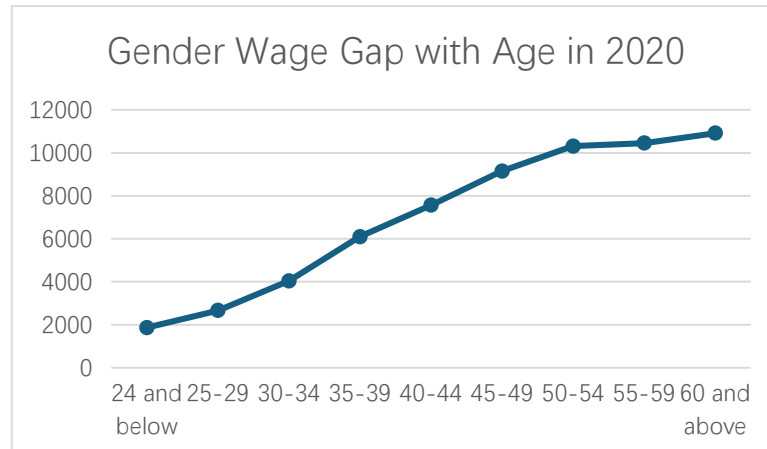


Fig. 5 Age, education and gender wage gap

As Figure 5 shown above, the gender wage gap increased as the worker's age increase constantly. Moreover, the rate at which gender wage gap's increase slowed down after

the workers older than 50 years old. It shows that worker's age could affect gender wage gap, in proportional relationship.

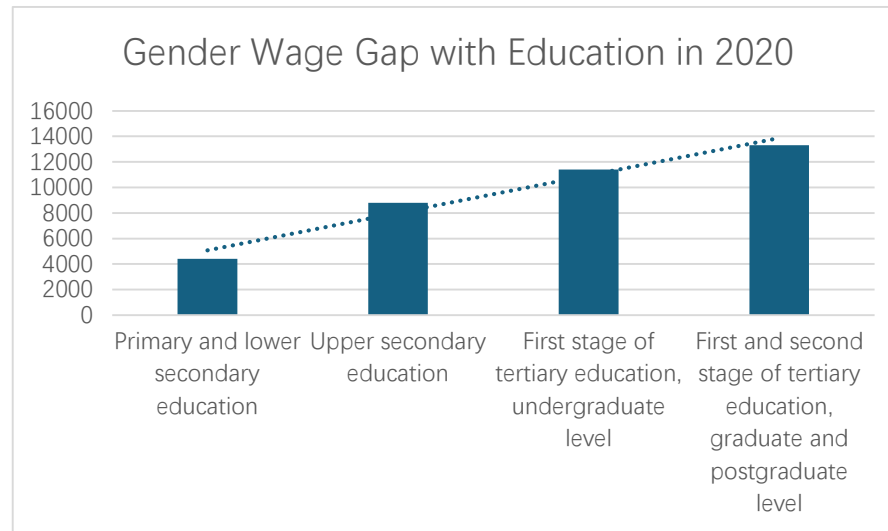


Fig. 6 Gender wage gap in 2020

In Figure 6, the education level also shows a clear trend: higher educational background in Norway often implies higher gender wage gap. The difference of gender wage gap between primary and lower secondary education and first and second stages of tertiary education could reach 8900 Norwegian kroner, which approached two times of

workers' average monthly salary, who have primary and lower secondary education.

Unlike KLIPS, the Norway Statista listed much more occupations. The occupations that Norway Statista provided can be categorized into four categories that KLIPS used (Table 1) [9]:

Table 1. Occupation categories

categories from KLIPS	categories from Norway Statistics
Managers, professionals, technical workers	Managers
	Professionals
	Technicians and associate professionals, armed forces
Clerks	Clerical support workers
Service and sales workers	Service and sales workers
Production workers	Skilled agricultural, forestry and fishery workers
	Craft and related trades workers
	Elementary occupations
	Plant and machine operators and assemblers

Therefore, the average of each occupation can be viewed in the same category. For example, the wage status of production workers in Norway will be justified by the average monthly wage of Elementary occupation workers,

craft workers, skilled agricultural workers and plant and machine operators. Thus, the final result can be viewed in the figure below (Figure 7).

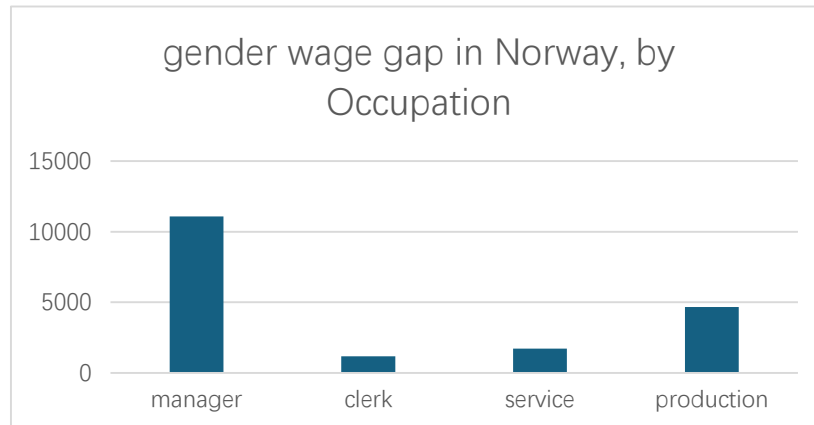


Fig. 7 Wage gap in Norway by occupation

In this figure, it is obvious that the occupation could impact gender wage gap, and there is a huge gap between manager's gender wage gap and other occupations' gender wage gap. The difference between the manager occupation and production worker occupation had reached 6000 Norway Krone, which is higher than other three occupations. From high to low, the gender wage gap of these four occupations is arranged as: Manager, professionals, technical workers; clerks; service and sale workers; and production workers. Since the Norway Statistics did not survey the data about gender wage gap with job duration, thus, this passage will not show the analysis of related data, and the comparison on job duration.

3. Comparison

As discussed above, there are difference between two countries' gender wage gap, and the influencing factors for the gender wage gap in two countries are also different. This part explores age, education and occupation factors. Additionally, it discusses whether job duration could impact gender wage gap in South Korea.

To summarize the previous conclusions before the comparison: In South Korea, education, age and occupation can all affect gender wage gap. The gender wage gap increased from 40 to 54 years old, then decreased. However, there is not a clear trend among the workers younger than 40 years old. Higher educational background usually stands for higher gender wage gap, and this feature is more obvious among older workers, especially workers that are in 50-54 years old. Occupation could impact gender wage gap, in order of the amount of A. The order is as follow: Managers, professionals and technical workers; clerks; service and sales workers; production workers.

In Norway, occupation, education and age also could affect gender wage gap. The gender wage gap constantly increases as the age of workers increase; Similarly, work-

ers' education background is also proportional to workers' gender wage gap. Different occupations could have different gender wage gap, some of the occupation have a huge difference with other occupations, such as manager.

After the summary of the research on gender wage gap in Norway and South Korea, we could compare the gender wage gap in two different countries in following aspects: The size of gender wage gap and the different features of factors that impact gender wage gap. Based on the data in 2020.7.31, the exchange rate between KRW and NOK is 131.411:1. The following research will base on this exchange rate. In the figure above, it shows that the gender wage gap in Norway is slightly lower than South Korea. For example, there is only 2000000 KRW gap between first stage of tertiary education and higher education background workers in Norway, and university-education background workers in South Korea. 2000000 KRW did not reach 10% of their monthly salary. The data above is not as exaggerated as the data from OECD. It shows that the factors we discussed in this research is not the complete reasons that cause that huge gender wage gap difference.

There are other features that are valuable for this study. First, if one focuses on the scale of gender wage gap with education, it is obvious that the high education background is related with high gender wage gap—no matter in which country, workers that have the highest education background would bear the highest gender wage gap. Second, the age factor could impact gender wage gap in both countries. However, the results are not exactly same. The relation between age and gender wage gap in two countries is different. In South Korea, as the workers get older, the gender wage gap increases until 50-54 years old (this process accelerate, then decelerate), then decrease. In Norway, as the age of the worker increases, the gender wage gap gradually constantly increases like workers' age, without any significant fluctuation.

Occupation could also impact gender wage gap. In South Korea, the gender wage gap for each occupation is ranked in descending order as follows: Managers, professionals, technical workers; Service and sale workers; Clerks; And production workers. However, this rank become like this in Norway: Managers, professionals, technical workers; Production workers; Service and sale workers; And clerks. Additionally, the gender wage gap of Managers, professionals, technical workers have a huge gap with other occupations. The gap between the technical workers and production workers have already reached the 100% of the gender wage gap of production workers, which ranked on the second place.

4. Conclusion

In this paper, as discussed above, the differences of gender wage gap in different countries mainly focus on three factors: age, education and occupation. There is a lot of differences between two countries' gender wage gap: not only on the size of workers' gender wage gap, but also on the relation between gender wage gap and factors that could influence gender wage gap. There is difference on the relationship between age and gender wage gap and occupation and gender wage gap. The gender wage gap behaves differently as workers become older in two countries. Meanwhile, the rank of occupation that have higher gender wage gap is different in two countries.

Norway's gender wage gap is lower than South Korea's gender wage gap. However, the factors mentioned in this paper did not reflect the reality that there is such a large gender wage gap. Thus, it shows that the factors we discussed now cannot include all gender wage gap.

At the same time, there are many inadequacies in this paper. It did not develop other factors that could influence gender wage gap—such as marriage, child, culture, job duration, working place and other factors. What is more, this paper was limited by the data that the author could achieve. Furthermore, this passage did not use mathematical method to show that the factors this passage discussed are related to gender wage gap.

A Norwegian country and an East Asian country are having huge gender wage gap difference. However, there are some commons between these two countries. Middle-aged workers in these two countries are both facing large gender wage gap, and so do the high education background

workers. Therefore, it is possible for governments to fix this problem, by social welfare, regular subsidy and other methods. In the future, the author will try to develop more factors that could affect gender wage gap and try to use mathematical method to prove their relationship. Moreover, more data from different years could be collected to verify the hypothesis.

References

- [1] United Nations (18 Sep. 2022). Equal Pay for Work of Equal Value. Accessed 29 Aug. 2024, from: <https://www.un.org/en/observances/equal-pay-day#:~:text=Across%20all%20regions%2C%20women%20are>.
- [2] Organisation for Economic Co-operation and Development (2024). Gender wage gap. Accessed 29 Aug. 2024, from: <https://www.oecd.org/en/data/indicators/gender-wage-gap.html?oecdcontrol-96565bc25e-var3=2020>.
- [3] Blau, F. D., & Kahn, L. M. (2017). The Gender Wage Gap: Extent, Trends, and Explanations. *Journal of Economic Literature*, 55(3), 789–865. <https://doi.org/10.1257/jel.20160995>.
- [4] Qutami, M., & Hamdan, Y. (2023). Covid- 19 and gender inequality: A critique of the working woman's struggle. *Heliyon*, 9(11), e21852. <https://doi.org/10.1016/j.heliyon.2023.e21852>.
- [5] Bai, W., Yue, Z., & Zhou, T. (2023). Jumping to male-dominated occupations: A novel way to reduce the gender wage gap for Chinese women. *Heliyon*, 9(3), e14198. <https://doi.org/10.1016/j.heliyon.2023.e14198>.
- [6] Ballo, J. G. (2023). Is the disability wage gap a gendered inequality? Evidence from a 13-year full population study from Norway. *Social Science & Medicine* (1982), 331, 116077. <https://doi.org/10.1016/j.socscimed.2023.116077>.
- [7] Dehli, M. M. (2020). Gender differences in the labor market: explaining the gender wage gap: empirical evidence from Norway. Norwegian School of Economics (Master's thesis).
- [8] Palley, M. L. (1990). Women's status in South Korea: tradition and change. *Asian Survey*, 30(12), 1136-1153.
- [9] Korean Labor and Income Panel Study (2024). Kli. re.kr. Accessed 29 Aug. 2024, from www.kli.re.kr/board.es?mid=a50601000000&bid=0058&act=view&list_no=143607&tag=&nPage=1.
- [10] Statistics Norway (2021, September 23). Earnings. SSB. Accessed 29 Aug 2024, from: <https://www.ssb.no/en/statbank/list/lonnansatt/>.