

South Korea's Gender Divide: Within Occupations and Across Them

Yoosik Youm

Underwood Distinguished Professor
Sociology Department
Yonsei University, South Korea



Gender Inequalities in Pay

- Two possible mechanisms:
Across occupations vs.
Within occupations
- Data
- Method/ Results
- Policy Implication



Based on, Youm, Y., Yamaguchi, K., and Sung, K. (2021). A tale of two gender inequalities. *Korean Journal of Sociology*. 55(4), 161-203

Two types of gender Inequalities

Within Occupation



Across Occupation



Data

-
- * No absolute and universal criteria to tell us how much inequality is bad
 - * Need for the comparisons across periods/ societies
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- * Inter-occupational gap
 - 한국노동패널 (Korean Labor & Income Panel Study): 2009-2018 (10 years) data
 - Only since 2009, the country-wide representative data are available.
 - Too small sample for managerial positions: not proper for intra-occupation
- * Intra-occupational gap
 - 고용형태별 근로실태조사보고서 (Survey report on labor conditions by employment type, Occupational Wage Survey): 1990-2019 (30 years) data
 - 3-digit occupation code is not available. → not proper for inter-occupation

Method : inter-occupational segregation by gender, Duncan Dissimilarity Index

P_i^M : the proportion of employed men in the occupation i

P_i^W : the proportion of employed women in the occupation i

$$D = \frac{1}{2} \sum_i^n |P_i^M - P_i^W|$$

This ranges from 0 to 1, meaning the minimum proportion of men (or women) to move for no occupational segregation

In general, the more occupational categories (n), the greater the index (D)

Method: occupational segregation index

8 occupations

- 1) Type 1 professional: doctor, dentist, professor, etc.
- 2) Type 2 professional: nurse, teacher, pharmacist, etc.
- 3) Managerial
- 4) Clerical
- 5) Sales
- 6) Manual, non-service
- 7) Manual, service
- 8) Others

분리 정도: Duncan Index

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Method : counter-factual decomposition of occupational segregation (Yamaguchi 2017)

Observed gender gap decomposed into:

- **Explained:** eliminated under the counterfactual assumption of identical human capital between genders
- **Unexplained:** persisting even with identical human capital

DFL Method (developed based on DiNardo, Fortin, Lemieux, 1996)

- Creates a hypothetical occupational distribution for women
- Impact: Shifts the overall population's occupational distribution
- Focus: Driven by supply-side factors (worker characteristics)

Matching Method

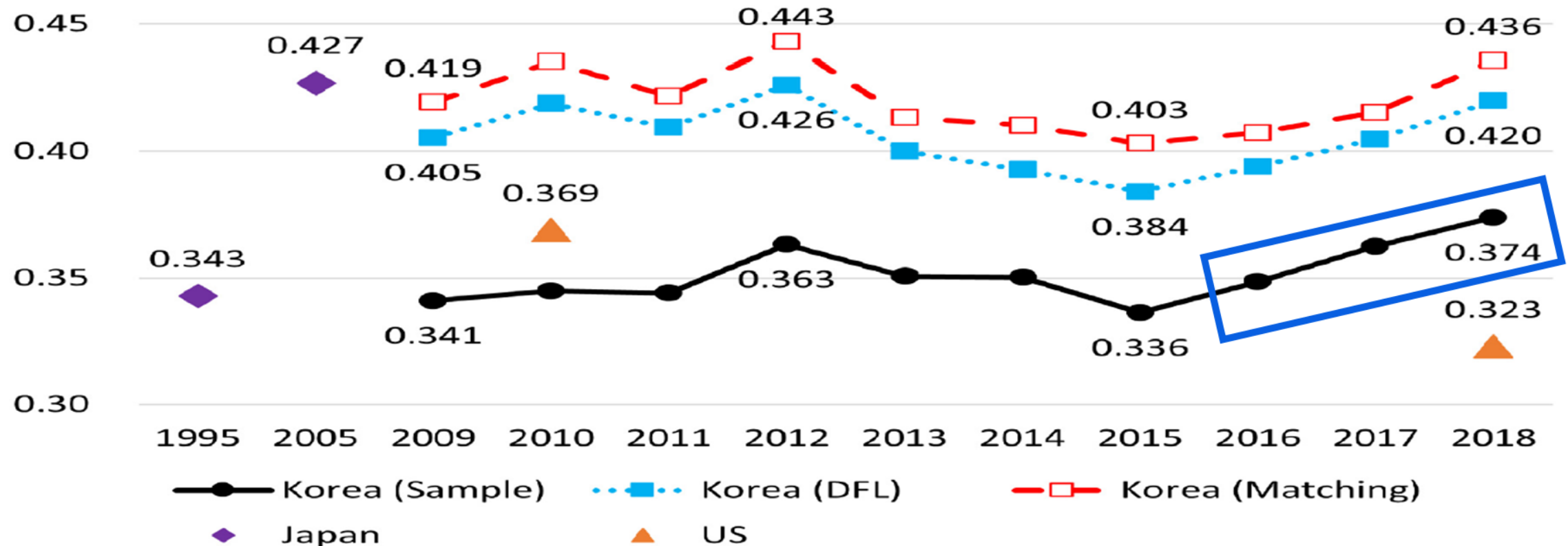
- Fixes the total population's occupational distribution
- Adjusts only the proportion of men and women within occupations under the identical human capital assumption
- Impact: Reflects changes driven by demand-side factors (employer preferences)

Method : Fortin and Huberman's counter-factual decomposition of wage gap

: decompose the wage gap into inter-occupational and intra-occupational (Fortin and Huberman 2002)

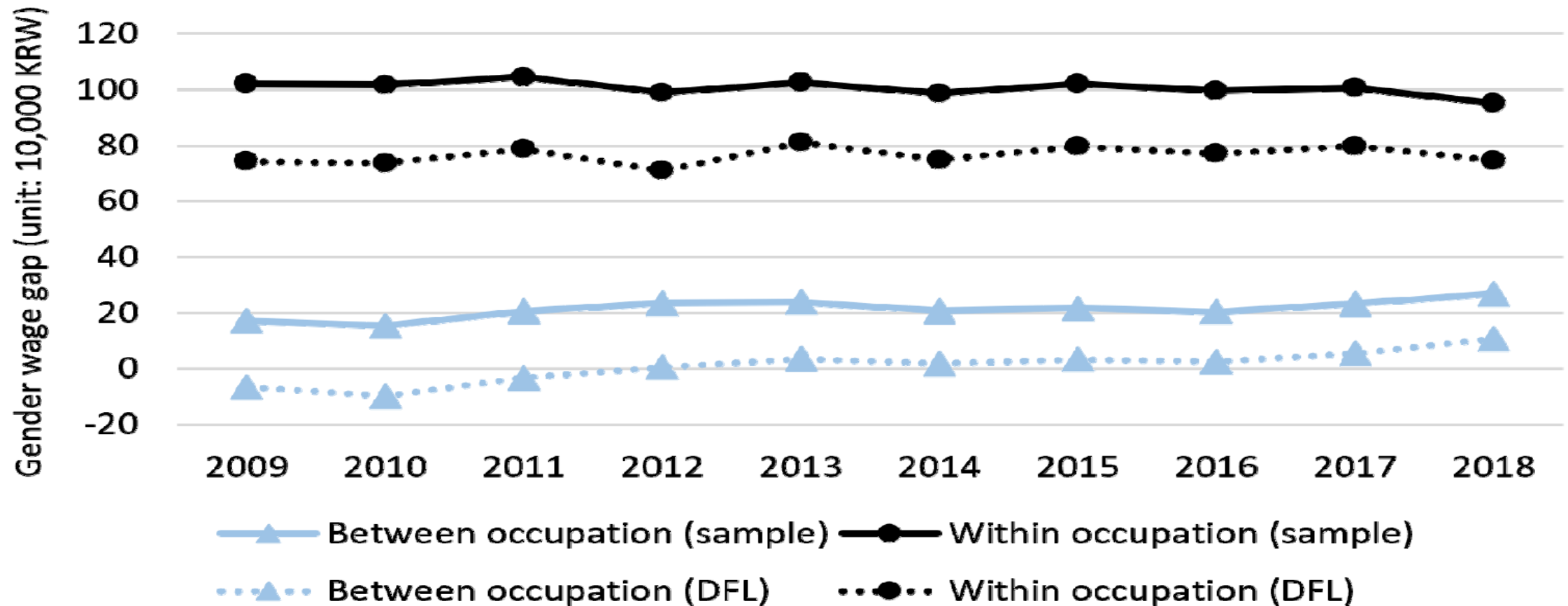
Occupational segregation- trend

<Figure 1> Occupational Segregation Paradox: Duncan Index of Dissimilarity
Measuring Occupational Segregation by Gender in Korea, Japan, and US



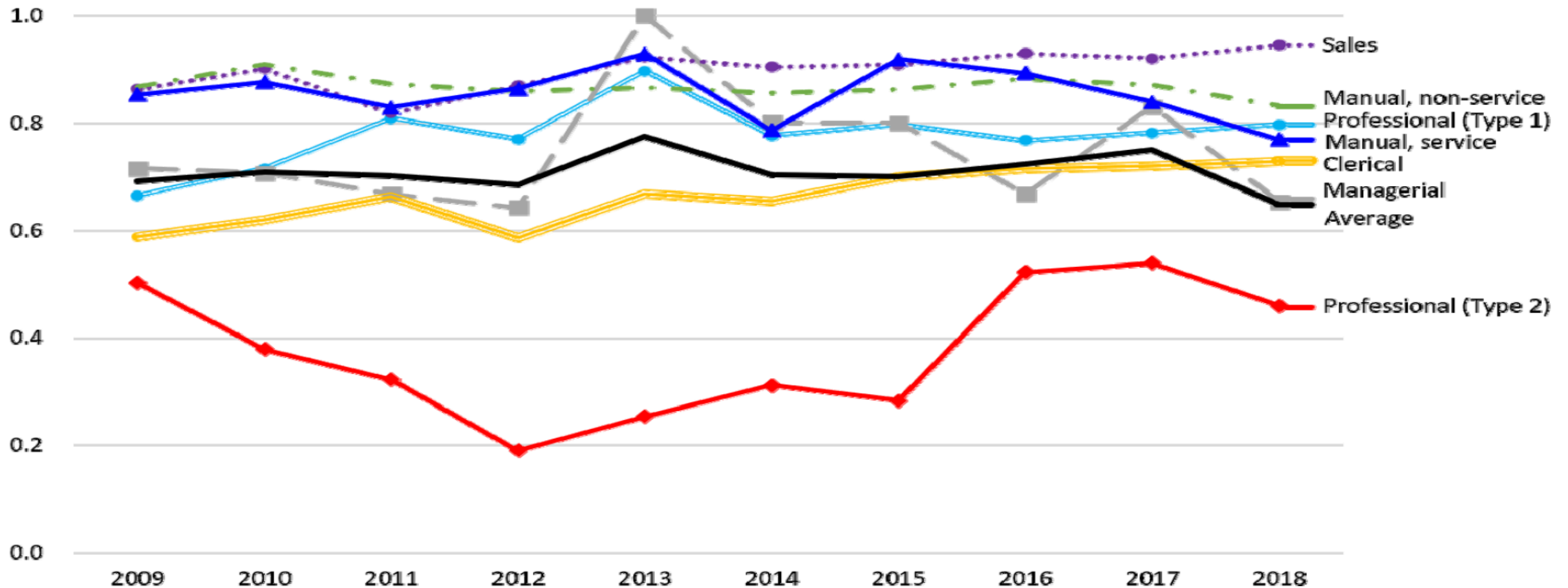
Occupational segregation – wage gap

<Figure 2> Decomposition of Gender Monthly Wage Gap into between and within Occupation Components, Before and After DFL Counterfactual Treatment



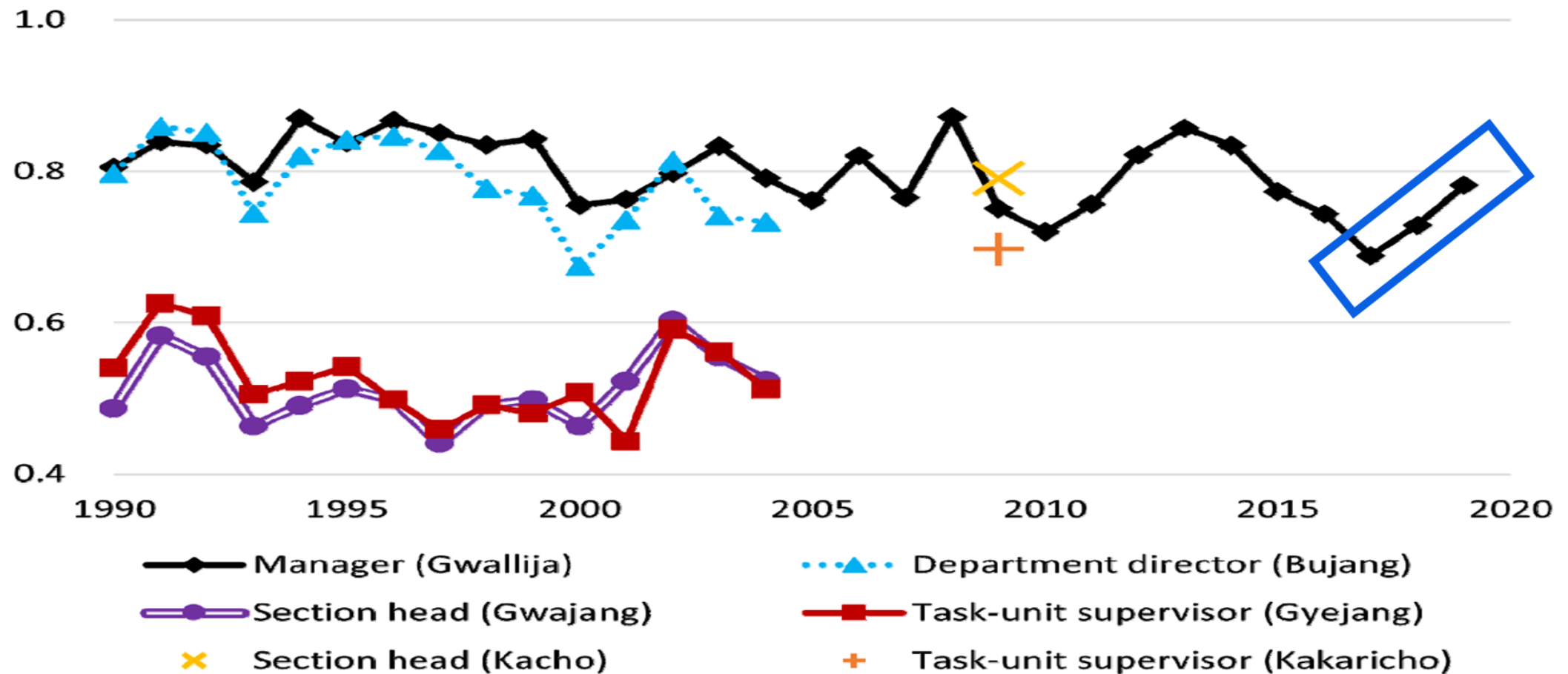
Wage gap: by occupation

<Figure 3> Unexplained Portion of Gender Wage Gap After DFL Counterfactual Treatment



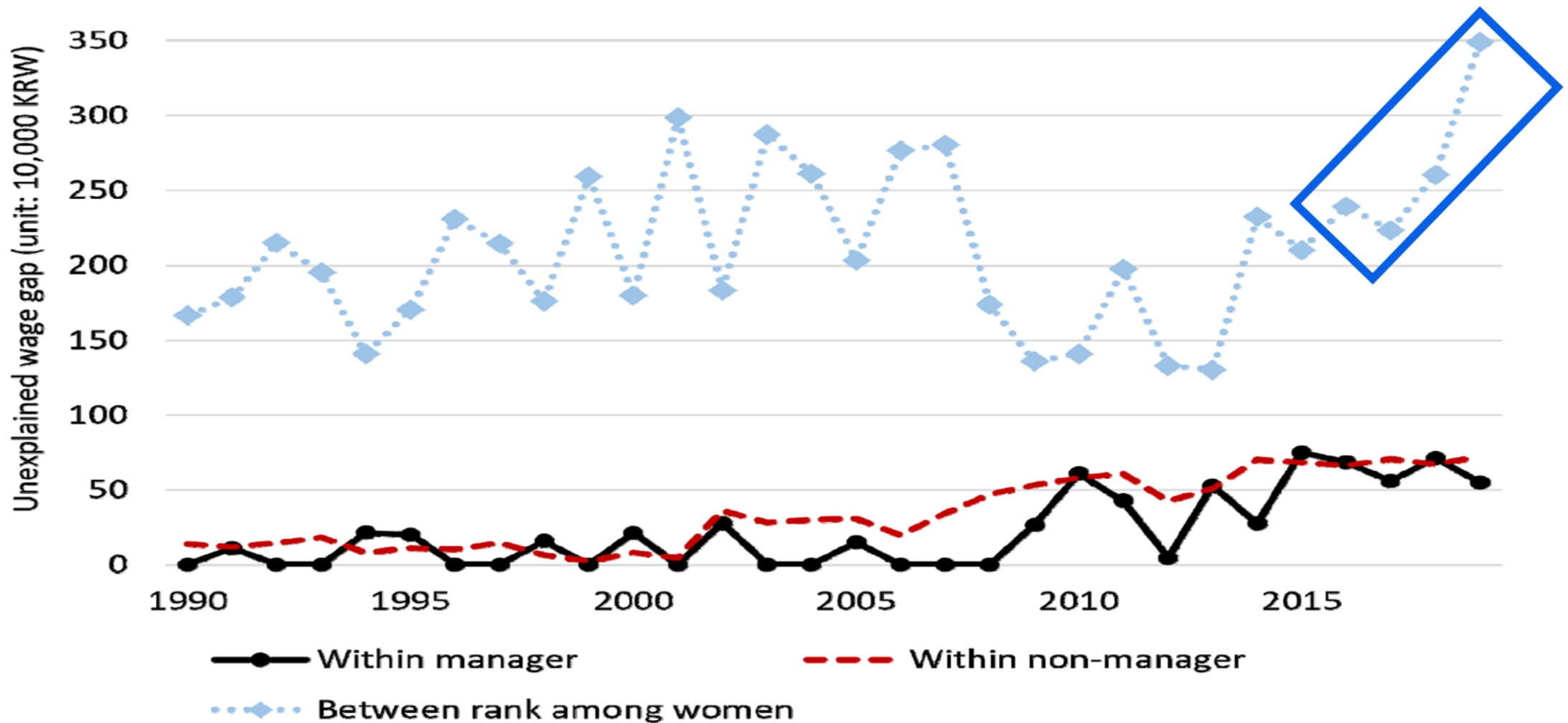
Vertical segregation (glass ceiling)- trend

<Figure 4> Unexplained Portion of Gender Gap in Managerial Positions after DFL Counterfactual Treatment



Vertical segregation – wage gap

<Figure 5> Unexplained Monthly Wage Gap in between and within Rank Components



A piece of white paper with a jagged, torn edge is positioned diagonally. The word "CONCLUSION" is printed in a bold, black, sans-serif font across the center of the torn section. To the left of the word, a small, cylindrical piece of the same paper is rolled up, partially overlapping the main piece. The background is a plain, light gray surface.

CONCLUSION

1. Within vs. Between Occupations

- Gender wage gap primarily driven by disparities **within** occupations, not **between** them.
- Counterfactual analysis (assuming equal human capital):
 - **Between occupations:** Gap < 100,000 KRW/month
 - **Within occupations:** Gap \approx 800,000 KRW/month

2. Vertical Segregation (glass ceiling) and Promotions

- **Within same job rank:** Women earn \approx 300,000 KRW/month less than men
- **Non-promoted women** (vs. promoted female manager): Earn \approx 2.1 million KRW/month less
- **Managerial promotions:**
 - Women less likely to be promoted to managerial roles
 - 70% of promotion gap remains unexplained (assuming equal human capital)
- Key driver: Fewer promotions for women lead to larger wage gaps within occupations

3. Trends Over Time

- Patterns largely unchanged over the reviewed period
- Gender wage gap has worsened in recent years



From inequality to injustice (inequity)

- **Policy Implications: South Korea**

- Women's equality – hottest social issue
- Lacks sufficient empirical data for evidence-based policymaking
- Deepen/ widen societal discussions based on evidence

- **Policy Implications**

- Strong firm-level incentive for women's promotion