The Old Boys' Club

Schmoozing and the Gender Gap

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Introduction

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  - 5% at CEO.
- Improvement over the last decades has been agonizingly slow.
- Not only unfair, but also massively inefficient (Hsieh et al., 2014).

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  - Employees interact with managers in various ways (e.g., breaks, coffee, sports).
  - Might benefit certain workers: learn skills, improve task assignments, or gain favor in promotion decisions.
- Long-standing *old boys' club* hypothesis.
  - Women are less able than men to schmooze and interact with male managers.
  - This disadvantage contributes to the gender gap in promotions.

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- Research Questions:
  1. Do social interactions with the manager lead to faster career progression?
  2. Do male employees have a career advantage from social interactions with their male managers?

Research Design

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   - Track careers.
2. Our approach: quasi-experimental evidence.
   - Event-study analysis of manager switches in a large commercial bank.
   - Smoking status of managers and employees introduce variation in overlapping breaks together.

Preview of Findings

- Evidence of social-interactions channel.
  - Smoking employees paired with a smoking manager take more breaks together and are promoted faster.
  - Unaccompanied by observable increases in productivity.

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- Evidence of social-interactions channel.
  - Smoking employees paired with a smoking manager take more breaks together and are promoted faster.
  - Unaccompanied by observable increases in productivity.
- Socializing contributes to a male-to-male advantage.
  - Male employees paired with male managers experience similar boost in shared breaks and promotion to co-smokers.
  - Can explain about a third of firms' gender gap.
  - Effects are mediated by physical proximity between employee and manager.

Related Literature

- **Social ties at work.** Mas & Moretti (2009); Bandiera, Barankay, and Rasul (2010); Castilla (2011); Field et al. (2015); Mengel (2015); Glover et al. (2017); Battaglini et al. (2019)
- **Gender wage gap.** Blau and Kahn (2000); Blau and DeVaro (2007); Bertrand et al. (2010); Goldin (2014); Azmat & Pertrongolo (2014); Cortes & Pan (2019); Bronson and Thoursie (2019)
- **Female leaders.** Bell (2005); Cardoso & Winter-Ebmer (2010); Grissom et al. (2012); Lucifora (2016); Kunze & Miller (2017); Dalvit et al. (2018); Flabbi et al. (2019); Mengel et al. (2019); Bertrand et al. (2019).

Our Contribution

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1. Identifying the impact of social interactions on career outcomes.
   - Relevant beyond the gender gap too.
2. Causal identification of manager gender with quasi-experimental methods.
   - Existing studies in corporate context are based on correlations.
3. Evidence on social interactions mechanisms for male-to-male advantage in corporate environment.

Institutional Context

- Large commercial bank in Southeast Asia.
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Institutional Context

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  - Thousands of employees, millions of customers, billions of dollars in assets.
- Smoking rates are the same as the world average 35% among men, 5% among women. OECD countries, 29% and 18%.
- "Typical" drop in female career progression.
  - 75% females at entry-level.
  - 61% at middle management.
  - 25% at C-Suite.
  - 0% at CEO.
- Helpful regional and cultural variation.

Sample Details

- Monthly employee panel from Jan-2015 to Dec-2018.
- Key outcome: employee's paygrade.
  - Tracks the employee's vertical progression in the corporate ladder.
  - +1 paygrade $\approx$ 25% raise.

Sample Details

- We can infer smoking status of employees and managers.
  - Self-reports from annual health exam.
  - Supplemented by short surveys.
  - 33% (19%) of employees (managers) are smokers.
- 2,907 unique employees, and 997 unique managers.

Summary of Switch Events

- We focus on switches that are outside of the control of the employee. +
  - Rotation of managers between teams.
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  - Rotation of managers between teams.
  - Not individual transfers or promotions.
- 1,798 event "shocks." +
  - Characteristics similar for managers/employees with vs. without events. emp in out

Shocks to Social Interactions

- We use co-smoking as quasi-experimental shock.
  - Anecdotally, smoker managers tend to socialize more with smoker employees.

Shocks to Social Interactions

- We use co-smoking as quasi-experimental shock.
  - Anecdotally, smoker managers tend to socialize more with smoker employees.
  - Hypothesis: when switching to smoker managers, smoker employees will socialize more and get promoted faster.

Research Design

Conceptual Framework

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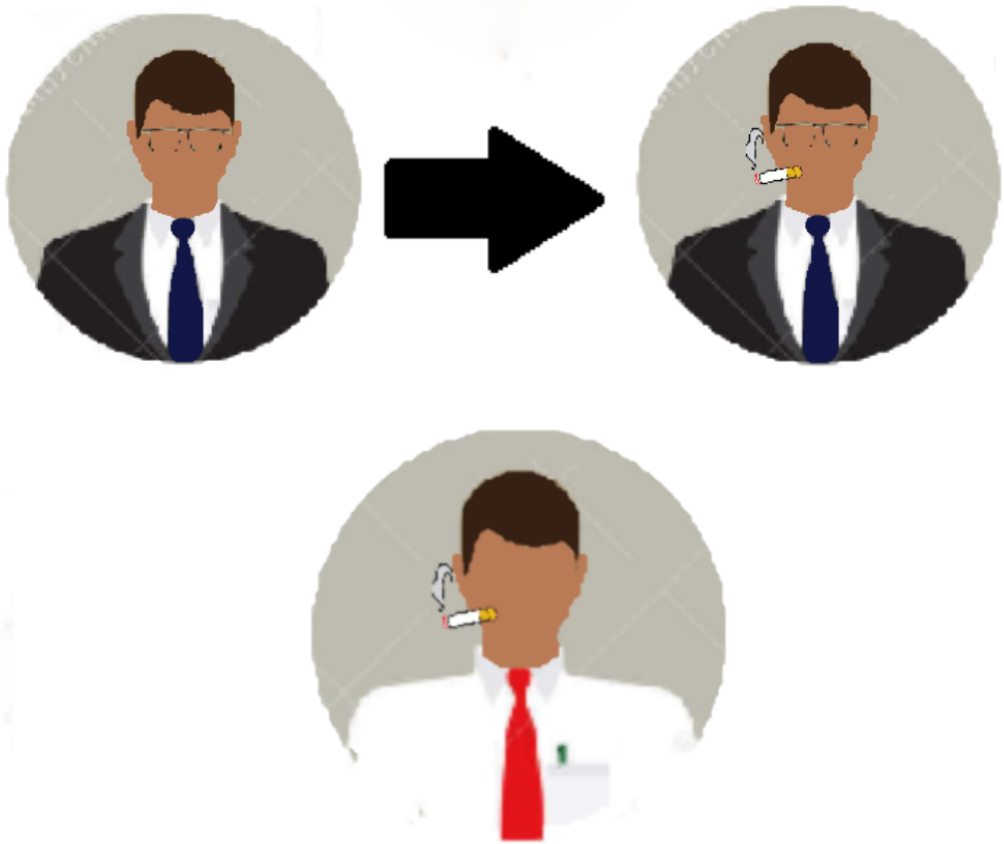
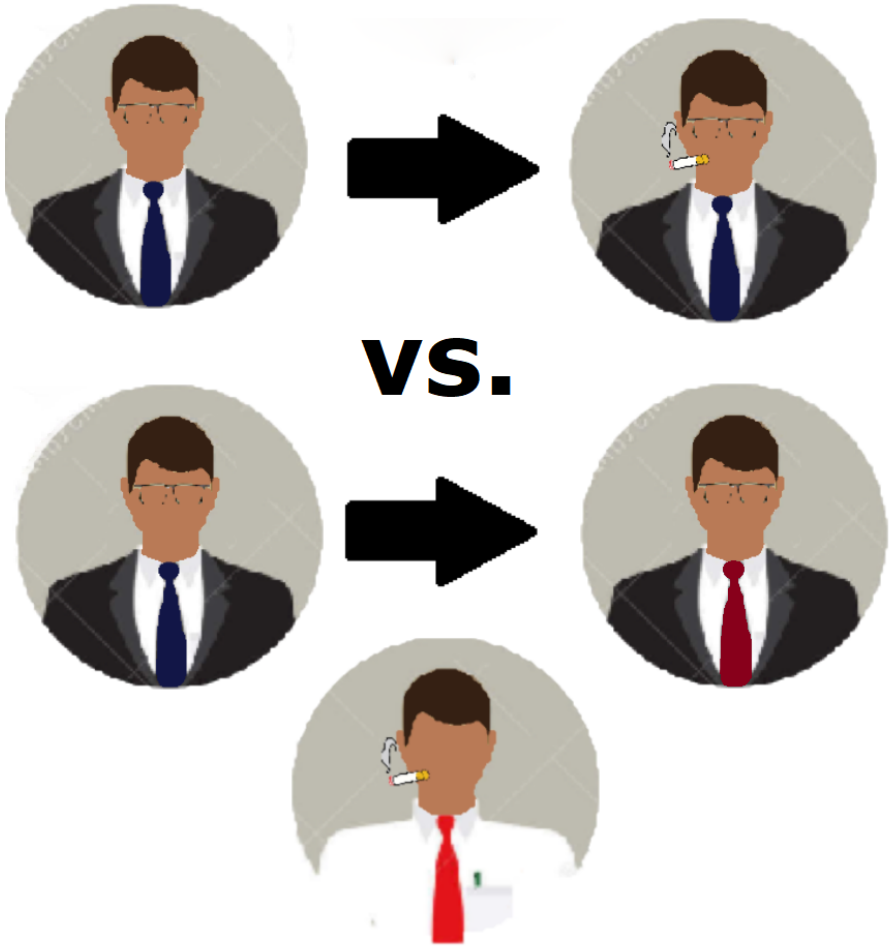


Conceptual Framework



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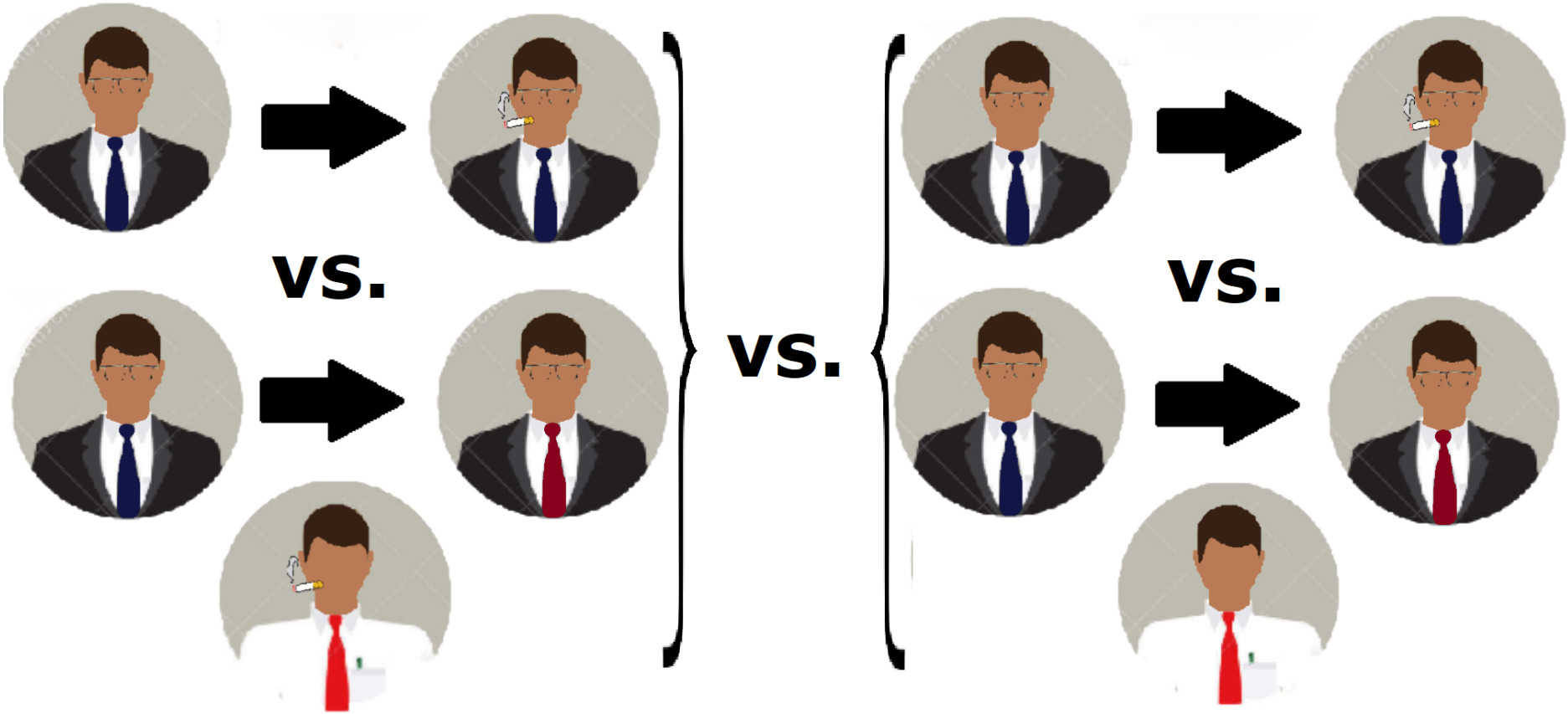


Effect on Social Interaction

- We want to measure effects of smoking status on social interactions.
- We use survey data from the Sales & Distribution division.
  - Out of 10 breaks, how many were shared with the manager?
  - Can report about last 1–6 managers.
- Due to smaller sample sizes, use stylized event-study regression.

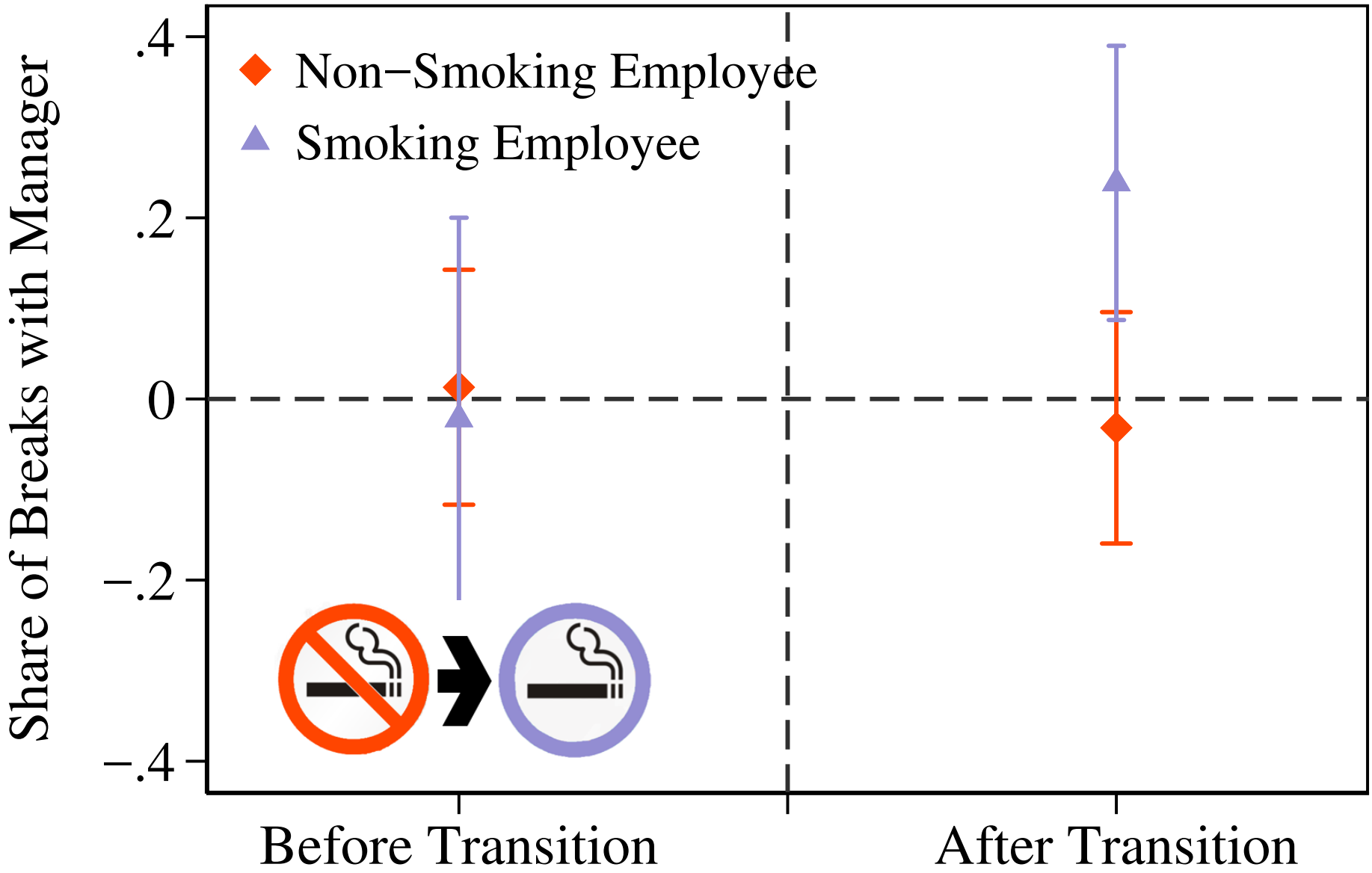
Econometric Model

$$y_{i,m} = \sum_{j \in J_S} \beta^S_{j,post} S_i D^j_{i,m} + \sum_{j \in J_S} \beta^N_{j,post} (1 - S_i) D^j_{i,m} +$$

$$\sum_{j \in J_S} \beta^S_{j,pre} S_i D^j_{i,m+1} + \sum_{j \in J_S} \beta^S_{j,pre} (1 - S_i) D^j_{i,m+1} + X_{i,m}\gamma + \epsilon_{i,m}$$

- i,m: employee, manager.
- $y_{i,t}$: share breaks spent with manager.
- S_i: smoking-status indicator.
- j: event type (e.g., N2S, N2N).
- $D^j_{i,m}$: dummy equal to 1 if i experiences event type j from manager m to manager $m+1$.
- $X_{i,m}$: unit size, manager's pay grade, position title dummies, smoking status of emp. and mgr.

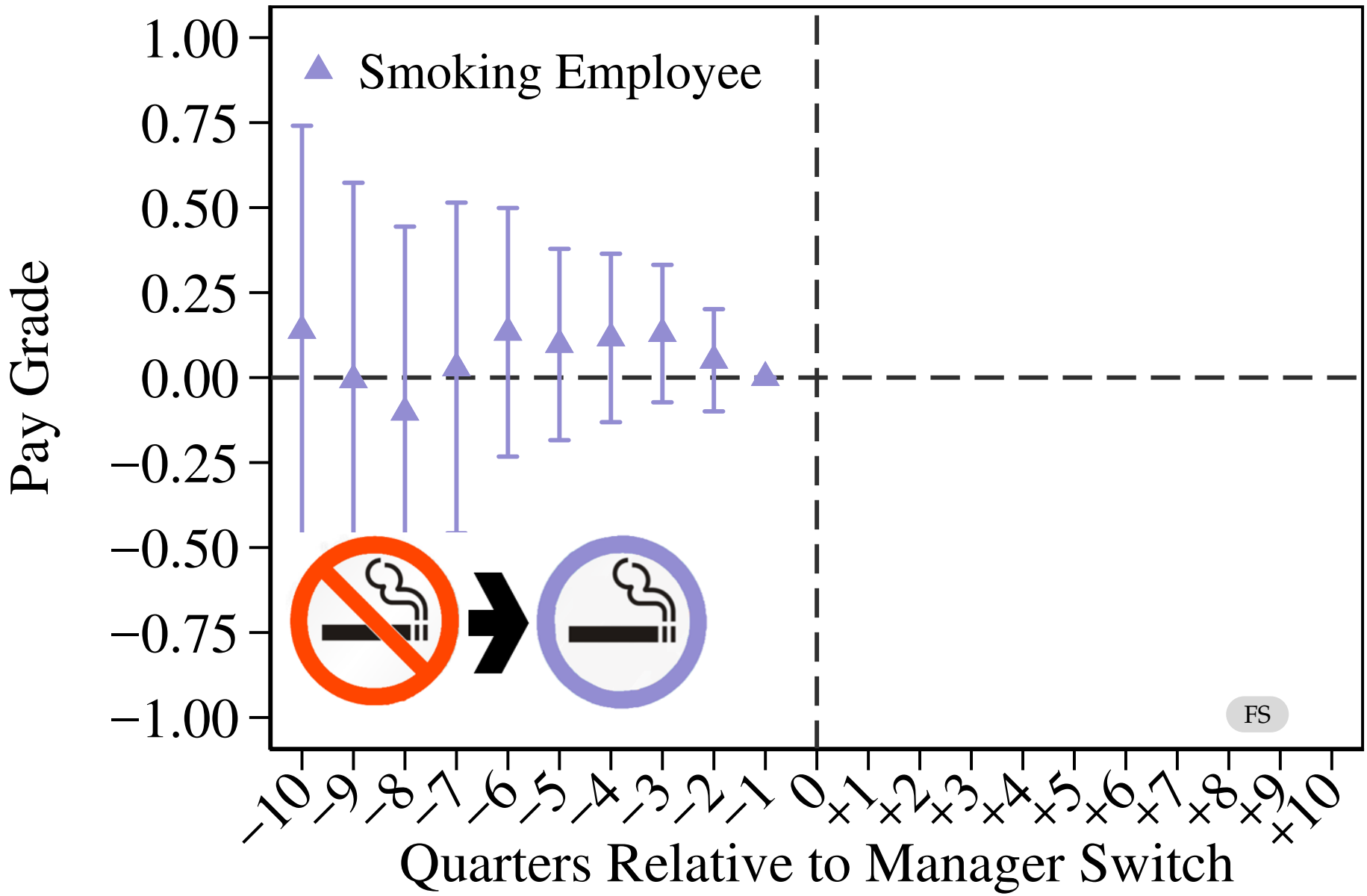
Effect on Social Interaction

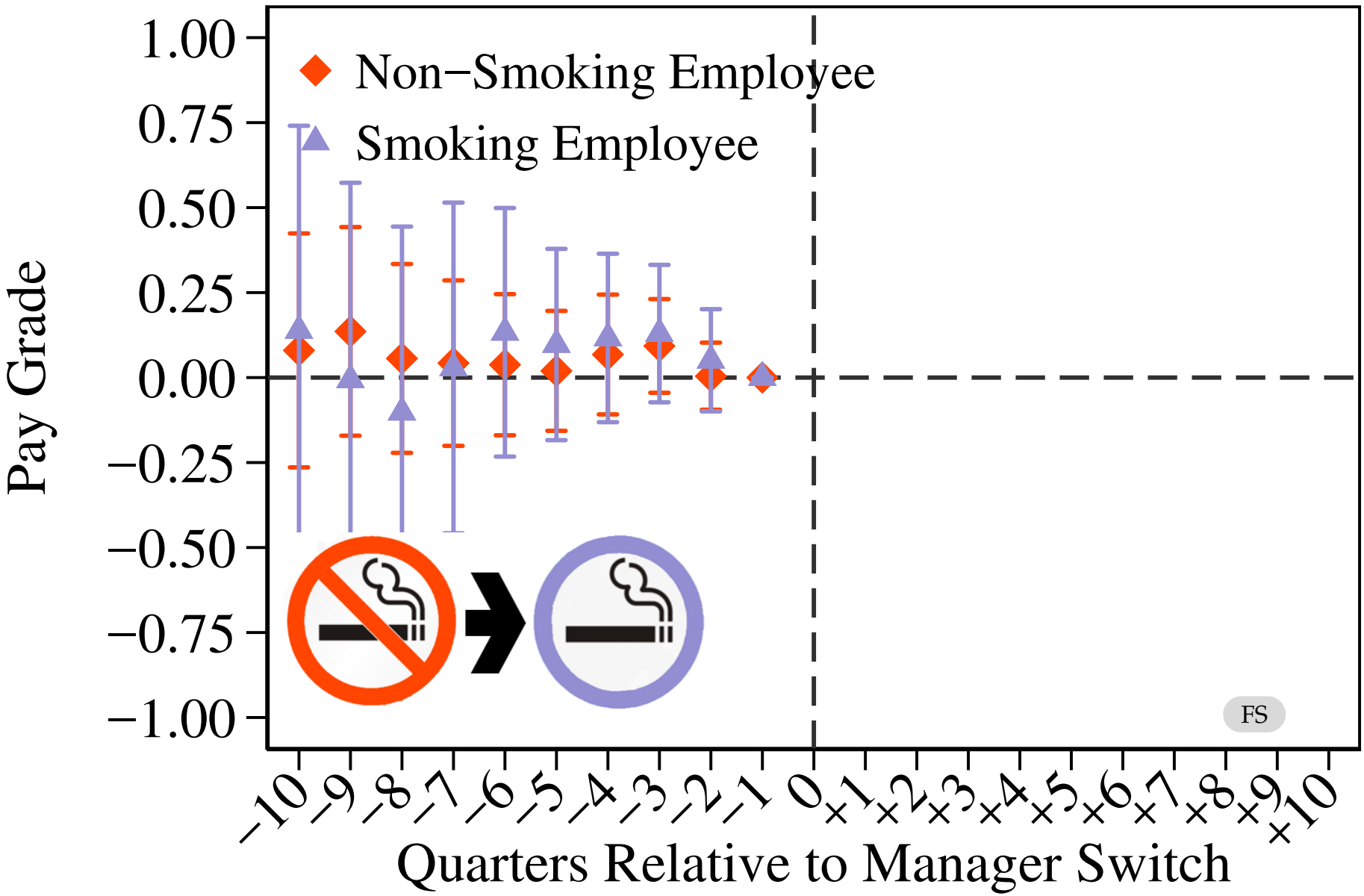


Econometric Model

$$y_{i,t} = \sum_{j \in J_S} \sum_{s \in S} \beta^S_{j,s} \cdot S_i \cdot D^j_{i,t+s} + \sum_j \sum_s \beta^N_{j,s} \cdot (1 - S_i) \cdot D^j_{i,t+s} +$$
$$\gamma_i + \eta_{i,t} + \delta^S_t + \delta^N_t + \epsilon_{i,t}$$

- i,t: employee, time.
- $y_{i,t}$: outcome (e.g., paygrade).
- S_i: smoking-status indicator.
- j: event type (e.g., N2S, N2N).
- $D^j_{i,t+s}$: event-study dummies.
- γ_i, $\eta_{i,t}$, δ^S_t, δ^N_t: emp, manager, and time FE.


Smoking Employee
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch
FS


Non−Smoking Employee
Smoking Employee
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch
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Non−Smoking Employee
Smoking Employee
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10
Quarters Relative to Manager Switch
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Non−Smoking Employee
Smoking Employee
Pay Grade
1.00
0.75
0.50
0.25
0.00
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−0.50
−0.75
−1.00
FS
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
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+4
+5
+6
+7
+8
+9
+10
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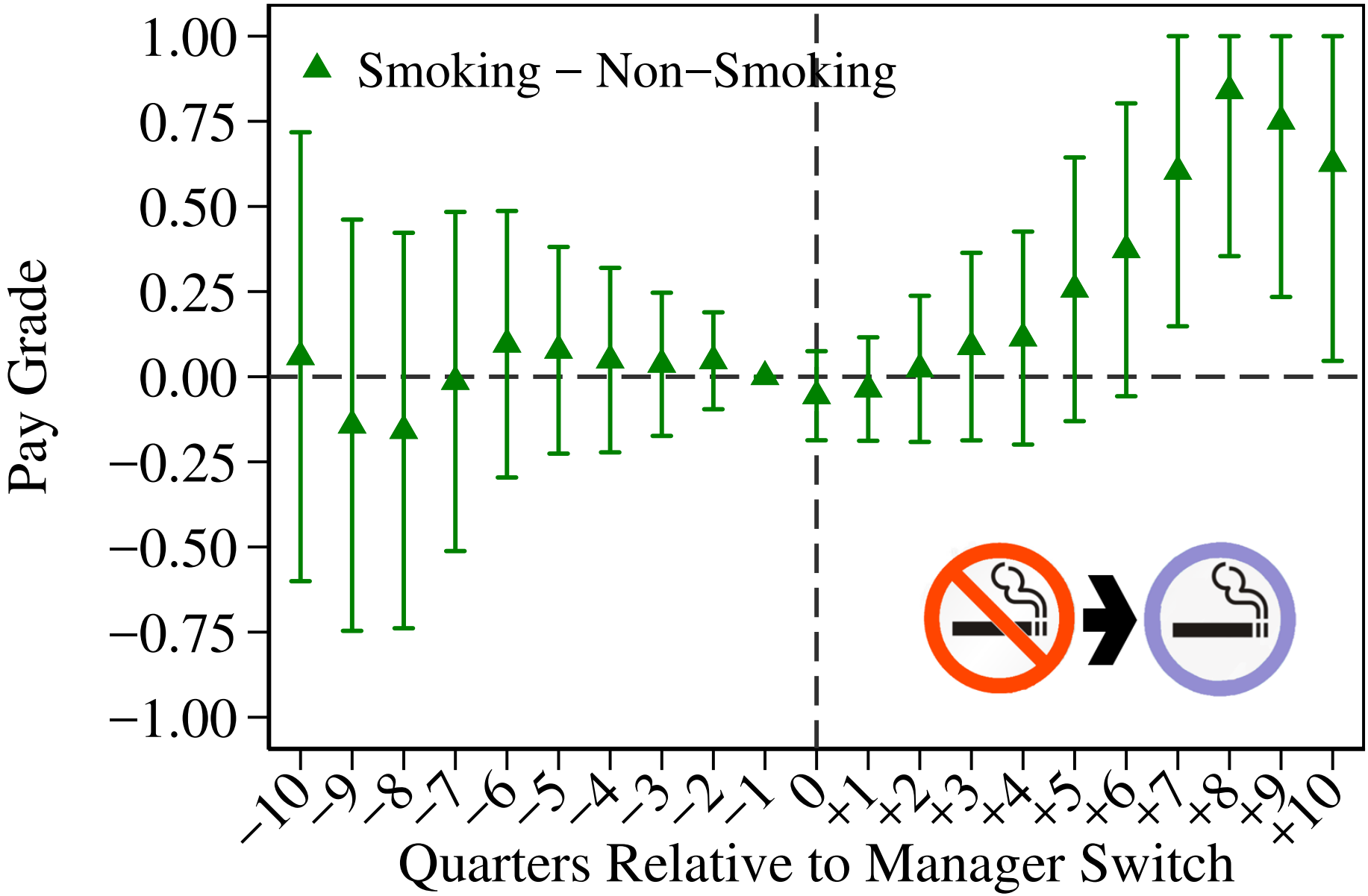
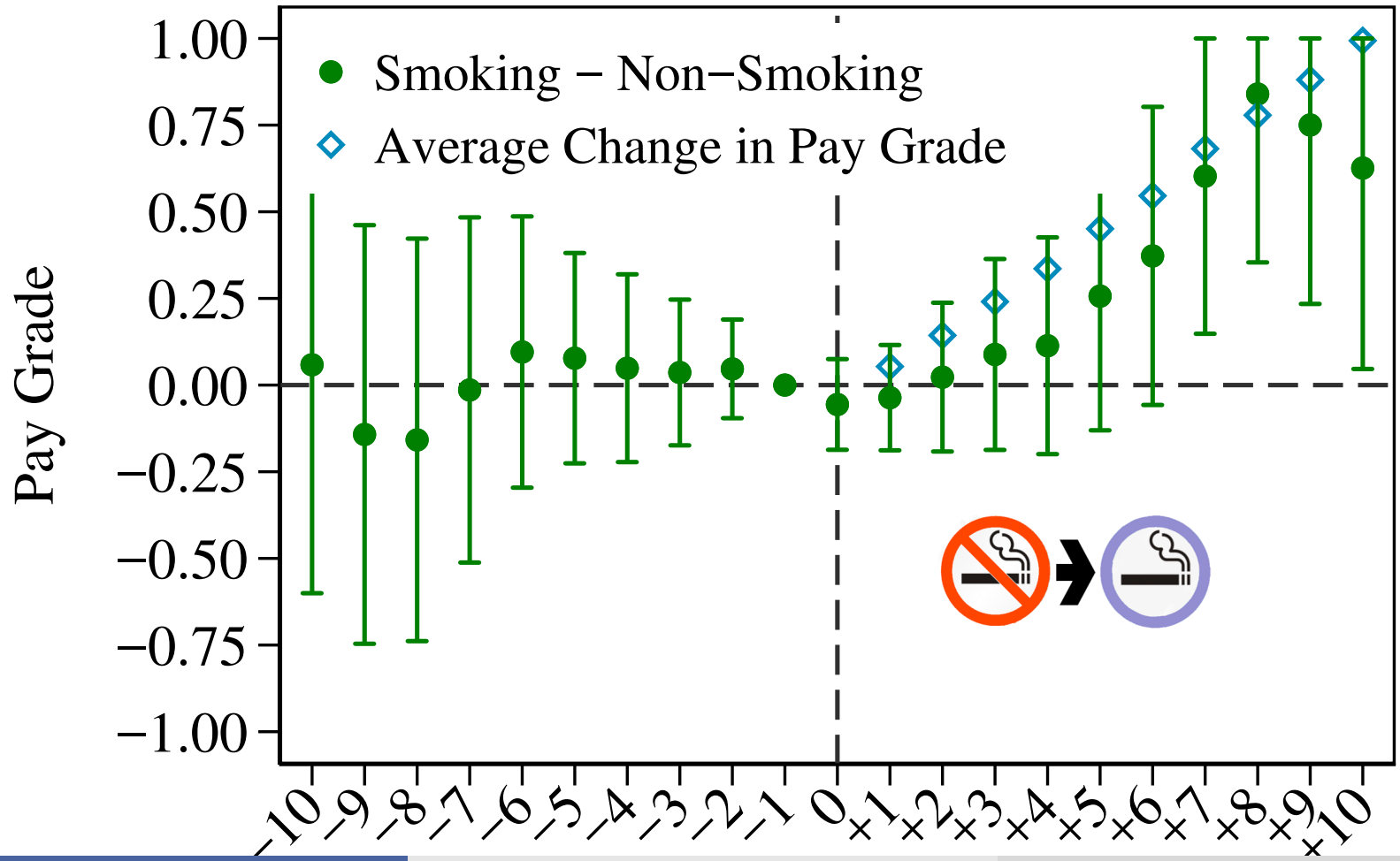

Smoking − Non−Smoking
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
×1
×2
×3
×4
×5
×6
×7
×8
×9
×10
Quarters Relative to Manager Switch

Magnitude of Effect

- +10 quarters later, smoker-to-smoker advantage of 0.63 pay grades, or 15% of salary.



Interpretation

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  - Matching on traits per se do not exhibit same patterns (eg. same college, same hometown, same cohort, same gender +)
- Are these effects driven by employees who "give up"?
  - Reproduce event study graph using firm exit as dependent variable and find no effect. +

Interpretation

- Do these differences in promotions reflect differences in effort/productivity?
  - Naive interpretation: inspiration/motivation.
  - Cynical interpretation: bias/favoritism.

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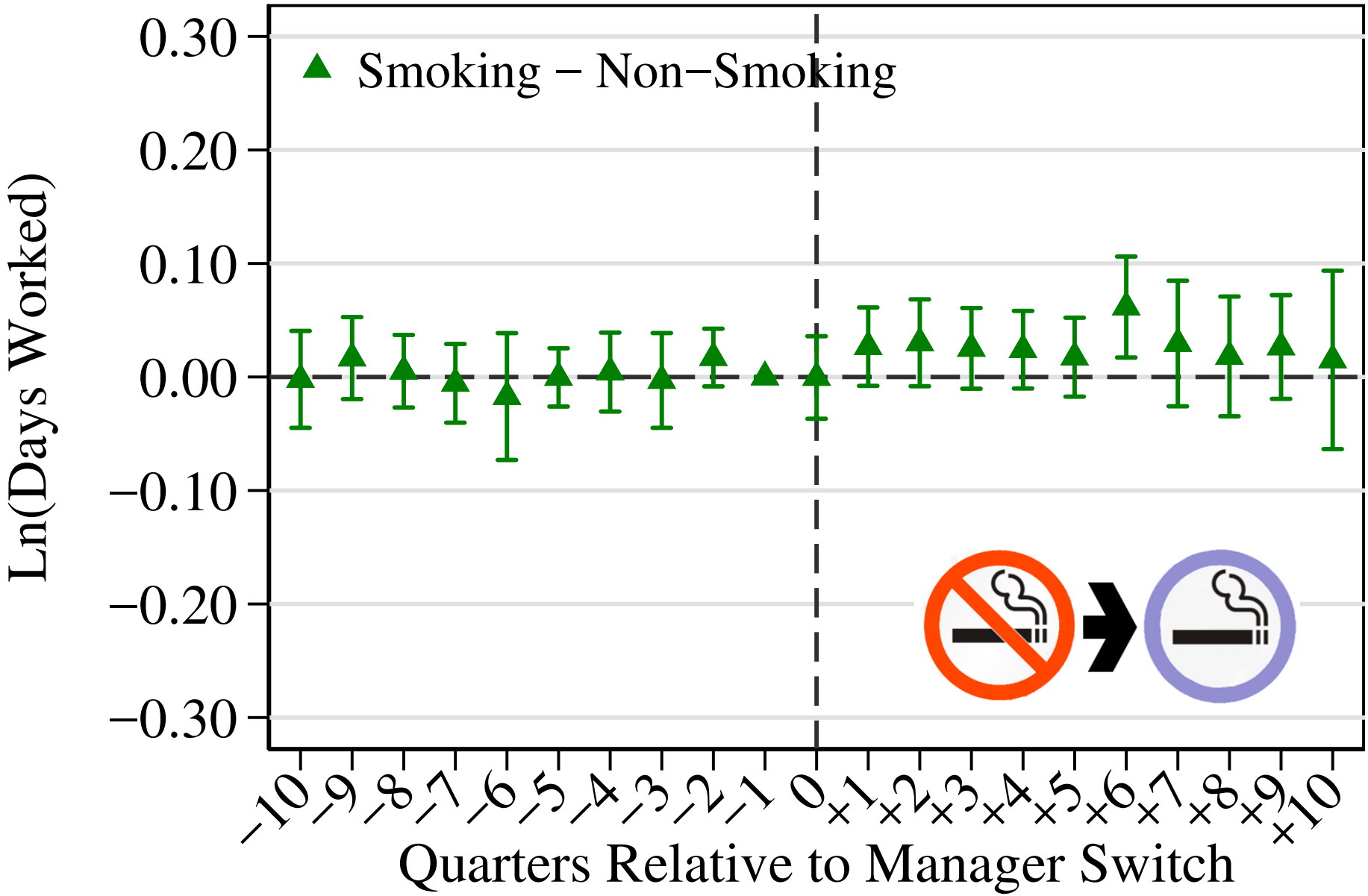
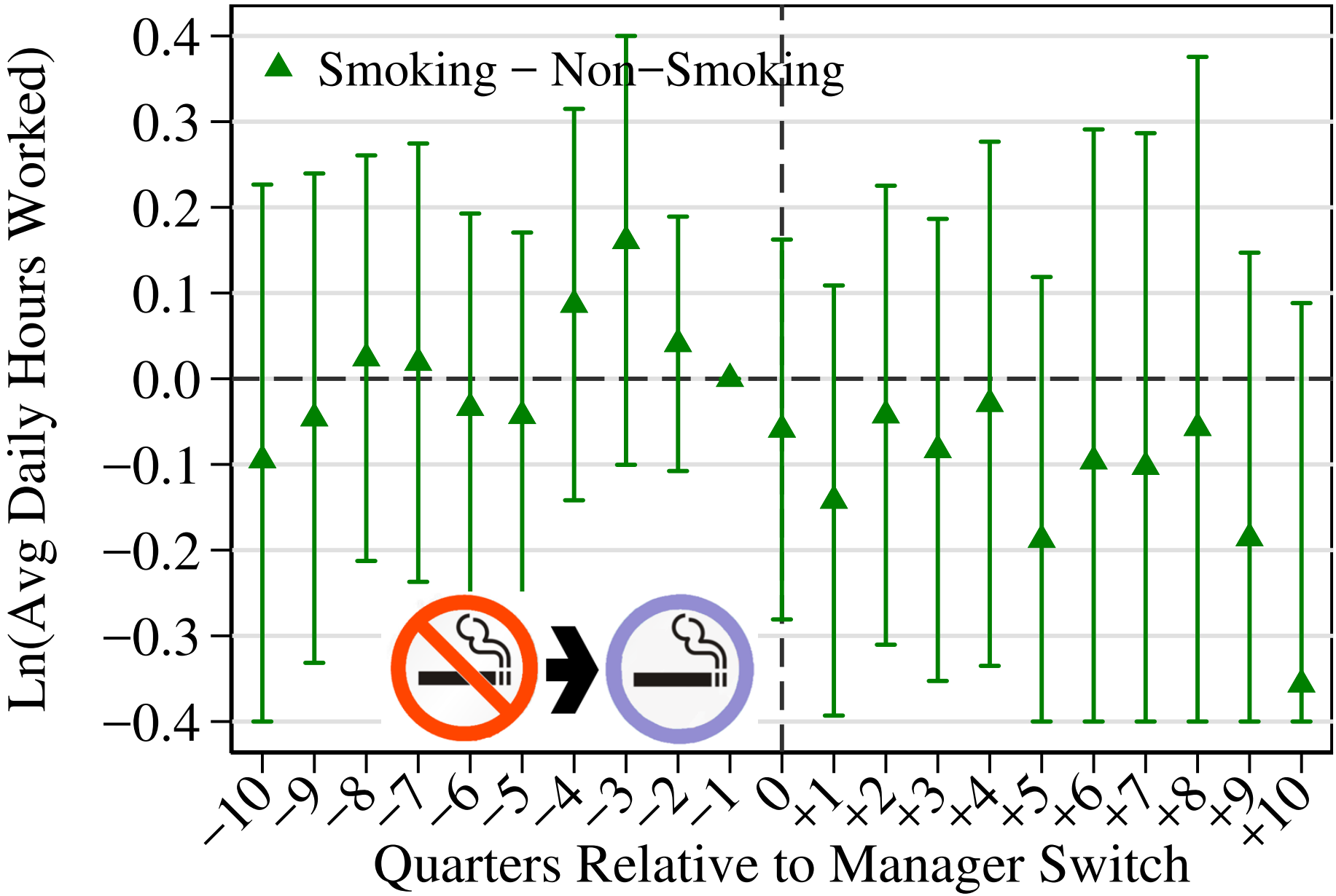
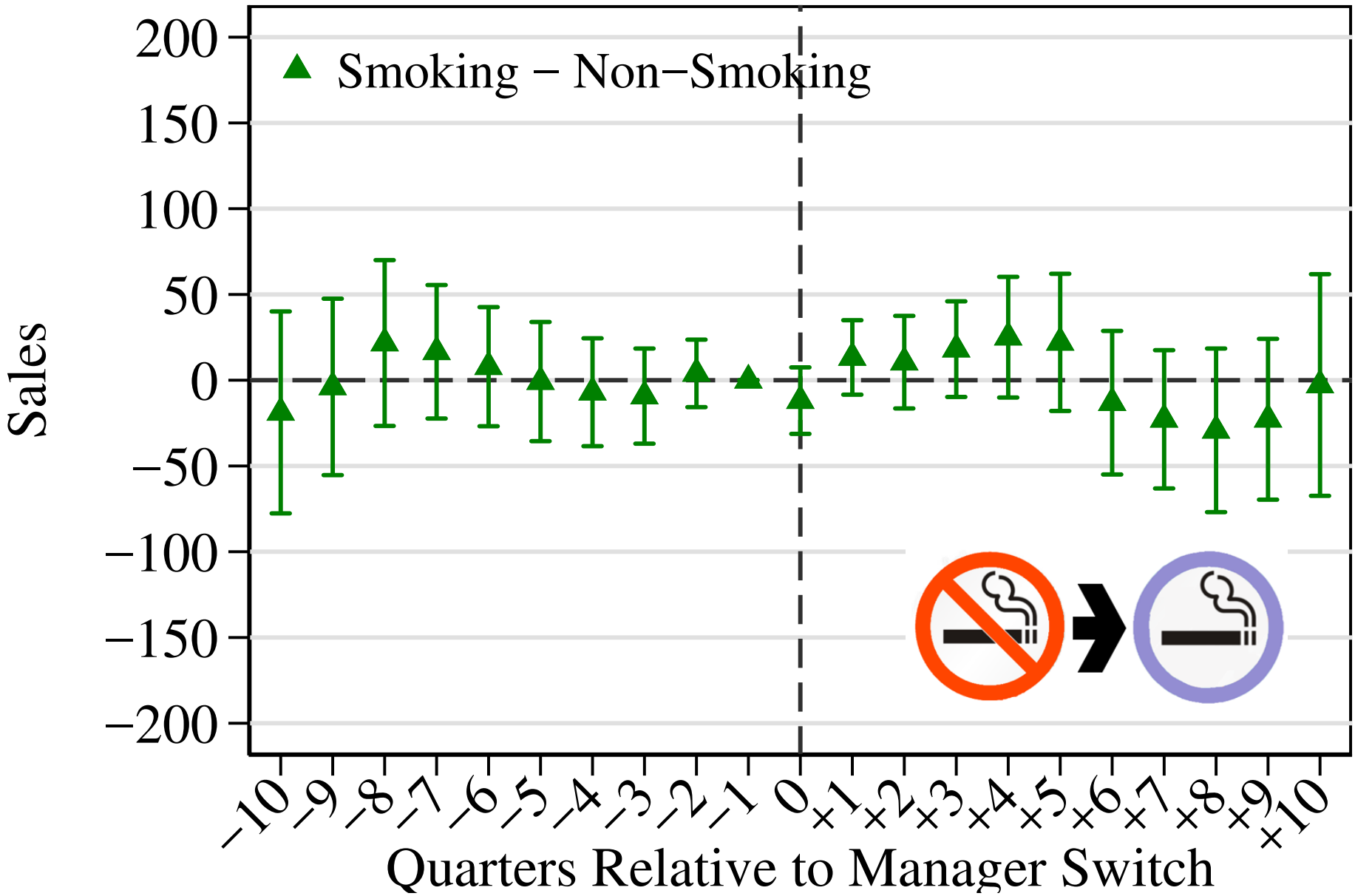
  - Naive interpretation: inspiration/motivation.
  - Cynical interpretation: bias/favoritism.
- Look at effects on following outcomes:
  - Number of days worked.
  - Hours worked (headquarter employees).
  - Sales revenues (sales employees).


Smoking − Non−Smoking
0.30
0.20
0.10
0.00
−0.10
−0.20
−0.30
Ln(Days Worked)
−10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10
Quarters Relative to Manager Switch


Smoking − Non−Smoking
Ln(Avg Daily Hours Worked)
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
−10 −9 −8 −7 −6 −5 −4 −3 −2 −1 0 +1 +2 +3 +4 +5 +6 +7 +8 +9 +10
Quarters Relative to Manager Switch


Smoking − Non−Smoking
Sales
200
150
100
50
0
−50
−100
−150
−200
−10
−9
−8
−7
−6
−5
−4
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−2
−1
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+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch

Socialization and the Gender Gap

- Hypothesis: if social interactions matter for career progression, they may exacerbate the gender gap.
  - Smoking is one of many gendered social activities at work; e.g. sports viewing
  - Women may have additional constraints on their time, and may even select into roles with fewer and more regular hours (Juhn et al. 2020; Cubas et al. 2019; Goldin 2014)

Socialization and the Gender Gap

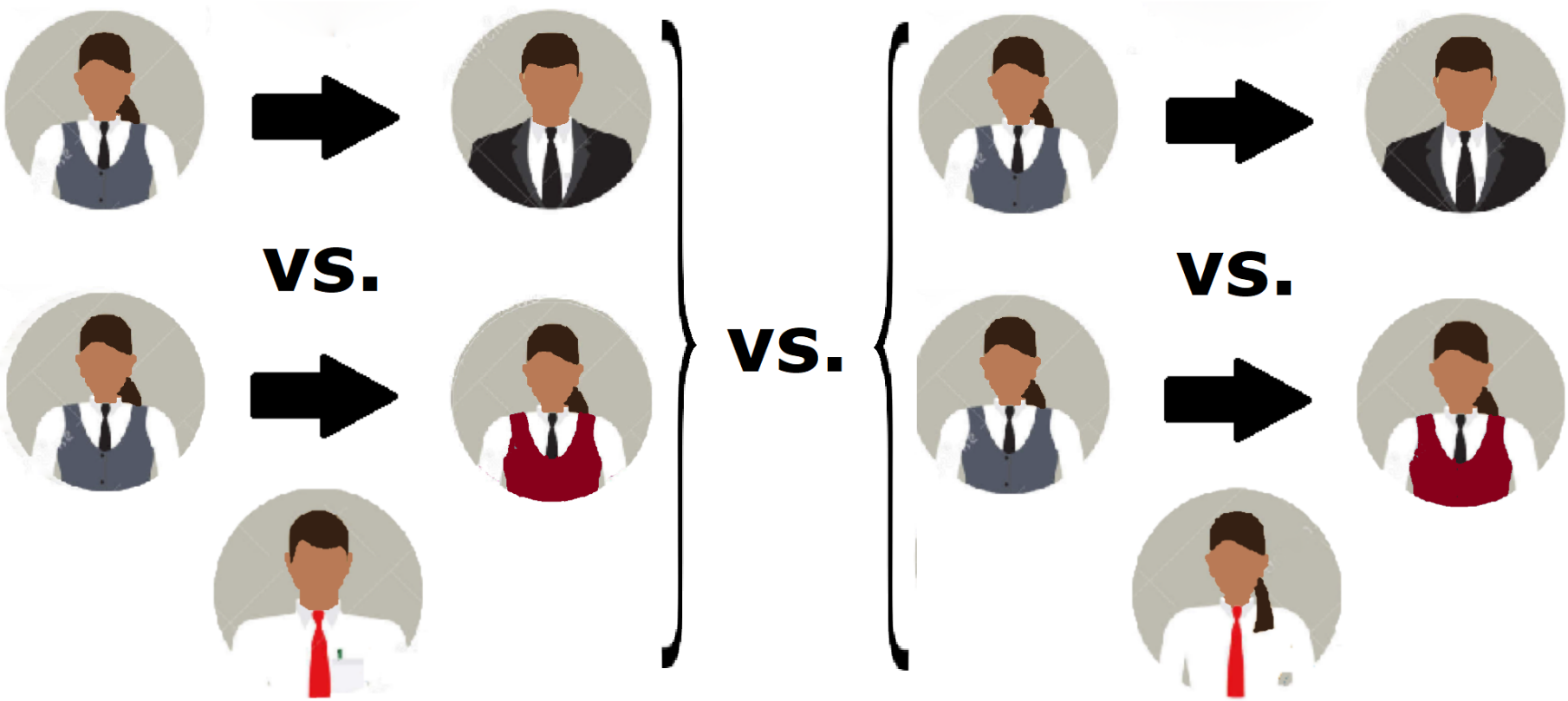
- Ideal experiment
  - Cross-randomize the gender of managers and access to socializing with employees.
  - Track socialization and career outcomes.
- Our research design
  - Quasi-random manager rotations.
  - Heterogeneity by physical proximity.
  - Comparison with smoker-to-smoker advantage.

Sample Details

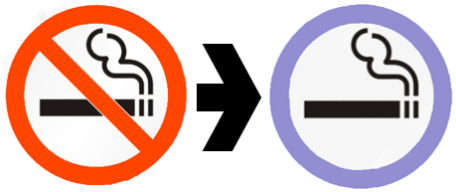
- Include all employees and managers:
  - Number of unique employees: 14,638.
  - Number of unique managers: 1,269.
  - 40% of employees experience an event.
- Sample 4x bigger than smoking sample.
  - Statistical power for additional tests.

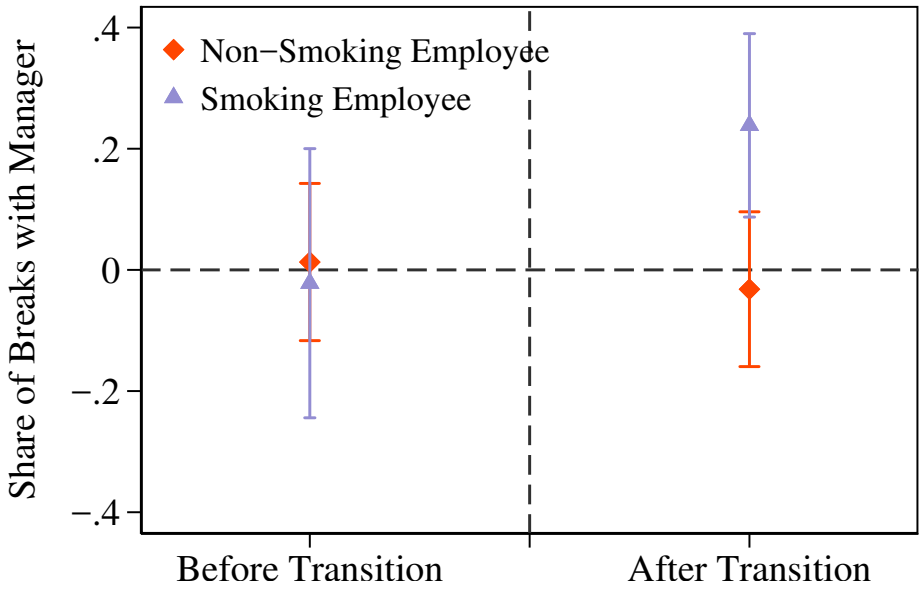
Results: Gender

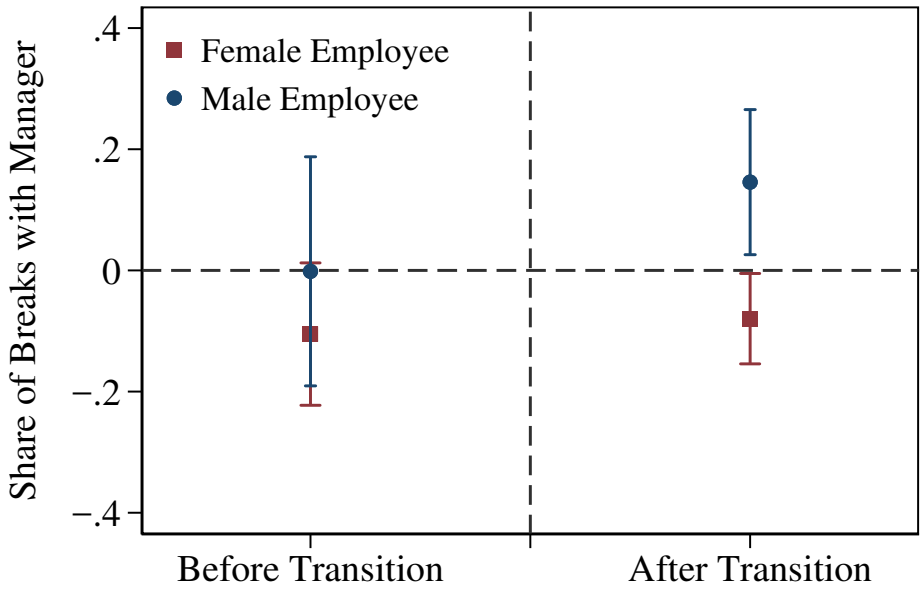
"Gaining" a Male Manager

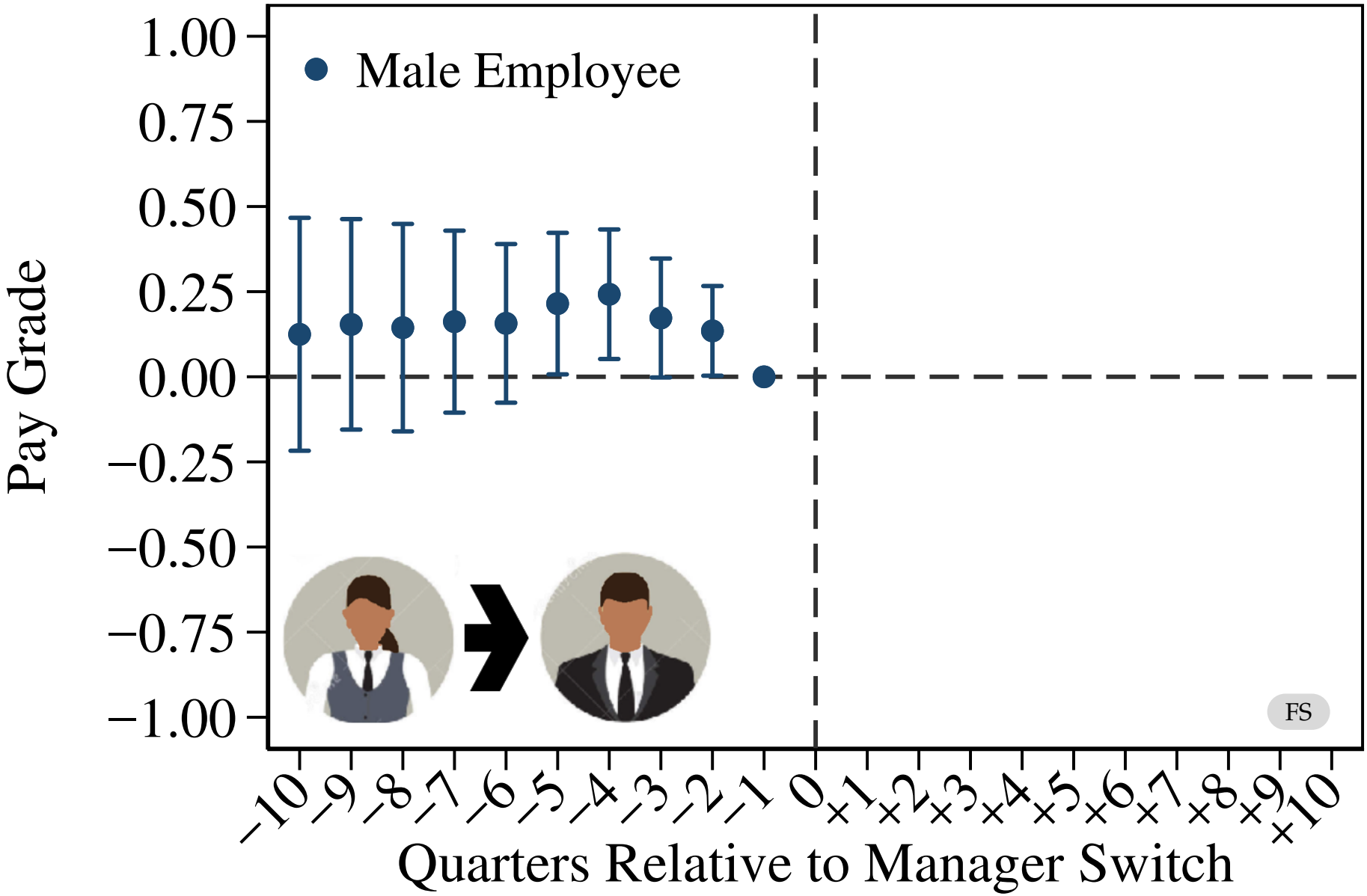


Effect on Social Interactions








Male Employee
Pay Grade
1.00
0.75
0.50
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0.00
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−0.75
−1.00
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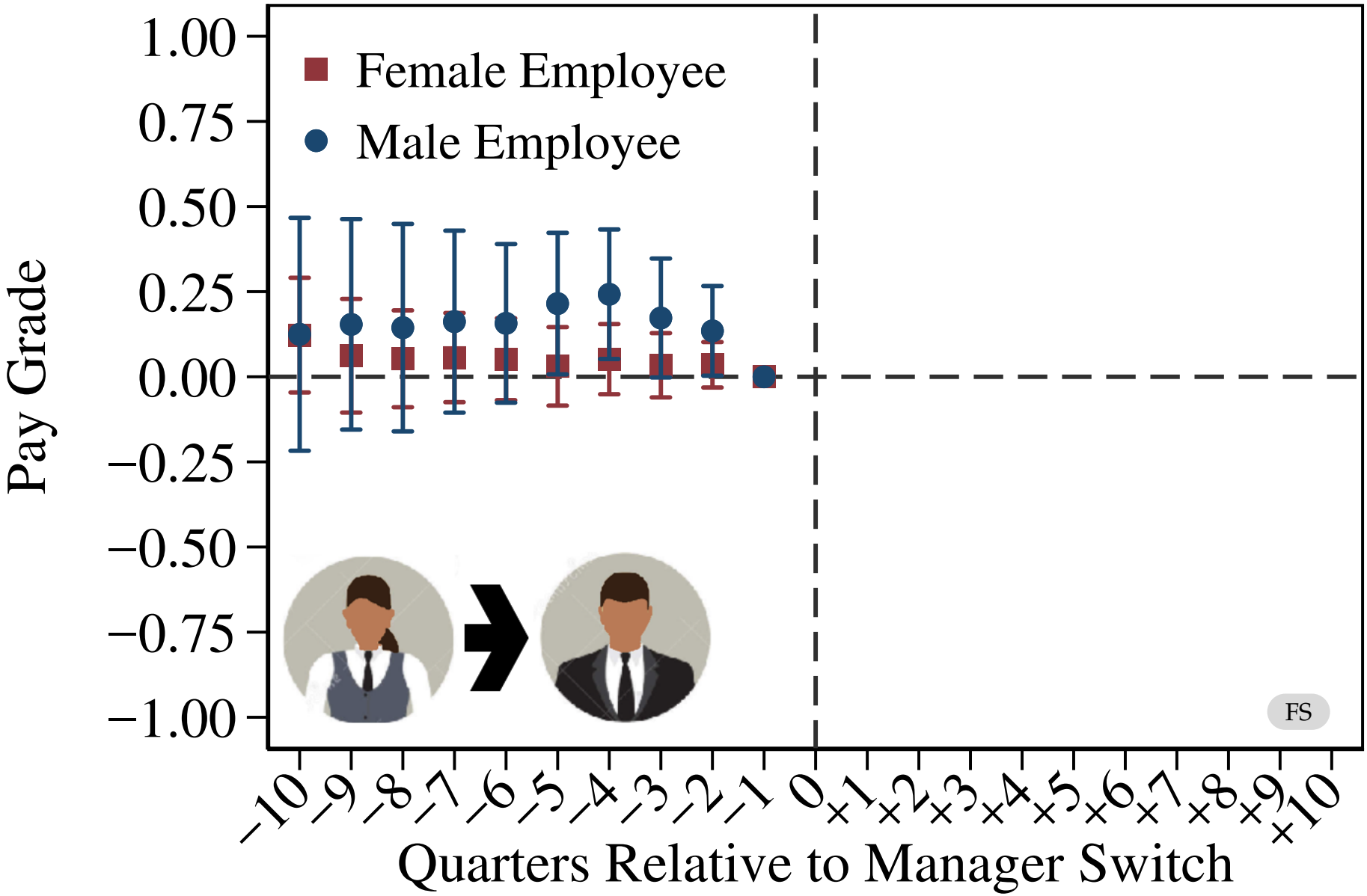
Quarters Relative to Manager Switch
FS


Female Employee
Male Employee
Pay Grade
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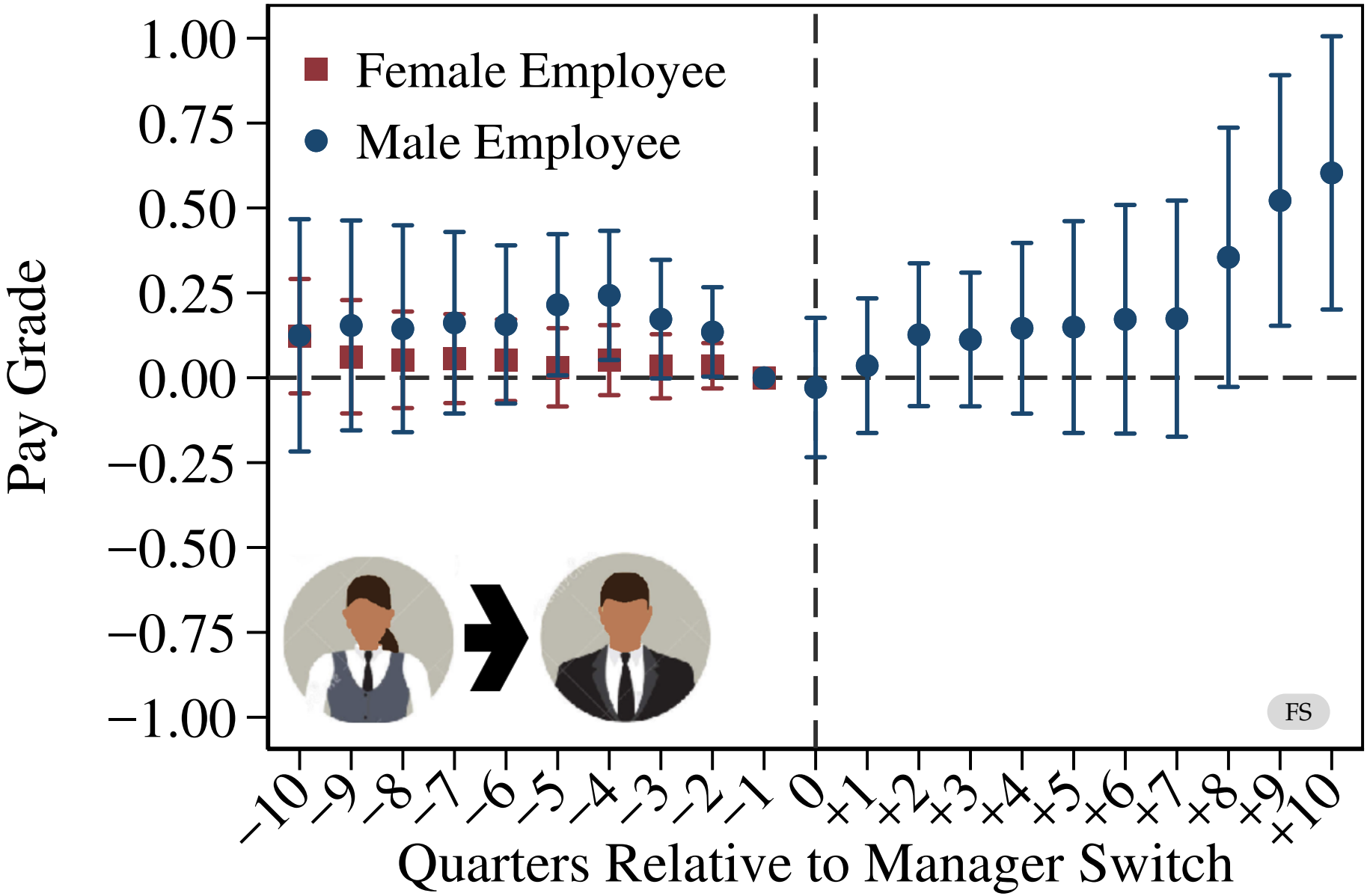
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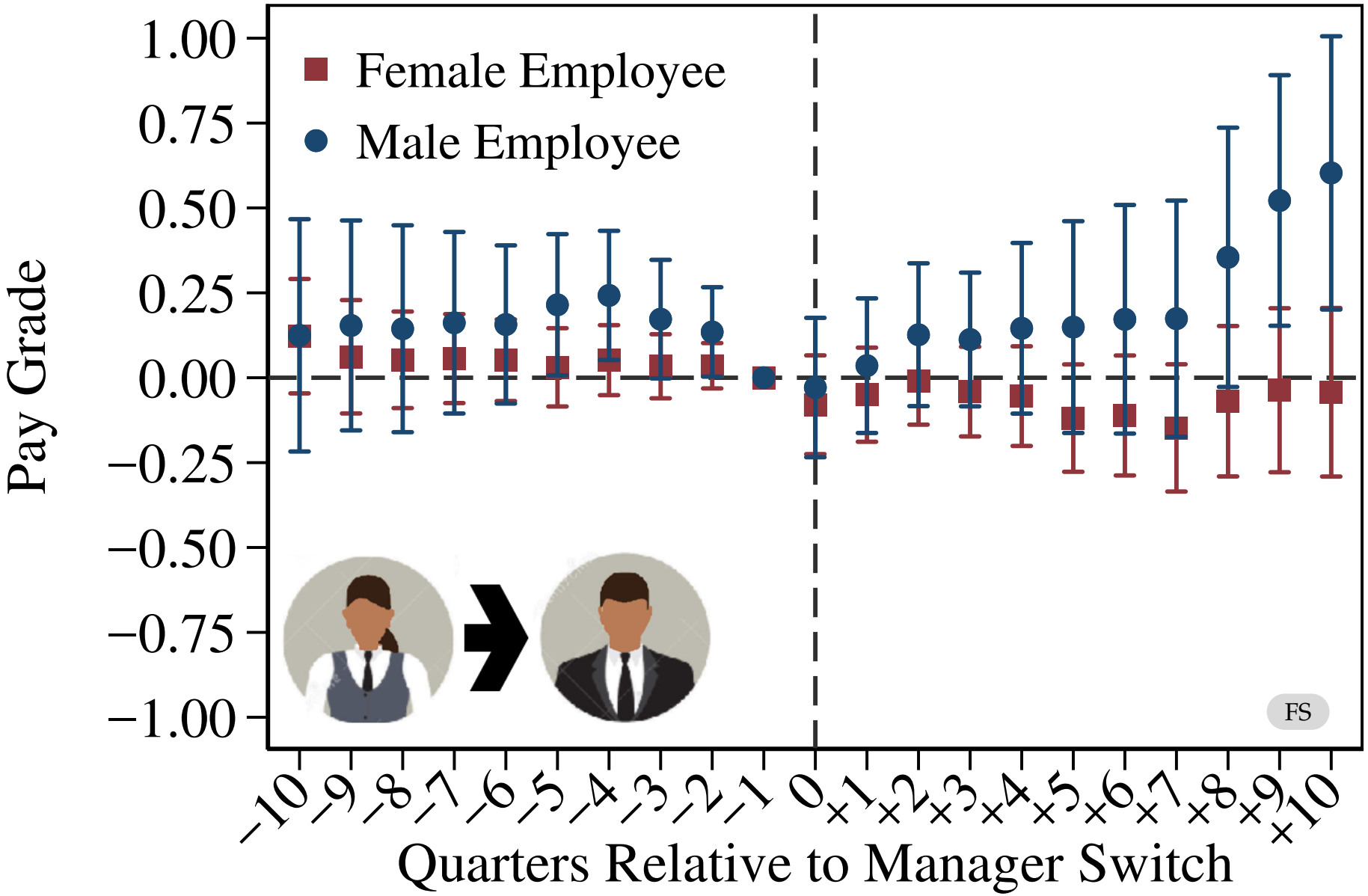
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−0.50
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−1.00
−10
−9
−8
−7
−6
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Quarters Relative to Manager Switch
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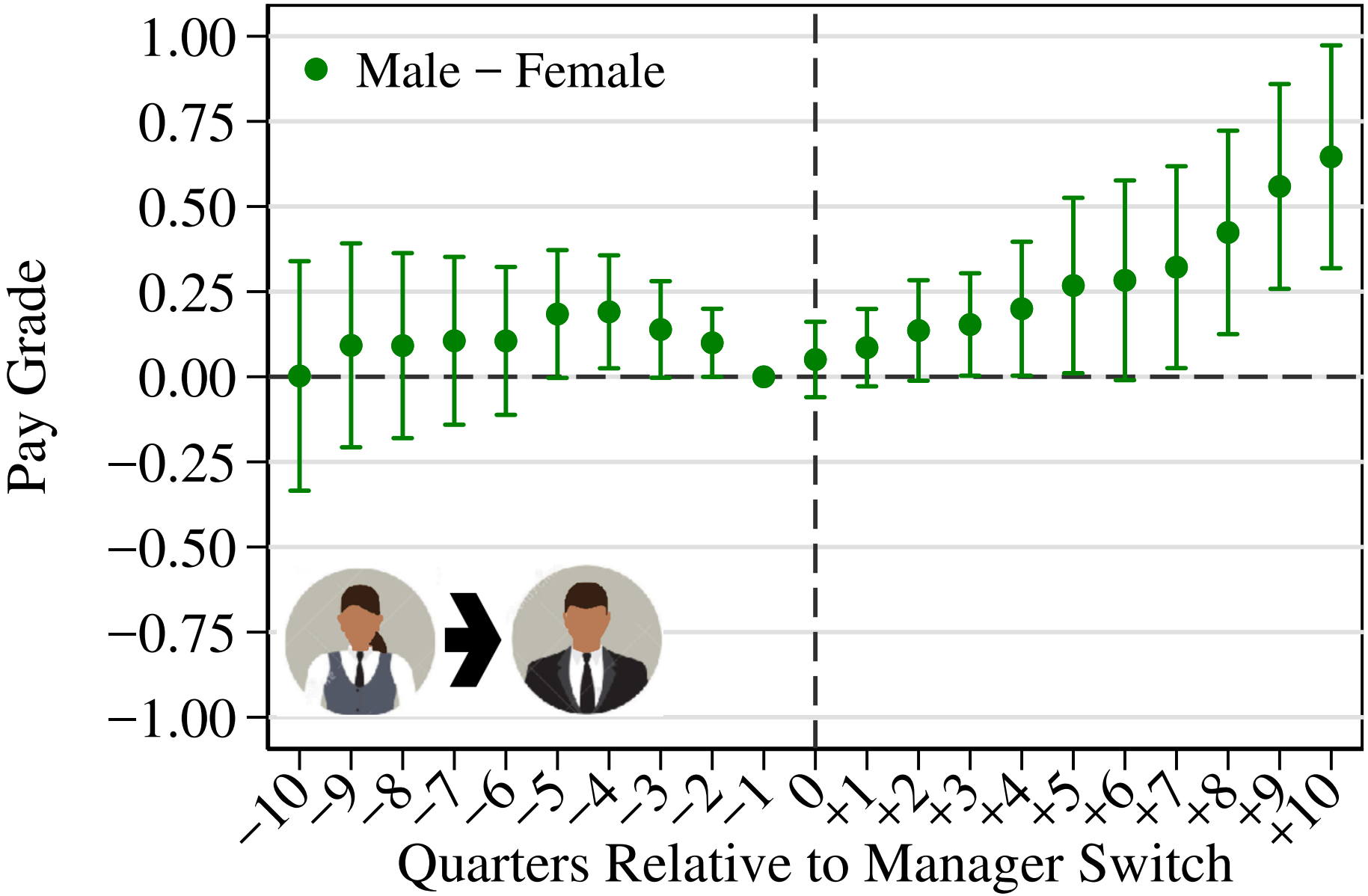
Male − Female
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
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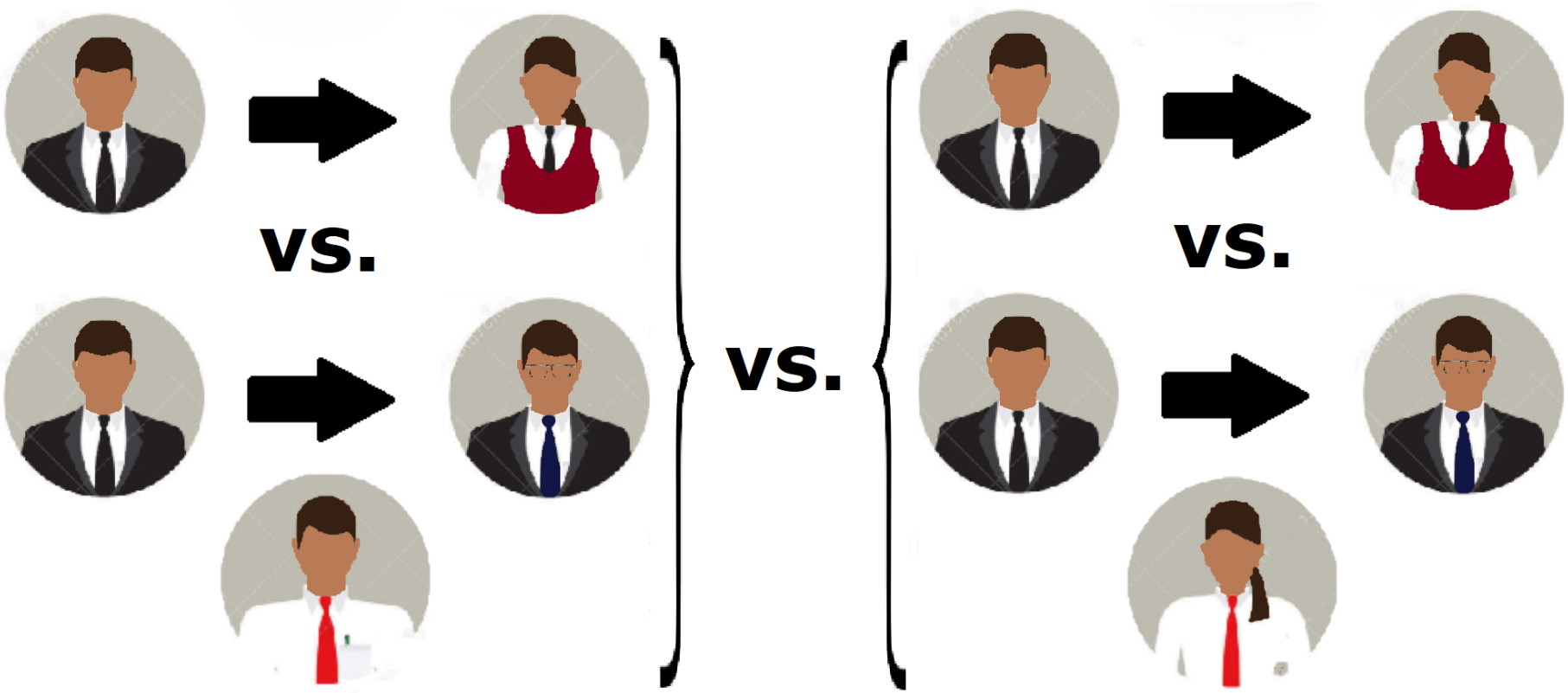
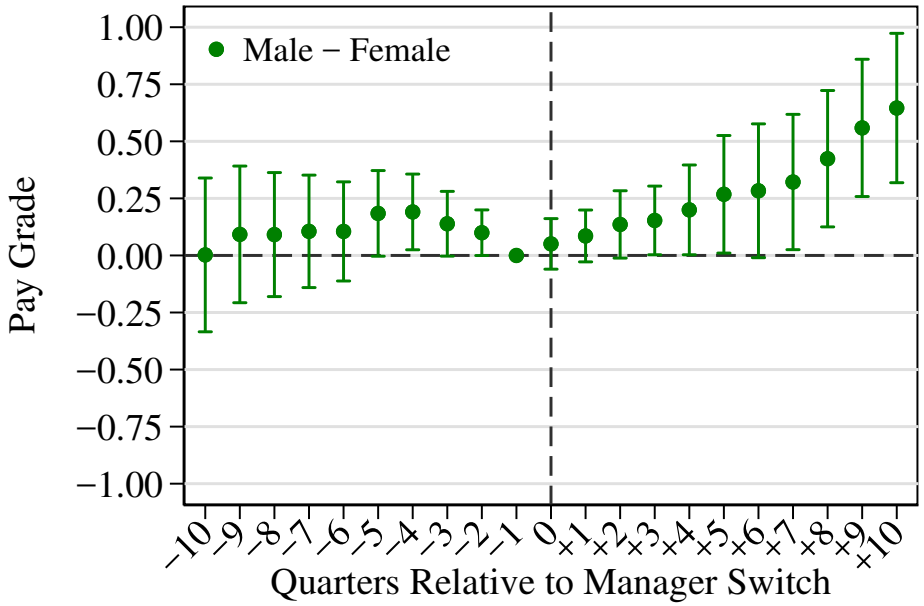
Quarters Relative to Manager Switch

"Losing" a Male Manager



Opposite Transitions



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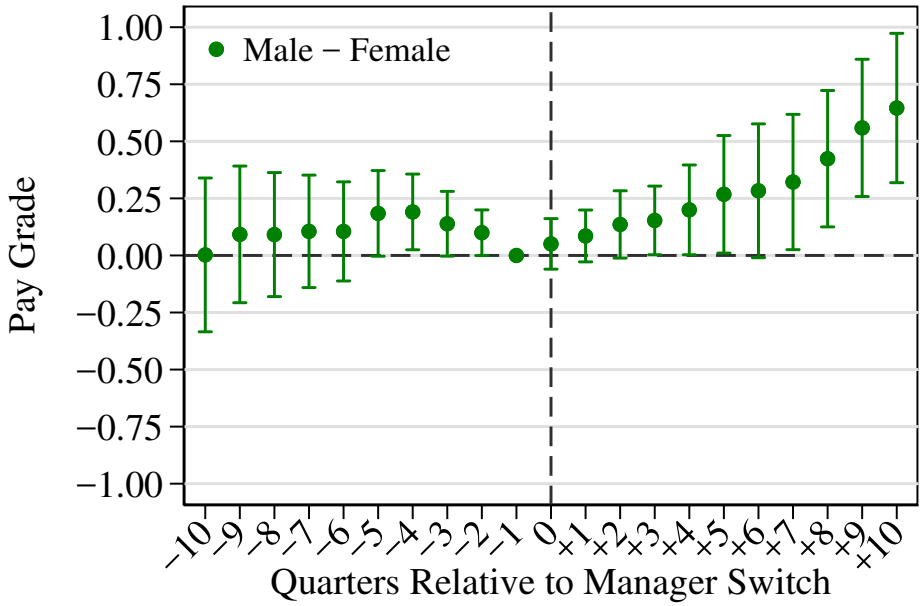
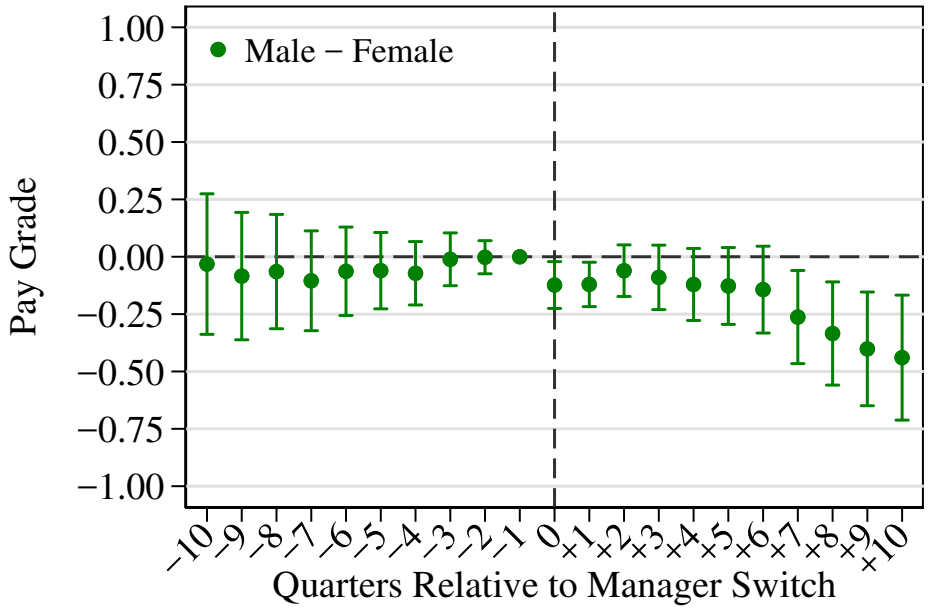
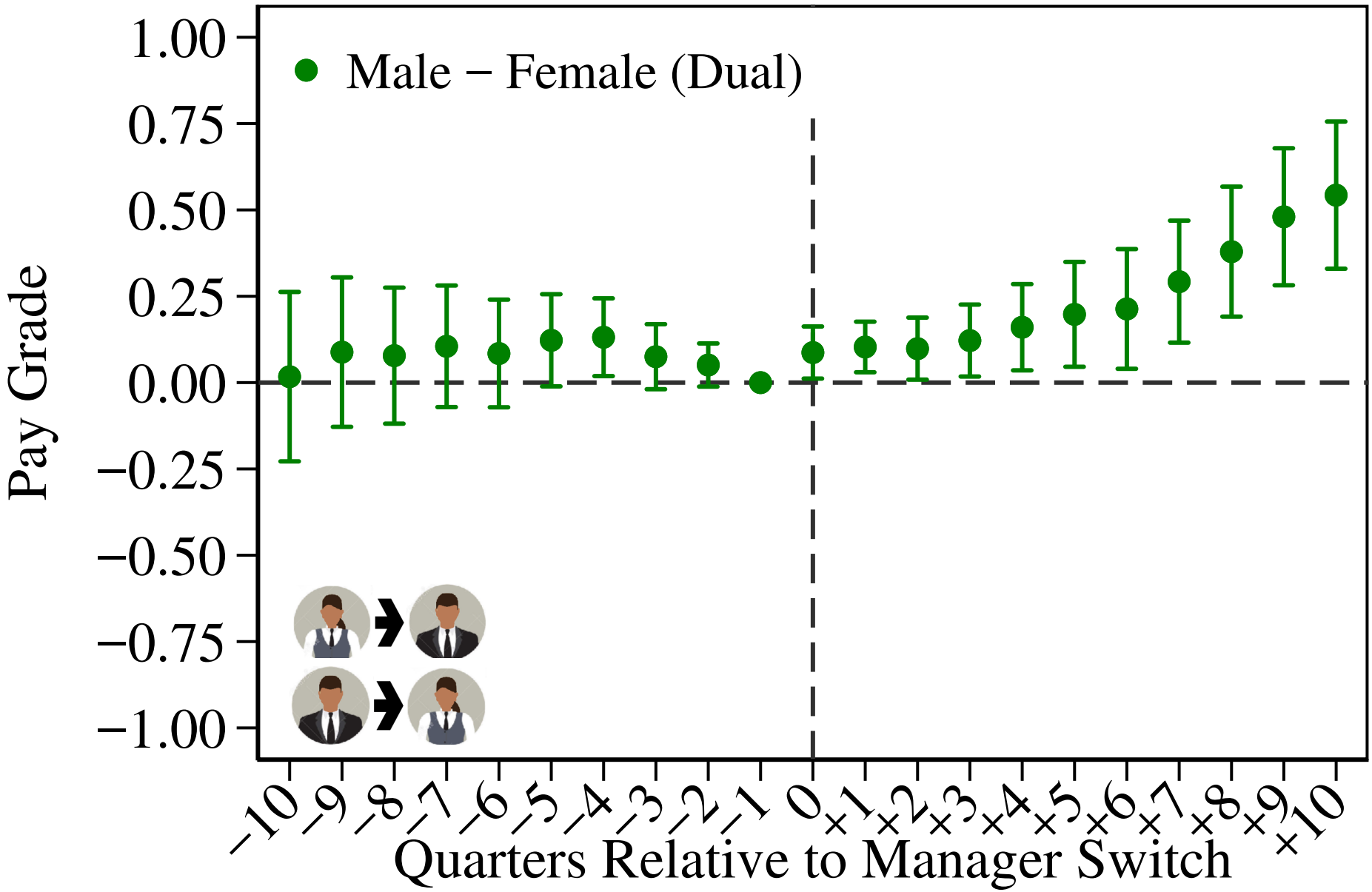
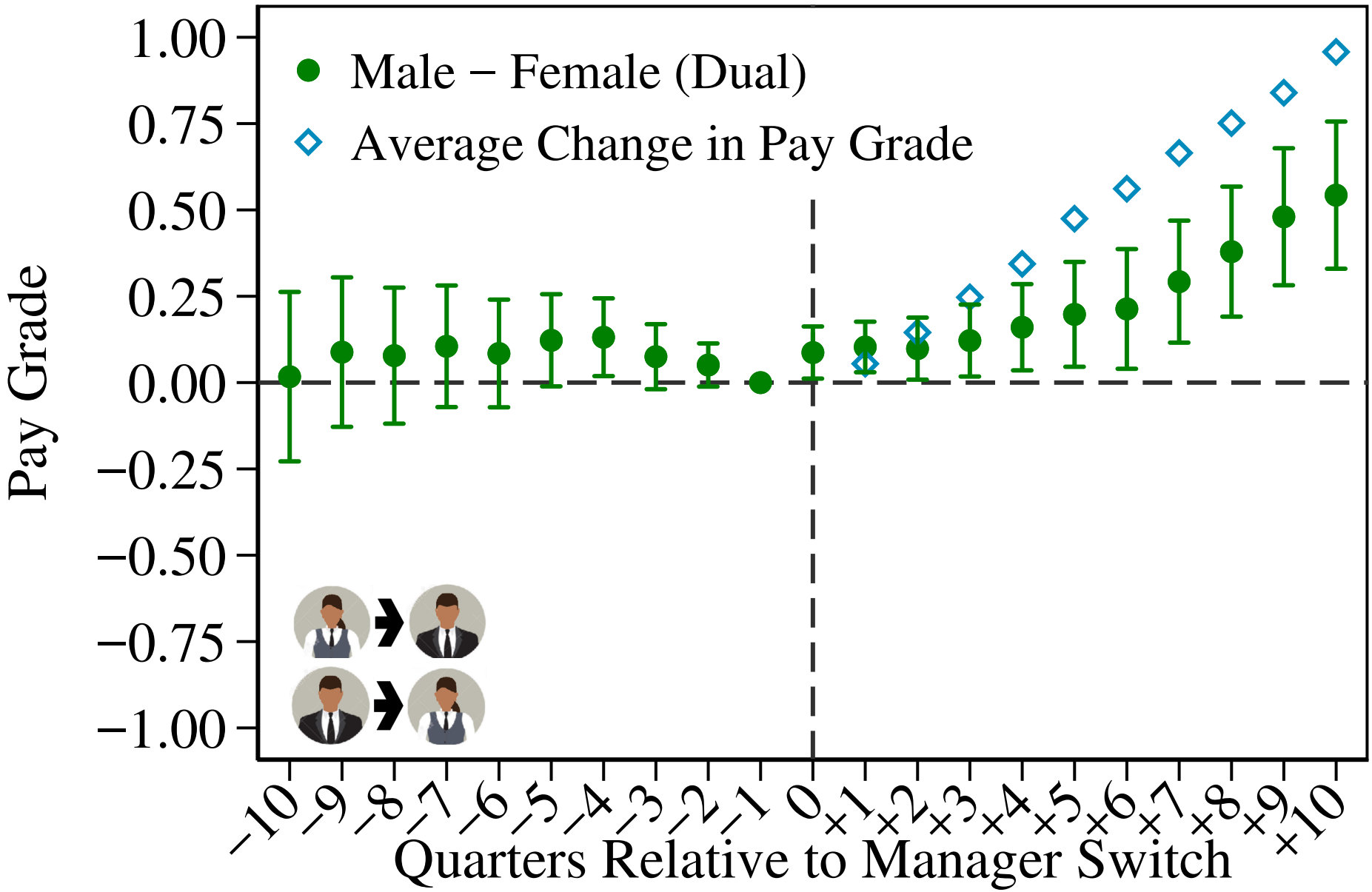





Male − Female (Dual)
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch


Male − Female (Dual)
Average Change in Pay Grade
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch

Magnitude of Effect

- +10 quarters later, male-to-male advantage of 0.54 pay grades.
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  - Roughly equivalent to 13% salary advantage.

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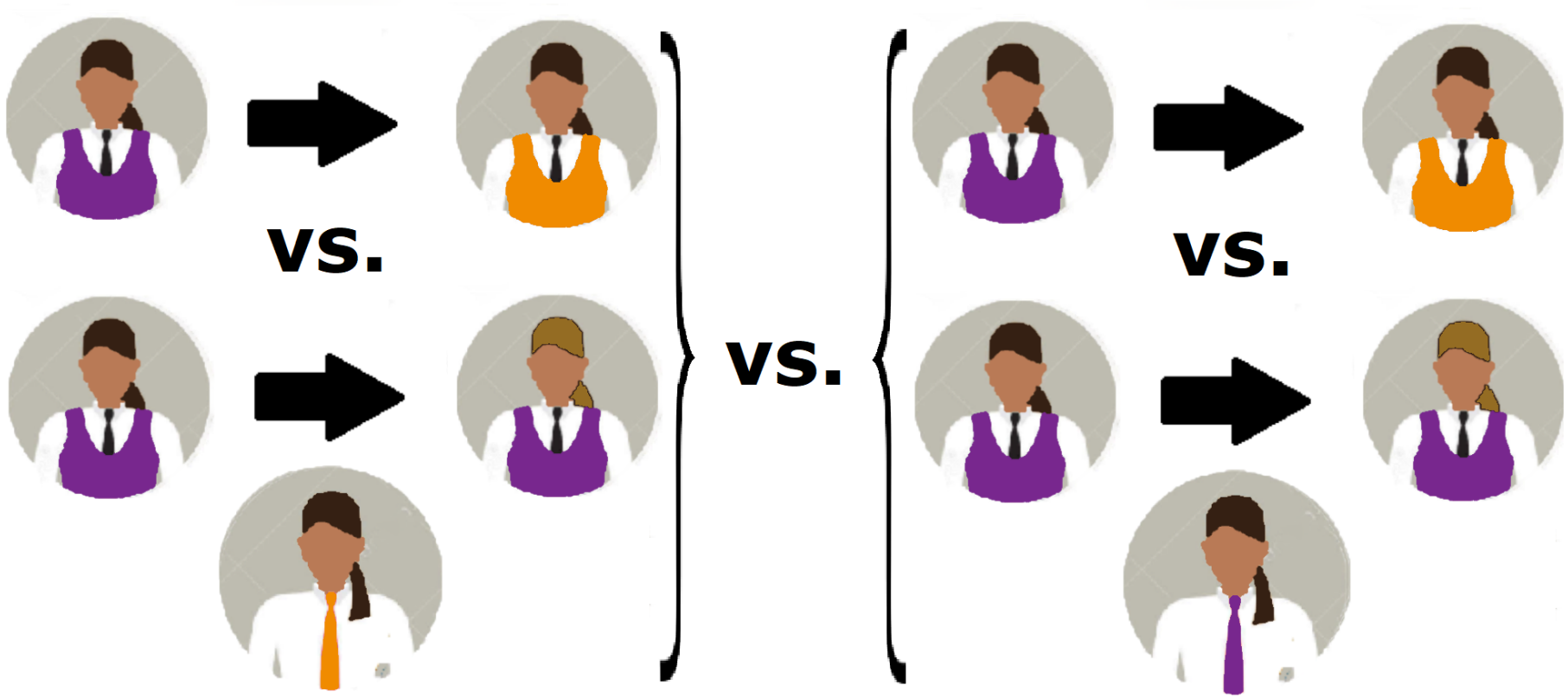
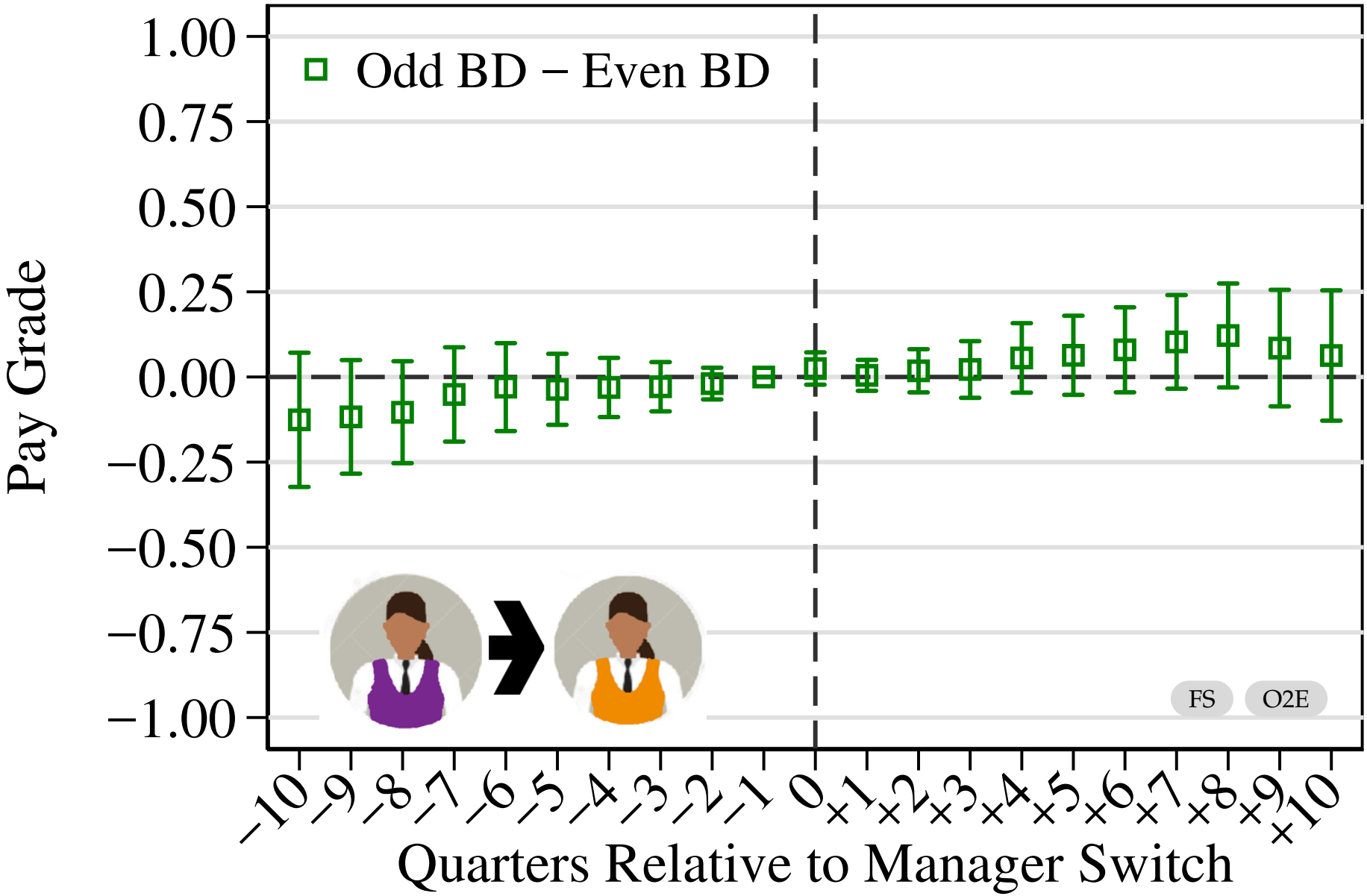
- Eliminating this advantage would reduce gender gap by 0.36 pay grades.
  - Because 66% of male employees have male managers.
- Eliminating this advantage would reduce gender gap by 40%.
  - From current gap of 0.90 pay grades to 0.54 pay grades.

Robustness Check

- "Placebo" event-study graphs.
- Replace female/male by a different trait that should not matter.
  - Whether day of birth is even/odd.

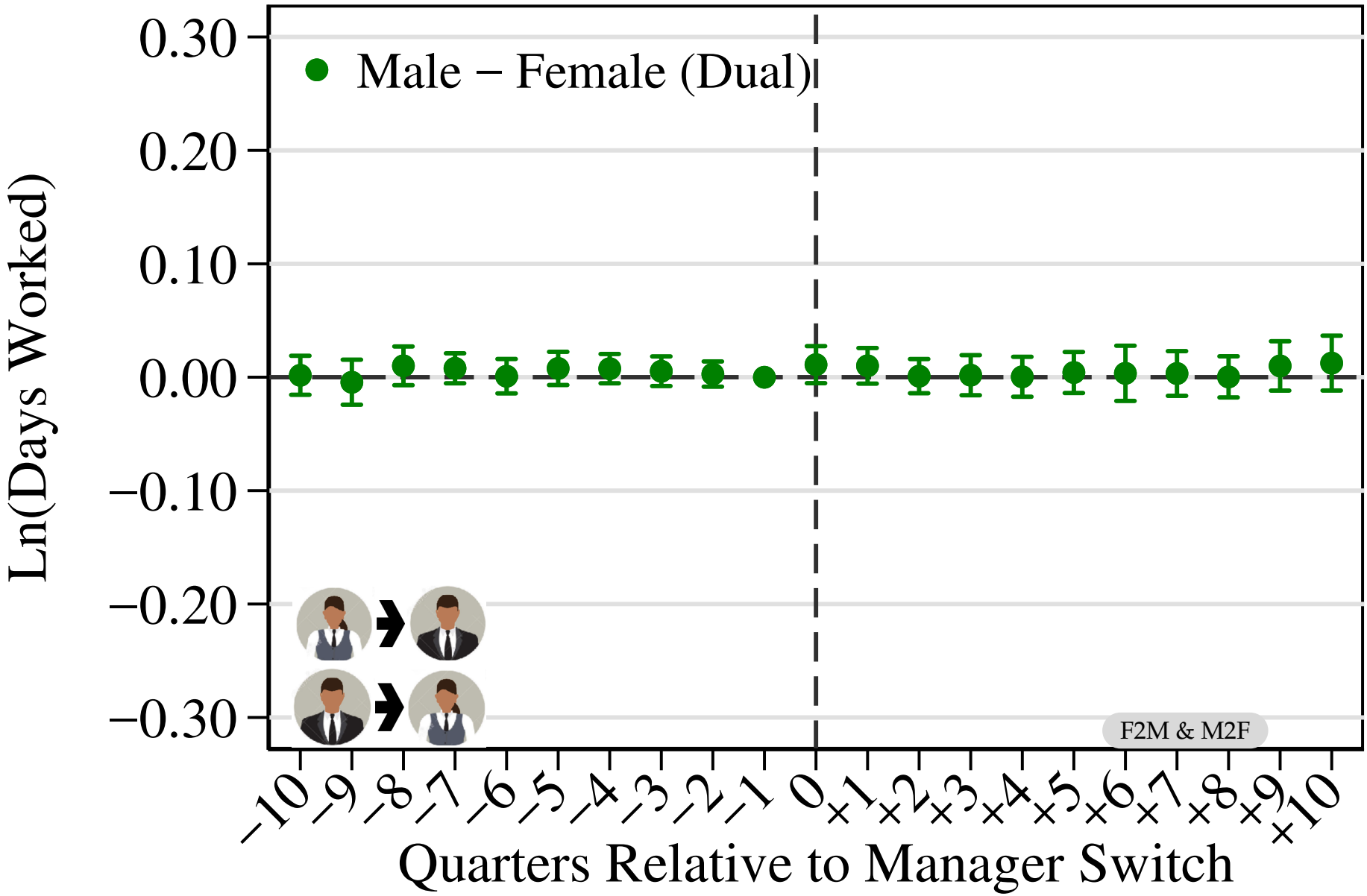
Even-Birthday vs. Odd-Birthday

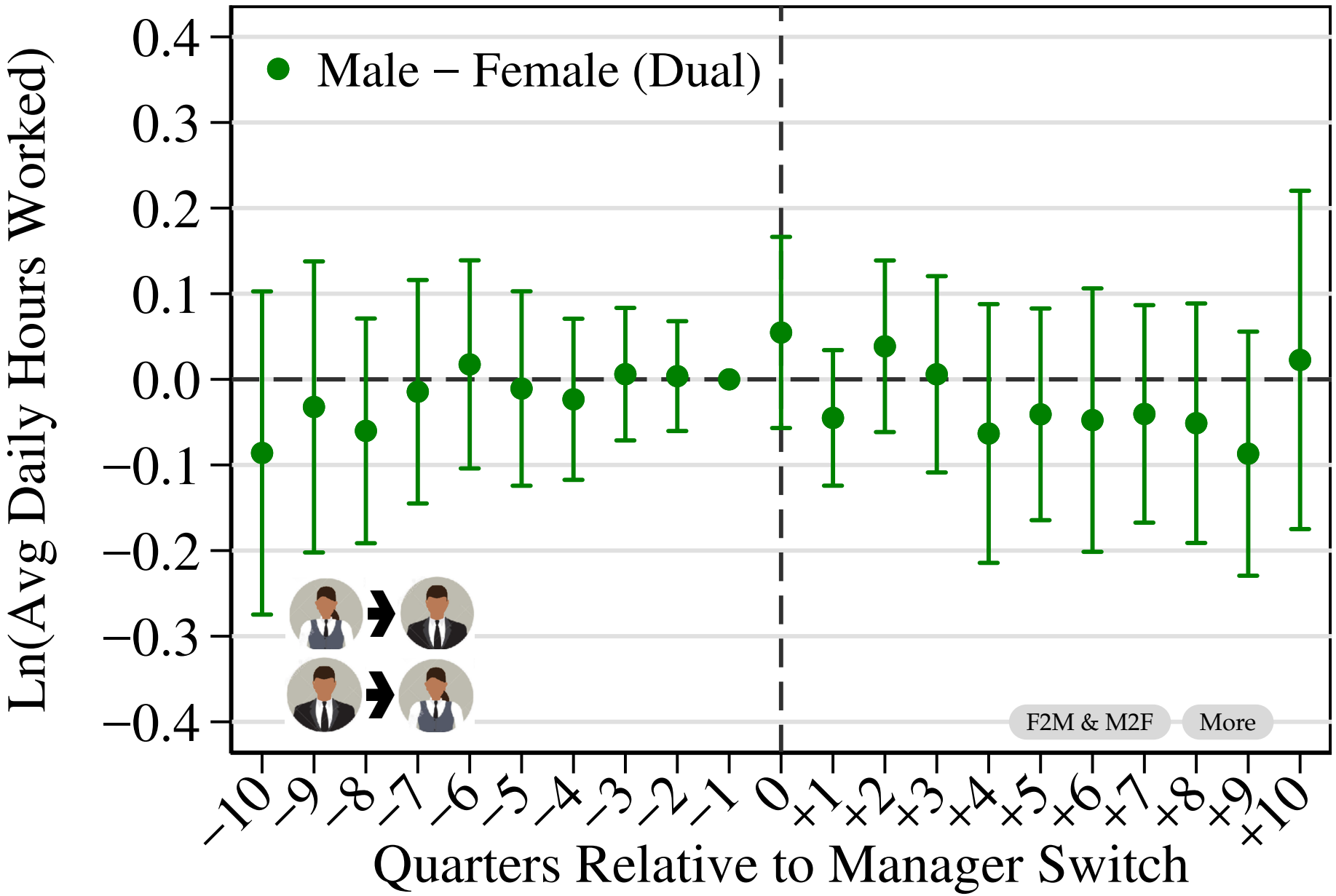


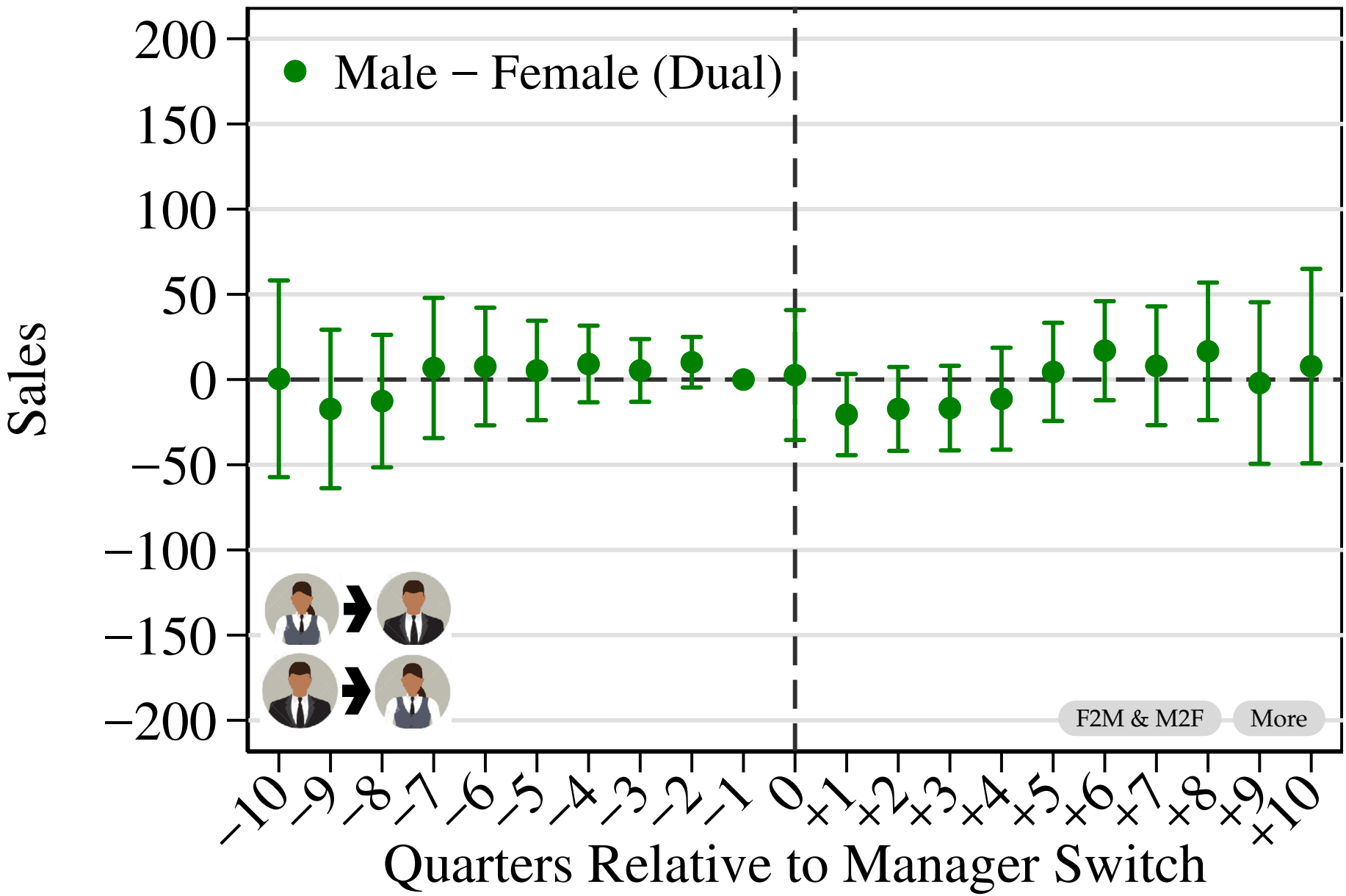

Odd BD − Even BD
Pay Grade
1.00
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch
FS
O2E

Interpretation

- Are these effects driven by employees who "give up"?
  - Reproduce event study graph using firm exit as dependent variable. +
- Do these differences in promotions reflect differences in effort/productivity?
  - Naive interpretation: inspiration/motivation.
  - Cynical interpretation: bias/favoritism.
- Look at effects on following outcomes:
  - Number of days worked.
  - Hours worked (headquarter employees).
  - Sales revenues (sales employees).


Male − Female (Dual)
0.30
0.20
0.10
0.00
−0.10
−0.20
−0.30
Ln(Days Worked)
F2M & M2F
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch


Male − Female (Dual)
Ln(Avg Daily Hours Worked)
0.4
0.3
0.2
0.1
0.0
−0.1
−0.2
−0.3
−0.4
F2M & M2F
More
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch


Male − Female (Dual)
Sales
200
150
100
50
0
−50
−100
−150
−200
−10
−9
−8
−7
−6
−5
−4
−3
−2
−1
0
+1
+2
+3
+4
+5
+6
+7
+8
+9
+10
Quarters Relative to Manager Switch
F2M & M2F
More

Results: Social Interactions

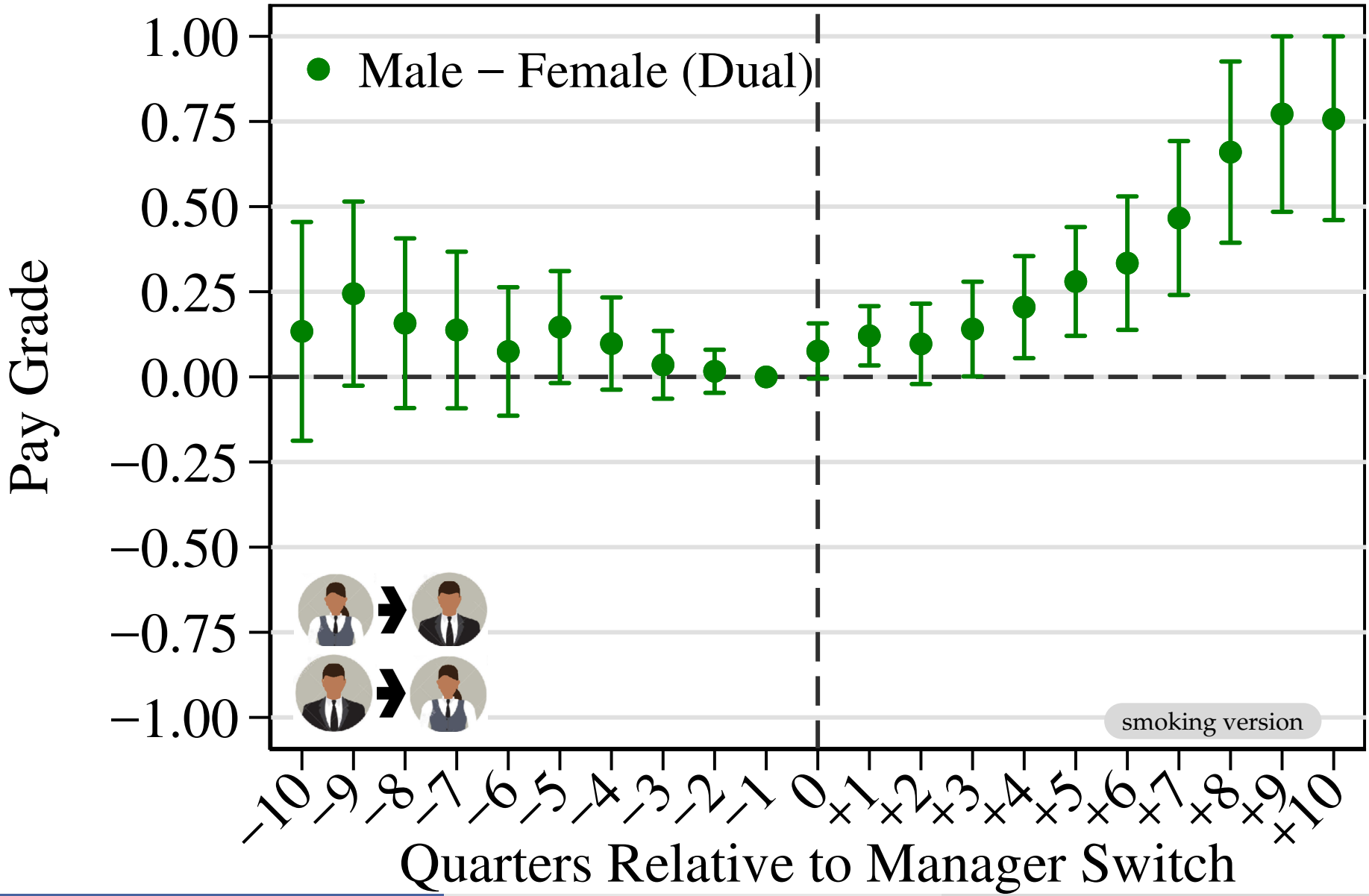
Social Interactions Channel

- If driven by social interactions, effects should be stronger when employee works in **proximity** to the manager.
- We split positions by high/low proximity and test this prediction.

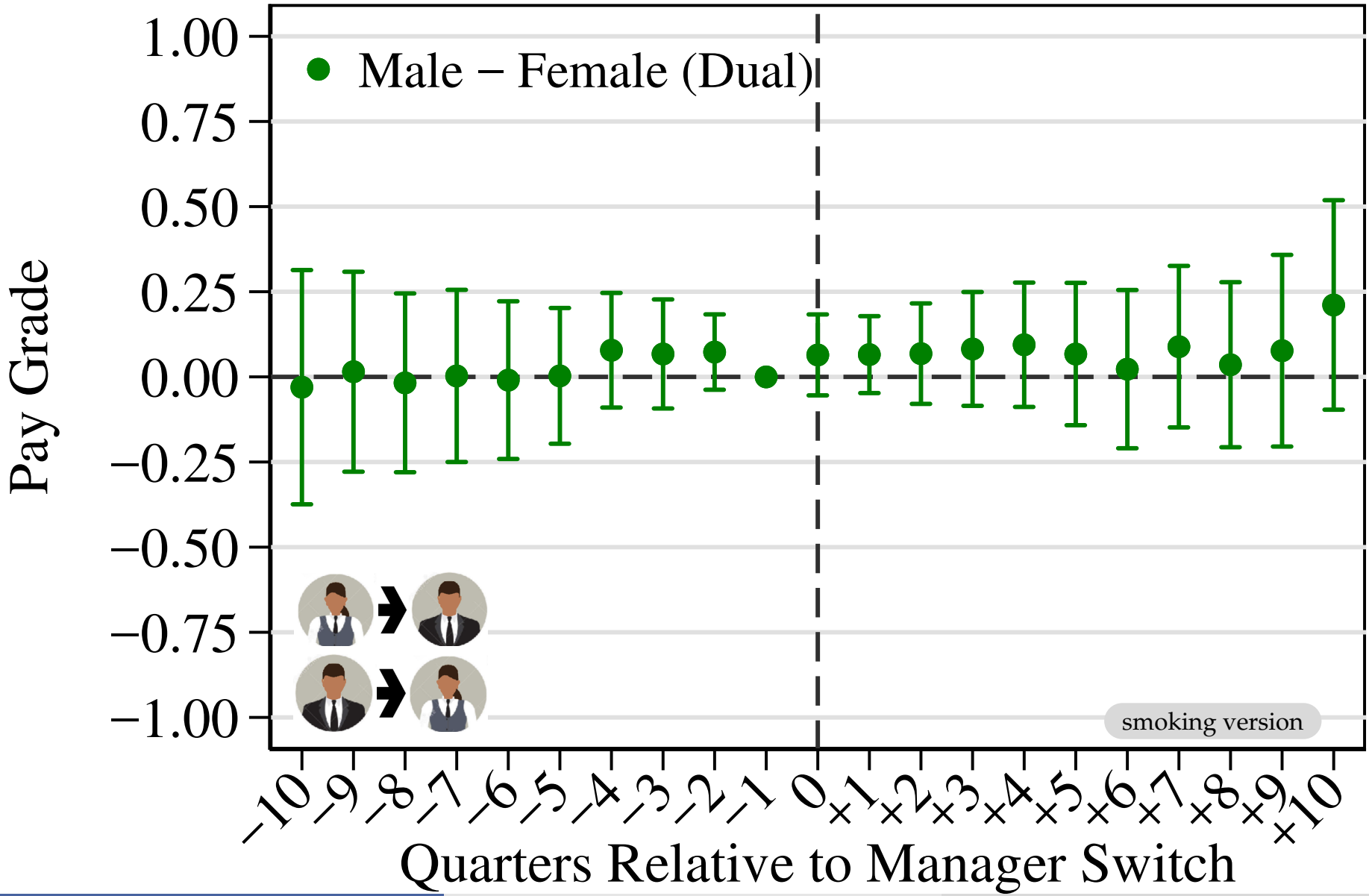
Proximity Data

- Headquarter Offices: security data.
  - Can figure out if employee and manager work on same floor.
- Sales & Distribution: survey data.
  - Employee self-reports if works in same floor/area as the manager.
- We use position-averages to split sample in higher vs. lower proximity.

Higher Proximity



Lower Proximity



Conclusions

Conclusions

- Certain employees and managers spend more social breaks together; this causally boosts promotion rates.
  - No corresponding boost in observable output/effort.
- Male employees get promoted faster under male managers; social interactions mediate this advantage. Role of local gender norms
  - Explains a third of the gender gap at this firm.
- Our methodology is quite "portable."
  - We hope it will be applied to other firms, countries and industries.