

The Morale Effects of Pay Inequality

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Stylized Fact: Wage Compression



Source: Breza, Kaur, Krishnaswamy, & Shamdasani (ongoing).

Sample size: 377 worker-days, 83 workers, 26 villages.

- Prevalent in poor and rich countries (Dreze & Mukherjee 1989, Frank 1984)
- Many potential explanations
- One potential reason: relative pay comparisons

Research Questions

- Do workers care about relative pay?
 - Labor supply
 - Effort (under incomplete contracting)
- When are pay differences acceptable?
 - Worker beliefs about justifications
- Use field experiment with manufacturing workers
 - Vary own and peer wages

Motivation: Relative Pay Concerns

- Long tradition of thought in social sciences
 - Psychology, sociology, management (e.g. Adams 1963)
 - Economics (e.g. Marshall 1890, Hicks 1932, Hamermesh 1975)
- Potential Implications
 - Wage compression (e.g. Fang & Moscarini 2006, Charness & Kuhn 2007)
 - Wage rigidity (e.g. Akerlof & Yellen 1990, Bewley 1999)
 - Sorting of workers into firms (e.g. Frank 1984)
 - Firm boundaries (e.g. Nickerson & Zenger 2008)
 - HR policies (e.g. Bewley 1999, Card et al. 2012)
 - Features of production (e.g. output observability) could affect when these effects manifest themselves (e.g. Bracha et al. 2015)

Literature

Limited field evidence on relative pay comparisons

- Mixed lab evidence
 - Charness & Kuhn 2007, Gächter & Thoni 2010, Bartling and von Siemens 2011, Bracha et al. 2015,...
- 2 recent field experiments focused on relative pay
 - Card, Mas, Moretti, & Saez (AER 2012)
 - Cohn, Fehr, Herrmann, & Schneider (JEEA 2014)

Outline

- **(Brief) Framework**
- Experiment Design
- Results
- Discussion

Framework (adapted from DellaVigna et al 2015)

Worker i receives wage offer w_i from firm, and chooses:

- (i) whether to work
- (ii) level of effort (incomplete contracting).

Outside option (from not working): $R_{it} \equiv R_i + \varepsilon_{it}$

Payoff from working:

$$V(w_i, \mathbf{w}_{-i}) = w_i - c(e_i) + M(w_i, \mathbf{w}_{-i}) e_i$$

where:

e_i = effort level chosen, where $e_i \geq 0$

$c(\cdot)$ = convex effort cost

\mathbf{w}_{-i} = wages of co-workers (peers)

$M(w_i, \mathbf{w}_{-i})$ = morale effect

Framework

Conceptualize relative pay concerns as reference dependence

$$V(w_i, \mathbf{w}_{-i}) = w_i - c(e_i) + M(w_i, \mathbf{w}_{-i}) e_i$$

$$M(w_i, \mathbf{w}_{-i}) = \alpha 1_{w_i < w_R(\mathbf{w}_{-i})} + \beta 1_{w_i > w_R(\mathbf{w}_{-i})} + f(w_i)$$

where:

$w_R(\mathbf{w}_{-i})$ is the reference wage

α reflects utility effect of being paid less than w_R

β reflects utility effect of being paid more than w_R

Framework

Conceptualize relative pay concerns as reference dependence

$$V(w_i, \mathbf{w}_{-i}) = w_i - c(e_i) + M(w_i, \mathbf{w}_{-i}) e_i$$

$$M(w_i, \mathbf{w}_{-i}) = \alpha 1_{w_i < w_R(\mathbf{w}_{-i})} + \beta 1_{w_i > w_R(\mathbf{w}_{-i})} + f(w_i)$$

where:

$w_R(\mathbf{w}_{-i})$ is the reference wage

α reflects utility effect of being paid less than w_R

β reflects utility effect of being paid more than w_R

Testing for morale effects

- Changes in $1_{w_i < w_R}$ and $1_{w_i > w_R}$ will affect both labor supply & effort
- Direction of effects reveal signs of α and β
 - E.g., Under loss aversion: $\alpha < 0$, $\beta \geq 0$, $|\alpha| > |\beta|$
- No ex-ante stance on functional form of $w_R(\mathbf{w}_{-i})$

Outline

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- **Experiment Design**
- Results
- Discussion

Context

- Low-skill manufacturing
 - Rope, brooms, incense sticks, candle wicks, plates, floor mats, paper bags...
 - Factory sites in Orissa, India
 - Partner with local contractors (set training and quality standards)
 - Output sold in local wholesale market
- Workers employed full-time over one month
 - Seasonal contract jobs (common during agri lean seasons)
 - Primary source of earnings
- Flat daily wage for attendance
 - Typical pay structure in area
- Sample (for today)
 - 378 workers
 - Adult males, ages 18-65

Experiment Design

Construct design to accomplish 3 goals:

- 1. Clear reference group for each worker**
2. Variation in co-worker pay, holding fixed own pay
3. Variation in perceived justification for pay differences

1. Reference Group = Product Team

- Teams of 3 workers each
- All team members produce *same* product
- Each team within factory produces *different* product
 - E.g. Team 1 makes brooms, Team 2 makes incense sticks, ...
- Factory structure
 - 10 teams in each factory
 - 10 products: brooms, incense sticks, rope, wicks, plates, etc.
- Note: Individual production
 - Hire staff to measure worker output after each day

Experiment Design

Construct design to accomplish 3 goals:

1. Clear reference group for each worker
2. **Variation in co-worker pay, holding fixed own pay**
3. Variation in perceived justification for pay differences

Wage Treatments

Design: Wage Treatments

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

- Rank computed from baseline productivity
- Modest wage differences: $w_{\text{High}} - w_{\text{Low}} \leq 10\%$

Wage Treatments

Design: Wage Treatments

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

- Expect $w_i < w_R(\mathbf{w}_{-i})$
- Predictions
 - $H_0: \alpha = 0$: same output
 - $H_1: \alpha < 0$: output lower under Heterogeneous pay

Wage Treatments

Design: Wage Treatments

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

- Expect $w_i > w_R(\mathbf{w}_{-i})$
- Predictions
 - $H_0: \beta = 0$: no difference in output
 - $H_1: \beta \geq 0$: output weakly higher under Heterogeneous

Wage Treatments

Design: Wage Treatments

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

- No ex-ante prediction on w_i relative to $w_R(\mathbf{w}_{-i})$
- Use findings to gain better understanding of $w_R(\mathbf{w}_{-i})$

Experiment Design

Construct design to accomplish 3 goals:

1. Clear reference group for each worker
2. Variation in co-worker pay, holding fixed own pay
- 3. Variation in perceived justification for pay differences**
 - 2 tests

Justifications I: “Actual” Fairness

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	W_{Low}	W_{Low}	W_{Medium}	W_{High}
Medium productivity	W_{Medium}	W_{Low}	W_{Medium}	W_{High}
High productivity	W_{High}	W_{Low}	W_{Medium}	W_{High}

- Productivity is continuous
 - Discrete fixed differences in wages
- Variation in $\{ \Delta Wage / \Delta Productivity \}$ among co-workers

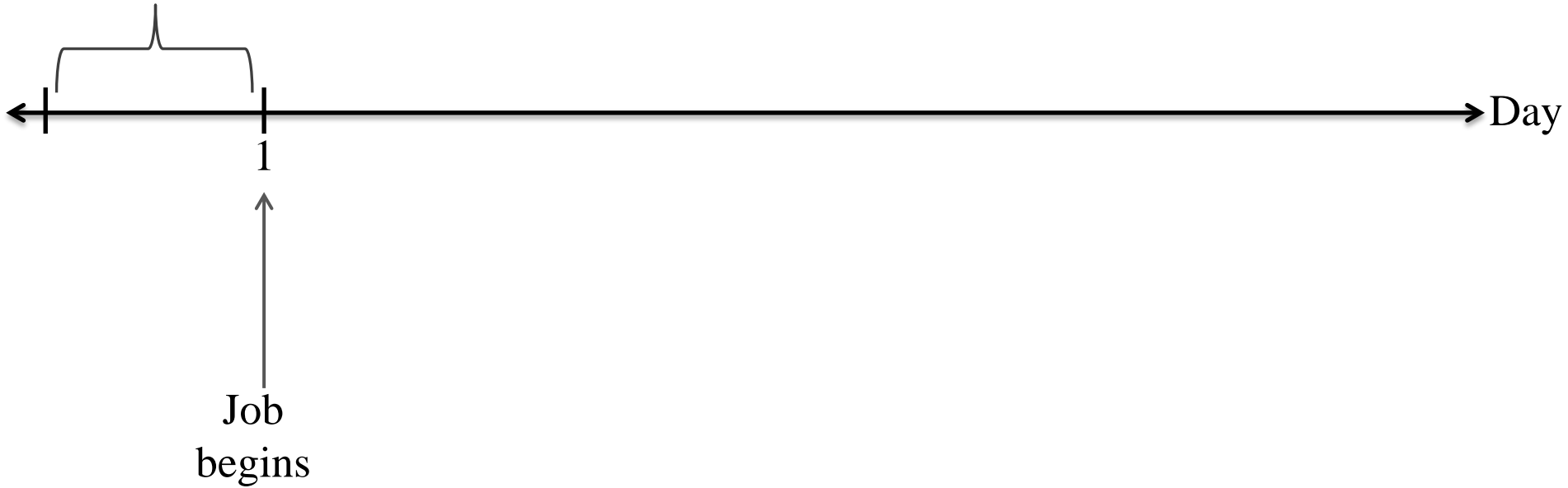
Justifications II: Perceived Fairness

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	W_{Low}	W_{Low}	W_{Medium}	W_{High}
Medium productivity	W_{Medium}	W_{Low}	W_{Medium}	W_{High}
High productivity	W_{High}	W_{Low}	W_{Medium}	W_{High}

- 10 production tasks
- Differ in observability of co-worker output
 - Quantify task observability at baseline
- Stratify treatment assignment by task (across rounds)

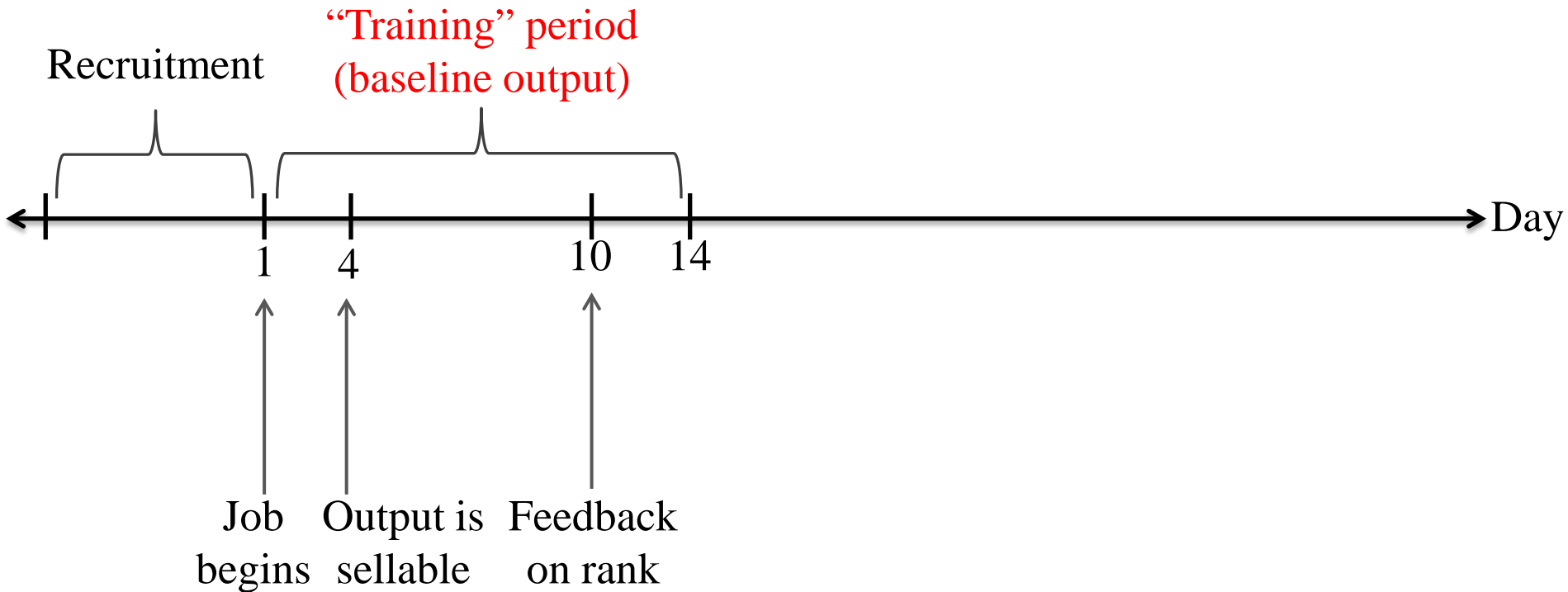
Timeline for Each Round

Recruitment



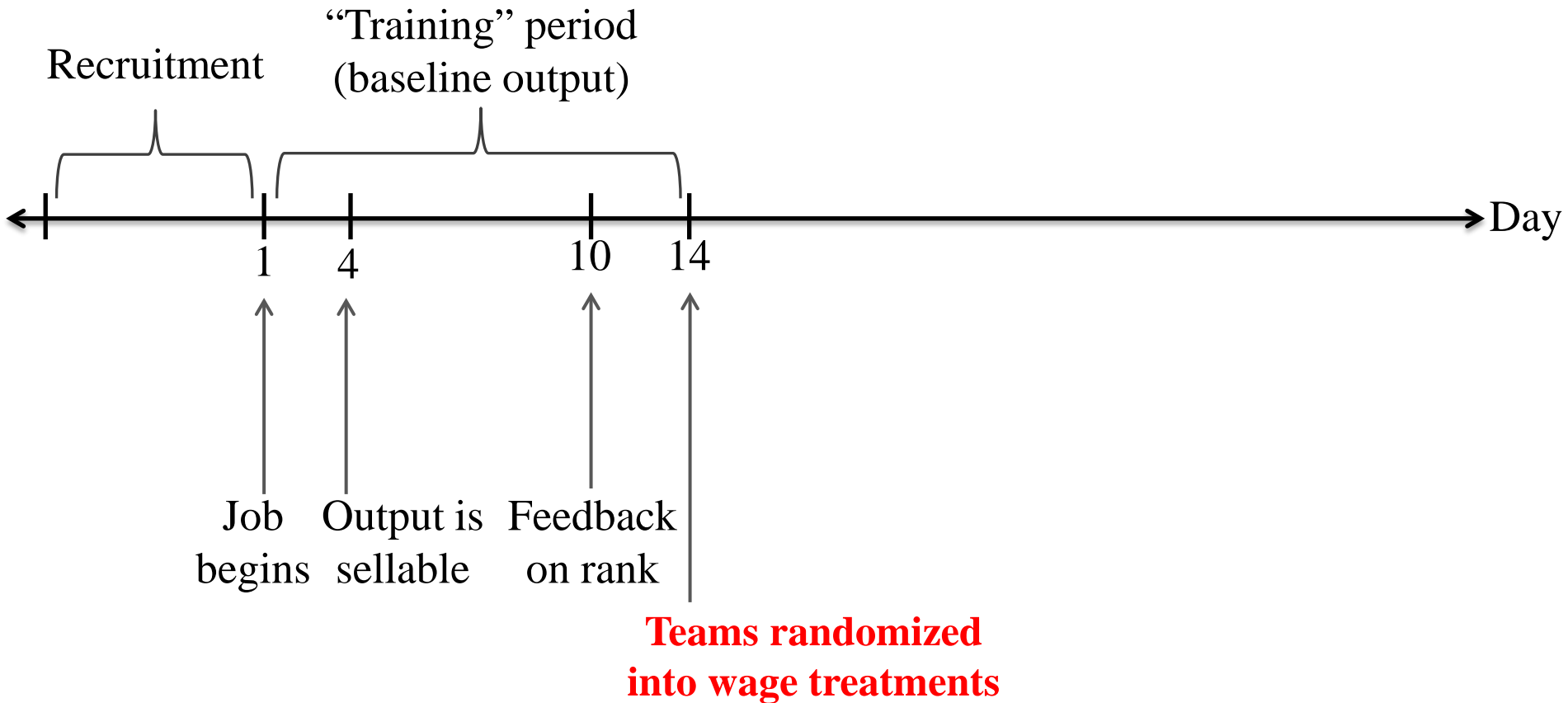
- 30 workers (10 teams) per round
- At entry – workers randomly assigned to team & product

Timeline for Each Round



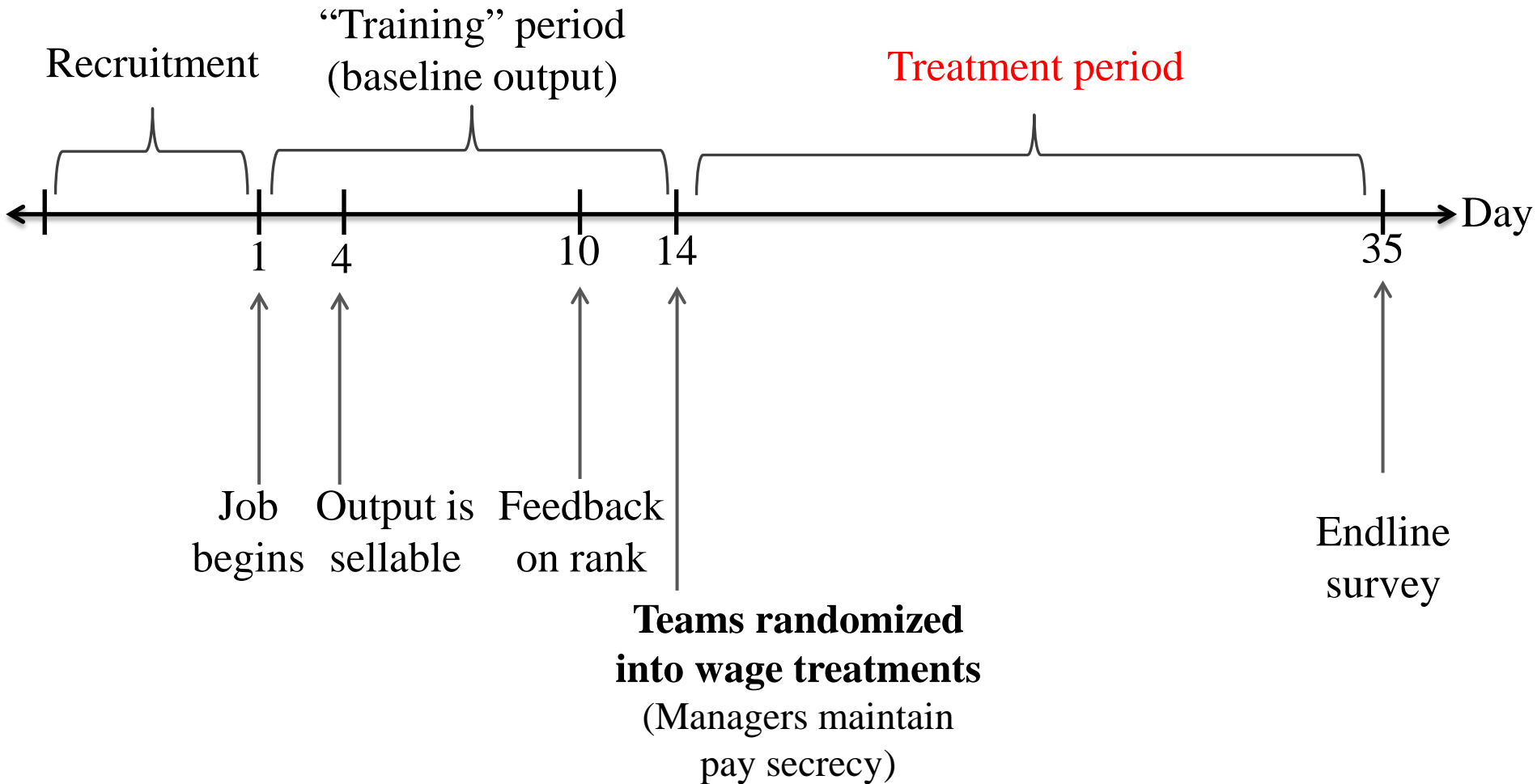
- Training: all workers receive same training wage
- On day 1: workers are told their post-training wage may depend on baseline productivity

Timeline for Each Round

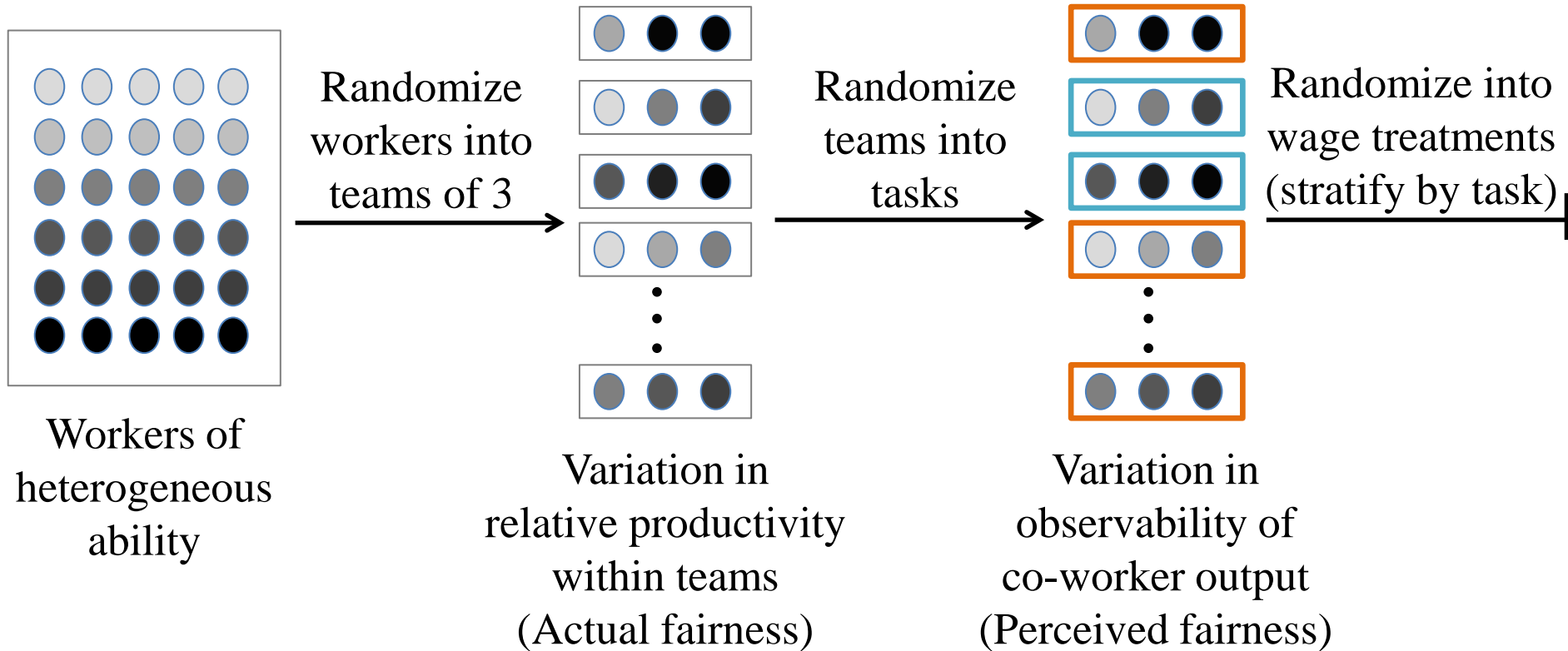


- Each worker privately told his individual wage
- Managers maintain pay secrecy

Timeline for Each Round



Summary of Randomization



2 Caveats

- Purposefully shutting off dynamic incentives
- Goal is to test for relative pay concerns – not a statement about optimal pay structure

Outline

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- **Results**
 - **Wage treatments**
 - Perceived justifications
 - Team cohesion (endline games)
- Discussion

Did workers learn co-worker wages?

- Use endline survey to verify knowledge of co-worker wages
- Compressed teams
 - 100% state that fellow teammates have the same wage
- Heterogeneous teams
 - 92% state that teammates have different wages from them
 - 77% can accurately report the 2 teammates' wages
 - No systematic pattern in lack of knowledge

Measurement

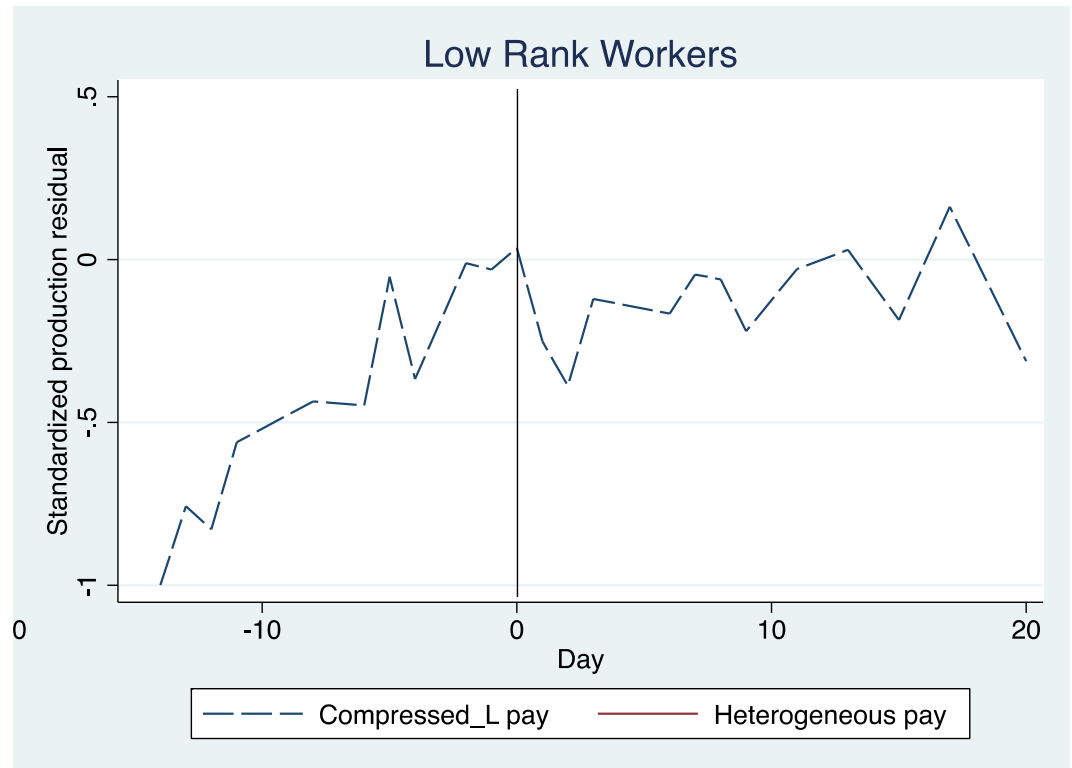
- Production = 0 when workers are absent
- Pooling across tasks
 - 10 production tasks
 - Standardize output within each task (using mean and standard deviation in baseline period)

Effects of Relative Pay Differences

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

Recall:

- Expect $w_i < w_R(w_{-i})$

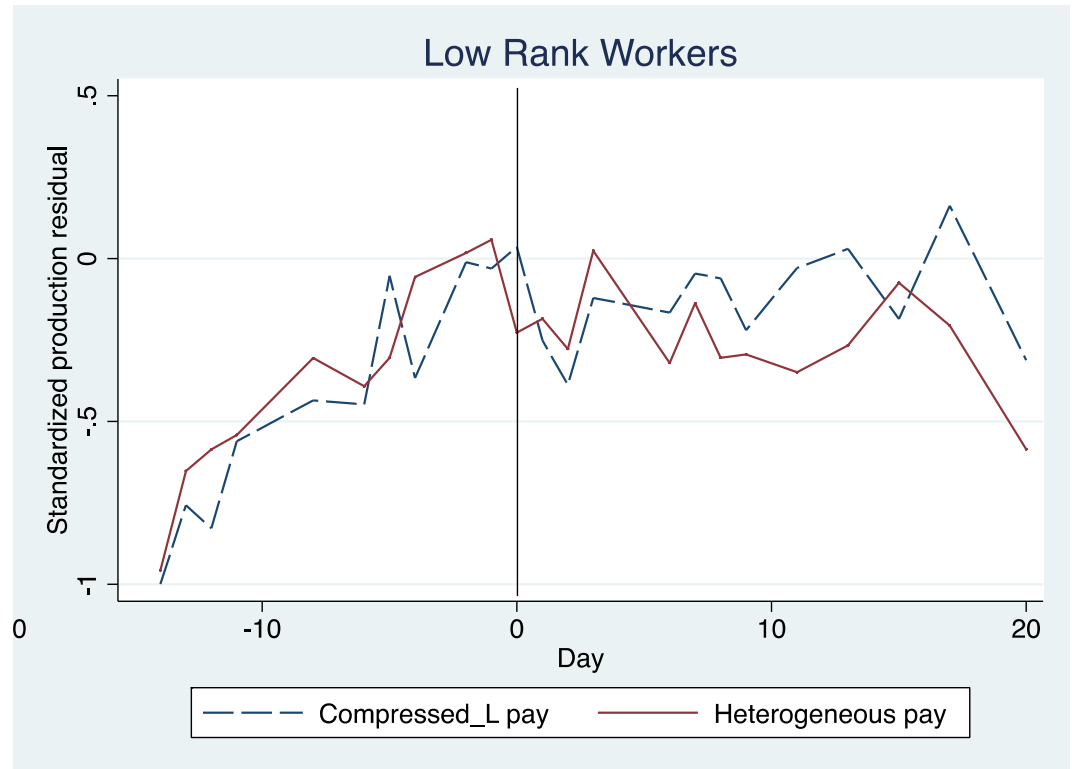


Effects of Relative Pay Differences

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

Recall:

- Expect $w_i < w_R(w_{-i})$
- Consistent with $\alpha < 0$

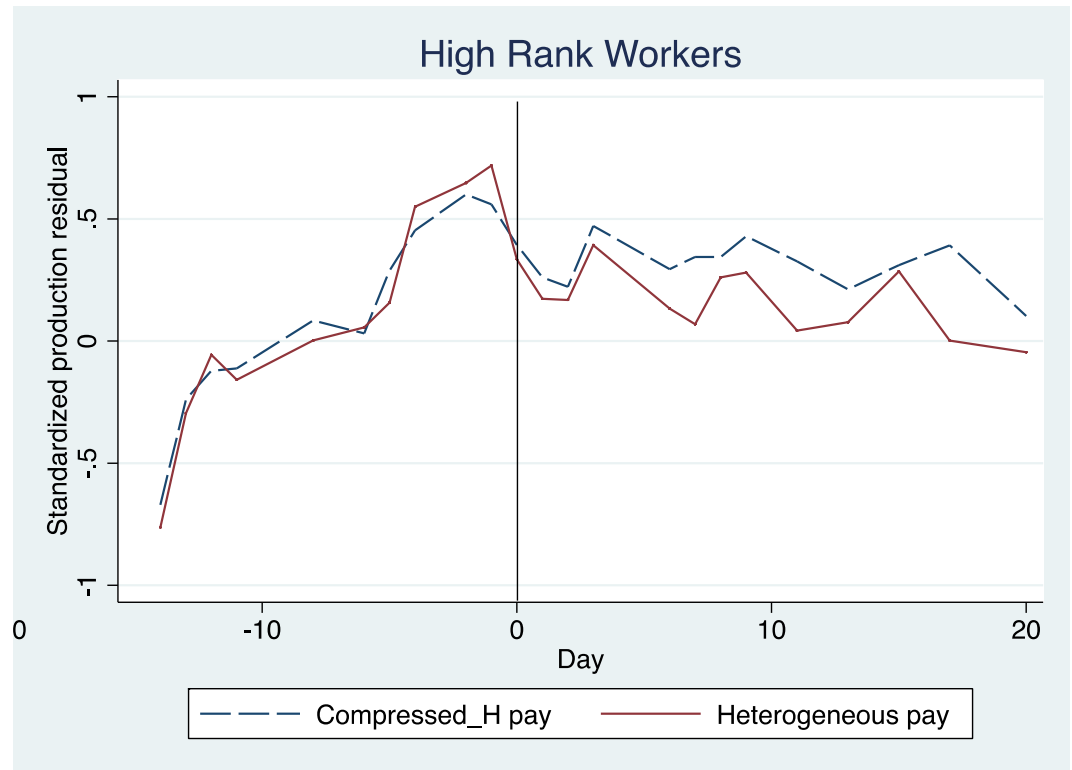


Effects of Relative Pay Differences

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	w_{Low}	w_{Low}	w_{Medium}	w_{High}
Medium productivity	w_{Medium}	w_{Low}	w_{Medium}	w_{High}
High productivity	w_{High}	w_{Low}	w_{Medium}	w_{High}

Recall:

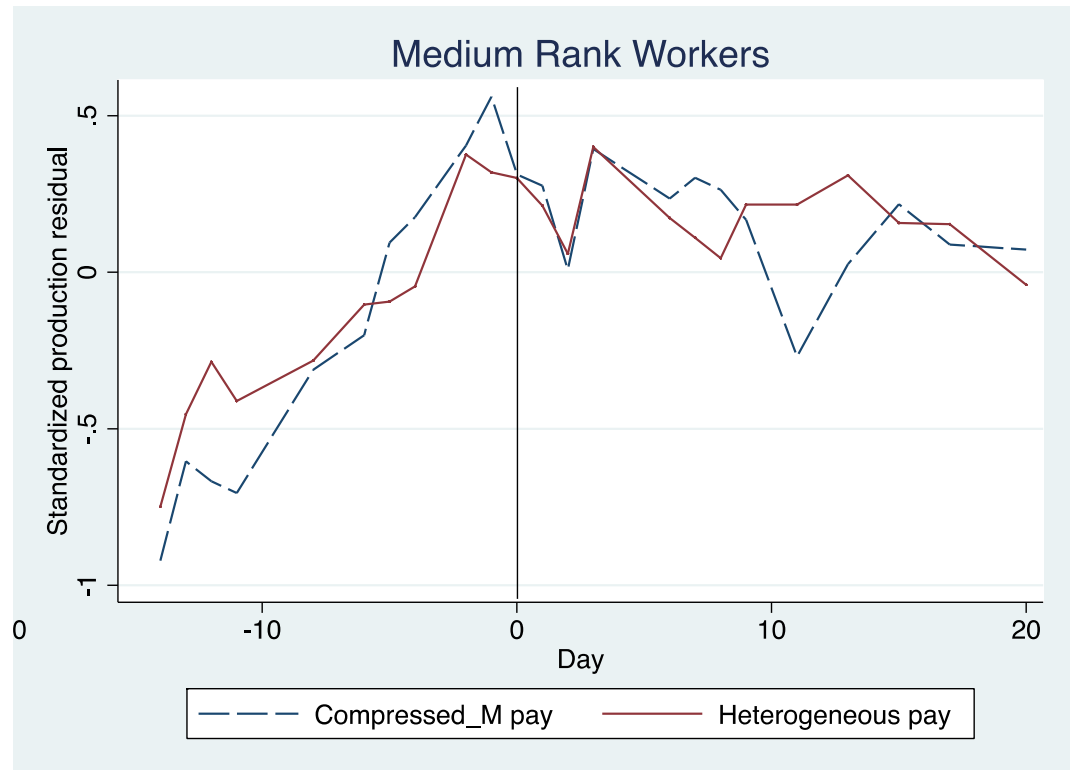
- Expect $w_i > w_R(w_{-i})$
- Little evidence for $\beta > 0$
- Consistent with loss aversion



Effects of Relative Pay Differences

Worker Rank	Heterogeneous	Compressed_L	Compressed_M	Compressed_H
Low productivity	W_{Low}	W_{Low}	W_{Medium}	W_{High}
Medium productivity	W_{Medium}	W_{Low}	W_{Medium}	W_{High}
High productivity	W_{High}	W_{Low}	W_{Medium}	W_{High}

- No evidence for fairness violation



Effects of Relative Pay Differences

	Dependent variable:		
	Output (standard dev.)		
	Full sample (1)	Full sample (2)	Non-paydays (3)
Post x Heterogeneous	-0.372*** (0.119)	-0.311** (0.125)	-0.316** (0.127)
Post x Heterogeneous x Med rank	0.360** (0.164)	0.327** (0.177)*	0.389** (0.174)
Post x Heterogeneous x High rank	0.207 (0.216)	0.238 (0.211)	0.260 (0.220)
Production task fixed effects?	Yes	No	No
Individual fixed effects?	No	Yes	Yes
F-test pvalue: (Post x Het) + (Post x Het x Med) = 0	0.465	0.392	0.252
F-test pvalue: (Post x Het) + (Post x Het x High) = 0	0.405	0.693	0.760
Post-treatment Compressed Mean	-0.0266	-0.0266	-0.0460
R-squared	0.252	0.187	0.194
N	7755	7755	6169

Notes: Regressions include day*round fixed effects and controls for neighboring teams. Standard errors clustered by team.

- Lower paid workers: 29% reduction in output

Effects of Relative Pay Differences

	Dependent variable: Output (standard dev.)			Dependent variable: Attendance	
	Full sample (1)	Full sample (2)	Non- paydays (3)	Full sample (4)	Non- paydays (5)
Post x Heterogeneous	-0.372*** (0.119)	-0.311** (0.125)	-0.316** (0.127)	-0.0925* (0.052)	-0.120** (0.052)
Post x Heterogeneous x Med rank	0.360** (0.164)	0.327** (0.177)*	0.389** (0.174)	0.0441 (0.075)	0.0682 (0.074)
Post x Heterogeneous x High rank	0.207 (0.216)	0.238 (0.211)	0.260 (0.220)	-0.0104 (0.073)	0.0199 (0.075)
Production task fixed effects?	Yes	No	No	No	No
Individual fixed effects?	No	Yes	Yes	Yes	Yes
F-test pvalue: (Post x Het) + (Post x Het x Med) = 0	0.465	0.392	0.252	0.356	0.277
F-test pvalue: (Post x Het) + (Post x Het x High) = 0	0.405	0.693	0.760	0.0499	0.0581
Post-treatment Compressed Mean	-0.0266	-0.0266	-0.0460	0.928	0.917
R-squared	0.252	0.187	0.194	0.198	0.209
N	7755	7755	6169	7755	6169

Notes: Regressions include day*round fixed effects and controls for neighboring teams. Standard errors clustered by team.

- Lower paid workers: leave 9% of earnings on the table
- Back of envelope: Attendance accounts for 50% of total output effect
- See output decline when limiting analysis to paydays only

Outline

- (Brief) Framework
- Experiment Design
- **Results**
 - Effects of wage differences
 - **Perceived justifications: 2 tests**
 - Team cohesion (endline games)
- Discussion

Perceived Justifications: Productivity Differences

- Difference in pre-period output between yourself and your higher-paid peer (for L and M rank)
- Indicator for being above mean difference
 - Corresponds to 0.32 standard deviations
 - Robust to other cut-offs and also continuous measure

Perceived Justifications: Productivity Differences

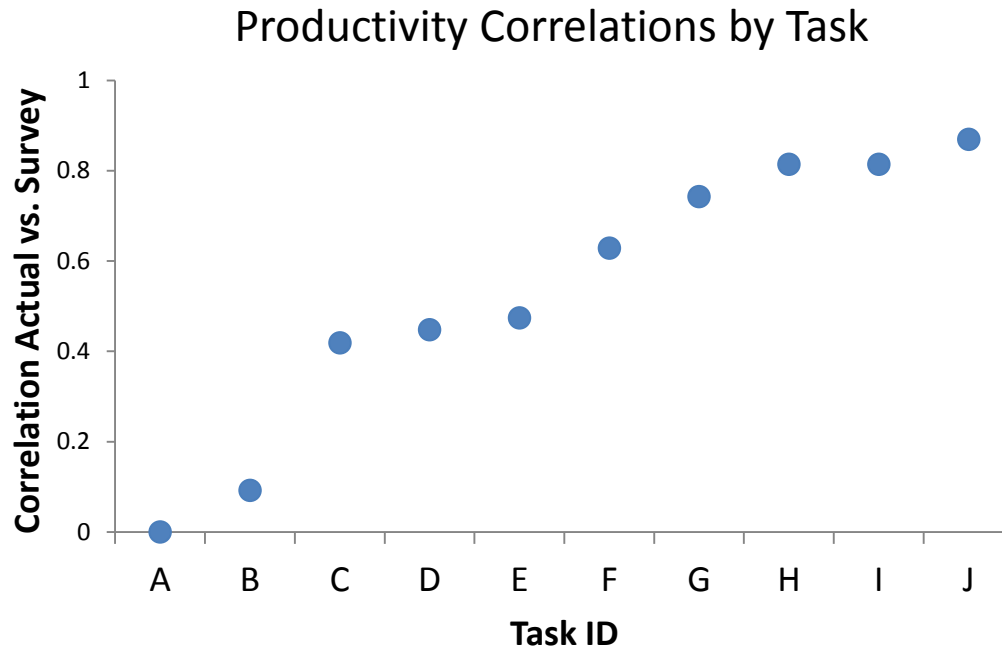
Dependent variable:	Output	Attendance
	(standard dev.)	
	(1)	(4)
Post x Heterogeneous	-0.548*** (0.196)	-0.213*** (0.0651)
Post x Heterogeneous x High prod difference	0.634** (0.273)	0.289*** (0.0858)
Post x Heterogeneous x Med rank	0.756*** (0.221)	0.203*** (0.0755)
Post x Heterogeneous x Med rank x High prod difference	-1.105*** (0.388)	-0.347*** (0.123)
Post x Heterogeneous x High rank	0.475* (0.255)	0.110 (0.0727)
Controls for own baseline prodn x treatment x rank x post?	No	No
Dropping bottom 10% of low-rank workers?	No	No
N	7,755	7,755

Notes: Regressions include individual fixed effects, day*round fixed effects, and neighboring team controls. Standard errors clustered by team.

- Potential concern: High productivity difference comes from low own productivity (e.g., L rank hit floor effects)
- Use 2 robustness checks to test (Cols. 2-3)

Perceived Justifications: Observability

- 10 production tasks in each worksite
- Ex-ante quantify observability at baseline (using pilots)
 - All teammates paid the same wage (no signal)
 - Can worker accurately state own productivity relative to peers?



Perceived Justifications: Observability

Dependent variable:	Output	Attendance
	(standard dev.)	
	(1)	(3)
Post x Heterogeneous	-0.840*** (0.234)	-0.120 (0.081)
Post x Heterogeneous x Observability correlation	1.205*** (0.414)	0.0910 (0.117)
Post x Heterogeneous x Med rank	0.726** (0.346)	0.131 (0.107)
Post x Heterogeneous x Med rank x Observability correlation	-1.006* (0.621)	-0.212 (0.195)
Post x Heterogeneous x High rank	0.552* (0.318)	-0.00875 (0.095)
Post x Heterogeneous x High rank x Observability correlation	-0.851 (0.551)	-0.0596 (0.139)
Number of observations (worker-days)	7755	7755

Notes: Regressions include individual fixed effects, day*round fixed effects, and neighboring team controls. Standard errors clustered by team.

Effects on Compressed Teams

- Compressed team members: all paid same wage within team
- Variation in relative productivity at baseline has no effect on subsequent performance
- Indicates fairness violation only triggered when pay levels differ

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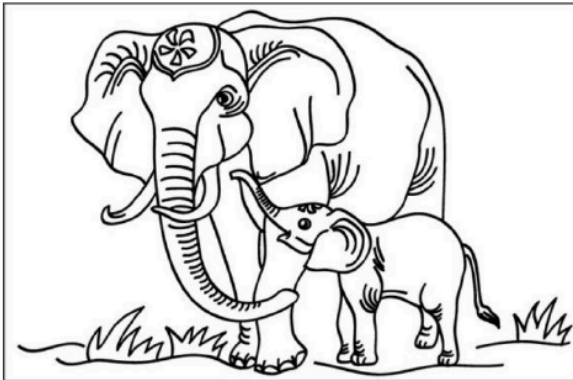
Tests for Team Cohesion

- Cooperative games on last day (fun farewell)
 - Performance determined by your own effort and cooperation with partner
- Paid piece rates for performance
- No benefit to the firm
 - Decrease in Heterogenous team performance is not about punishing the firm
- Note: conducted in later rounds only

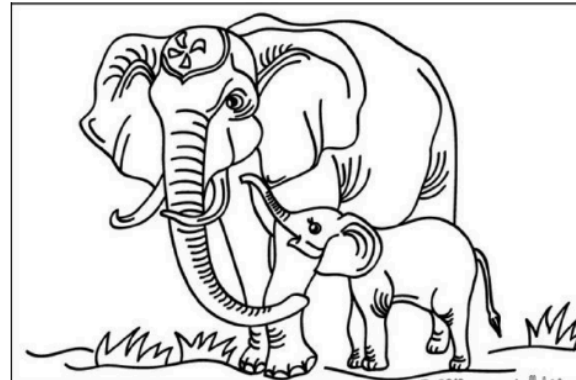
Cooperative pair games

- Spot the difference & Symbol matching
- Workers in pairs: each gets 1 sheet, must cooperate to solve

Sheet 1, Player 1



Sheet 2, Player 2



Sheet 1, Player 1

β	ϣ	÷	Φ	÷	↓	↯	ϣ	ξ	T	μ	λ	†	↓	β
ς	⊚	⊚	ϣ	†	↓	⊚	T	ε	μ	¶	↯	÷	β	ς
Z	ξ	÷	¶	λ	ξ	⊚	μ	Φ	β	⊚	⊚	ζ	ξ	
¶	¶	↓	↓	β	↯	ϣ	ξ	Λ	Λ	⊚	ς	ς	¶	¶
†	ς	ε	μ	μ	ε	⊚	T	β	T	↓	⊚	T	↯	Φ
β	ϣ	↓	ζ	Φ	ξ	ϣ	¶	β	Φ	ς	⊚	⊚	λ	ε
ϣ	ξ	¶	ς	↯	β	θ	⊚	†	↓	↓	⊚	λ	ϣ	ξ
ε	μ	÷	↓	÷	↓	↓	⊚	T	ς	⊚	¶	ξ	μ	÷
T	ϣ	ζ	Φ	ξ	Φ	¶	β	ς	ε	ξ	θ	T	ϣ	Z
ς	↓	⊚	ς	†	⊚	Λ	T	β	÷	λ	†	¶	¶	ς

Sheet 2, Player 2

μ	ξ	÷	†	÷	ε	β	ξ	⊚	ξ	ζ	β	μ	ξ	ξ
Φ	ξ	⊚	θ	ε	↓	↯	†	Ω	ε	θ	Φ	ξ	λ	θ
↓	ξ	ς	ξ	ς	μ	↯	θ	†	T	↯	Ω	ς	↓	
Ω	ζ	ς	T	T	β	ϣ	θ	Z	ς	θ	T	Λ	ζ	ς
Λ	↓	ϣ	⊚	↓	Ω	⊚	ϣ	θ	ϣ	T	†	ϣ	ϣ	Λ
ς	μ	ξ	T	ζ	μ	ϣ	ζ	Λ	Φ	↓	θ	Φ	÷	μ
β	↓	ξ	⊚	θ	⊚	⊚	θ	Λ	÷	ς	⊚	ζ	ε	β
Ω	ξ	ξ	β	↯	Λ	⊚	Λ	ς	β	ξ	ϣ	θ	Λ	ξ
ε	↯	ϣ	T	†	↓	Φ	ϣ	Ω	⊚	ε	↯	ϣ	T	†
†	†	⊚	ς	÷	ς	⊚	ϣ	Λ	β	λ	β	Φ	¶	†

Games 2: Cooperative pair games

- Reshuffle workers into pairs
- Variation in whether paired with own teammate or person from another team
- One common pairwise score for each pair-game
 - Item must be correct and circled by both individuals in pair
- More explicit test for team cohesion: Examine how Heterogeneous workers perform with own teammates vs. others

Games 2: Cooperative pair games

Dependent variable: Number of items correct		
Both workers from same team	0.440 (0.287)	0.613** (0.290)
Both workers from same team x Heterogeneous	-0.929** (0.464)	-0.888* (0.465)
At least one Heterogeneous worker in pair	0.411 (0.345)	0.383 (0.334)
At least one low rank worker in pair		-0.820*** (0.269)
At least one medium rank worker in pair		-0.599** (0.281)
Observations: Number of pair-games	1,870	1,870
Dependent variable mean	4.329	4.329
R-squared	0.199	0.207

- Compressed teams: benefits of playing with teammate
- Heterogeneous team: benefit is completely undone (like playing with a stranger)
- (Note predictive power of productivity rankings in games)

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Alternate Explanations?

- Career concerns

Workers take relative wage as signal of $\Pr(\text{future employment})$

- Workers are told this is a one-time job
- Inconsistent with attendance effect (why give up full-time earnings)
- Inconsistent with the observability and relative difference results

- Discouragement effects / self-signaling

Workers interpret lower wage as negative signal about productivity and reduce output due to discouragement

- No negative effect of telling workers their own ranks
- Inconsistent with the observability and relative difference results

Dynamic incentives

- Lack of dynamic incentives

Experiment shuts down possibility of earning higher wage after treatment

- We are isolating one mechanism: morale effect of unequal pay.
- Unequal pay may have other benefits (e.g. motivation or selection). Optimal policy would balance these effects.
- Not uncommon to have wage set based on $E[\text{MPL}]$, with strong persistence

Conclusion

Summary

- Effort and earnings reductions for L rank, no benefits for H rank
- Perceived justifications are very important

Some possible implications

- Wage compression may be more likely in some settings than others
 - Performance pay perceived as fair (piece rates) → wage dispersion in salaried sales agents
 - Flat wages are often severely compressed (prevailing daily wage) → wage compression in flat hourly or daily wage workers
- Effects of increased transparency in effort
 - Output increases beyond traditional moral hazard benefits

Conclusion

Implications for welfare?

- Wage compression common
 - Casual daily wage, mailroom clerk, tollbooth attendant
- Reward for performance through extensive margin
 - Days of employment, Pr(promotion), Pr(retention)
 - In some sense, incentives may be very high powered
- Wage compression \neq Earnings compression
 - Compressed wage \rightarrow insurance?
 - Earnings dispersion \rightarrow exacerbates inequality?
- Breza, Kaur, Krishnaswamy (ongoing)

Appendix

Team Level Regressions

	Production (std dev)		Attendance	
	Full Sample	Excluding First Day	Full Sample	Excluding First Day
	(1)	(2)	(3)	(4)
Post Wage Change x Heterogeneous Team	-0.440 (0.409)	-0.463 (0.406)	-0.0425 (0.0320)	-0.0486 (0.0324)
Post Wage Change x Compressed_Medium Team	0.00225 (0.483)	0.0125 (0.486)	0.0317 (0.0278)	0.0299 (0.0286)
Post Wage Change x Compressed_High Team	0.756 (0.471)	0.699 (0.478)	0.0682** (0.0274)	0.0661** (0.0284)
Team-day observations	1,483	1,407	1,483	1,407

Notes: Difference in differences regressions. Regressions include task*experience, day*round, and team fixed effects. Standard errors clustered by team. Compressed_Low Team is the omitted category.

Productivity Differences

Productivity difference measure	Dependent variable: Output (standard dev.)		Dependent variable: Attendance	
	Production difference (1)	Above mean difference (2)	Production difference (3)	Above mean difference (4)
Post x Heterogeneous	-0.294** (0.149)	-0.539*** (0.197)	-0.107* (0.0577)	-0.213*** (0.0651)
Post x Heterogeneous x Prod difference	0.128 (0.223)	0.604** (0.277)	0.077 (0.0697)	0.289*** (0.0858)
Post x Heterogeneous x Med rank	0.651** (0.280)	0.956*** (0.300)	0.0980 (0.0774)	0.203*** (0.0755)
Post x Heterogeneous x Med rank x Prod difference	-0.634 (0.409)	-1.210*** (0.397)	-0.156 (0.122)	-0.347*** (0.123)
N	7,755	7,755	7,755	7,755

Notes: Regressions include individual fixed effects, day*round fixed effects, and neighboring team controls. Standard errors clustered by team.