

ONLINE SUPPLEMENTAL APPENDIX TO ACCOMPANY:
*Toward an Understanding of Corporate Social Responsibility: Theory
and Field Experimental Evidence*,
by Daniel Hedblom, Brent R. Hickman, and John A. List

B Hiring and Work Stage Experimental Details

In this section we provide additional details of the experimental design to illustrate various aspects of the test subject experience during our study.

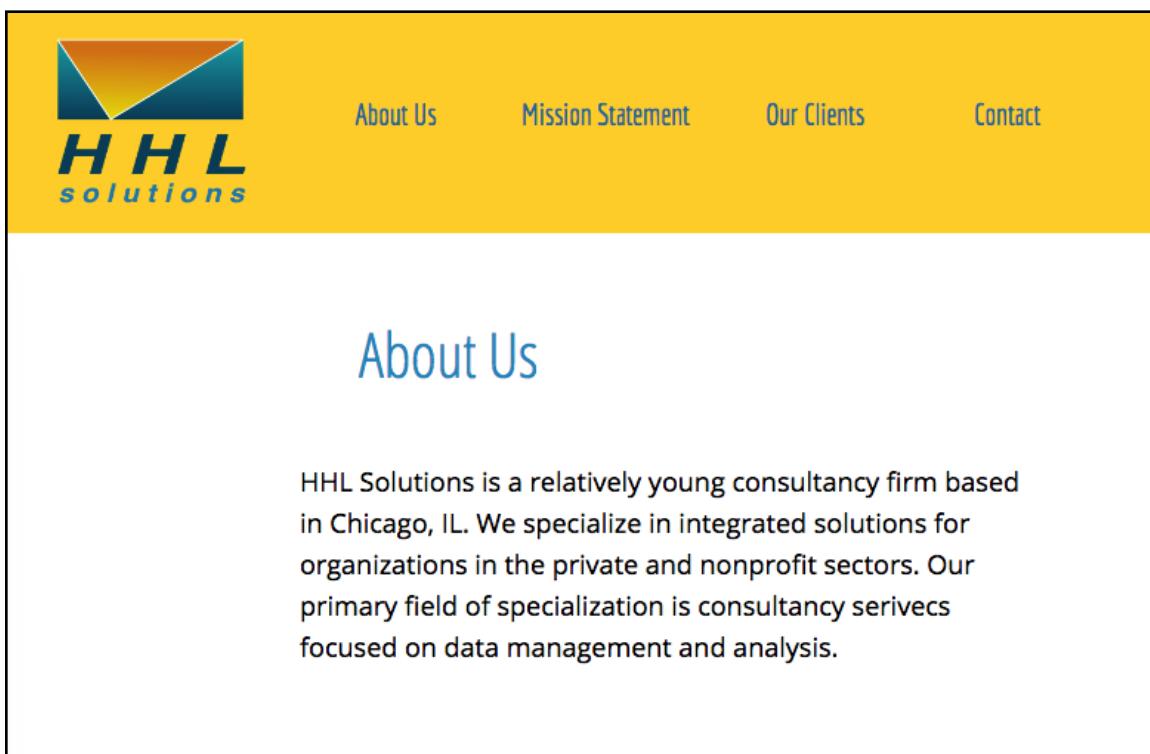


Figure 12: Screenshot of firm website

Note: this website was not directly used in the hiring stage, but rather, was present on the internet before recruiting began in case any potential employee wished to search for more information about *HHL Inc.* on their own

(a) Neutral Recruitment Letter

Dear applicant,

Thank you for your interest in the position! We are sending this general first response to interested applicants.

First, a little more information about the job:

The position is focused on data entry tasks for a number of our clients. We provide services for a variety of different firms and organizations.

The hourly wage rate is \$15.

In the beginning of each day, you will be provided with a number of files with image-coded data. Your responsibility is to manually enter the data into an online database using our web-based interface. You will be paid by the hour and the system will automatically log the number of hours worked each day. You may work as many or as few hours as you would like during the project period. The first project period lasts for about 2 weeks, but there is a possibility of continued work after the initial period.

Detailed information about the actual task will be provided to the individual(s) we proceed to hire.

If you are interested, please formally apply for the position by sending your resume to info@hhlsolutions.com. (We ask you to do this even if you have already sent us your resume in a previous e-mail.) Please put "Data Entry Position Application" in the subject line.

Best regards,

Diana Cavazos
HHL Solutions
Chicago, Illinois

(b) CSR Recruitment Letter

Dear applicant,

Thank you for your interest in the position! We are sending this general first response to interested applicants.

First, a little more information about the job:

The position is focused on data entry tasks for a number of our clients. We provide services for a variety of different firms and organizations. Some of them work in the nonprofit sector with various charitable causes. For example with projects aimed at improving access to education for underprivileged children. We believe that these organizations are making the world a better place and we want to help them doing so. Due to the charitable nature of their activity, we only charge these clients at cost.

The hourly wage rate is \$15.

In the beginning of each day, you will be provided with a number of files with image-coded data. Your responsibility is to manually enter the data into an online database using our web-based interface. You will be paid by the hour and the system will automatically log the number of hours worked each day. You may work as many or as few hours as you would like during the project period. The first project period lasts for about 2 weeks, but there is a possibility of continued work after the initial period.

Detailed information about the actual task will be provided to the individual(s) we proceed to hire.

If you are interested, please formally apply for the position by sending your resume to info@hhlsolutions.com. (We ask you to do this even if you have already sent us your resume in a previous e-mail.) Please put "Data Entry Position Application" in the subject line.

Best regards,

Diana Cavazos
HHL Solutions
Chicago, Illinois

Figure 13: Hiring Stage Non-pecuniary Letters

Note: the above letters show non-pecuniary variation in the third block of text after the salutation. Wage variation occurred in the fourth block of text after the salutation. Both letters above include a \$15 offer, but for low-wage recruits that line would read "The hourly wage rate is \$11." instead.

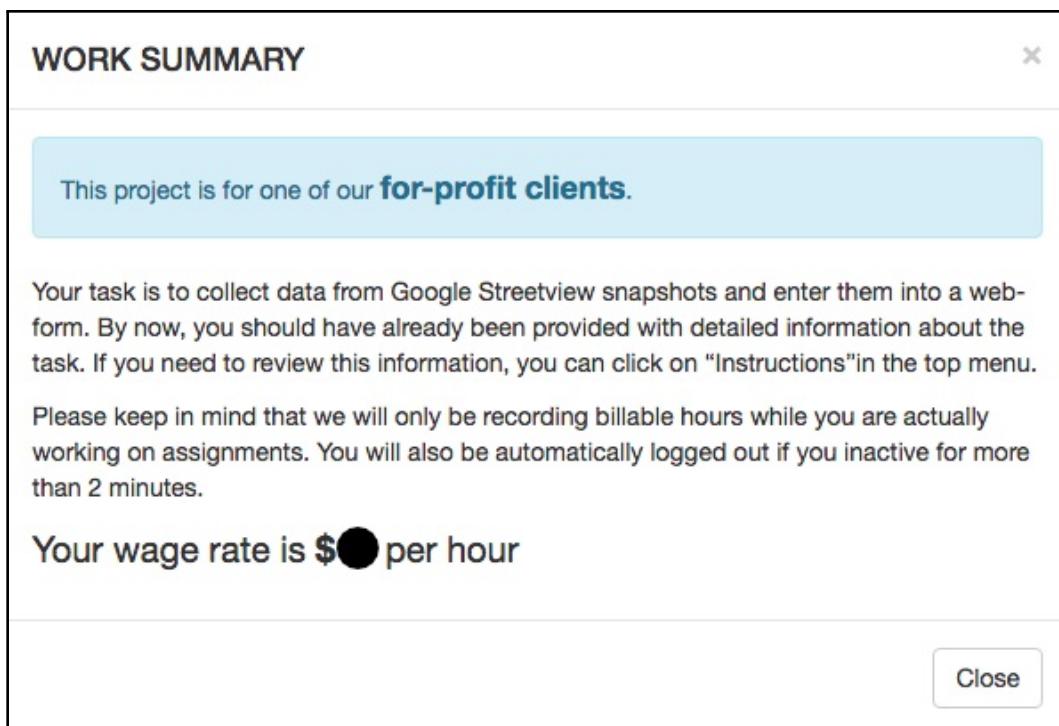


Figure 14: Example Login Information: For-Profit Client Project

Note: this prompt was visible to employees on neutral-framed days immediately after authenticating with their login credentials. Once the employee clicked “Close” he/she was directed to the main screen (see Figure 16).

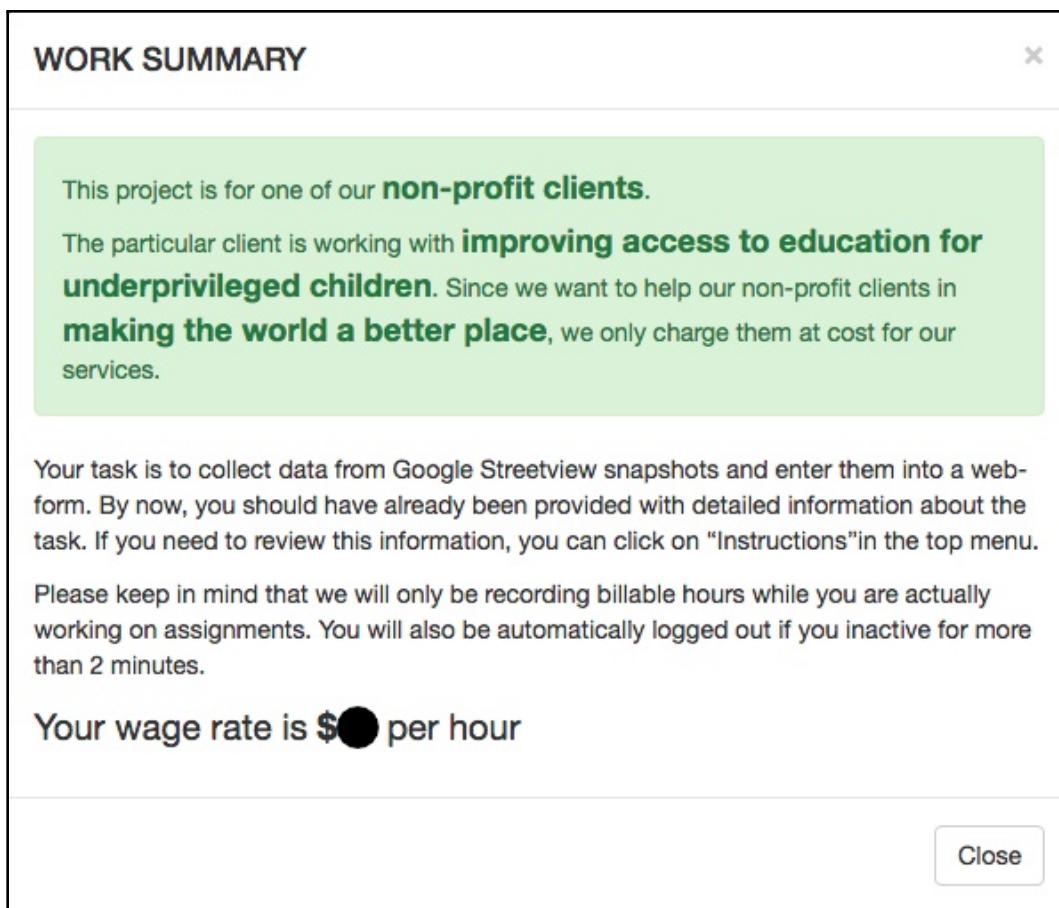


Figure 15: Example Login Information: CSR Client Project

Note: this prompt was visible to employees on CSR-framed days immediately after authenticating with their login credentials. Once the employee clicked “Close” he/she was directed to the main screen (see Figure 17).

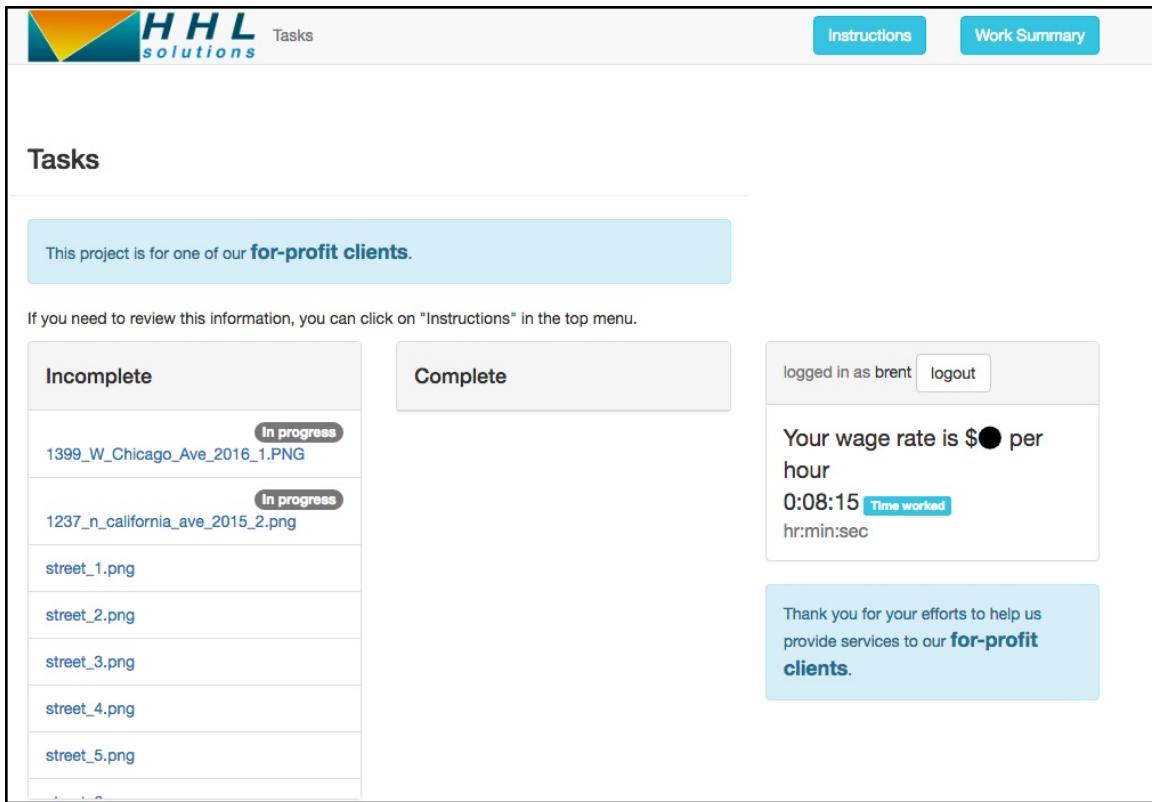


Figure 16: Example Main Screen: For-Profit Client Project

Note: this is a screenshot of the main screen visible to employees on neutral-framed days. The “Incomplete” list on the left contained links to image processing pages where the employee accomplished productive work for the firm (see Figures 18 and 19). The “Complete” list contains tasks that the employee has accomplished during the current web session. Prompts at the top and right-hand side contain reminders of the employee’s wage rate (held constant throughout the experiment), a log of hours worked on the current day, and prompts about the for-profit client tied to the project for the current day.

For expositional purposes, the “Incomplete” list displays two units of output that were underway concurrently, though in our data this was a rare occurrence. In order for an image to be completed, all 19 fields in the data entry form must be filled by the worker. The website prompted the user in cases where he/she left some fields empty. For this reason, it was rare for images in our data to remain only partially processed (well under 1%), and unfinished responses were dropped from the worker-output-level production data. It was also very rare for a worker to pause in the middle of data entry for one image and begin another before finishing the first, as depicted in the image. In the few cases when this did occur—a few dozen out of over 62,000—the image that was completed first was counted first in the sequence of worker i ’s output.

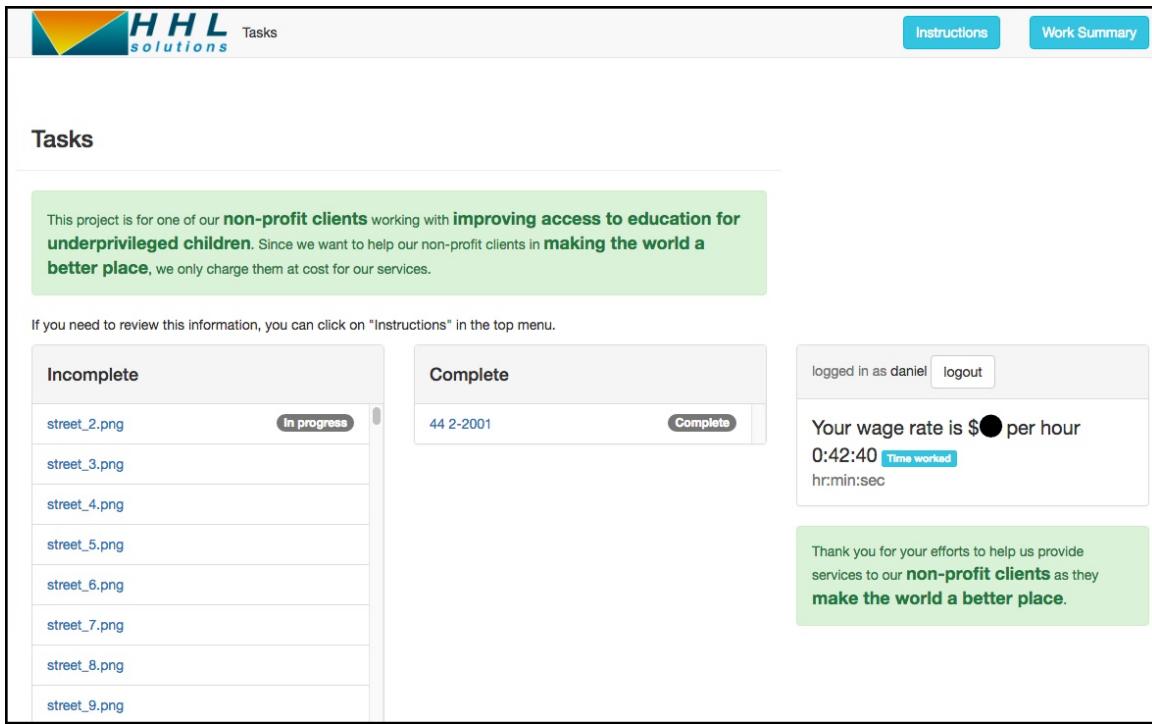


Figure 17: Example Main Screen: CSR Client Project

Note: this is a screenshot of the main screen visible to employees on CSR-framed days. The “Incomplete” list on the left contained links to image processing pages where the employee accomplished productive work for the firm (see Figures 18 and 19). The “Complete” list contains tasks that the employee has accomplished during the current web session. Prompts at the top and right-hand side contain reminders of the employee’s wage rate (held constant throughout the experiment), a log of hours worked on the current day, and prompts about the non-profit client tied to the project for the current day.

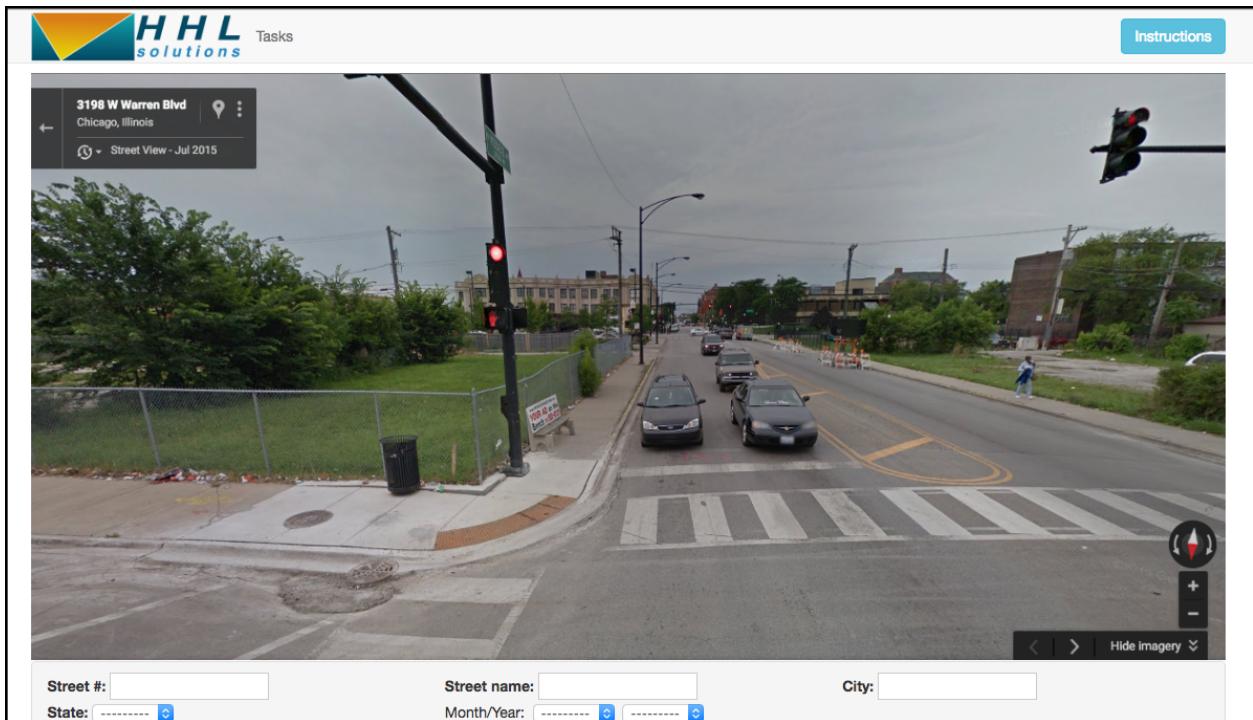


Figure 18: Example Data Entry Screen (top half)

Street #: []	Street name: []	City: []
State: []	Month/Year: []	
The quality of the actual picture is high: []		
The quality of the streets visible in the picture is high: []		How many potholes are visible in the picture: []
The quality of buildings visible in the picture is high: []		The quality of the vehicles visible in the picture is high: []
The amount of litter visible in the picture is high: []		Are there signs of road work visible in the picture: []
Is there graffiti visible in the picture: []		There are one or more house for sale signs visible in the picture: []
Are there shoes on a wire visible in the picture: []		Are there trees and/or large bushes visible in the picture: []
Are there any broken street signs visible in the picture: []		Are there people actively covering their faces visible in the picture: []
<input type="button" value="Save"/> <input type="button" value="submit"/>		

Figure 19: Example Data Entry Screen (bottom half)

Variable	Response	Mean	Mean	#Obs	
Name	Type	Response	StDev	Correct	#Obs
$v_1 : Road\ Work\ Visible$	Binary (0,1,N/A)	0.07	0.29	0.96	62,138
$v_2 : Graffiti\ Visible$	Binary (0,1,N/A)	0.05	0.25	0.96	62,138
$v_3 : Trees/Shrubs\ Visible$	Binary (0,1,N/A)	0.91	0.29	0.93	62,138
$v_4 : For-Sale\ Signs\ Visible$	Binary (0,1,N/A)	0.08	0.37	0.96	62,138
$v_5 : Broken\ Street\ Signs\ Visible$	Binary (0,1,N/A)	0.03	0.23	0.98	62,138
$v_6 : People\ Covering\ Faces$	Binary (0,1,N/A)	0.16	0.53	0.92	62,138
$v_7 : Shoes\ hanging\ from\ wires$	Binary (0,1,N/A)	0.04	0.26	0.98	62,138
$v_8 : Street\ Number$	Integer (open)	1,663	2,188	0.95	62,138
$v_9 : Month$	Categorical (drop-down)	7.31	2.26	0.99	62,138
$v_{10} : Year$	Categorical (drop-down)	2,012	3.02	0.99	62,138
$v_{11} : City$	String (open)	–	–	0.99	62,138
$v_{12} : State$	Categorical (drop-down)	–	–	0.99	62,138
$v_{13} : Building\ Quality$	Likert scale (1-5)	3.64	1.15	0.48	62,138
$v_{14} : Quality\ of\ Visible\ Cars$	Likert scale (1-5)	3.73	1.15	0.50	62,138
$v_{15} : Litter$	Likert scale (1-5)	2.37	1.57	0.47	62,138
$v_{16} : Picture\ Quality$	Likert scale (1-5)	3.83	1.10	0.55	62,138
$v_{17} : Street\ Quality$	Likert scale (1-5)	3.60	1.15	0.48	62,138
$v_{18} : Number\ of\ Visible\ Potholes$	Integer (drop-down)	0.52	1.19	0.76	62,138
$v_{19} : Street\ Name$	String (open)	–	–	0.85	62,138
Accuracy Index: (across worker-image pairs)	Derived $(\min A_{q_i}, \max A_{q_i}) = (0,1)$	0.586	0.226	–	62,138

Table 11: Summary of Data Entry Variables

Note on Accuracy Index Calculation: One additional concern was over the possibility that male and female workers may systematically diverge on fields requiring judgment calls, in a way that reflects underlying gender differences of mean opinion, rather than effort or ability. The raw response data suggested this is the case: female workers on average saw lower quality in the cars, buildings, picture, and streets, and on average saw higher quantities of litter and potholes than did their male counterparts. Other variables showed no sign of a divergence. In order to filter out systematic gender-based differences in mean judgment, our final accuracy measure defines a given response for the Likert-scale variables as correct if it matches the modal response within the worker’s own gender group for that image-variable pair. All descriptive statistics in the table follow this convention. Gender data were gleaned from resume names and cross-checked using publicly available information on social media.

C Supplemental Tables and Figures

C.1 Estimated Learning Curves

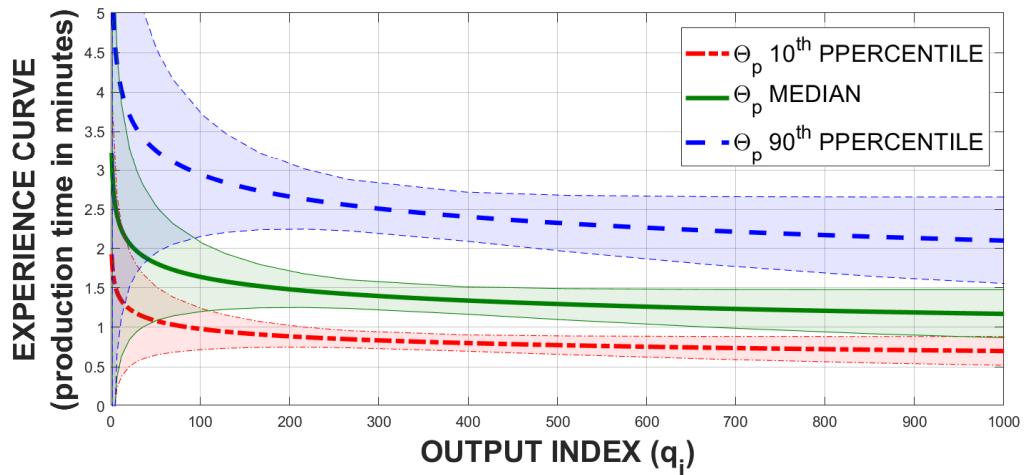


Figure 20: Experience Curves with 90% Confidence Bounds

C.2 Model Fit

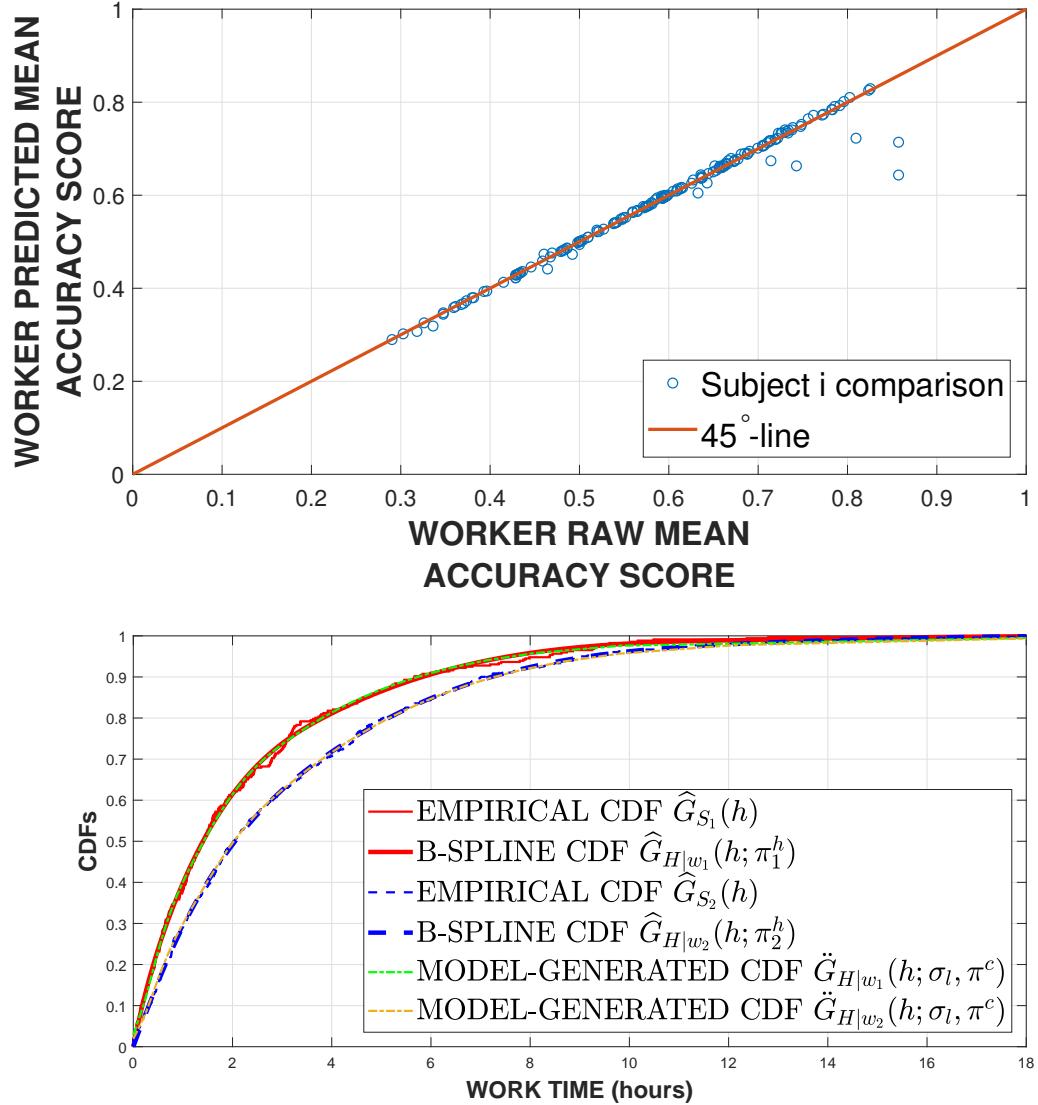


Figure 21: Model Fit: Accuracy and Labor Supply

C.2.1 Correlations Among Worker Characteristics

Here we explore correlations between productivity, work quality, and the value of one's leisure time. Using the weights defined in Appendix A.8 we can also define weighted Pearson's linear correlation coefficient estimators as follows:

$$\begin{aligned}
\widehat{\text{Corr}}[\log(\Theta_p), \Theta_a] &= \frac{\widehat{\text{Cov}}[\log(\Theta_p), \Theta_a]}{\sqrt{\widehat{\text{Var}}[\log(\Theta_p)] \widehat{\text{Var}}[\Theta_a]}}, \\
\widehat{\text{Corr}}[\log(\Theta_d), \Theta_a] &= \frac{\widehat{\text{Cov}}[\log(\Theta_d), \Theta_a]}{\sqrt{\widehat{\text{Var}}[\log(\Theta_d)] \widehat{\text{Var}}[\Theta_a]}}, \\
\widehat{\text{Corr}}[\log(\Theta_p), \log(\Theta_l)] &= \frac{\widehat{\text{Cov}}[\log(\Theta_p), \log(\Theta_l)]}{\sqrt{\widehat{\text{Var}}[\log(\Theta_p)] \widehat{\text{Var}}[\log(\Theta_l)]}}, \\
\widehat{\text{Corr}}[\log(\Theta_d), \log(\Theta_l)] &= \frac{\widehat{\text{Cov}}[\log(\Theta_d), \log(\Theta_l)]}{\sqrt{\widehat{\text{Var}}[\log(\Theta_d)] \widehat{\text{Var}}[\log(\Theta_l)]}}, \\
\widehat{\text{Corr}}[\log(\Theta_p), \log(\Theta_d)] &= \frac{\widehat{\text{Cov}}[\log(\Theta_p), \log(\Theta_d)]}{\sqrt{\widehat{\text{Var}}[\log(\Theta_p)] \widehat{\text{Var}}[\log(\Theta_d)]}}, \text{ and} \\
\widehat{\text{Corr}}[\Theta_a, \log(\Theta_l)] &= \frac{\widehat{\text{Cov}}[\Theta_a, \log(\Theta_l)]}{\sqrt{\widehat{\text{Var}}[\Theta_a] \widehat{\text{Var}}[\log(\Theta_l)]}}
\end{aligned} \tag{33}$$

where

$$\begin{aligned}
\widehat{\text{Cov}}[\log(\Theta_p), \Theta_a] &= \sum_{i=1}^I \frac{\eta_i^p + \eta_i^a}{2} \left(\log(\widehat{\Theta}_p) - \widehat{E}[\log(\Theta_p)] \right) \left(\widehat{\Theta}_a - \widehat{E}[\Theta_a] \right), \\
\widehat{\text{Cov}}[\log(\Theta_d), \Theta_a] &= \sum_{i=1}^I \frac{\eta_i^d + \eta_i^a}{2} \left(\log(\widehat{\Theta}_d) - \widehat{E}[\log(\Theta_d)] \right) \left(\widehat{\Theta}_a - \widehat{E}[\Theta_a] \right), \\
\widehat{\text{Cov}}[\log(\Theta_p), \log(\Theta_l)] &= \sum_{i=1}^I \frac{\eta_i^p + \eta_i^l}{2} \left(\log(\widehat{\Theta}_p) - \widehat{E}[\log(\Theta_p)] \right) \left(\log(\widehat{\Theta}_l) - \widehat{E}[\log(\Theta_l)] \right), \\
\widehat{\text{Cov}}[\log(\Theta_d), \log(\Theta_l)] &= \sum_{i=1}^I \frac{\eta_i^d + \eta_i^l}{2} \left(\log(\widehat{\Theta}_d) - \widehat{E}[\log(\Theta_d)] \right) \left(\log(\widehat{\Theta}_l) - \widehat{E}[\log(\Theta_l)] \right), \\
\widehat{\text{Cov}}[\log(\Theta_p), \log(\Theta_d)] &= \sum_{i=1}^I \frac{\eta_i^p + \eta_i^d}{2} \left(\log(\widehat{\Theta}_p) - \widehat{E}[\log(\Theta_p)] \right) \left(\log(\widehat{\Theta}_d) - \widehat{E}[\log(\Theta_d)] \right), \\
\widehat{\text{Cov}}[\Theta_a, \log(\Theta_l)] &= \sum_{i=1}^I \frac{\eta_i^l + \eta_i^a}{2} \left(\log(\widehat{\Theta}_l) - \widehat{E}[\log(\Theta_l)] \right) \left(\widehat{\Theta}_a - \widehat{E}[\Theta_a] \right),
\end{aligned} \tag{34}$$

and where the $\widehat{E}[\cdot]$'s and $\widehat{Var}[\cdot]$'s are the familiar weighted expectation and variance estimators.³¹ Alternatively, we may wish to examine rank correlations among the various worker characteristics, using Spearman's rank correlation coefficient. This we do in the same way as above, except that in equations (33) – (34) we compute weighted correlations of quantile ranks $(\widehat{G}_p(\widehat{\Theta}_{pi}), \widehat{G}_d(\widehat{\Theta}_{di}), \widehat{G}_a(\widehat{\Theta}_{ai}), \widehat{G}_l(\widehat{\Theta}_{li}))$ instead. This alternative measure allows for non-linear co-movement between Θ_j and Θ_k .

Table 12 contains a summary of the estimated pairwise linear correlations between $\log(\Theta_p)$, $\log(\Theta_d)$, Θ_a , and $\log(\Theta_l)$. We also compute several measures relating to the predictive power of productivity and work quality on the value of one's time. Specifically, we first report the combined R^2_l of a weighted regression of the following form:

$$\begin{aligned} \log(\Theta_{li}) = & \pi_0 + \pi_1 \log(\Theta_{pi}) + \pi_2 \log(\Theta_{pi})^2 + \pi_3 \log(\Theta_{di}) + \pi_4 \log(\Theta_{di})^2 + \pi_5 \Theta_{ai} + \pi_6 \Theta_{ai}^2 \\ & + \pi_7 \log(\Theta_{pi}) \log(\Theta_{di}) + \pi_8 \log(\Theta_{pi}) \Theta_{ai} + \pi_9 \log(\Theta_{di}) \Theta_{ai} + \epsilon_i. \end{aligned} \quad (35)$$

In addition, we report individual partial- $R^2_{l,j}$ measures, $j = p, d, a$, using only the linear, quadratic, and intercept terms in the j^{th} control, one at a time. Finally, we report partial- $R^2_{l,pda}$ which is the goodness of fit measure from a regression of $\log(\Theta_{li})$ on only the interaction terms from (35) and an intercept. When interpreting the numbers in the table, it is important to keep in mind that, due to first-stage sample variation—that is, due to the fact that we must estimate correlations and predictive power using *estimated* worker types $\widehat{\Theta}_{ji}$, $j = p, d, a, l$, rather than a sample of direct observations of worker types Θ_{ji} , $j = p, d, a, l$ —we must confront a measurement error problem which attenuates correlations and R^2 measures toward zero. Thus, one can think of the figures in the table as providing an approximate lower bound on the strengths of the various relationships they represent.

The table shows that active productivity is strongly correlated with the other three characteristics, both in levels and in ranks. Recall that one's productivity in the active (passive) sense is *decreasing* in Θ_p (Θ_d), whereas accuracy and the value of time are *increasing* in Θ_a and Θ_l , respectively. Therefore, the signs of the estimated correlations suggest that workers who are more productive in the active sense also

³¹Because the correlation coefficient seeks to measure the strength of a linear relationship between two random variables, we take the logs of productivity and leisure preferences in order to put them into a linear scale first.

PEARSON'S					SPEARMAN'S				PREDICTIVE		
LINEAR CORRELATIONS					RANK CORRELATIONS				POWER		
	$\log(\Theta_p)$	$\log(\Theta_d)$	Θ_a	$\log(\Theta_l)$		Θ_p	Θ_d	Θ_a	Θ_l	Measure	Value
$\log(\Theta_p)$	1	0.5818	-0.1571	-0.4395	Θ_p	1	0.5357	-0.1966	-0.2153	R_l^2 (combined)	0.3407
$\log(\Theta_d)$	—	1	0.0683	0.0223	Θ_d	—	1	0.0767	0.1214	$R_{l,p}^2$ (partial)	0.1494
Θ_a	—	—	1	0.0727	Θ_a	—	—	1	0.0469	$R_{l,d}^2$ (partial)	0.0202
$\log(\Theta_l)$	—	—	—	1	Θ_l	—	—	—	1	$R_{l,a}^2$ (partial)	0.0093
										$R_{l,pda}^2$ (partial)	0.1220

Table 12: Correlations and Predictive Power

tend to be more productive in the passive sense. They also tend to produce higher quality work, and have more highly valued time. The remaining pairwise correlations are smaller and weaker. In terms of predictive power, a quadratic polynomial in the productivity and accuracy variables is able to explain 34% of the variation in the value of one's time.³² The partial R^2 numbers indicate that active productivity is the most important single variable for predicting the value of worker time, but that interactions among the productivity and work quality characteristics play an important role as well.

³²Adding cubic terms only increases R_l^2 by about 2%.

C.3 Model Simulations and Counterfactual Results:

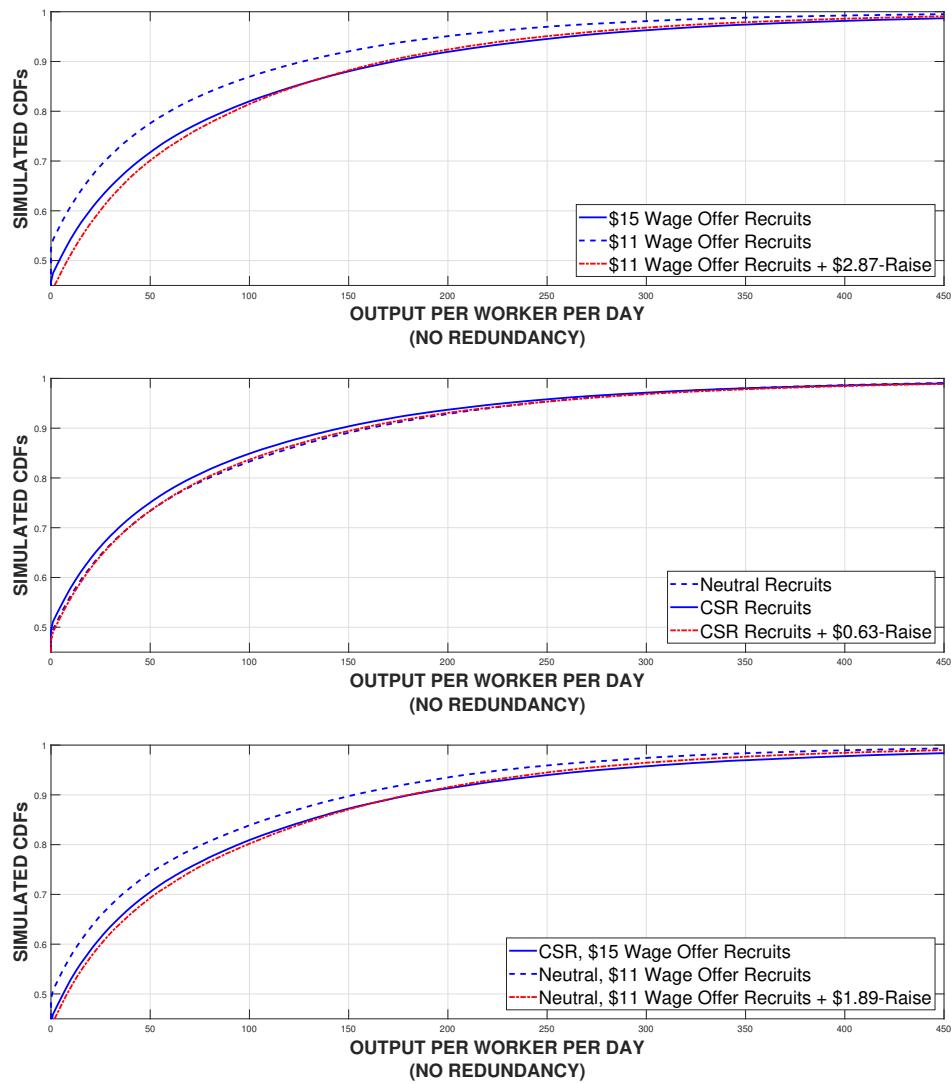


Figure 22: Simulated Per-Worker Daily Output Supply

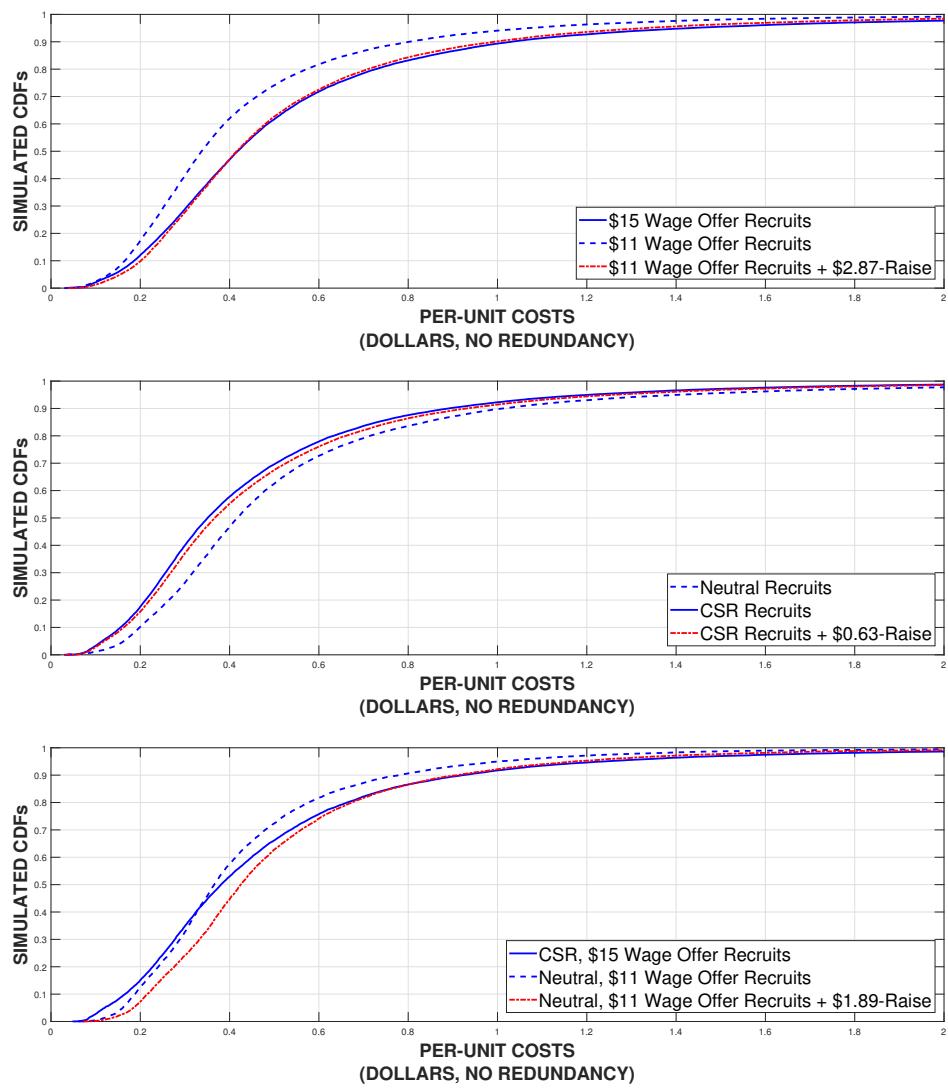


Figure 23: Simulated Per-Unit Production Costs

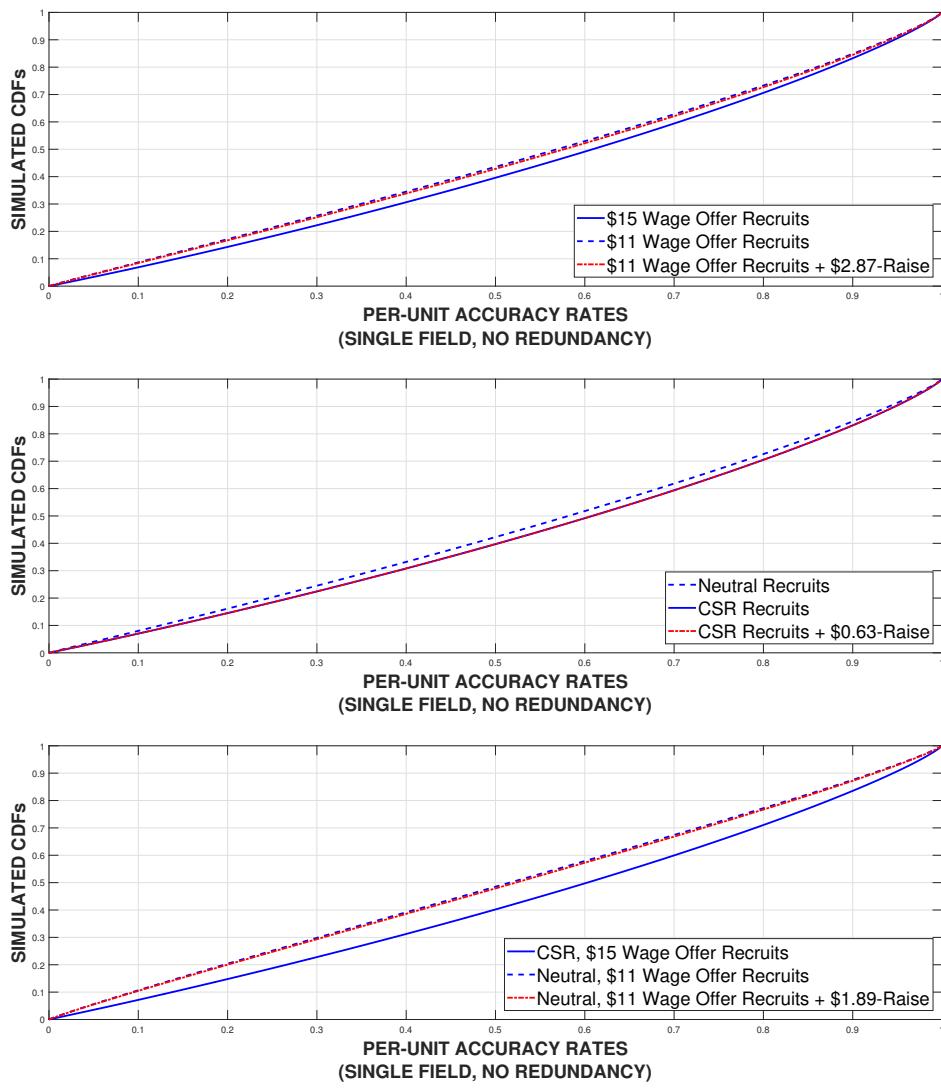


Figure 24: Simulated Per-Unit, Single-Worker Accuracy Rates

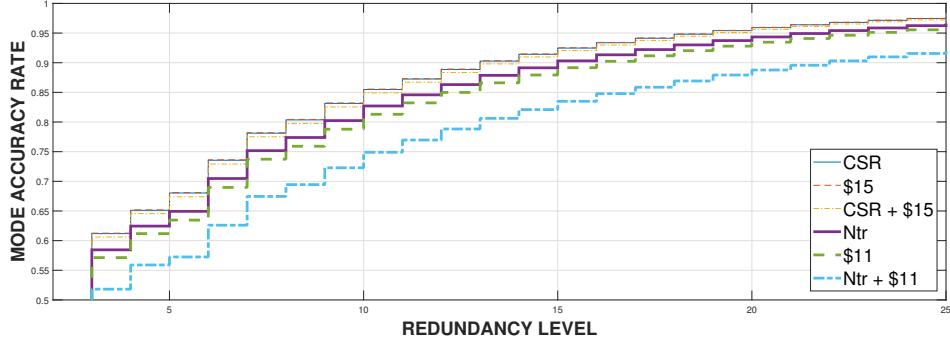


Figure 25: Redundancy Simulations

C.4 Heterogeneous Treatment Effects By Gender

Recall that for productivity measures, the treatment parameters are directly interpretable as a scaling factor for mean production time. For active productivity, our estimates show that in response to our CSR treatment, male workers reduce on-task production times by roughly 51.1%, while females reduce on-task production times by about 11.4%. In terms of passive productivity, the estimated effects are large as well: male workers reduce their consumption of paid, off-task time by 71.3%, while females reduce it by 28.7%. One possible reason for the treatment effects being larger for males than for females is the fact that our male workers were less productive than their female counterparts at baseline. In particular, mean on-task production times for males (in absence of work-stage treatment) were 44.7% higher than for their female counterparts, and mean off-task times per unit of output were 89.7% higher. A two-sided bootstrap test reveals that these productivity differences by gender are statistically significant at the 10% level at baseline. However, a similar test in the presence of CSR work-stage treatment results in no statistically significant productivity difference (active or passive) between male and female workers.³³

³³These productivity differences are measured in terms of workers' estimated fixed effects, which we discuss in the body of the paper. The baseline test compares weighted means of $\hat{\Theta}_{ji}$ within gender group for $j = p, d$, and the second test compares weighted means of $\hat{\Theta}_{ji}\hat{T}_j$ within gender group for $j = p, d$.

	<i>Parameter</i>	<i>Estimate</i>	<i>P-value</i>	<i>Error</i>	<i>Std</i> <i>90% CI</i>
ACTIVE PRODUCTIVITY:					
Treatment, Male:	β_p	0.4894	1.16×10^{-5} ($H_0 : \beta_p = 1$)	0.0842	[0, 0.608] (one-sided)
Female Treatment Differential:	β_{pf}	1.8102	0.0019 ($H_0 : \beta_{pf} = 1$)	0.3440	[1.321, 2.480]
Treatment, Female:	$\beta_p \times \beta_{pf}$	0.8860	0.0799 ($H_0 : \beta_p \times \beta_{pf} = 1$)	0.0771	[0, 0.989] (one-sided)
PASSIVE PRODUCTIVITY:					
Treatment, Male:	β_d	0.2875	0.0026 ($H_0 : \beta_d = 1$)	0.1340	[0, 0.510] (one-sided)
Female Treatment Differential:	β_{df}	2.4787	0.0679 ($H_0 : \beta_{df} = 1$)	1.2093	[1.109, 5.616]
Treatment, Female:	$\beta_d \times \beta_{df}$	0.7127	0.0571 ($H_0 : \beta_d \times \beta_{df} = 1$)	0.1565	[0, 0.938] (one-sided)
ACCURACY/WORK QUALITY:					
Treatment, Male:	β_a	-0.0124	0.1742 ($H_0 : \beta_a = 0$)	0.0091	[-0.027, 0.003]
Female Treatment Differential:	β_{af}	-0.0045	0.6774 ($H_0 : \beta_{af} = 0$)	0.0108	[-0.022, 0.013]
Treatment, Female:	$\beta_a + \beta_{af}$	-0.0168	0.0031 ($H_0 : \beta_a + \beta_{af} = 0$)	0.0057	[-0.026, -0.008]
LABOR SUPPLY COSTS:					
Treatment, Male:	β_l	0.9438	0.1582 ($H_0 : \beta_l = 1$)	0.0398	[0.878, 1.009]
Female Treatment Differential:	β_{lf}	1.1199	0.1807 ($H_0 : \beta_{lf} = 1$)	0.0896	[0.9726, 1.2673]
Treatment, Female:	$\beta_l \times \beta_{lf}$	1.0570	0.3578 ($H_0 : \beta_l \times \beta_{lf} = 1$)	0.062	[0.955, 1.159]

Table 13: Parameter estimates: Treatment Effects By Gender.

C.5 Point-Specific P-Values for Stochastic Dominance Tests

Given the large speed-up in production of each unit of output, it may be less obvious *a priori* what the expected sign of the treatment effects for work quality should be. On the one hand, the CSR treatment may inspire workers to exert themselves in producing accurate output. On the other hand, since they are producing units of output more quickly and taking less rest time in between, it is also possible, through burnout or mental fatigue, that work quality may fall. In the third section of Table 5 we see that the point estimates are all negative. Estimated effects for male and female workers are of roughly the same magnitude, but both are economically insignificant. To place the units in context, note that the accuracy treatment effect for females—the one which is statistically different from zero—is only enough to reduce mean predicted accuracy for the average female worker by two thirds of one percentage point. Taking this result in combination with the previous estimates, we find that the work-stage CSR treatment substantially increases productivity in both the active and passive senses, and that this speed-up of production is virtually all valuable to the firm, coming at little or no cost in terms of diminished work quality.

For labor supply, we do not find strong evidence of a work-stage treatment effect. For males we find weak evidence that receiving a CSR treatment at the work stage causes them to increase their within-day labor supply as if their supply costs had dropped by 5.6%. However, for females, the point estimate for work-stage treatment is in the opposite direction but less precisely estimated.

Percentile	Θ_p	P-val		Percentile	Θ_p	P-val	
		$H_2 : \frac{G_{p Ntr}}{G_{p CSR}} <$	$H_3 : \frac{G_{p Ntr}}{G_{p CSR}} >$			$H_2 : \frac{G_{p w=\$11}}{G_{p w=\$15}} <$	$H_3 : \frac{G_{p w=\$11}}{G_{p w=\$15}} >$
0.01	0.330	0.000	1.000	0.01	0.330	0.000	1.000
0.02	0.399	0.000	1.000	0.02	0.399	0.000	1.000
0.03	0.433	0.822	0.178	0.03	0.433	0.158	0.842
0.05	0.462	0.760	0.240	0.05	0.462	0.249	0.751
0.07	0.474	0.712	0.288	0.07	0.474	0.264	0.736
0.08	0.485	0.189	0.811	0.08	0.485	0.028	0.972
0.10	0.505	0.220	0.780	0.10	0.505	0.074	0.926
0.11	0.515	0.239	0.761	0.11	0.515	0.114	0.886
0.12	0.524	0.258	0.742	0.12	0.524	0.165	0.835
0.14	0.543	0.625	0.375	0.14	0.543	0.045	0.955
0.15	0.553	0.358	0.642	0.15	0.553	0.009	0.991
0.16	0.563	0.399	0.601	0.16	0.563	0.025	0.975
0.19	0.585	0.310	0.690	0.19	0.585	0.029	0.971
0.20	0.596	0.314	0.686	0.20	0.596	0.039	0.961
0.21	0.608	0.155	0.845	0.21	0.608	0.017	0.983
0.23	0.634	0.158	0.842	0.23	0.634	0.033	0.967
0.24	0.647	0.175	0.825	0.24	0.647	0.035	0.965
0.25	0.661	0.158	0.842	0.25	0.661	0.041	0.959
0.27	0.690	0.167	0.833	0.27	0.690	0.041	0.959
0.29	0.705	0.289	0.711	0.29	0.705	0.039	0.961
0.30	0.720	0.306	0.694	0.30	0.720	0.149	0.851
0.32	0.750	0.259	0.741	0.32	0.750	0.171	0.829
0.33	0.764	0.233	0.767	0.33	0.764	0.197	0.803
0.34	0.779	0.152	0.848	0.34	0.779	0.130	0.870
0.36	0.806	0.116	0.884	0.36	0.806	0.099	0.901
0.37	0.820	0.194	0.806	0.37	0.820	0.075	0.925
0.38	0.833	0.184	0.816	0.38	0.833	0.084	0.916
0.41	0.859	0.246	0.754	0.41	0.859	0.101	0.899
0.42	0.872	0.235	0.765	0.42	0.872	0.096	0.904
0.43	0.885	0.234	0.766	0.43	0.885	0.097	0.903
0.45	0.911	0.258	0.742	0.45	0.911	0.102	0.898
0.46	0.924	0.257	0.743	0.46	0.924	0.103	0.897
0.47	0.936	0.305	0.695	0.47	0.936	0.087	0.913
0.49	0.962	0.341	0.659	0.49	0.962	0.080	0.920
0.51	0.976	0.417	0.583	0.51	0.976	0.146	0.854
0.52	0.989	0.295	0.705	0.52	0.989	0.125	0.875
0.54	1.016	0.337	0.663	0.54	1.016	0.105	0.895
0.55	1.030	0.371	0.629	0.55	1.030	0.096	0.904
0.56	1.044	0.342	0.658	0.56	1.044	0.117	0.883
0.58	1.073	0.182	0.818	0.58	1.073	0.201	0.799
0.59	1.089	0.178	0.822	0.59	1.089	0.208	0.792
0.60	1.105	0.136	0.864	0.60	1.105	0.256	0.744
0.63	1.138	0.068	0.932	0.63	1.138	0.262	0.738
0.64	1.155	0.048	0.952	0.64	1.155	0.232	0.768
0.65	1.173	0.043	0.957	0.65	1.173	0.223	0.777
0.67	1.211	0.064	0.936	0.67	1.211	0.328	0.672
0.68	1.231	0.058	0.942	0.68	1.231	0.328	0.672
0.69	1.252	0.110	0.890	0.69	1.252	0.256	0.744
0.71	1.298	0.140	0.860	0.71	1.298	0.350	0.650
0.72	1.323	0.138	0.862	0.72	1.323	0.350	0.650
0.74	1.350	0.206	0.794	0.74	1.350	0.483	0.517
0.76	1.408	0.180	0.820	0.76	1.408	0.482	0.518
0.77	1.439	0.182	0.818	0.77	1.439	0.489	0.511
0.78	1.473	0.380	0.620	0.78	1.473	0.762	0.238
0.80	1.546	0.531	0.469	0.80	1.546	0.897	0.103
0.81	1.585	0.253	0.747	0.81	1.585	0.835	0.165
0.82	1.626	0.323	0.677	0.82	1.626	0.863	0.137
0.85	1.714	0.514	0.486	0.85	1.714	0.843	0.157
0.86	1.761	0.515	0.485	0.86	1.761	0.865	0.135
0.87	1.812	0.515	0.485	0.87	1.812	0.883	0.117
0.89	1.923	0.320	0.680	0.89	1.923	0.766	0.234
0.90	1.985	0.342	0.658	0.90	1.985	0.812	0.188
0.91	2.053	0.338	0.662	0.91	2.053	0.819	0.181
0.93	2.211	0.285	0.715	0.93	2.211	0.802	0.198
0.94	2.306	0.137	0.863	0.94	2.306	0.744	0.256
0.96	2.415	0.122	0.878	0.96	2.415	0.747	0.253
0.98	2.704	0.073	0.927	0.98	2.704	0.772	0.228
0.99	2.899	0.369	0.631	0.99	2.899	0.483	0.517

Table 14: Point-Specific P-Values for Θ_p (First-Order Dominance Test)

Percentile	Θ_p	$H_2 : G_{p CSR+Trmt}^{G_p Ntr <}$		$H_3 : G_{p CSR+Trmt}^{G_p Ntr >}$		Percentile	Θ_p	$H_2 : G_{p CSR,w=\$11}^{G_p Ntr,w=\$11 <}$		$H_3 : G_{p CSR,w=\$15}^{G_p Ntr,w=\$11 >}$	
		$P\text{-val}$		$P\text{-val}$				$P\text{-val}$		$P\text{-val}$	
0.01	0.330	0.099		0.901		0.01	0.330	0.000		1.000	
0.02	0.399	0.078		0.922		0.02	0.399	0.000		1.000	
0.03	0.433	0.204		0.796		0.03	0.433	0.000		1.000	
0.05	0.462	0.176		0.824		0.05	0.462	0.000		1.000	
0.07	0.474	0.180		0.820		0.07	0.474	0.000		1.000	
0.08	0.485	0.039		0.961		0.08	0.485	0.000		1.000	
0.10	0.505	0.032		0.968		0.10	0.505	0.000		1.000	
0.11	0.515	0.037		0.963		0.11	0.515	0.000		1.000	
0.12	0.524	0.042		0.958		0.12	0.524	0.000		1.000	
0.14	0.543	0.070		0.930		0.14	0.543	0.000		1.000	
0.15	0.553	0.057		0.943		0.15	0.553	0.000		1.000	
0.16	0.563	0.042		0.958		0.16	0.563	0.041		0.959	
0.19	0.585	0.037		0.963		0.19	0.585	0.034		0.966	
0.20	0.596	0.039		0.961		0.20	0.596	0.050		0.950	
0.21	0.608	0.040		0.960		0.21	0.608	0.008		0.992	
0.23	0.634	0.023		0.977		0.23	0.634	0.018		0.982	
0.24	0.647	0.026		0.974		0.24	0.647	0.023		0.977	
0.25	0.661	0.025		0.975		0.25	0.661	0.025		0.975	
0.27	0.690	0.008		0.992		0.27	0.690	0.032		0.968	
0.29	0.705	0.013		0.987		0.29	0.705	0.059		0.941	
0.30	0.720	0.026		0.974		0.30	0.720	0.147		0.853	
0.32	0.750	0.021		0.979		0.32	0.750	0.140		0.860	
0.33	0.764	0.018		0.982		0.33	0.764	0.138		0.862	
0.34	0.779	0.016		0.984		0.34	0.779	0.076		0.924	
0.36	0.806	0.015		0.985		0.36	0.806	0.055		0.945	
0.37	0.820	0.032		0.968		0.37	0.820	0.065		0.935	
0.38	0.833	0.032		0.968		0.38	0.833	0.067		0.933	
0.41	0.859	0.065		0.935		0.41	0.859	0.104		0.896	
0.42	0.872	0.044		0.956		0.42	0.872	0.099		0.901	
0.43	0.885	0.044		0.956		0.43	0.885	0.099		0.901	
0.45	0.911	0.037		0.963		0.45	0.911	0.100		0.900	
0.46	0.924	0.030		0.970		0.46	0.924	0.100		0.900	
0.47	0.936	0.023		0.977		0.47	0.936	0.101		0.899	
0.49	0.962	0.016		0.984		0.49	0.962	0.101		0.899	
0.51	0.976	0.019		0.981		0.51	0.976	0.189		0.811	
0.52	0.989	0.018		0.982		0.52	0.989	0.128		0.872	
0.54	1.016	0.017		0.983		0.54	1.016	0.120		0.880	
0.55	1.030	0.021		0.979		0.55	1.030	0.121		0.879	
0.56	1.044	0.019		0.981		0.56	1.044	0.121		0.879	
0.58	1.073	0.017		0.983		0.58	1.073	0.097		0.903	
0.59	1.089	0.015		0.985		0.59	1.089	0.100		0.900	
0.60	1.105	0.014		0.986		0.60	1.105	0.099		0.901	
0.63	1.138	0.007		0.993		0.63	1.138	0.079		0.921	
0.64	1.155	0.007		0.993		0.64	1.155	0.069		0.931	
0.65	1.173	0.006		0.994		0.65	1.173	0.070		0.930	
0.67	1.211	0.009		0.991		0.67	1.211	0.136		0.864	
0.68	1.231	0.009		0.991		0.68	1.231	0.137		0.863	
0.69	1.252	0.020		0.980		0.69	1.252	0.141		0.859	
0.71	1.298	0.027		0.973		0.71	1.298	0.213		0.787	
0.72	1.323	0.026		0.974		0.72	1.323	0.209		0.791	
0.74	1.350	0.048		0.952		0.74	1.350	0.339		0.661	
0.76	1.408	0.009		0.991		0.76	1.408	0.296		0.704	
0.77	1.439	0.005		0.995		0.77	1.439	0.265		0.735	
0.78	1.473	0.011		0.989		0.78	1.473	0.643		0.357	
0.80	1.546	0.017		0.983		0.80	1.546	0.841		0.159	
0.81	1.585	0.012		0.988		0.81	1.585	0.758		0.242	
0.82	1.626	0.027		0.973		0.82	1.626	0.798		0.202	
0.85	1.714	0.053		0.947		0.85	1.714	0.871		0.129	
0.86	1.761	0.037		0.963		0.86	1.761	0.902		0.098	
0.87	1.812	0.023		0.977		0.87	1.812	0.926		0.074	
0.89	1.923	0.015		0.985		0.89	1.923	0.734		0.266	
0.90	1.985	0.012		0.988		0.90	1.985	0.898		0.102	
0.91	2.053	0.000		1.000		0.91	2.053	0.927		0.073	
0.93	2.211	0.000		1.000		0.93	2.211	0.956		0.044	
0.94	2.306	0.000		1.000		0.94	2.306	0.000		1.000	
0.96	2.415	0.000		1.000		0.96	2.415	0.000		1.000	
0.98	2.704	0.000		1.000		0.98	2.704	0.000		1.000	
0.99	2.899	0.000		1.000		0.99	2.899	0.000		1.000	

Table 15: Point-Specific P-Values for Θ_p^{21} (First-Order Dominance Test): Combined Effects

Percentile	Θ_d	P-val		Percentile	Θ_d	P-val	
		$H_2 : G_{d Ntr} < G_{d CSR}$	$H_3 : G_{d Ntr} > G_{d CSR}$			$H_2 : G_{d w=\$11} < G_{d w=\$15}$	$H_3 : G_{d w=\$11} > G_{d w=\$15}$
0.01	0.403	0.000	1.000	0.01	0.403	0.000	1.000
0.02	0.430	0.000	1.000	0.02	0.430	0.708	0.292
0.03	0.450	0.370	0.630	0.03	0.450	0.499	0.501
0.05	0.477	0.679	0.321	0.05	0.477	0.304	0.696
0.07	0.489	0.647	0.353	0.07	0.489	0.334	0.666
0.08	0.503	0.522	0.478	0.08	0.503	0.682	0.318
0.10	0.530	0.656	0.344	0.10	0.530	0.486	0.514
0.11	0.544	0.176	0.824	0.11	0.544	0.173	0.827
0.12	0.558	0.045	0.955	0.12	0.558	0.080	0.920
0.14	0.584	0.096	0.904	0.14	0.584	0.178	0.822
0.15	0.596	0.119	0.881	0.15	0.596	0.195	0.805
0.16	0.607	0.108	0.892	0.16	0.607	0.272	0.728
0.19	0.627	0.136	0.864	0.19	0.627	0.286	0.714
0.20	0.636	0.111	0.889	0.20	0.636	0.248	0.752
0.21	0.644	0.187	0.813	0.21	0.644	0.437	0.563
0.23	0.659	0.539	0.461	0.23	0.659	0.370	0.630
0.24	0.666	0.538	0.462	0.24	0.666	0.373	0.627
0.25	0.673	0.455	0.545	0.25	0.673	0.318	0.682
0.27	0.687	0.449	0.551	0.27	0.687	0.334	0.666
0.29	0.693	0.634	0.366	0.29	0.693	0.648	0.352
0.30	0.700	0.633	0.367	0.30	0.700	0.644	0.356
0.32	0.714	0.631	0.369	0.32	0.714	0.639	0.361
0.33	0.720	0.496	0.504	0.33	0.720	0.537	0.463
0.34	0.727	0.478	0.522	0.34	0.727	0.564	0.436
0.36	0.741	0.434	0.566	0.36	0.741	0.536	0.464
0.37	0.749	0.254	0.746	0.37	0.749	0.395	0.605
0.38	0.757	0.291	0.709	0.38	0.757	0.463	0.537
0.41	0.773	0.219	0.781	0.41	0.773	0.657	0.343
0.42	0.782	0.276	0.724	0.42	0.782	0.750	0.250
0.43	0.792	0.345	0.655	0.43	0.792	0.720	0.280
0.45	0.813	0.395	0.605	0.45	0.813	0.686	0.314
0.46	0.825	0.392	0.608	0.46	0.825	0.693	0.307
0.47	0.838	0.390	0.610	0.47	0.838	0.694	0.306
0.49	0.867	0.429	0.571	0.49	0.867	0.771	0.229
0.51	0.884	0.422	0.578	0.51	0.884	0.766	0.234
0.52	0.903	0.412	0.588	0.52	0.903	0.740	0.260
0.54	0.945	0.475	0.525	0.54	0.945	0.573	0.427
0.55	0.968	0.520	0.480	0.55	0.968	0.539	0.461
0.56	0.991	0.520	0.480	0.56	0.991	0.538	0.462
0.58	1.034	0.500	0.500	0.58	1.034	0.506	0.494
0.59	1.053	0.500	0.500	0.59	1.053	0.507	0.493
0.60	1.071	0.512	0.488	0.60	1.071	0.419	0.581
0.63	1.106	0.608	0.392	0.63	1.106	0.564	0.436
0.64	1.123	0.417	0.583	0.64	1.123	0.329	0.671
0.65	1.140	0.334	0.666	0.65	1.140	0.267	0.733
0.67	1.174	0.386	0.614	0.67	1.174	0.231	0.769
0.68	1.192	0.348	0.652	0.68	1.192	0.273	0.727
0.69	1.210	0.348	0.652	0.69	1.210	0.273	0.727
0.71	1.249	0.345	0.655	0.71	1.249	0.281	0.719
0.72	1.269	0.350	0.650	0.72	1.269	0.286	0.714
0.74	1.291	0.356	0.644	0.74	1.291	0.268	0.732
0.76	1.340	0.491	0.509	0.76	1.340	0.192	0.808
0.77	1.369	0.407	0.593	0.77	1.369	0.418	0.582
0.78	1.400	0.400	0.600	0.78	1.400	0.428	0.572
0.80	1.479	0.567	0.433	0.80	1.479	0.639	0.361
0.81	1.527	0.565	0.435	0.81	1.527	0.643	0.357
0.82	1.582	0.728	0.272	0.82	1.582	0.846	0.154
0.85	1.714	0.697	0.303	0.85	1.714	0.871	0.129
0.86	1.797	0.626	0.374	0.86	1.797	0.884	0.116
0.87	1.895	0.646	0.354	0.87	1.895	0.893	0.107
0.89	2.155	0.899	0.101	0.89	2.155	0.807	0.193
0.90	2.310	0.874	0.126	0.90	2.310	0.742	0.258
0.91	2.481	0.853	0.147	0.91	2.481	0.523	0.477
0.93	2.892	0.786	0.214	0.93	2.892	0.810	0.190
0.94	3.151	0.316	0.684	0.94	3.151	0.681	0.319
0.96	3.473	0.545	0.455	0.96	3.473	0.450	0.550
0.98	4.610	0.462	0.538	0.98	4.610	0.318	0.682
0.99	5.840	0.401	0.599	0.99	5.840	0.205	0.795

Table 16: Point-Specific P-Values for Θ_d (First-Order Dominance Test)

Percentile	Θ_d	$P\text{-val}$		Percentile	Θ_d	$P\text{-val}$	
		$H_2 : G_{d CSR+Trmt}^{G_d Ntr <}$	$H_3 : G_{d CSR+Trmt}^{G_d Ntr >}$			$H_2 : G_{d CSR,w=\$15}^{G_d Ntr,w=\$11 <}$	$H_3 : G_{d CSR,w=\$15}^{G_d Ntr,w=\$11 >}$
0.01	0.403	0.000	1.000	0.01	0.403	0.000	1.000
0.02	0.430	0.000	1.000	0.02	0.430	0.000	1.000
0.03	0.450	0.000	1.000	0.03	0.450	0.000	1.000
0.05	0.477	0.013	0.987	0.05	0.477	0.000	1.000
0.07	0.489	0.007	0.993	0.07	0.489	0.000	1.000
0.08	0.503	0.021	0.979	0.08	0.503	0.000	1.000
0.10	0.530	0.004	0.996	0.10	0.530	0.000	1.000
0.11	0.544	0.000	1.000	0.11	0.544	0.000	1.000
0.12	0.558	0.001	0.999	0.12	0.558	0.000	1.000
0.14	0.584	0.003	0.997	0.14	0.584	0.051	0.949
0.15	0.596	0.004	0.996	0.15	0.596	0.072	0.928
0.16	0.607	0.003	0.997	0.16	0.607	0.094	0.906
0.19	0.627	0.003	0.997	0.19	0.627	0.131	0.869
0.20	0.636	0.003	0.997	0.20	0.636	0.118	0.882
0.21	0.644	0.005	0.995	0.21	0.644	0.262	0.738
0.23	0.659	0.016	0.984	0.23	0.659	0.433	0.567
0.24	0.666	0.015	0.985	0.24	0.666	0.438	0.562
0.25	0.673	0.015	0.985	0.25	0.673	0.368	0.632
0.27	0.687	0.014	0.986	0.27	0.687	0.372	0.628
0.29	0.693	0.020	0.980	0.29	0.693	0.714	0.286
0.30	0.700	0.019	0.981	0.30	0.700	0.710	0.290
0.32	0.714	0.017	0.983	0.32	0.714	0.706	0.294
0.33	0.720	0.016	0.984	0.33	0.720	0.585	0.415
0.34	0.727	0.015	0.985	0.34	0.727	0.585	0.415
0.36	0.741	0.013	0.987	0.36	0.741	0.547	0.453
0.37	0.749	0.013	0.987	0.37	0.749	0.364	0.636
0.38	0.757	0.014	0.986	0.38	0.757	0.443	0.557
0.41	0.773	0.014	0.986	0.41	0.773	0.489	0.511
0.42	0.782	0.016	0.984	0.42	0.782	0.621	0.379
0.43	0.792	0.021	0.979	0.43	0.792	0.622	0.378
0.45	0.813	0.017	0.983	0.45	0.813	0.623	0.377
0.46	0.825	0.016	0.984	0.46	0.825	0.623	0.377
0.47	0.838	0.014	0.986	0.47	0.838	0.624	0.376
0.49	0.867	0.010	0.990	0.49	0.867	0.672	0.328
0.51	0.884	0.009	0.991	0.51	0.884	0.664	0.336
0.52	0.903	0.008	0.992	0.52	0.903	0.637	0.363
0.54	0.945	0.009	0.991	0.54	0.945	0.553	0.447
0.55	0.968	0.008	0.992	0.55	0.968	0.552	0.448
0.56	0.991	0.006	0.994	0.56	0.991	0.552	0.448
0.58	1.034	0.004	0.996	0.58	1.034	0.511	0.489
0.59	1.053	0.003	0.997	0.59	1.053	0.512	0.488
0.60	1.071	0.004	0.996	0.60	1.071	0.468	0.532
0.63	1.106	0.005	0.995	0.63	1.106	0.640	0.360
0.64	1.123	0.007	0.993	0.64	1.123	0.400	0.600
0.65	1.140	0.007	0.993	0.65	1.140	0.318	0.682
0.67	1.174	0.007	0.993	0.67	1.174	0.317	0.683
0.68	1.192	0.005	0.995	0.68	1.192	0.315	0.685
0.69	1.210	0.004	0.996	0.69	1.210	0.315	0.685
0.71	1.249	0.003	0.997	0.71	1.249	0.319	0.681
0.72	1.269	0.003	0.997	0.72	1.269	0.326	0.674
0.74	1.291	0.003	0.997	0.74	1.291	0.315	0.685
0.76	1.340	0.006	0.994	0.76	1.340	0.317	0.683
0.77	1.369	0.007	0.993	0.77	1.369	0.407	0.593
0.78	1.400	0.006	0.994	0.78	1.400	0.404	0.596
0.80	1.479	0.030	0.970	0.80	1.479	0.646	0.354
0.81	1.527	0.025	0.975	0.81	1.527	0.658	0.342
0.82	1.582	0.077	0.923	0.82	1.582	0.893	0.107
0.85	1.714	0.051	0.949	0.85	1.714	0.930	0.070
0.86	1.797	0.040	0.960	0.86	1.797	0.941	0.059
0.87	1.895	0.031	0.969	0.87	1.895	0.960	0.040
0.89	2.155	0.069	0.931	0.89	2.155	0.986	0.014
0.90	2.310	0.051	0.949	0.90	2.310	0.988	0.012
0.91	2.481	0.092	0.908	0.91	2.481	0.924	0.076
0.93	2.892	0.037	0.963	0.93	2.892	0.999	0.001
0.94	3.151	0.019	0.981	0.94	3.151	0.575	0.425
0.96	3.473	0.090	0.910	0.96	3.473	0.605	0.395
0.98	4.610	0.052	0.948	0.98	4.610	0.274	0.726
0.99	5.840	0.000	1.000	0.99	5.840	0.183	0.817

Table 17: Point-Specific P-Values for Θ_d^{23} (First-Order Dominance Test): Combined Effects

Percentile	Θ_a	P-val		Percentile	Θ_a	P-val	
		$H_2 : \frac{G_{a Ntr}}{G_{a CSR}} <$	$H_3 : \frac{G_{a Ntr}}{G_{a CSR}} >$			$H_2 : \frac{G_{a w=\$11}}{G_{a w=\$15}} <$	$H_3 : \frac{G_{a w=\$11}}{G_{a w=\$15}} >$
0.01	-0.506	0.709	0.291	0.01	-0.506	0.390	0.610
0.02	-0.468	0.694	0.306	0.02	-0.468	0.401	0.599
0.03	-0.431	0.811	0.189	0.03	-0.431	0.169	0.831
0.05	-0.368	0.498	0.502	0.05	-0.368	0.053	0.947
0.07	-0.341	0.414	0.586	0.07	-0.341	0.082	0.918
0.08	-0.316	0.509	0.491	0.08	-0.316	0.130	0.870
0.10	-0.272	0.237	0.763	0.10	-0.272	0.085	0.915
0.11	-0.252	0.113	0.887	0.11	-0.252	0.022	0.978
0.12	-0.232	0.116	0.884	0.12	-0.232	0.023	0.977
0.14	-0.194	0.130	0.870	0.14	-0.194	0.022	0.978
0.15	-0.175	0.148	0.852	0.15	-0.175	0.030	0.970
0.16	-0.156	0.058	0.942	0.16	-0.156	0.149	0.851
0.19	-0.118	0.023	0.977	0.19	-0.118	0.013	0.987
0.20	-0.099	0.028	0.972	0.20	-0.099	0.014	0.986
0.21	-0.081	0.058	0.942	0.21	-0.081	0.006	0.994
0.23	-0.047	0.107	0.893	0.23	-0.047	0.011	0.990
0.24	-0.031	0.220	0.780	0.24	-0.031	0.021	0.979
0.25	-0.016	0.219	0.781	0.25	-0.016	0.022	0.978
0.27	0.014	0.207	0.793	0.27	0.014	0.021	0.979
0.29	0.028	0.239	0.761	0.29	0.028	0.026	0.974
0.30	0.041	0.426	0.574	0.30	0.041	0.054	0.946
0.32	0.068	0.421	0.579	0.32	0.068	0.056	0.944
0.33	0.081	0.520	0.480	0.33	0.081	0.075	0.925
0.34	0.095	0.519	0.481	0.34	0.095	0.076	0.924
0.36	0.121	0.462	0.538	0.36	0.121	0.054	0.946
0.37	0.134	0.536	0.464	0.37	0.134	0.068	0.932
0.38	0.147	0.544	0.456	0.38	0.147	0.070	0.930
0.41	0.175	0.621	0.379	0.41	0.175	0.087	0.913
0.42	0.188	0.617	0.383	0.42	0.188	0.088	0.912
0.43	0.202	0.567	0.433	0.43	0.202	0.070	0.930
0.45	0.230	0.405	0.595	0.45	0.230	0.118	0.882
0.46	0.244	0.436	0.564	0.46	0.244	0.094	0.906
0.47	0.257	0.509	0.491	0.47	0.257	0.027	0.973
0.49	0.283	0.535	0.465	0.49	0.283	0.029	0.971
0.51	0.296	0.568	0.432	0.51	0.296	0.030	0.970
0.52	0.308	0.632	0.368	0.52	0.308	0.039	0.961
0.54	0.331	0.706	0.294	0.54	0.331	0.017	0.983
0.55	0.342	0.702	0.298	0.55	0.342	0.017	0.983
0.56	0.353	0.702	0.298	0.56	0.353	0.015	0.985
0.58	0.374	0.381	0.619	0.58	0.374	0.009	0.991
0.59	0.384	0.401	0.599	0.59	0.384	0.010	0.990
0.60	0.394	0.356	0.644	0.60	0.394	0.012	0.988
0.63	0.412	0.304	0.696	0.63	0.412	0.016	0.984
0.64	0.421	0.182	0.818	0.64	0.421	0.008	0.992
0.65	0.430	0.071	0.929	0.65	0.430	0.022	0.978
0.67	0.446	0.065	0.935	0.67	0.446	0.014	0.986
0.68	0.454	0.064	0.936	0.68	0.454	0.013	0.987
0.69	0.462	0.073	0.927	0.69	0.462	0.007	0.993
0.71	0.478	0.195	0.805	0.71	0.478	0.020	0.980
0.72	0.485	0.186	0.814	0.72	0.485	0.017	0.983
0.74	0.493	0.163	0.837	0.74	0.493	0.016	0.984
0.76	0.508	0.023	0.977	0.76	0.508	0.076	0.924
0.77	0.515	0.022	0.978	0.77	0.515	0.075	0.925
0.78	0.523	0.021	0.979	0.78	0.523	0.075	0.925
0.80	0.539	0.019	0.981	0.80	0.539	0.055	0.945
0.81	0.547	0.043	0.957	0.81	0.547	0.098	0.902
0.82	0.556	0.218	0.782	0.82	0.556	0.312	0.688
0.85	0.574	0.214	0.786	0.85	0.574	0.316	0.684
0.86	0.584	0.207	0.793	0.86	0.584	0.253	0.747
0.87	0.594	0.495	0.505	0.87	0.594	0.342	0.658
0.89	0.617	0.402	0.598	0.89	0.617	0.402	0.598
0.90	0.629	0.412	0.588	0.90	0.629	0.409	0.591
0.91	0.643	0.674	0.326	0.91	0.643	0.583	0.417
0.93	0.673	0.800	0.200	0.93	0.673	0.429	0.571
0.94	0.691	0.483	0.517	0.94	0.691	0.699	0.301
0.96	0.712	0.482	0.518	0.96	0.712	0.704	0.296
0.98	0.768	0.693	0.307	0.98	0.768	0.407	0.593
0.99	0.814	0.194	0.806	0.99	0.814	0.711	0.289

Table 18: Point-Specific P-Values for Θ_a (First-Order Dominance Test) 24

Percentile	Θ_a	$P\text{-val}$ $G_{a Ntr} <$		$P\text{-val}$ $G_{a Ntr} >$		Percentile	Θ_a	$P\text{-val}$ $G_{a Ntr,w=\$11} <$		$P\text{-val}$ $G_{a Ntr,w=\$11} >$	
		$H_2 : G_{a CSR+Trtmt}$	$H_3 : G_{a CSR+Trtmt}$	$H_2 : G_{a CSR,w=\$15}$	$H_3 : G_{a CSR,w=\$15}$			$H_2 : G_{a CSR,w=\$15}$	$H_3 : G_{a CSR,w=\$15}$	$H_2 : G_{a CSR,w=\$15}$	$H_3 : G_{a CSR,w=\$15}$
0.01	-0.506	0.639	0.361	0.01	-0.506	0.410	0.590				
0.02	-0.468	0.694	0.306	0.02	-0.468	0.360	0.640				
0.03	-0.431	0.811	0.189	0.03	-0.431	0.348	0.652				
0.05	-0.368	0.498	0.502	0.05	-0.368	0.142	0.858				
0.07	-0.341	0.487	0.513	0.07	-0.341	0.149	0.851				
0.08	-0.316	0.550	0.450	0.08	-0.316	0.225	0.775				
0.10	-0.272	0.254	0.746	0.10	-0.272	0.102	0.898				
0.11	-0.252	0.113	0.887	0.11	-0.252	0.028	0.972				
0.12	-0.232	0.116	0.884	0.12	-0.232	0.029	0.971				
0.14	-0.194	0.130	0.870	0.14	-0.194	0.030	0.970				
0.15	-0.175	0.205	0.795	0.15	-0.175	0.034	0.966				
0.16	-0.156	0.059	0.941	0.16	-0.156	0.069	0.931				
0.19	-0.118	0.023	0.977	0.19	-0.118	0.007	0.993				
0.20	-0.099	0.053	0.947	0.20	-0.099	0.007	0.993				
0.21	-0.081	0.096	0.904	0.21	-0.081	0.007	0.993				
0.23	-0.047	0.230	0.770	0.23	-0.047	0.014	0.986				
0.24	-0.031	0.221	0.779	0.24	-0.031	0.033	0.967				
0.25	-0.016	0.221	0.779	0.25	-0.016	0.034	0.966				
0.27	0.014	0.230	0.770	0.27	0.014	0.035	0.965				
0.29	0.028	0.429	0.571	0.29	0.028	0.043	0.957				
0.30	0.041	0.426	0.574	0.30	0.041	0.096	0.904				
0.32	0.068	0.525	0.475	0.32	0.068	0.096	0.904				
0.33	0.081	0.520	0.480	0.33	0.081	0.132	0.868				
0.34	0.095	0.520	0.480	0.34	0.095	0.131	0.869				
0.36	0.121	0.536	0.464	0.36	0.121	0.083	0.917				
0.37	0.134	0.543	0.457	0.37	0.134	0.110	0.890				
0.38	0.147	0.546	0.454	0.38	0.147	0.112	0.888				
0.41	0.175	0.621	0.379	0.41	0.175	0.146	0.854				
0.42	0.188	0.655	0.345	0.42	0.188	0.144	0.856				
0.43	0.202	0.575	0.425	0.43	0.202	0.117	0.883				
0.45	0.230	0.562	0.438	0.45	0.230	0.114	0.886				
0.46	0.244	0.600	0.400	0.46	0.244	0.112	0.888				
0.47	0.257	0.530	0.470	0.47	0.257	0.078	0.922				
0.49	0.283	0.638	0.362	0.49	0.283	0.086	0.914				
0.51	0.296	0.631	0.369	0.51	0.296	0.095	0.905				
0.52	0.308	0.632	0.368	0.52	0.308	0.123	0.877				
0.54	0.331	0.707	0.293	0.54	0.331	0.123	0.877				
0.55	0.342	0.703	0.297	0.55	0.342	0.119	0.881				
0.56	0.353	0.709	0.291	0.56	0.353	0.111	0.889				
0.58	0.374	0.402	0.598	0.58	0.374	0.026	0.974				
0.59	0.384	0.401	0.599	0.59	0.384	0.027	0.973				
0.60	0.394	0.356	0.644	0.60	0.394	0.026	0.974				
0.63	0.412	0.321	0.679	0.63	0.412	0.021	0.979				
0.64	0.421	0.184	0.816	0.64	0.421	0.004	0.996				
0.65	0.430	0.071	0.929	0.65	0.430	0.003	0.997				
0.67	0.446	0.086	0.914	0.67	0.446	0.001	0.999				
0.68	0.454	0.223	0.777	0.68	0.454	0.001	0.999				
0.69	0.462	0.205	0.795	0.69	0.462	0.000	1.000				
0.71	0.478	0.196	0.804	0.71	0.478	0.005	0.995				
0.72	0.485	0.186	0.814	0.72	0.485	0.004	0.996				
0.74	0.493	0.163	0.837	0.74	0.493	0.004	0.996				
0.76	0.508	0.023	0.977	0.76	0.508	0.004	0.996				
0.77	0.515	0.022	0.978	0.77	0.515	0.004	0.996				
0.78	0.523	0.024	0.976	0.78	0.523	0.003	0.997				
0.80	0.539	0.246	0.754	0.80	0.539	0.001	0.999				
0.81	0.547	0.233	0.767	0.81	0.547	0.004	0.996				
0.82	0.556	0.234	0.766	0.82	0.556	0.092	0.908				
0.85	0.574	0.463	0.537	0.85	0.574	0.061	0.939				
0.86	0.584	0.496	0.504	0.86	0.584	0.029	0.971				
0.87	0.594	0.501	0.499	0.87	0.594	0.195	0.805				
0.89	0.617	0.416	0.584	0.89	0.617	0.136	0.864				
0.90	0.629	0.668	0.332	0.90	0.629	0.120	0.880				
0.91	0.643	0.757	0.243	0.91	0.643	0.543	0.457				
0.93	0.673	0.800	0.200	0.93	0.673	0.571	0.429				
0.94	0.691	0.483	0.517	0.94	0.691	0.577	0.423				
0.96	0.712	0.508	0.492	0.96	0.712	0.584	0.416				
0.98	0.768	0.690	0.310	0.98	0.768	0.509	0.491				
0.99	0.814	0.601	0.399	0.99	0.814	0.503	0.497				

Table 19: Point-Specific P-Values for Θ_a (First-Order Dominance Test):Combined Effects 25

Percentile	Θ_l	P-val		P-val		Percentile	Θ_l	P-val		P-val	
		$H_2 : G_{l Ntr} < G_{l CSR}$	$H_3 : G_{l Ntr} > G_{l CSR}$	$H_2 : G_{l w=\$11} < G_{l w=\$15}$	$H_3 : G_{l w=\$11} > G_{l w=\$15}$			$H_2 : G_{l w=\$11} < G_{l w=\$15}$	$H_3 : G_{l w=\$11} > G_{l w=\$15}$		
0.01	1.515	0.000	1.000	0.01	1.515	0.000	1.000	0.000	1.000	0.000	1.000
0.02	1.828	0.000	1.000	0.02	1.828	0.141	0.859	0.000	1.000	0.000	1.000
0.03	2.503	0.000	1.000	0.03	2.503	0.623	0.377	0.000	1.000	0.000	1.000
0.05	3.135	0.056	0.944	0.05	3.135	0.156	0.844	0.000	1.000	0.000	1.000
0.07	3.416	0.035	0.965	0.07	3.416	0.464	0.536	0.000	1.000	0.000	1.000
0.08	3.691	0.037	0.963	0.08	3.691	0.443	0.557	0.000	1.000	0.000	1.000
0.10	4.148	0.054	0.946	0.10	4.148	0.379	0.621	0.000	1.000	0.000	1.000
0.11	4.338	0.020	0.980	0.11	4.338	0.037	0.963	0.000	1.000	0.000	1.000
0.12	4.514	0.023	0.977	0.12	4.514	0.066	0.934	0.000	1.000	0.000	1.000
0.14	4.842	0.014	0.986	0.14	4.842	0.010	0.990	0.000	1.000	0.000	1.000
0.15	4.998	0.017	0.983	0.15	4.998	0.006	0.994	0.000	1.000	0.000	1.000
0.16	5.152	0.033	0.967	0.16	5.152	0.025	0.975	0.000	1.000	0.000	1.000
0.19	5.455	0.042	0.958	0.19	5.455	0.032	0.968	0.000	1.000	0.000	1.000
0.20	5.606	0.045	0.955	0.20	5.606	0.030	0.970	0.000	1.000	0.000	1.000
0.21	5.758	0.076	0.924	0.21	5.758	0.073	0.927	0.000	1.000	0.000	1.000
0.23	6.067	0.247	0.753	0.23	6.067	0.091	0.909	0.000	1.000	0.000	1.000
0.24	6.224	0.235	0.765	0.24	6.224	0.233	0.767	0.000	1.000	0.000	1.000
0.25	6.384	0.242	0.758	0.25	6.384	0.231	0.769	0.000	1.000	0.000	1.000
0.27	6.710	0.131	0.869	0.27	6.710	0.197	0.803	0.000	1.000	0.000	1.000
0.29	6.878	0.178	0.822	0.29	6.878	0.237	0.763	0.000	1.000	0.000	1.000
0.30	7.048	0.119	0.881	0.30	7.048	0.292	0.708	0.000	1.000	0.000	1.000
0.32	7.398	0.169	0.831	0.32	7.398	0.181	0.819	0.000	1.000	0.000	1.000
0.33	7.579	0.227	0.773	0.33	7.579	0.261	0.739	0.000	1.000	0.000	1.000
0.34	7.762	0.291	0.709	0.34	7.762	0.322	0.678	0.000	1.000	0.000	1.000
0.36	8.142	0.217	0.783	0.36	8.142	0.097	0.903	0.000	1.000	0.000	1.000
0.37	8.338	0.220	0.780	0.37	8.338	0.105	0.895	0.000	1.000	0.000	1.000
0.38	8.537	0.279	0.721	0.38	8.537	0.068	0.932	0.000	1.000	0.000	1.000
0.41	8.946	0.253	0.747	0.41	8.946	0.073	0.927	0.000	1.000	0.000	1.000
0.42	9.155	0.200	0.800	0.42	9.155	0.103	0.897	0.000	1.000	0.000	1.000
0.43	9.365	0.138	0.862	0.43	9.365	0.130	0.870	0.000	1.000	0.000	1.000
0.45	9.792	0.100	0.900	0.45	9.792	0.163	0.837	0.000	1.000	0.000	1.000
0.46	10.007	0.136	0.864	0.46	10.007	0.211	0.789	0.000	1.000	0.000	1.000
0.47	10.223	0.136	0.864	0.47	10.223	0.210	0.790	0.000	1.000	0.000	1.000
0.49	10.656	0.288	0.712	0.49	10.656	0.153	0.847	0.000	1.000	0.000	1.000
0.51	10.872	0.346	0.654	0.51	10.872	0.132	0.868	0.000	1.000	0.000	1.000
0.52	11.088	0.411	0.589	0.52	11.088	0.167	0.833	0.000	1.000	0.000	1.000
0.54	11.519	0.395	0.605	0.54	11.519	0.249	0.751	0.000	1.000	0.000	1.000
0.55	11.734	0.410	0.590	0.55	11.734	0.210	0.790	0.000	1.000	0.000	1.000
0.56	11.947	0.585	0.415	0.56	11.947	0.221	0.779	0.000	1.000	0.000	1.000
0.58	12.372	0.564	0.436	0.58	12.372	0.280	0.720	0.000	1.000	0.000	1.000
0.59	12.582	0.602	0.398	0.59	12.582	0.326	0.674	0.000	1.000	0.000	1.000
0.60	12.792	0.528	0.472	0.60	12.792	0.374	0.626	0.000	1.000	0.000	1.000
0.63	13.212	0.531	0.469	0.63	13.212	0.379	0.621	0.000	1.000	0.000	1.000
0.64	13.424	0.444	0.556	0.64	13.424	0.425	0.575	0.000	1.000	0.000	1.000
0.65	13.637	0.521	0.479	0.65	13.637	0.462	0.538	0.000	1.000	0.000	1.000
0.67	14.070	0.658	0.342	0.67	14.070	0.451	0.549	0.000	1.000	0.000	1.000
0.68	14.292	0.567	0.433	0.68	14.292	0.442	0.558	0.000	1.000	0.000	1.000
0.69	14.517	0.537	0.463	0.69	14.517	0.441	0.559	0.000	1.000	0.000	1.000
0.71	14.983	0.584	0.416	0.71	14.983	0.300	0.700	0.000	1.000	0.000	1.000
0.72	15.225	0.636	0.364	0.72	15.225	0.187	0.813	0.000	1.000	0.000	1.000
0.74	15.474	0.717	0.283	0.74	15.474	0.244	0.756	0.000	1.000	0.000	1.000
0.76	15.999	0.404	0.596	0.76	15.999	0.282	0.718	0.000	1.000	0.000	1.000
0.77	16.277	0.534	0.466	0.77	16.277	0.273	0.727	0.000	1.000	0.000	1.000
0.78	16.569	0.590	0.410	0.78	16.569	0.235	0.765	0.000	1.000	0.000	1.000
0.80	17.203	0.508	0.492	0.80	17.203	0.205	0.795	0.000	1.000	0.000	1.000
0.81	17.551	0.406	0.594	0.81	17.551	0.167	0.833	0.000	1.000	0.000	1.000
0.82	17.925	0.436	0.564	0.82	17.925	0.140	0.860	0.000	1.000	0.000	1.000
0.85	18.764	0.763	0.237	0.85	18.764	0.135	0.865	0.000	1.000	0.000	1.000
0.86	19.238	0.783	0.217	0.86	19.238	0.124	0.876	0.000	1.000	0.000	1.000
0.87	19.757	0.839	0.161	0.87	19.757	0.099	0.901	0.000	1.000	0.000	1.000
0.89	20.966	0.941	0.059	0.89	20.966	0.053	0.947	0.000	1.000	0.000	1.000
0.90	21.679	0.922	0.078	0.90	21.679	0.049	0.951	0.000	1.000	0.000	1.000
0.91	22.488	0.963	0.037	0.91	22.488	0.037	0.963	0.000	1.000	0.000	1.000
0.93	24.481	0.863	0.137	0.93	24.481	0.027	0.973	0.000	1.000	0.000	1.000
0.94	25.727	0.922	0.078	0.94	25.727	0.020	0.980	0.000	1.000	0.000	1.000
0.96	27.182	0.930	0.070	0.96	27.182	0.000	1.000	0.000	1.000	0.000	1.000
0.98	30.744	0.853	0.147	0.98	30.744	0.000	1.000	0.000	1.000	0.000	1.000
0.99	32.760	0.894	0.106	0.99	32.760	0.000	1.000	0.000	1.000	0.000	1.000

Percentile	Θ_l	$P\text{-val}$		Percentile	Θ_l	$P\text{-val}$	
		$H_2 : G_{l CSR+Trtmt}^{G_l Ntr <}$	$H_3 : G_{l CSR+Trtmt}^{G_l Ntr >}$			$H_2 : G_{l CSR,w=\$11}^{G_l Ntr,w=\$11 <}$	$H_3 : G_{l CSR,w=\$15}^{G_l Ntr,w=\$11 >}$
0.01	1.515	0.000	1.000	0.01	1.515	0.000	1.000
0.02	1.828	0.000	1.000	0.02	1.828	0.000	1.000
0.03	2.503	0.000	1.000	0.03	2.503	0.000	1.000
0.05	3.135	0.030	0.970	0.05	3.135	0.020	0.980
0.07	3.416	0.054	0.946	0.07	3.416	0.022	0.978
0.08	3.691	0.035	0.965	0.08	3.691	0.025	0.975
0.10	4.148	0.055	0.945	0.10	4.148	0.234	0.766
0.11	4.338	0.018	0.982	0.11	4.338	0.001	0.999
0.12	4.514	0.021	0.980	0.12	4.514	0.002	0.998
0.14	4.842	0.013	0.987	0.14	4.842	0.000	1.000
0.15	4.998	0.009	0.991	0.15	4.998	0.001	0.999
0.16	5.152	0.011	0.989	0.16	5.152	0.003	0.997
0.19	5.455	0.040	0.960	0.19	5.455	0.005	0.995
0.20	5.606	0.065	0.935	0.20	5.606	0.004	0.996
0.21	5.758	0.119	0.881	0.21	5.758	0.011	0.989
0.23	6.067	0.188	0.812	0.23	6.067	0.085	0.915
0.24	6.224	0.171	0.829	0.24	6.224	0.142	0.858
0.25	6.384	0.179	0.821	0.25	6.384	0.150	0.850
0.27	6.710	0.180	0.820	0.27	6.710	0.060	0.940
0.29	6.878	0.127	0.873	0.29	6.878	0.098	0.902
0.30	7.048	0.056	0.944	0.30	7.048	0.067	0.933
0.32	7.398	0.125	0.875	0.32	7.398	0.067	0.933
0.33	7.579	0.128	0.872	0.33	7.579	0.113	0.887
0.34	7.762	0.129	0.871	0.34	7.762	0.177	0.823
0.36	8.142	0.177	0.823	0.36	8.142	0.046	0.954
0.37	8.338	0.238	0.762	0.37	8.338	0.048	0.952
0.38	8.537	0.332	0.668	0.38	8.537	0.050	0.950
0.41	8.946	0.263	0.737	0.41	8.946	0.041	0.959
0.42	9.155	0.258	0.742	0.42	9.155	0.044	0.956
0.43	9.365	0.182	0.818	0.43	9.365	0.033	0.967
0.45	9.792	0.106	0.894	0.45	9.792	0.039	0.961
0.46	10.007	0.141	0.859	0.46	10.007	0.063	0.937
0.47	10.223	0.142	0.858	0.47	10.223	0.063	0.937
0.49	10.656	0.235	0.765	0.49	10.656	0.093	0.907
0.51	10.872	0.236	0.764	0.51	10.872	0.092	0.908
0.52	11.088	0.292	0.708	0.52	11.088	0.136	0.864
0.54	11.519	0.391	0.609	0.54	11.519	0.180	0.820
0.55	11.734	0.380	0.620	0.55	11.734	0.182	0.818
0.56	11.947	0.351	0.649	0.56	11.947	0.281	0.719
0.58	12.372	0.420	0.580	0.58	12.372	0.321	0.679
0.59	12.582	0.352	0.648	0.59	12.582	0.389	0.611
0.60	12.792	0.421	0.579	0.60	12.792	0.389	0.611
0.63	13.212	0.454	0.546	0.63	13.212	0.353	0.647
0.64	13.424	0.439	0.561	0.64	13.424	0.354	0.646
0.65	13.637	0.439	0.561	0.65	13.637	0.424	0.576
0.67	14.070	0.552	0.448	0.67	14.070	0.488	0.512
0.68	14.292	0.540	0.460	0.68	14.292	0.421	0.579
0.69	14.517	0.581	0.419	0.69	14.517	0.420	0.580
0.71	14.983	0.527	0.473	0.71	14.983	0.277	0.723
0.72	15.225	0.455	0.545	0.72	15.225	0.191	0.809
0.74	15.474	0.483	0.517	0.74	15.474	0.285	0.715
0.76	15.999	0.423	0.577	0.76	15.999	0.204	0.796
0.77	16.277	0.495	0.505	0.77	16.277	0.235	0.765
0.78	16.569	0.524	0.476	0.78	16.569	0.203	0.797
0.80	17.203	0.458	0.542	0.80	17.203	0.146	0.854
0.81	17.551	0.406	0.594	0.81	17.551	0.092	0.908
0.82	17.925	0.377	0.623	0.82	17.925	0.071	0.929
0.85	18.764	0.388	0.612	0.85	18.764	0.124	0.876
0.86	19.238	0.597	0.403	0.86	19.238	0.108	0.892
0.87	19.757	0.762	0.238	0.87	19.757	0.096	0.904
0.89	20.966	0.890	0.110	0.89	20.966	0.071	0.929
0.90	21.679	0.908	0.092	0.90	21.679	0.059	0.941
0.91	22.488	0.906	0.094	0.91	22.488	0.061	0.939
0.93	24.481	0.867	0.133	0.93	24.481	0.025	0.975
0.94	25.727	0.866	0.134	0.94	25.727	0.000	1.000
0.96	27.182	0.916	0.084	0.96	27.182	0.000	1.000
0.98	30.744	0.133	0.867	0.98	30.744	0.000	1.000
0.99	32.760	0.855	0.145	0.99	32.760	0.000	1.000

Table 21: Point-Specific P-Values for Θ_l (First-Order Dominance Test): Combined Effects ²⁷