

Appendices for online publication only

A Tables and Figures

Table A1: Summary statistics Agents vs principal

Variable	(1) Workers	(2) principals	(3) Diff.	(4) Obs.
Female	0.500 (0.501)	0.434 (0.498)	-0.066 (0.058)	339
Age	25.468 (5.356)	25.514 (4.154)	0.046 (0.593)	325
In a relationship	0.346 (0.477)	0.343 (0.477)	-0.003 (0.056)	325
Student	0.615 (0.488)	0.596 (0.493)	-0.018 (0.057)	327
Econ student	0.314 (0.465)	0.310 (0.464)	-0.004 (0.054)	339
Master or PhD education level	0.438 (0.497)	0.434 (0.498)	-0.004 (0.057)	339
Observations	226	113		339

Table A2: Summary statistics principals Spectator vs Stakeholder

Variable	(1) Spectators	(2) Stakeholders	(3) Diff.	(4) Obs.
Female	0.345 (0.480)	0.517 (0.504)	0.172 (0.093)*	113
Age	25.420 (3.923)	25.600 (4.387)	0.180 (0.815)	105
In a relationship	0.377 (0.489)	0.309 (0.466)	-0.068 (0.092)	108
Student	0.667 (0.476)	0.527 (0.504)	-0.139 (0.094)	109
Econ student	0.364 (0.485)	0.259 (0.442)	-0.105 (0.087)	113
Master or PhD education level	0.436 (0.501)	0.431 (0.500)	-0.005 (0.094)	113
Observations	55	58		113

Table A3: Regressions that characterize contract decisions using belief-based trade-offs and individual fixed effects

	Stakeholders		Spectators	
	(1)	(2)	(3)	(4)
Dependent variable: Contract 2 (high inequality) was chosen				
A is equal piece rate	-0.0245 (0.0343)	0.0208 (0.0363)	-0.0310 (0.0451)	0.000998 (0.0445)
$\frac{\Delta(\text{Expected Output 2 and 1})}{10}$	0.0700*** (0.00854)	0.0674*** (0.00834)	0.0299*** (0.00794)	0.0284*** (0.00777)
$\frac{\Delta(\text{Expected Inequality 2 and 1})}{10}$	-0.0334*** (0.00887)	-0.0193* (0.00988)	-0.0241** (0.0112)	-0.0147 (0.0114)
Egalitarian vs. equal piece rate		0.123*** (0.0437)		0.0875* (0.0503)
Constant	0.609*** (0.0413)	0.527*** (0.0493)	0.410*** (0.0508)	0.354*** (0.0538)
Fixed effects	Yes	Yes	Yes	Yes
N	898	898	852	852

Standard errors clustered on the subject level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The specification regresses a dummy indicating the choice of Contract 2 on other Choice characteristics using a linear probability model. Explanatory variables include the expected difference in output between Contract 2 and 1, the expected difference in inequality between Contracts 2 and 1 (both based on principals' beliefs) and a dummy for whether Contract 1 constitutes an equal piece rate contract rather than an egalitarian contract. Columns (2) and (4) further add a control dummy for whether the current observation is an egalitarian vs. equal piece rate choice. All columns include individual fixed effects.

Table A4: Regressions that characterize contract decisions including outliers

	Theoretical trade-offs		Belief-based trade-offs	
	(1)	(2)	(3)	(4)
Dependent variable: Contract 2 (high inequality) was chosen				
Stakeholder	0.190** (0.0830)	0.190** (0.0831)	0.209*** (0.0793)	0.208** (0.0800)
$\frac{\Delta(\text{Output 2 and 1})}{10}$	0.0452*** (0.0127)	0.0415*** (0.0127)	0.0171** (0.00668)	0.0154** (0.00659)
$\frac{\Delta(\text{Output 2 and 1})}{10}$ * Stakeholder	0.0317* (0.0167)	0.0317* (0.0167)	0.0183 (0.0124)	0.0190 (0.0121)
$\frac{\Delta(\text{Inequality 2 and 1})}{10}$	-0.0468*** (0.0134)	-0.0349** (0.0136)	-0.0201** (0.00952)	-0.00972 (0.00957)
$\frac{\Delta(\text{Inequality 2 and 1})}{10}$ * Stakeholder	-0.00727 (0.0180)	-0.00727 (0.0180)	0.000771 (0.0150)	0.000661 (0.0150)
A is equal piece rate	-0.0876** (0.0437)	-0.0475 (0.0435)	-0.0233 (0.0424)	0.0145 (0.0423)
A is equal piece rate * Stakeholder	0.0105 (0.0621)	0.0105 (0.0621)	0.0333 (0.0564)	0.0326 (0.0565)
Egalitarian vs. equal piece rate		0.0941*** (0.0321)		0.112*** (0.0403)
Constant	0.483*** (0.0856)	0.416*** (0.0856)	0.441*** (0.0824)	0.378*** (0.0844)
Control variables	Yes	Yes	Yes	Yes
Observations	1808	1808	1808	1808
R^2	0.100	0.103	0.123	0.127

Standard errors clustered on the subject level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

The specification regresses a dummy indicating the choice of Contract 2 on other Choice characteristics using a linear probability model. The sample excludes observations where the difference in output is lower than or equal to zero or higher than a 100. In columns (1) and (2), explanatory variables include a Stakeholder treatment dummy variable, the theoretical difference in output between Contract 2 and 1, the theoretical difference in inequality between Contracts 2 and 1 (both assuming workers' best responses), a dummy for whether Contract 1 constitutes an equal piece rate contract rather than an egalitarian contract and the interactions of these variables with the Stakeholder dummy. In columns (3) and (4), principals' beliefs are used to calculate the difference variables. Columns (2) and (4) add controls for whether the current observation is an egalitarian vs. equal piece rate choice. All the specifications include the following controls: female dummy, economics background dummy, whether the subject is currently a student and whether he is currently in a relationship.

Figure A1: The production and cost function per effort level and agent.

Worker A											
Effort level	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Production	0	30	60	90	120	150	180	210	240	270	300
Effort cost	0	1	6	14	23	35	48	64	81	100	120

Worker B											
Effort level	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Production	0	20	40	60	80	100	120	140	160	180	200
Effort cost	0	1	6	14	23	35	48	64	81	100	120

Figure A2: Screenshot of a decision made by agent B.

Part 4: real choices Real choice number 5

Choice of effort level with a piece rate of 0.5 EU

Effort level	0	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5
Production	0	30	60	90	120	150	180	210	240	270	300
Effort cost	0	1	6	13.5	23	34.5	48	64	81	100	120
Variable income of the worker (net of effort cost) with a piece rate of 0.5 ECU	0	14	24	31.5	37	40.5	42	41	39	35	30

Which effort level do you choose with a piece rate of 0.5 ECU?

Make an effort choice: 0 0.5 1 1.5 2 2.5 3 3.5 4 4.5 5

Your decision:

Effort level: 3
 Production with this decision: 180
 Piece rate: 0.5
 Cost with this decision: 48
 Net income with this decision: 42

Notes: this is a translated version of the experiment. Original screenshots are available upon request. We recreated the exact same display as the French version.

Figure A3: Screenshot of a decision made by the principal.

Part 4: real choices
Description of the table

Real choice number 1

You have been matched to the following employees. Here are the tables summarizing their characteristics.
Which piece rates do you choose?

Calculator

Contract 1 (0.4 for employee A and 0.6 for employee B) or Contract 2 (0.5 for employee A and 0.5 for employee B)

Worker A											
Effort level	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5
Variable income of Worker A (net of effort cost) with a piece rate of 0.4 ECU	0	11	18	23	25	26	24	20	15	8	0
Variable income of Worker A (net of effort cost) with a piece rate of 0.5 ECU	0	14	24	32	37	41	42	41	39	35	30
Your income	0	15	30	45	60	75	90	105	120	135	150

Worker B											
Effort level	0	0,5	1	1,5	2	2,5	3	3,5	4	4,5	5
Variable income of Worker A (net of effort cost) with a piece rate of 0.6 ECU	0	11	18	23	25	26	24	20	15	8	0
Variable income of Worker A (net of effort cost) with a piece rate of 0.5 ECU	0	9	14	17	17	16	12	6	-1	-10	-20
Your income	0	10	20	30	40	50	60	70	80	90	100

Remember that employees receive in addition a fixed income of 90 ECU for their participation

Make a choice between both contracts (click on each of the contracts to see a simulation of the consequences of your choice)

	Worker A	Worker B
Contract 1	<input checked="" type="radio"/> 0.40	0.60
Contract 2	<input type="radio"/> 0.50	0.50

Simulation of the consequences of Contract 1, based on your anticipation of the behavior of both workers

Consequences for both employees	Worker A	Worker B
Effort choice (according to your anticipations)	2.5	2.5
Production (computed based on your effort anticipations)	150	100
Variable income of the worker (net of effort cost) (computed based on your effort anticipations)	25.5	25.5

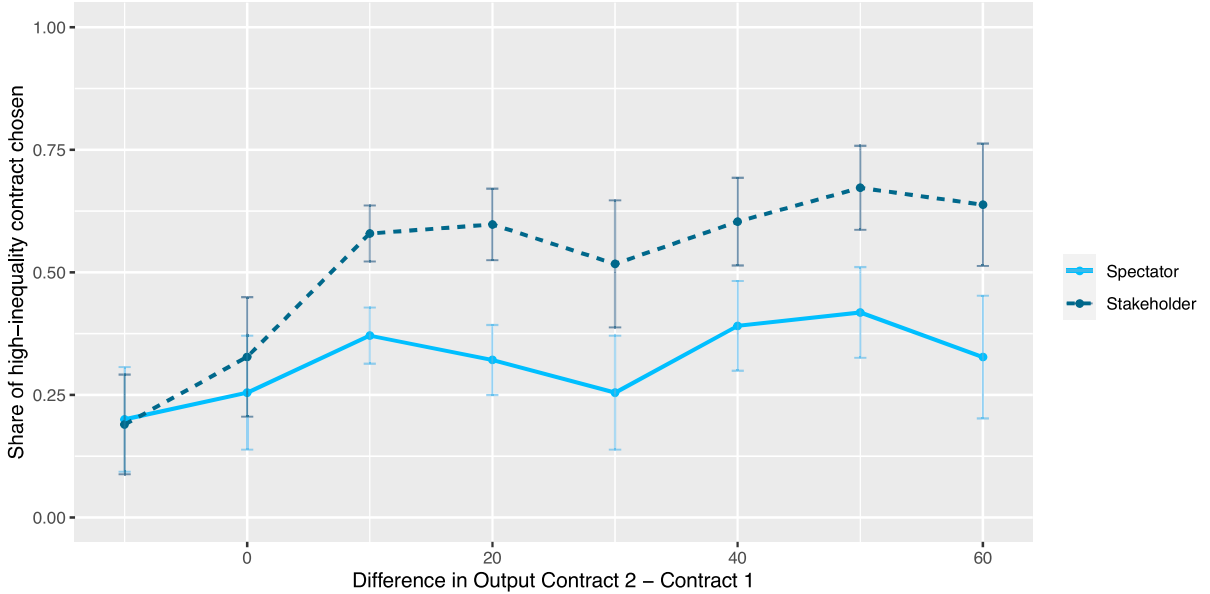
Consequences for yourself

Your income with Contract 1 would be equal to 125 ECU according to the effort level you anticipate.

Click here to confirm your choice after taking note of both simulations OK

Notes: this is a translated version of the experiment. Original screenshots are available upon request. We recreated the exact same display as the French version.

Figure A4: Principals' contract choices by treatment groups



Notes: the Figure shows the share of observations in which the most egalitarian contract of the pair is selected (either an egalitarian or equal piece rate contract). This corresponds to Contract 1 in all cases. We calculate these shares by output trade-off, i.e. the difference in output between Contract 2 and Contract 1. The solid blue line represents the choices of the Spectator group and the dotted dark blue line shows the choices of the Stakeholder group. The measures are calculated assuming that agents best respond. The same figure using belief-based data is Figure 4 in the main text. We show 95% confidence intervals for the shares.

B Derivation of Hypotheses

We derive the hypotheses laid out in Section 2.5 using a simple random utility model, which characterizes choice probabilities using exponential transformation. In our case this is particularly useful because the experiment involves a series of choices between two contracts. The random utility framework assumes that utility has a deterministic $E(U) = E[y_p + \gamma\pi(w^H, w^L) - \beta(M(\mathbf{y}^*(\mathbf{w}^H, \mathbf{w}^L) - \mathbf{y}(\mathbf{w}^H, \mathbf{w}^L)))]$, as characterized in Section 2.5, and a random component ε , where ε is i.i.d. and follows a Gumbel distribution.

The random component allows us to characterize the probability that contract 1 (P_1) is chosen, by assuming that a principal chooses such a contract if her overall utility (deterministic and stochastic) is larger from choosing contract 1 compared to contract 2. This can then be re-expressed as a probability and yields:

$$\begin{aligned}
 P_1 &= Pr(U_1(w_1^H, w_1^L) - U_2(w_2^H, w_2^L) \geq \varepsilon_1 - \varepsilon_2) \\
 &= \frac{\exp(U_1(w_1^H, w_1^L))}{\exp(U_1(w_1^H, w_1^L)) + \exp(U_2(w_2^H, w_2^L))},
 \end{aligned} \tag{2}$$

where the subscript 1 or 2 characterizes whether contract 1 or 2 is chosen. If utility associated with both contracts is equal, there is a 50% chance that either contract is chosen. To derive our hypotheses we assume that contract 1 has a weakly higher level of inequality (in opportunity and/or outcomes) and output.

We derive Hypothesis 1 by showing that if subjects attach no importance to distributive conse-

quences of their incentivization choices ($\beta = 0$), we have that $P_1 \rightarrow 1$ because the deterministic part of the utility function is strictly higher if contract 1 is chosen. However, if distributive concerns are meaningful (β becomes sufficiently large) the likelihood that a principal chooses an output-maximizing contract decreases because P_1 strictly decreases in β when holding the choice that a principal faces constant.

Hypothesis 2 is derived by comparing the likelihood that contract 1 is chosen between spectators and stakeholders. As for spectators, we have $y_1^p = y_2^p = y_p$ for both contracts while $y_1^p = 0.5\pi_1$ and $y_2^p = 0.5\pi_2$ for stakeholders. Since y_p cancels out for the spectators, we will have a strictly higher P_1 for stakeholders compared to spectators as soon as $\pi_1 > \pi_2$. This is particularly the case for predominantly selfish individuals in our sample who adopt a corner solution once their income is at stake. The magnitude of crowding out is characterized by γ , since the gap in the probability to choose contract 1 between Stakeholders and Spectators is strictly decreasing as γ increases. Hence, γ characterizes the relative importance of intrinsic motives to maximize output compared to income maximization and thus it characterizes the extent to which extrinsic motives reduce the propensity of choosing a contract that minimizes $M(\cdot)$.

Hypothesis 3 is derived by taking the derivative of π_1 , holding β constant. Since P_1 is strictly increasing in π_1 (and strictly decreasing in π_2), we conclude that even if subjects have distributive concerns, an increase in a contract’s expected output—compared to the alternative contract—makes it more likely to be chosen.

Hypothesis 4 is derived by using an example where principals face a choice between a high inequality output-maximizing contract and a low inequality contract. A principal who is motivated to minimize differences in piece rates rather than differences in ex-post incomes will always be better off if the low inequality contract is an equal piece rate contract compared to an otherwise identical choice where the low inequality contract would have been an egalitarian contract. She is, thus, more willing to forgo output if the inequality reducing contract minimizes inequality in piece rates rather than incomes. This follows from the general property of our choice model that P_1 is strictly increasing in $M(\mathbf{y}_2^*, \mathbf{y}_2)$ after holding all other variables constant.

C Comprehension test

For the full comprehension test, please look at the instructions online in the replication material.

C.1 Comprehension test performance

Overall, subjects managed to complete the comprehension tests without any major difficulty and obtained fairly high scores. For each test, the majority of the subjects’ answers were completely correct at the first try. Subsequent attempts with feedback improved scores substantially. For the last trials, the share of completely correct answers was always above 83% for all three tests. There were minor variations across Spectators and Stakeholders: principals in the Spectator treatment tended to perform slightly better. This can be easily explained by the fact that the comprehension test for Stakeholders had a few more questions and was harder because we also asked them to compute their own income under various scenarios, which was not necessary for Spectators.

Figure C1: Principals' comprehension tests

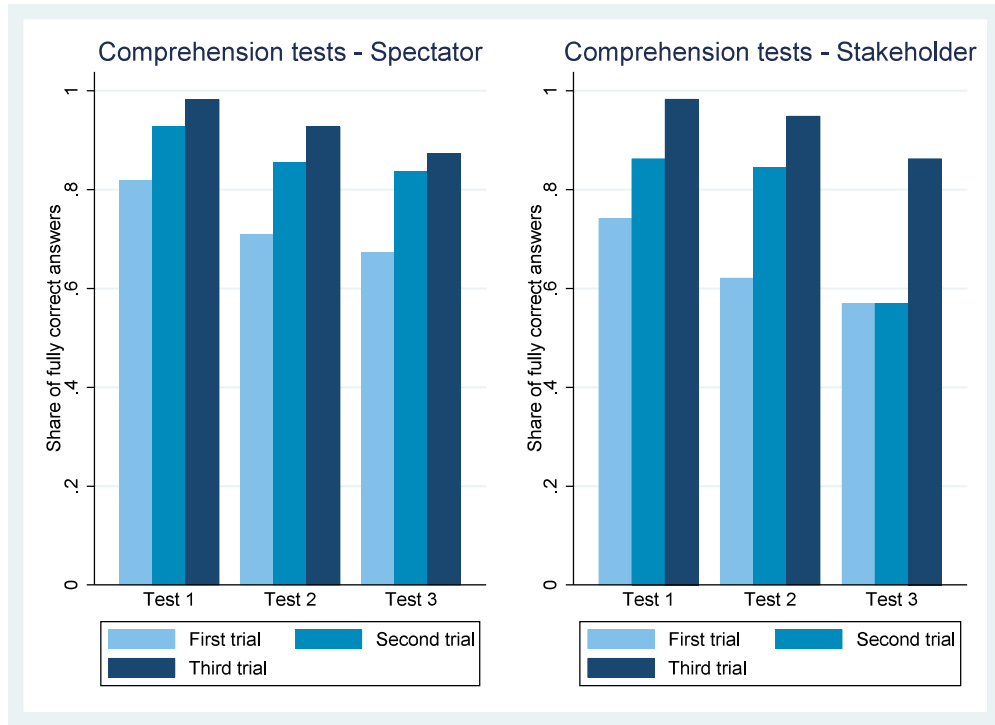
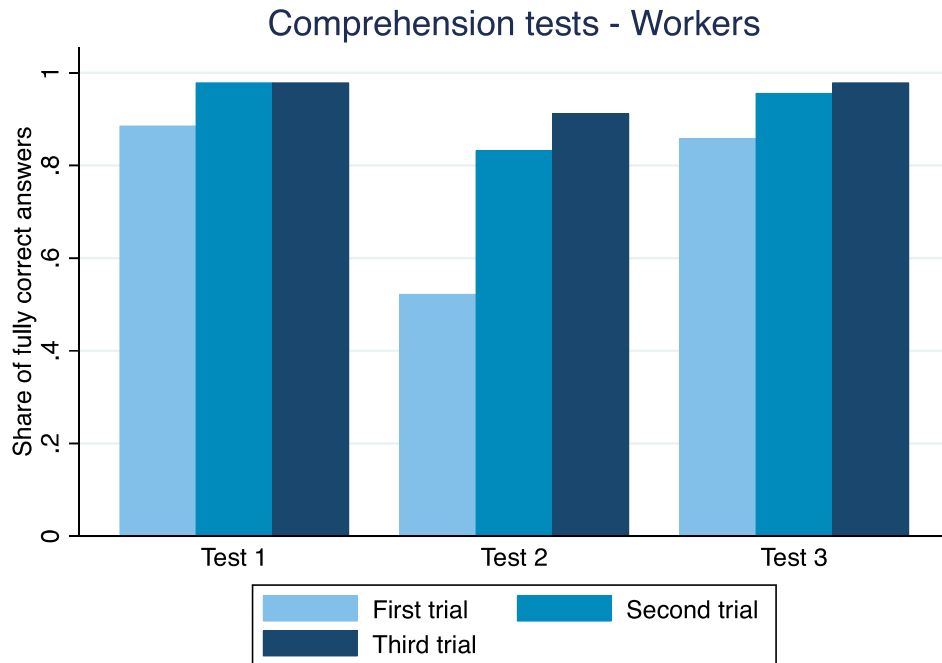


Figure C2: Workers' comprehension tests



Notes: each bar displays the share of principals achieving a perfect score for each Test and trial. There are three trials per test. The first test has 2 (4) questions for Spectators (Stakeholders), the second test has 2 (3) questions for Spectators (Stakeholders) and the third test has 4 (6) questions for Spectators (Stakeholders)

Table C1: True-False average score

Variable	Obs	Mean	Std. Dev.	Min	Max
Average score Stakeholders	58	.877	.111	.5	1
Average score Spectators	55	.907	.0998	.556	1
Average score Workers	226	.857	.186	.2	1

Notes: The average score is calculated as follows. We create binary variables for each question of the True-False test that are equal to 1 if the subject answered correctly. The average score is the mean of these binary variables.

D Aptitude test

Translated from French to English by the Authors.

D.1 French Questions

Question 1: A hyperbole is a figure of speech in which the expression of an idea or reality is exaggerated in order to highlight it (example: this man is as handsome as an angel). Among the five sentences below, only one does not include hyperbole. Which one?

1. I've been waiting for you for an eternity!
2. Your story is as old as the hills: surely you don't expect anyone to believe you?
3. He came in soaked to the bones because of the storm that was raging outside.
4. **I finished this book in three hours, I devoured it.**

Question 2: Which of the following assertions is the odd one out?²⁰

1. All his work is just a drop in the ocean of the work that remains to be done.
2. His explanation was as clear as a mountain stream.²¹
3. **There is a chasm between the world champion and his rivals.**
4. The sea is your mirror, you contemplate your soul in its infinitely rolling waves.

Question 3 Which of the following words is a synonym of eminent?²²

1. **Remarkable**
2. Immediate
3. Indiscreet
4. Boaster

²⁰Subjects had to realize that all sentences except one uses a water-related semantic field. Sentences are translated word for word to make this clearer but obviously, these French expressions using water elements do not always have an exact English counterpart.

²¹Crystal-clear would be the correct translation but then this sentence would be an intruder too

²²In French immediate can be translated by "imminent" and thus many people are confused about the difference between "éminent" and "imminent"

D.2 Logic questions

Question 4: David has capital of 10,000 euros that he decides to invest in a savings account. After withdrawing his investment with interest two years later, he has total capital of 12,100 euros. What is the annual interest rate on the savings account?

1. 7%
2. **10%**
3. 11%
4. 13%

Question 5: The group formed by the words "triangle", "glove", "clock", "bicycle", corresponds to the group formed by the following numbers:

1. 1,2,3,4
2. 10,4,7,2
3. 4,8,10,12
4. **3,5,12,2**

Question 6: Complete the following series 5V - 4Q - 3L - 2G -?

1. 1A
2. 1B
3. 1C
4. 1D

D.3 General knowledge

Question 7: Simone Veil

1. Was an attorney
2. Had been convicted for anti-Semitic statements
3. **Was the first woman President of the European Parliament**
4. Entered the Panthéon in September 2017

Question 8 The Schengen Agreement is treaty about:

1. The European flag

2. The introduction of the Euro
3. The project of European Constitution
4. **The free movement of people**

Question 9: NASDAQ is a stock market located:

1. **In the United States**
2. In Asia
3. In the United Kingdom
4. In Germany