Knowing When to Ask: The Cost of Leaning-in

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Abstract

Women's reluctance to negotiate is often used to explain the gender wage gap, popularizing the push for women to "lean-in" and negotiate more. Examining an environment where women achieve positive profits when they choose to negotiate, we find that increased negotiations are not helpful. Women know when to ask: they enter negotiations resulting in positive profits and avoid negotiations resulting in negative profits. While the findings are similar for men, we find no evidence that men are more adept than women at knowing when to ask. Thus, our results caution against a greater push for women to negotiate.

Keywords: gender; negotiations; leaning-in; selection

1 Introduction

Should women negotiate their salaries more often? According to 75% of adults recently surveyed in the United States, the answer is simply yes.[1] The belief that women should negotiate more is also reflected in the popular push for women to "lean-in" (Sandberg, 2013).[2] Indeed, concern that women's negotiation decisions contribute to the wage gap has motivated a large academic literature on what factors influence women's negotiation decisions. For instance, building on past research (e.g., Babcock and Laschever, 2003), the literature on negotiation decisions

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[1]Results from a Google Consumer Survey (February 2017, n = 202) that asked "Do you think women should negotiate their salaries more often?" (no/yes). Another Google Consumer Survey (February 2017, n = 201) that instead asked about men found that 54% responded yes to men negotiating more often.

[2]While we focus on whether women should "lean-in" to negotiate more, related questions include whether women should lean-in by entering competitions more (Niederle and Vesterlund, 2007, 2011), entering challenging tasks more (Niederle and Yestrumskas, 2008), guessing more (Baldiga, 2014), or contributing their ideas more (Coffman, 2014).

includes recent observational evidence (Card, Cardoso and Kline, 2016), laboratory studies (Dittrich, Knabe and Leipold, 2014) and field experiments (Leibbrandt and List, 2015).[3]

The push for women to negotiate more, however, is often accompanied by a caution: 66% of adults recently surveyed in the United States report that women may lose from negotiating their salaries more.[4] The potential loss from negotiations can take many forms. Negotiations may instill immediate costs in the form of opportunity costs of time or disutility from negotiations themselves. They may give rise to future costs in the form of backlash (Bowles, Babcock and Lai, 2007; Tinsley et al., 2009; Amanatullah and Morris, 2010; Amanatullah and Tinsley, 2013), damage to one's reputation, or decreased chances of future negotiations being successful.[5] Further negotiation costs may be particularly large in the case of a negotiation impasse. For example, failure to reach an agreement may reduce returns to future collaboration, result in legal costs, or, in extreme cases, prompt the retraction of job offers or previous agreements.[6]

The low entry into negotiation by women and the possibility of both gains and losses raise the question of whether women financially benefit from negotiating more. While vast, the literature on gender and negotiation does not answer this question. The finding that women who negotiate benefit from doing so does not imply that all women benefit from negotiating more. Selection may play a role. To determine whether increased negotiations are financially beneficial to women, this paper provides the first comparison of outcomes from a setting where individuals choose whether to negotiate to the counterfactual outcomes from a setting where individuals always negotiate.

[3]For additional evidence, see Stuhlmacher and Walters (1999); Bowles and McGinn (2008); Eckel, de Oliveira and Grossman (2008); Bowles (2013); Azmat and Petrongolo (2014); Mazei et al. (2015); Bohnet (2016). Note that a number of factors influence gender differences in negotiation outcomes such as the sex of negotiating partners (Eckel and Grossman, 2001; Solnick, 2001; Bowles, Babcock and Lai, 2007; Sutter et al., 2009; Hernandez-Arenaz and Iriberri, 2018*b*), the activation of stereotypes (Kray, Thompson and Galinsky, 2001; Kray, Galinsky and Thompson, 2002), the availability of information on what others do or what is recommended (Bowles, Babcock and McGinn, 2005; Rigdon, 2012), the beneficiaries of the negotiation (Bowles, Babcock and McGinn, 2005), the extent to which the possibility for a negotiation is known (Small et al., 2007; Leibbrandt and List, 2015), the framing of the situation as a negotiation or an ask (Small et al., 2007), the cultural context of the negotiations (Andersen et al., 2013), the relative positional power in a negotiation (Andersen et al., 2013; Dittrich, Knabe and Leipold, 2014; Greenberg and Petrie, 2015), the communication strategies or mode (Bowles and Babcock, 2013; Bowles, 2013; Greenberg and Petrie, 2015), the ability to signal valuations or experience (Castillo et al., 2013; Busse, Israeli and Zettelmeyer, 2016), age (Chandra, Gulati and Sallee, 2017), and the existence of sharing norms (Hernandez-Arenaz and Iriberri, 2018*a*). Gender differences in preferences, such as risk aversion or fairness concerns, may also contribute to differences in negotiation outcomes. For survey papers on gender differences in such preferences, see Croson and Gneezy (2009), Bertrand (2011) and Niederle (2016).

[4]Results from a Google Consumer Survey (February 2017, n = 200) that asked "Do you think women can lose from negotiating their salaries more often?" (no/yes/ sometimes yes, other times no). Another Google Consumer Survey (February 2017, n = 203), that instead asked about men, found that 63% responded "yes" or "sometimes yes, other times no."

[5]For explanations why women who negotiate are disliked, see e.g. http://www.today.com/money/women-asking-raise-damned-if-you-do-if-you-dont-2D11658374.

[6]Examples of such extreme cases include a woman's job offer as an assistant professor being retracted after trying to negotiate (http://www.newyorker.com/science/maria-konnikova/lean-out-the-dangers-for-women-who-negotiate) and a consultant who was fired after asking for a pay raise for a promotion (http://www.cbsnews.com/news/can-you-be-fired-for-asking-for-a-raise).

We conduct laboratory experiments that abstract away from factors that are known to induce gender differences in more complex negotiations. This abstraction allows us to study the negotiation decisions themselves. Participants are anonymous to mitigate fear of discrimination or backlash. To limit ambiguity, they encounter explicit negotiation opportunities and decisions. Participants are informed of what they bring to the table to ease concerns related to lacking confidence. They are informed of their outside options to make the potential loss of a negotiation clear. Whether participants can avoid negotiations, however, varies across our two treatments. Participants in our Choice treatment can choose to avoid a negotiation opportunity and instead receive an outside option. By contrast, participants in our Always treatment must always enter negotiations.

When women choose to enter negotiations in the Choice treatment, they largely gain from doing so. We nonetheless replicate the common finding that women frequently avoid negotiations. While this has been seen as evidence that an increase in negotiations will secure improvements for women, we find, from the counterfactual of women always negotiating, that there are no gains from increased negotiations. When given a choice, women already enter negotiation opportunities that result in gains. They only avoid negotiation opportunities that would have otherwise resulted in losses. Increased negotiations are not helpful to women; in fact, they are harmful. Forcing women to negotiate hurts them.

In considering the outcomes among men, we further show that increased negotiations do not result in relatively better outcomes for women than they do for men. Examining the selection into negotiations provides a similar takeaway. When comparing the financial outcomes from "self-selected" negotiations that workers choose to enter in the Choice treatment to those from "non-self-selected" negotiations in the Always treatment, it is clear that women know when to ask and men are not more adept at knowing when to ask than women are.

Put differently, our paper cautions against targeting lean-in advice towards women. This caution is strengthened by findings from two additional experiments. First, while the initial laboratory experiment was conducted at Stanford University with 292 participants, we replicate our initial study at the University of Pittsburgh using a larger sample of 398 participants. Second, we conduct an online experiment that provides incentive compatible evidence of a greater paternalistic demand to eliminate a worker's ability to avoid a negotiation if the worker is female rather than male.

Our paper first reports on our initial laboratory experiment conducted at Stanford University: with the corresponding details for the design in Section 2, the data in Section 3, and the results in Section 4. In Section 5, we discuss our replication conducted at University of Pittsburgh. In Section 6, we present the evidence on the third-party demand for increased negotiations from an online experiment. In Section 7, we discuss extensions and limitations of our results as well as potential implications on recommendations for helping women to negotiate.

2 Design

We create a negotiation environment, using Ztree (Fischbacher, 2007), where participants can compose free-form arguments for their point of view and can separately generate official proposals which the opposing side can accept at any time. Participants are evenly split between firms and workers at the beginning of sessions of each treatment. They remain in their randomly assigned role throughout the session. Participants face two blocks of five negotiation opportunities. Each block is preceded by one performance round that determines the individual contribution a participant brings to each of the subsequent five negotiation opportunities. For each negotiation opportunity, participants are randomly matched into worker-firm pairs with joint revenues equal to the sum of the worker contribution and the firm contribution. The computer generates a random suggested wage that correlates with the worker contribution. Workers in the Choice treatment can decide to enter into a negotiation with the firm or to forgo the negotiation by accepting the suggested wage. Workers in the Always treatment enter negotiations while still observing the suggested wage. All negotiations concern the share of joint revenue the worker receives as a wage. Negotiations that fail to reach an agreement result in the suggested wage being implemented along with a five-dollar impasse penalty for both the worker and the firm.

Appendix B contains the instructions given to participants. These instructions include information on workers and firms as well as screenshots of how negotiations take place. Instructions are read out loud to guarantee that the structure of the experiment is common information. Before turning to the description and motivation for each design element, we note that our design purposefully limits three channels that have been shown to generate gender differences in negotiations.[7] First, individuals know their individual contributions to prevent gender differences in confidence about what one brings to the table (Niederle and Vesterlund, 2007; Mobius et al., 2014). Second, negotiations are anonymous to reduce potential fears of backlash among women in particular (Bowles, Babcock and Lai, 2007; Tinsley et al., 2009; Amanatullah and Morris, 2010; Amanatullah and Tinsley, 2013). Third, the negotiation opportunity is explicit to reduce the potential for gender differences arising from uncertainty about whether a negotiation is possible (Small et al., 2007; Leibbrandt and List, 2015).

Individual Contributions and Joint Revenue

Participants perform a five-minute real-effort task at the beginning of each of the two negotiation blocks. Their performance determines their individual contribution for the subsequent five rounds of negotiation opportunities in that block. A worker's contribution is \$20, \$15 or \$10, depending on whether the worker's performance is the highest, second highest or third highest when compared to two other randomly selected workers. A firm's contribution is \$25 or \$20,

[7] To examine whether increased negotiations are beneficial to women, we sought to design an environment where negotiations are generally profitable for women. Showing that increased negotiations are not helpful to women in an environment where women rarely do well in negotiations would be less informative.

depending on whether the firm's performance is the highest or second highest performance when compared to one other randomly selected firm. Any performance ties are broken randomly, and all participants are informed that this process determines contributions. In the first block, the real-effort task is to calculate the sum of five two-digit numbers. In the second block, the task is to count the number of zeros in a table with ten rows and five columns of zeros and ones (i.e., one row may appear like "00101"). Since participants' relative performances may vary across the two tasks, their individual contributions may vary across the two blocks. After learning their individual contributions for a block, participants face five rounds of negotiation opportunities. In each round, a firm and a worker are randomly paired, and the joint revenue is the sum of the worker and firm contributions.

By making contribution levels not depend linearly on performances and instead imply a set of contribution levels, we ensure that variation in individual contribution levels can be easily explained. The variance in individual contribution levels also generates multiple focal points of the negotiation. In addition to arguing for "equal splits" where the joint revenue is split 50-50, individuals may argue for "equity splits" where the joint revenue is split proportionally according to their individual contributions. The potential insistence on equity splits may result from individuals feeling entitled to their contribution and seeing it as the relevant reference point, particularly since individual performances determine individual contribution levels (Konow, 2000).[8]

On the other hand, the highest contribution level of the worker equals the lowest contribution level of the firm, which may help workers justify requests that exceed their individual contribution levels.[9]

The firm is always informed of the worker contribution. Whether the worker is informed of the firm contribution depends on the study version. In a common information version, the worker is informed of the firm contribution. In a private information version, the worker is not informed of the firm contribution. This variation in information is motivated by the finding that women often fare worse in negotiations that involve more ambiguity (see Bowles and McGinn (2008) and Mazei et al. (2015) for reviews, or Leibbrandt and List (2015) for recent evidence). However, perhaps given the anonymity and explicit choice to negotiate in our setting, this variation in knowledge does not produce significantly different results.[10] Our analysis will therefore not focus on this variation and instead includes it as a control where relevant.

[8]Feeling entitled may influence individuals' decisions as shown in Hoffman et al. (1994) and discussed more broadly in Engel (2011). Since much of this work examines dictator games, it is interesting to note that Demiral and Mollerstrom (2018) do not find evidence for an entitlement effect in ultimatum games.

[9]See Konow, Saijo and Akai (2016) for a discussion on "equality" and "equity" principles of fairness. The equity principle may also be referred to as being Libertarian (Almås et al., 2010). For earlier work showing that multiple reference points and fairness principles can result in diverse negotiation outcomes see also Roth and Murnighan (1982).

[10]For instance, workers enter negotiations 72% of the time when there is private information and 69% of the time when there is common information. We fail to reject the equality of the entrance rates ($p = 0.36$) and the equality of the average profit from negotiations of \$1.31 vs \$1.23 conditional on negotiations ($p = 0.74$).

Suggested Wage and Potential Payoffs

In the Choice treatment, a worker can choose to avoid negotiations by accepting a "suggested wage." The suggested wage for a worker equals the worker contribution plus a bonus that in each round is randomly and uniformly drawn from the set -4, -2, 0, 2. While workers know that the suggested wage is random, they do not know the details of the process. However, knowing their own contribution levels, workers can determine the extent to which suggested wages differ from their own contributions.

If a worker accepts a suggested wage, the firm receives the joint revenue minus the suggested wage. If a worker instead enters a negotiation in the Choice treatment, or when a worker always negotiates in the Always treatment, two payoff scenarios are possible. When an agreement is reached, the worker receives the agreed upon wage and the firm receives the remainder of the joint revenue. When an agreement is not reached, the suggested wage is implemented along with a five-dollar impasse penalty for both the worker and firm. That is, the worker receives the suggested wage minus five dollars, and the firm receives the joint revenue minus the suggested wage minus five dollars. Table 1 summarizes these potential payoffs. One round from each block is randomly selected for payment.

Table 1: Worker Payoffs (W) and Firm Payoffs (F)

	Choice treatment	Always Treatment
No Negotiation	W = suggested wage F = joint revenue - suggested wage	N/A
Negotiation Agreement	W = agreed upon wage F = joint revenue - agreed upon wage	
Negotiation Impasse	W = suggested wage - \$5 F = joint revenue - suggested wage - \$5	

W indicates the payoff for the worker, and F indicates the payoff for the firm. In the Choice treatment, a worker may decide to accept the suggested wage and thus not enter a negotiation. The resulting payoffs are shown in the No Negotiation row. Alternatively, a worker may choose to reject the suggested wage and enter a negotiation. Payoffs when an agreement is reached are shown in the Negotiation Agreement row, while payoffs when an agreement in not reached are shown in the Negotiation Impasse row. In the Always treatment, workers always enter negotiations so only these latter two payoffs are relevant.

The suggested wage serves as a focal point for negotiations, as agreed upon wages should fall within \$5 of the suggested wage. Outside of the resulting \$10 range for a given suggested wage, a payoff dominant strategy – for either the worker or the firm – would instead involve a negotiation impasse which implements the suggested wage with the \$5 penalty. Assuming risk neutrality, the suggested wage indeed corresponds to the symmetric Nash Bargaining Solution since it results – with a symmetric \$5 penalty – from an impasse. There are thus three potential focal points for negotiations: the equal split, the equity split, and the symmetric Nash Bargaining Solution (i.e., implementing the suggested wage).

In varying the extent to which a suggested wage differs from an individual's contribution, the random bonus helps us assess how outcomes from negotiations and entry into negotiations vary with an observable characteristic of the negotiations. While the Nash Bargaining solution predicts that the outcomes from negotiations are independent of bonus, both the equality and equity principles of fairness suggest that how much a worker benefits from a negotiation decreases as the bonus increases. We therefore expect a negative bonus (of -4 or -2) to represent an easier and potentially more favorable negotiation opportunity. For instance, when the suggested wage is less than the worker's contribution, a worker may find it easier to appeal to the equity fairness principle to justify why they should receive a wage that is greater than their suggested wage. A non-negative bonus (of 0 or 2) may instead represent a more difficult and less favorable negotiation opportunity, as workers may find it more difficult to negotiate a wage that improves upon the suggested wage since doing so involves arguing for more than their contribution.

Assigning a $5 impasse penalty achieves three purposes in our study. First, it opens up room for losses in negotiation to occur even if an agreement is reached. That is, workers may agree to a negotiated wage that is $1-$5 below their suggested wage to avoid impasse and the resulting loss of $5. Losses from negotiations, even in the event of an agreement, may arise in contexts outside of our study due to factors such as future costs in the form of backlash (Bowles, Babcock and Lai, 2007; Tinsley et al., 2009; Amanatullah and Morris, 2010; Amanatullah and Tinsley, 2013), damage to one's reputation, costs in regard to decreased profits from future negotiations, loss of goodwill or loss from the worker subsequently being seen as a weak negotiator.

Second, assigning an impasse penalty allows us to make explicit the financial costs from disagreement, as is common in bargaining experiments.[11] Of course, there may also be psychological costs in the form of embarrassment or disutility from being seen as failing. Costs of impasse are often an important feature to negotiations in contexts outside of our study as well. For instance, an impasse today can result in even larger losses in future collaborations, escalating backlash, financial costs of decreased reputation, or decreased likelihood of cooperation after what may be seen as a defection (e.g., Dal Bó and Fréchette, 2018, and Dreber et al., 2008).

Third and finally, the answer to our question on whether women and men would benefit from negotiating more is obvious absent a potential downside to negotiation. If there is no risk or potential cost to negotiating (e.g., if the suggested wage is always guaranteed), profits would be maximized by negotiating all the time. Also, in using a fixed cost of $5, we hold the impasse cost independent of the individual's worker-firm role and of the individual's contributions, thus ensuring that the range of individually rational agreements in every negotiation is $10.

[11] Common costs of bargaining impasse in negotiation studies include the total destruction of surplus in the ultimatum game (Güth, Schmittberger and Schwarze, 1982) and in unstructured negotiations experiments such as Roth and Murnighan (1982). For an early overview of negotiation experiments see e.g., Roth (1995). Similar to our design, Babcock and Loewenstein (1997) use a fixed cost of bargaining impasse in the form of "legal fees," which are strictly smaller than the total amount to be divided.

Negotiations

The structure of negotiations is public knowledge and is as follows. Workers and firms have three minutes to send each other instant chat messages. Messages are not allowed to identify participants in any way, such as containing their name, age or gender. While chat messages can be used to discuss different wages, no agreements can be implemented through the chat itself. Instead, official wage proposals must be entered into a separate table. Individuals can update proposals at any time by submitting a new one to the table. All wage proposals must be in dollars (i.e., integer values). An agreement is reached only if a participant explicitly accepts an opponent's most recent wage proposal by clicking the "I accept this offer" button.

In the Always treatment, negotiations always occur. By contrast, in the Choice treatment, negotiations only occur when the worker chooses to enter a negotiation.[12] When a negotiation occurs and an agreement is reached prior to the completion of 3 minutes, the worker and firm can no longer communicate but must wait for the remainder of the 3 minutes. When no negotiation occurs due to a worker choosing not to negotiate, the worker and firm can never communicate and instead wait for the 3 minutes to pass.

The chat messages help to make the negotiations more realistic. Requiring formal wage proposals, meanwhile, ensures that the negotiations are tractable. The well-defined parameters of the negotiation environment, including the strict time limit, decrease structural ambiguity.

Follow-up activities

After participants complete both blocks of five negotiation rounds, we elicit risk and fairness measures over payoffs similar to those faced when workers decide whether to negotiate.

To measure how participants respond to risk, they make a series of five binary choices between (1) \$13 for certain and (2) a lottery of \$18 with P% chance and \$8 with $(1-P)$% chance. From the first to fifth choice, P increases in increments of 10 percentage points from 50% to 90%. Participants learn that one of these choices from one decision maker in each session will be implemented for payment.[13]

This measure of risk allows us to examine whether gender differences in entry into negotiations are due to potential gender differences in risk aversion. The gambles are structured so that they mirror the potential risk a participant faces when choosing between accepting a suggested wage of \$13 or entering a negotiation. That is, when entering such a negotiation, a participant would receive \$8 as a result of the \$5 penalty if an agreement is not reached or \$18 by instead fully

[12] When a worker is deciding whether to negotiate, their firm is told "If the worker you were matched with chooses to negotiate in this round, you will be given 3 minutes to negotiate and will begin this negotiation in a few seconds. Otherwise, you will be directed to a waiting screen where you will need to wait for 3 minutes while the negotiation round completes."

[13] In our initial experiment at Stanford University, a mistake in the payment code resulted in participants receiving too large of a payment: one of these choices for each participant was implemented for payment. In our replication experiment at the University of Pittsburgh, this was fixed: one of these choices from one decision marker in each session was implemented for payment.

capturing $5 from the individually rational bargaining range of +/- $5 around the suggested wage.[14]

To elicit perceptions of fairness, participants are asked to select a wage in six scenarios that vary according to the worker contribution, the firm contribution and the suggested wage.[15] In each session, we randomly select one decision maker and implement one scenario for payment for an unrelated worker-firm pair. To encourage participants' allocations to reflect their own views on fairness and their expectations of others' views on fairness, the worker-firm pair award the decision-maker a bonus, from $0 to $10, according to how fair they view the decision maker's implemented wage.

This measure of fairness allows us to examine if workers' entry decisions are driven by fairness perceptions. For instance, we can ask whether workers whose fairness perceptions are inclined towards the equity principle of fairness – i.e., that a wage should reflect what workers bring to the table – are less likely to enter negotiations in which their suggested wage equals or exceeds their individual contribution.

Finally, participants complete a short follow-up survey that collects demographic information on their age, sex, graduation year, degree program, and GPA.

3 Data

From May - October 2013, 292 undergraduate students participated in sixteen sessions at the Stanford Economics Research Laboratory (SERL). We used the online recruiting system Sona, following standard SERL procedures. The study was advertised as a 120-minute "Standard Lab Study" with an average payment of $40 and without any further details about the study. The modal session achieved gender-balance with the percentage of female participants ranging from 42% to 63% across sessions.[16] Nearly all participants (96%) were between 18 and 22 years old. Most participants expected to graduate from the School of Humanities & Sciences (56%), followed by the School of Engineering (24%) and those who had not decided on a major (15%). From the two randomly selected negotiation rounds (one from each block), additional payments from the follow-up activities and a $5 show-up fee, cash earnings ranged from $22 - $99 with an average of $56. In the Always treatment, there were 33 female workers, 31 male workers, 34 female firms and 30 male firms. In the Choice treatment, there were 41 female workers, 41

[14] We chose $13 as it reflects a "middle" suggested wage that arises from a worker contribution of $15 and a bonus of -2. Also, while workers can reach agreements outside the range of their suggested wage plus or minus $5, doing so requires the worker or firm to forgo a strictly dominant (financial) outcome of failing to reach an agreement and hence having the suggested wage with the $5 penalty implemented as the worker's wage. Indeed, only 2.6% of negotiations result in workers receiving a wage outside of this range.

[15] The scenarios (worker contribution, firm contribution, suggested wage) are: (10, 25, 10), (15, 25, 15), (20, 25, 20), (20, 25, 14), (20, 25, 16), and (20, 25, 22).

[16] Aiming for gender-balance, we used Sona to recruit two sets of participants for each session – male and female participants. Participants cannot view studies that they are not eligible for on Sona, which allows us to recruit separately by gender and thus discretely secure that equal numbers of men and women are signed up for a session.

male workers, 38 female firms, and 44 male firms. For each participant, we observe 10 rounds of negotiation data.

These data allow us to determine if and when male and female workers choose to enter negotiations and their profits from doing so. We compute profits as the worker's payoff minus their suggested wage. When workers choose not to enter negotiations in the Choice treatment, their profits are thus zero. Conditional on negotiations, their profits depend on whether an agreement is reached. In the case of agreement, the profit is negative, zero, or positive whenever the agreed upon wage falls below, equals, or exceeds the suggested wage. In the case of impasse, the profit is negative five dollars by design.

To examine how participants engage in free-form chat when they enter negotiations, we hired three undergraduate research assistants at an hourly rate to indicate for each round of negotiations whether the firm and/or worker sent chat messages that could be classified as using aggression, compromise, deference, entitlement, even-split arguments, fairness concepts, need-based appeals, and/or norms.[17] We consider an individual's chat message to fall into one of the above categories for a given round if two or more research assistants indicated the relevance of that category. We also hired one research assistant to indicate the chance (from 0 to 100%) that a particular round of anonymized chat messages was sent by a female. In addition to being paid an hourly rate, this research assistant was paid a bonus according to the accuracy of 10 randomly selected guesses.[18]

Before turning to our data on workers' decisions to negotiate and the profits from doing so, we note that there are no gender differences in the other measures we collect for workers.[19] First, there are neither significant gender differences in the individual contribution levels nor in the

[17]An overview of the provided definitions for these chat categories are as follows: *aggressive* - a participant threatens to not reach an agreement or strongly questions their partner's proposal; *compromise* - a participant explicitly suggests they take into account their own preference and their partner's preference; *deferential* - a participant talks poorly of themselves or favorably of their partner, is apologetic, is uncertain, uses caveats, or looks for assurance (particularly via the use of question marks); *entitled* - a participant advocates for higher payment by saying they deserve it for some reason; *even-split* - a participant explicitly says they should split the joint revenue equally; *fair* - a participant uses the word fair or a close synonym for fair; *need-based* - a participant discusses their financial need for the money; *norm* - a participant discusses what they have received or how payments have been determined in past rounds. Among the non-self-selected negotiations in the Always treatment, the following chat tendencies occur less than 10% of the time and are excluded from the remaining analysis: *compromise*, *even-split*, *norm* and *needy*. There are no significant gender differences in any of the remaining chat tendencies: *aggressive*, *deferential*, *entitled* and *fair*.

[18]Specifically, the research assistant knew that for each of the selected guesses, we would randomly draw an integer X from 1 to 100. If X was less than or equal to his percentage guess that the message was sent by a female, he would receive \$10 if the message was indeed sent by a female and \$0 otherwise. If X was greater than his percentage guess that the message was sent by a female, he would receive \$10 with a X% chance and \$0 otherwise. Among the negotiations in the Always treatment – the research assistant correctly guessed, on average, a higher chance that a message was sent by a female worker if that indeed was the case (51% versus 46%, two-sided t-test $p < 0.01$).

[19]For firms there are likewise no significant gender differences in these other measures with one exception: our risk measure indicates that female firms are significantly more risk averse than male firms. This difference does not result in negotiation outcomes for firms differing by gender.

performances that help to determine the individual contributions. On the task that involves calculating the sum of five two-digit numbers, the average individual contribution level is \$14.59 among female workers and \$14.58 among male workers (two-sided t-test, $p = 0.99$).[20] When the task involves counting the number of zeros in a table with 50 numbers, the average individual contribution level is \$15.20 among female workers and \$14.79 among male workers (two-sided t-test, $p = 0.56$).[21] Second, there are no gender differences in our measure of risk aversion: the number of times (i) a certain amount of \$13 is chosen over (ii) a lottery of \$18 with P% chance and \$8 with $(1 - P)$% chance. There are five such lotteries where P is 50%, 60%, 70%, 80%, or 90%. The certain option is chosen an average of 2.28 times by female workers and 2.06 times by male workers (two-sided t-test, $p = 0.26$). Given that only 3 workers have multiple switching points, this implies that the average worker chooses the lottery of \$18 with P% chance once P is approximately 70%. Third, there are no significant differences in our measure of fairness concerns. Out of the six scenarios that involve different worker contributions, firm contributions, and suggested wages, the perceived fair wage is set to equal the worker's individual contribution level 2.53 times by female workers and 2.99 times by male workers (two-sided t-test, $p = 0.25$).

4 Results

We consider two key questions. First, we ask whether always negotiating is financially beneficial. Second, we ask whether there is evidence of non-random and systematic selection into negotiations.

After answering these two questions separately for female workers in Section 4.1 and male workers in Section 4.2, we explore in Section 4.3 whether our results vary by gender and whether they justify a greater push to negotiate for women than for men. In Section 4.4, we expand upon our second question by examining whether workers select on observable characteristics of the negotiation and/or individual characteristics that are unobservable to us.

To assess the benefits of negotiation, we focus on a worker's improvement in earnings from negotiations. Recall that in the Choice treatment the decision to negotiate implies giving up the suggested wage, and the worker's profit from negotiation is thus the difference between the worker's payoffs from the negotiation and the suggested wage. We compute the worker's profit from negotiation in the same manner in the Always treatment. This allows us to evaluate the consequences of always negotiating and thus forgoing the option of taking the suggested wage, though that option is of course only available in the Choice treatment.[22]

[20] The average correct number of answers is 9.92 among female workers and 10.67 among males workers (two-sided t-test, $p = 0.22$).

[21] The average correct number of answers is 21.95 among female workers and 22.35 among male workers (two-sided t-test, $p = 0.66$).

[22] While earnings are another measure of the success of always negotiating, they are a more noisy one, as they directly depend on the worker contribution and the bonus.

4.1 Women's Negotiation Decisions and Outcomes

Results from our Choice treatment show that female workers enter negotiations 66% of the time. Out of the 41 female workers, only one never enters a negotiation and four enter all negotiations. Entering negotiations is largely beneficial: agreements are reached 89% of the time, a substantial 74% of negotiations result in gains while only 13% result in losses. The average profit achieved from entering negotiations is \$1.45. Consistent with the evidence often used to support the recommendation for increased negotiations, women often avoid negotiations even though negotiations are largely beneficial.

To answer our first question on whether women would financially benefit from negotiating more often, it is not sufficient to consider the profits that result when women chose to negotiate in the Choice treatment. Rather, we need to compare the profits achieved by women in the Choice treatment to the counterfactual of the profits achieved by women in the Always treatment. To answer our second question regarding selection into negotiations, only profits that result from negotiations are relevant.[23] That is, the answer to our second question requires a comparison of the profits from "self-selected" negotiations (those where workers choose to enter negotiations in the Choice treatment) to the profits from "non-self-selected" negotiations (those in the Always treatment). While no differences between the self-selected negotiations and non-self-selected negotiations would indicate random selection, outcomes from self-selected negotiations exceeding (or falling short of) those from non-self-selected negotiations would indicate positive (or negative) selection into negotiations.

Addressing whether women financially benefit from always negotiating, Figure 1 shows the profits female workers achieve — the difference between the final wage and the suggested wage — in the Choice and Always treatments. As a result of the many negotiations that are not entered in the Choice treatment, many secure zero profits in that treatment. The remainder of the distribution shows that negotiations are mostly successful and result in gains. The vast majority of negotiations yield a wage that exceeds the suggested wage.

The distribution of profits in the Always treatment sheds light on what would happen if, instead of forgoing 34% of negotiations, women always negotiated. Not surprisingly, the share of zero profits decreases in the Always treatment, as it is not possible simply to accept the suggested wage. These additional negotiations, however, do not mirror the positive profits seen in the Choice treatment. Relative to the Choice treatment, there is no increase in the share of negotiations that raise earnings above the suggested wage in the Always treatment. Increased

[23] While the analyses concerning these two questions are closely related, they are importantly distinct. For instance, when not conditioning on negotiations as in our first question, imagine that profits reflecting losses are more likely in the Always than in the Choice treatment. When conditioning on negotiations, the fraction of profits reflecting losses in the Choice treatment will increase due to the exclusion of zero-profits that result from a choice not to negotiate. Thus, it need not follow that profits reflecting losses are also more likely in the Always than the Choice treatment, when conditioning on negotiations.

negotiations are not helpful to women, as they do not avoid negotiations that would have resulted in gains.

Not only do we observe that increased negotiations are not helpful to women, we further observe that increased negotiations result in more losses. The share of losses more than triples from 9% in the Choice treatment to 33% in the Always treatment (two-sided t-test, $p < 0.01$). This increase in losses does not result from increased impasse in the Always treatment. The rate of impasse insignificantly decreases from 11% in the Choice treatment to 8% in the Always treatment (two-sided t-test, $p = 0.36$).

Figure 1: Distribution of profits among female workers

Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0. Data include the observations from the 41 female workers during the 10 rounds in the Choice treatment, and the 33 female workers during the 10 rounds in the Always treatment.

The distribution of profits in Figure 1 draws from all bonus levels. In reproducing this distribution for each bonus level, Appendix Figure A.1 documents that at no bonus level do increased negotiations result in substantially more gains. While the lack of additional gains cannot easily be seen among the negotiation opportunities with negative bonuses of -4 and -2, since nearly all of those negotiations are entered (88%), it is clearly seen among the negotiation opportunities with the non-negative bonuses of 0 and 2, where only 44% of negotiations are entered.

Table 2 confirms these findings via regression results. These regression results control for observable factors about the negotiations, including round fixed effects and individual contributions to the joint revenue. These regression results also account for small sample size considerations while allowing for within cluster correlation and across cluster heteroskedasticity. In particular, standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times using the method in Cameron and Miller (2015).[24] Since

[24]To do so, we use the code developed by Judson Caskey (see https://sites.google.com/site/judsoncaskey/data).

this method involves resampling t-statistics, note that p-values instead of standard errors are shown in parentheses.

In the odd columns, the coefficient estimates on the *Always* indicator capture the differences in outcomes in the Always treatment relative to those in the Choice treatment when pooling across all bonuses. In the even columns, the coefficient estimates on the *Always* indicator instead capture the differences in outcomes in the Always treatment relative to those in the Choice treatment among negotiation opportunities with non-negative bonuses (because of the inclusion of the $Always^{*}b < 0$ indicator). This latter specification is of particular interest since the high entry rate into negotiations with negative bonuses mechanically leaves little room for changes in profits as a result of increased negotiations.[25]

Columns 1 - 4 of Table 2 confirm the results on the distribution of profits shown in Figure 1.[26] Increased negotiations do not increase the frequency of gains (Columns 1 - 2) but do significantly increase the frequency of losses by 24 percentage points when pooling across bonuses (Column 3) and by 39 percentage points when considering the non-negative bonuses (Column 4). Thus, in examining the extensive margin results, we observe no evidence for women avoiding negotiation opportunities that would have resulted in gains yet substantial and significant evidence for women avoiding negotiation opportunities that would have resulted in losses.

In jointly considering the extensive and intensive margins, the results in Columns 5 - 6 further show that increased negotiations do not result in higher average profits for women. Instead, increased negotiations result in insignificantly lower average profits when pooling across bonuses (Column 5) and significantly lower profits when focusing on non-negative bonuses (Column 6).[27] Rather than finding that women benefit from increased negotiations, our results suggest that it hurts them.[28]

We provide four additional pieces of evidence of increased negotiations not financially benefiting women. First, not only does the likelihood of gains not increase in the Always treatment relative to the Choice treatment, the size of gains does not significantly increase (Columns 7 - 8). Second, not only does the likelihood of losses increase in the Always treatment relative to the Choice treatment, the size of the losses increases (Columns 9 - 10). Third, Appendix Table A.1 shows that our results are robust to the exclusion of controls. Fourth, the downward shift

[25] As detailed in Section 2, and evident via our exogenous variation of bonus levels, we ex-ante expected bonus levels to influence negotiation outcomes. Section 4.4 explores the important role of the bonus in driving selection into negotiations.

[26] We see the distributional results as more informative than average profits, because the latter is directly influenced by parameters of the experiment. That is, average profits, more so than changes in the distribution of profits, is sensitive to the parameters of the experiment, such as specific distributions of the bonus level and the $5 impasse penalty.

[27] Not surprisingly given the high entry rate when the bonus is negative, there is not a significant impact on average profits from increased negotiations when the bonus is negative. However, it remains directionally negative and thus shows that increased negotiations are not financially beneficial even when the bonus is negative.

[28] As seen in Section 5, the mean effect on profits is significant in our replication with a larger sample at the University of Pittsburgh.

Table 2: Profits among female workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.00	0.05	0.24***	0.39***	-0.44	-0.79***	0.23	-0.14	-0.95***	-1.15***	-0.64**	-1.24***
	(0.95)	(0.58)	(0.00)	(0.00)	(0.13)	(0.00)	(0.29)	(0.58)	(0.00)	(0.00)	(0.04)	(0.00)
$b < 0$		0.48***		0.04		1.30***		0.74***		-1.30**		1.07***
		(0.00)		(0.14)		(0.00)		(0.01)		(0.01)		(0.00)
Always		-0.09		-0.29***		0.62*		0.47		0.59		0.83*
$*b < 0$		(0.28)		(0.00)		(0.09)		(0.13)		(0.36)		(0.07)
Constant	0.68***	0.16	-0.03	0.02	1.18	-0.87	1.11	-0.12	-0.94	0.34	1.25	-0.58
	(0.01)	(0.52)	(0.84)	(0.92)	(0.28)	(0.44)	(0.19)	(0.90)	(0.35)	(0.70)	(0.34)	(0.68)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	740	740	740	740	740	740	361	361	379	379	601	601

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 41 female workers during the 10 rounds of the Choice treatment and the 33 female workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

in the distribution of profits in our Choice treatment relative to our Always treatment allows us to precisely and non-parametrically reject ($p < 0.001$) the equality of these distributions using a two-sample Kolmogorov-Smirnov test.

Thus, the answer to our first question is clear: there is no evidence that women financially benefit from increased negotiations. Increased negotiations instead result in women entering more negotiations that are financially harmful. Since women appear to know when to ask, these findings are also suggestive in terms of answering our second question on whether we observe non-random and systematic selection into negotiations. Relative to profits from self-selected negotiations in the Choice treatment, the average profits from the non-self-selected negotiations in the Always treatment are significantly lower when pooling across bonuses (Column 11) and when focusing on non-negative bonuses (Column 12). Thus, the answer to our second question is clear: women positively select into negotiations.

4.2 Men's Negotiation Decisions and Outcomes

Results from the Choice treatment show that male workers enter negotiations 74% of the time. All 41 male workers enter at least one negotiation, and 7 of them enter all negotiations.

Entering negotiations is beneficial: agreements are reached 84% of the time, a substantial 71% of negotiations result in gains and only 19% result in losses. The average profit achieved from entering negotiations is $1.12.

As with female workers, this positive profit from negotiating need not imply an affirmative answer to our first question on whether increased negotiations are financially beneficial for men. Figure 2 compares the profits achieved by men in the Choice treatment to the profits achieved by men in the Always treatment. Consistent with men opting out of negotiations 26% of the time in the Choice treatment, the frequency of zero profits is smaller in the Always treatment. The additional negotiations, however, do not result in more gains in the Always treatment than in the Choice treatment (54% versus 53%, two-sided t-test, $p = 0.82$). The additional negotiations instead increase losses from 14% in the Choice treatment to 25% in the Always treatment (two-sided t-test, $p < 0.01$). The increase in losses is not driven by an increase in the rate of impasse. The rate of impasse is significantly smaller in the Always treatment than in the Choice treatment (8% versus 16%, two-sided t-test, $p < 0.01$).

Figure 2: Distribution of profits among male workers

Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0. Data include the 41 male workers during the 10 rounds in the Choice treatment, and the 31 male workers during the 10 rounds in the Always treatment.

In reproducing the distribution of profits for each bonus level, Appendix Figure A.2 documents a similar pattern. Increased negotiations do not result in substantially more gains at any bonus level. While the lack of additional gains cannot be seen among the negotiation opportunities with negative bonuses of -4 and -2, since nearly all of those negotiations are entered (97%), it is clearly seen among the negotiation opportunities with the non-negative bonuses of 0 and 2, where only 55% of negotiations are entered. Despite men avoiding approximately half of the negotiations with non-negative bonuses, we observe no evidence for men avoiding negotiations that would have been financially beneficial.

Table 3 (which reproduce the specifications from Table 2 for male workers) confirms the results on the distribution of profits.[29] Increased negotiations do not increase the frequency of gains (Columns 1 - 2) but do significantly increase the frequency of losses by 11 percentage points when pooling across bonuses (Column 3) and by 27 percentage points when considering the non-negative bonuses (Column 4). Increased negotiations also do not result in higher average profits for men. Instead, increased negotiations have a near-zero impact on average profits when pooling across bonuses (Column 5) and significantly lower profits when focusing on non-negative bonuses (Column 6).

Table 3: Profits among male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.01	-0.03	0.11***	0.27***	-0.03	-0.55**	0.04	-0.30	-0.08	-0.45*	0.03	-0.66*
	(0.92)	(0.60)	(0.00)	(0.00)	(0.86)	(0.05)	(0.85)	(0.26)	(0.72)	(0.08)	(0.90)	(0.10)
$b < 0$		0.47***		0.03		1.43***		0.71***		-2.37***		1.36***
		(0.00)		(0.36)		(0.00)		(0.00)		(0.00)		(0.00)
Always		0.05		-0.31***		0.99***		0.40		1.67**		1.06**
$*b < 0$		(0.52)		(0.00)		(0.01)		(0.25)		(0.05)		(0.02)
Constant	0.65***	0.17	0.04	0.08	1.59	-0.46	2.67***	1.31*	-1.66	0.19	1.58	-0.32
	(0.00)	(0.32)	(0.81)	(0.59)	(0.14)	(0.67)	(0.00)	(0.07)	(0.17)	(0.78)	(0.21)	(0.83)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	720	720	720	720	720	720	382	382	338	338	615	615

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 41 male workers during the 10 rounds of the Choice treatment and the 31 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

We provide four additional pieces of evidence of increased negotiations not financially benefiting men.[30] First, not only does the likelihood of gains not increase in the Always treatment relative to the Choice treatment, the size of gains does not significantly increase (Columns 7 - 8). Second, not only does the likelihood of losses increase in the Always treatment relative

[29] As mentioned in footnote 26, our focus on the distribution of profits instead of average profits reduces sensitivity to the parameters of the experiment. Indeed, and as further discussed in Section 4.4, the fact that men are more likely to experience impasse in the Choice than in the Always treatment drives the lack of a significant impact on average profits as it is sensitive to the $5 impasse penalty.

[30] These four additional pieces of evidence are also robust to pooling across all bonuses.

to the Choice treatment, the size of the losses, if anything, increases (Columns 9 - 10). Third, Appendix Table A.1 shows that our results are robust to the exclusion of controls. Fourth, the downward shift in the distributions of profits in our Choice treatment relative to our Always treatment allows us to precisely and non-parametrically reject ($p < 0.001$) the equality of these distributions using a two-sample Kolmogorov-Smirnov test.

As for women, we find that for men the answer to our first question is clear: there is no evidence in support of men financially benefiting from increased negotiation. Increased negotiations instead result in men entering more negotiations that are financially harmful. The answer to our second question on whether we observe non-random and systematic selection into negotiations is, perhaps at best, suggestive. Relative to profits from self-selected negotiations in the Choice treatment, the average profits from the non-self-selected negotiations in the Always treatment do not differ when pooling across bonuses (Column 11) but are marginally significantly lower when focusing on non-negative bonuses (Column 12). Thus, the answer to our second question is supportive of men, if anything, positively selecting into negotiations.

4.3 Gender Differences in Negotiation Decisions and Outcomes

The answers to our first question on whether increased negotiations are financially helpful are the same for both women and men: increased negotiations are not financially helpful. We nonetheless begin this section by examining whether any gender differences arise in response to our first question. Since the recommendation of increased negotiations is directed more frequently towards women than men, we are interested in whether a female-targeted recommendation is justified. That is, we ask whether increased negotiations are financially more helpful to women than they are to men.

In contrast to evidence that would support female-targeted lean-in advice, we find that increased negotiations are not more helpful to women than they are to men. Table 4 examines gender differences in profits to increased negotiations by presenting regression results when considering both genders instead of separately considering women (Table 2) and men (Table 3). The coefficient estimates on *Always*Male* show that women are not more likely to avoid financially beneficial negotiations than men are (Columns 1 - 2). Even though selected negotiations are largely beneficial and that women avoid more negotiations than men do, we do not find that women are missing out on more worthwhile negotiation opportunities than men are.[31] When given a choice, women — to the same degree as men — already enter negotiation opportunities that are likely to result in gains.

Rather than increased negotiations being more helpful to women than they are to men,

[31]Pooling across all bonuses, the entry rate for female workers is significantly lower than the entry rate for male workers (66% vs 74%, two-sided t-test, $p < 0.01$). A similar pattern results when only considering negative bonuses (88% vs 97%, two-sided t-test, $p < 0.01$) and when only considering non-negative bonuses (44% vs 55%, two-sided t-test, $p = 0.02$). Results in Table 5 confirm this gender difference in entry when clustering standard errors at the participant level.

Table 4: Profits among female versus male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.00	0.01	0.24***	0.40***	-0.45*	-0.89***	0.23	-0.10	-0.92***	-1.26***	-0.61**	-1.25***
	(0.96)	(0.91)	(0.00)	(0.00)	(0.10)	(0.00)	(0.26)	(0.67)	(0.00)	(0.00)	(0.05)	(0.00)
$b < 0$		0.48***		0.04*		1.36***		0.73***		-1.78***		1.24***
		(0.00)		(0.08)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.02		-0.30***		0.80***		0.44*		1.08**		0.92**
$*b < 0$		(0.69)		(0.00)		(0.00)		(0.05)		(0.03)		(0.01)
Male	0.06	0.06	0.05**	0.06***	-0.07	-0.07	0.10	0.12	-0.67***	-0.74***	-0.26	-0.27
	(0.24)	(0.24)	(0.03)	(0.01)	(0.71)	(0.70)	(0.62)	(0.52)	(0.01)	(0.00)	(0.37)	(0.35)
Always	-0.01	-0.01	-0.13**	-0.14***	0.42	0.44	-0.19	-0.23	0.85***	0.95***	0.63	0.64
$*$*Male*	(0.90)	(0.91)	(0.01)	(0.01)	(0.25)	(0.23)	(0.50)	(0.38)	(0.01)	(0.00)	(0.13)	(0.11)
Constant	0.64***	0.14	-0.03	0.01	1.46*	-0.57	1.82***	0.57	-0.91	0.70	1.61*	-0.24
	(0.00)	(0.32)	(0.76)	(0.92)	(0.06)	(0.47)	(0.00)	(0.33)	(0.24)	(0.30)	(0.08)	(0.80)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1460	1460	1460	1460	1460	1460	743	743	717	717	1216	1216

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. *Male* is an indicator for male workers. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 41 female workers and 41 male workers during the 10 rounds of the Choice treatment and the 33 female workers and 31 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

increased negotiations are, if anything, more harmful to women than they are to men. Increased negotiations result in significantly more losses for women than they do for men (Columns 3 -4) and, within the set of no gains, result in a significantly greater decrease in the average profit among women than they do among men (Columns 9 - 10). No other significant differences emerge (Columns 5 - 8, 11 - 12), and these results are robust to the exclusion of controls (see Appendix Table A.5).

Thus, our results do not support the notion that men are more adept at knowing when to ask than women are. If anything, our results suggest that women are more adept at knowing when to ask.[32] While this is notable given that female-targeted lean-in advice would suggest the

[32]We do not observe similar gender differences when considering firms. Appendix Table A.8 (and Appendix A.4 more generally) demonstrates the lack of significant gender differences among the firms. The lack of a substantial gender difference among firms is consistent with prior literature — see for instance Andersen et al. (2013) and Dittrich, Knabe and Leipold (2014) — as the greater (appearing) bargaining power for firms may limit the potential of a gender difference. Although sex-pairings often influence negotiations (Eckel and Grossman,

opposite, it is not surprising in light of our earlier gender-specific analyses showing that increased negotiations are neither helpful to women nor to men.

4.4 Investigating the selection into negotiations on observable and unobservable characteristics

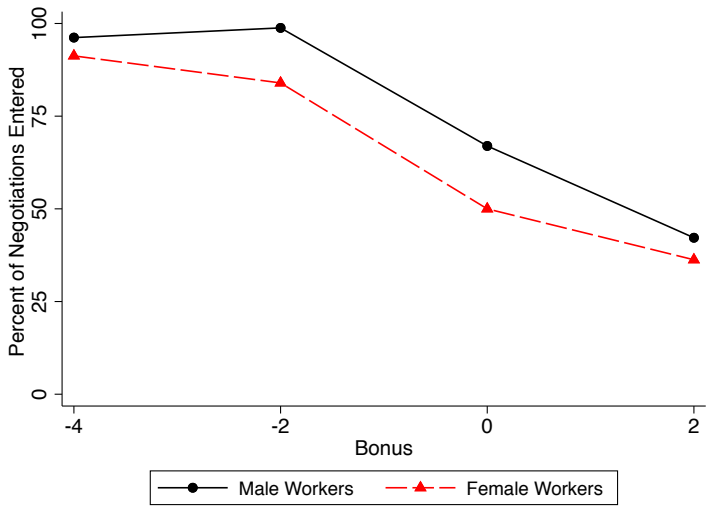
Since we do not observe evidence for better selection into negotiations by men than women, this section examines two additional questions to examine whether there is evidence for better selection into negotiations by men than women when considering particular channels through which selection may operate. First, we ask whether men more than women select on observable advantageous characteristics of the negotiation environment. Second, we ask whether men more than women select into negotiations according to their individual advantageous characteristics that are unobservable us.

With respect to observable characteristics of the negotiation environment, note that we vary one such central characteristic: the bonus. Our earlier results show that this characteristic is an important determinant of selection into negotiation. Recall that women are 44 percentage points more likely to enter negotiations with negative than non-negative bonuses (88% vs 44%, two-sided t-test, $p < 0.01$), and that men are similarly 42 percentage points more likely to enter negotiations with negative than non-negative bonuses (97% vs 55%, two-sided t-test, $p < 0.01$). Figure 3 shows negotiation entry by bonus level and reveals that the response to changes in bonus is similar for women and men. This results is confirmed by Column 1 of Table 5 (see the significantly negative coefficient on b as well as the small and insignificant coefficient on $Male^*b$). Column 1 also shows that female workers are marginally less likely than male workers to enter into a negotiation (see the coefficient on $Male$, $p = 0.06$).

While these findings show that workers select into negotiations based on the bonus, the results in Column 4 of Table 5 indicate that workers *positively* select into negotiations based on the bonus: increases in the bonus are significantly correlated with lower average profits in the Always treatment. Workers, by avoiding more negotiations as the bonus increases, avoid the least advantageous negotiation opportunities. We note that this pattern is in line with our expectation detailed in Section 2. When facing a negative bonus, the suggested wage is below the worker contribution, potentially making the firm more amenable to increasing the wage because of equity concerns. Meanwhile, increases in the bonus correspond to increases in the worker's suggested wage, potentially making it more difficult to negotiate for a higher wage. Put differently, the combination of these results — that negotiation entry and profits are decreasing in the bonus — indicate that workers know how the bonus should influence their willingness to negotiate. They are more likely to enter "easier" negotiation opportunities (those with negative bonuses) than "more difficult" negotiation opportunities (those with non-negative bonuses). Finding that there

2001; Solnick, 2001; Bowles, Babcock and Lai, 2007; Hernandez-Arenaz and Iriberri, 2018*b*), we do not find corresponding evidence in our data, which may result from our use of anonymous negotiations.

Figure 3: Entry decisions into negotiations



Notes: This figure shows how often participants choose to enter negotiations given a bonus level. Data include the observations from the 41 female workers during the 10 rounds in the Choice treatment and the 41 male workers during the 10 rounds in the Choice treatment.

are no significant gender differences, moreover, shows that men, no more than women, positively select into negotiations based off of the bonus.

To examine whether workers select on their individual characteristics that are unobservable to us, we first ask whether entry decisions vary by bargaining ability. A key challenge to answering this question is that we need a measure of bargaining ability. While a natural measure is the profit to negotiation, it is essential that we measure ability where selection into negotiation does not play a substantial role. As such, we construct two ability measures from negotiations that nearly all workers enter: those involving a bonus of -4. Ability measure 1 is the average profit from all negotiations with a bonus of -4. Ability measure 2 is the average profit from all negotiations with a bonus of -4 that reach an agreement.[33] Ability measure 2 is useful since a failure to reach an agreement results in a large loss, which could make the first ability measure quite noisy. Given that these ability measures are constructed from profits at a bonus of -4, we examine whether they are predictive of entry into more "difficult" negotiations (i.e., non-negative bonus negotiations) where there is substantial variation in entry.

Columns 2 and 3 of Table 5 show the extent to which these ability measures are predictive of entry decisions when the bonus is non-negative. While female workers with higher ability

[33]In principle, we could have considered many measures of ability, making multiple hypotheses testing a concern. While our restriction to ability measures where selection concerns are limited (i.e., at a bonus of -4) prevented the consideration of many potential measures of ability, we nonetheless note that these results – per other reasons mentioned in the text – are speculative in nature.

measures are significantly more likely to enter negotiations with non-negative bonuses (see the coefficient estimates on the ability measures), male workers with higher ability measures are not (the sums of the coefficient estimates on the ability measures and the interactions of the male indicator with the ability measures are not significantly different from zero). Columns 5 and 6 of Table 5 further show that these ability measures are correlated with higher average profits when the bonus is non-negative.[34] These results therefore suggest that men are not more likely, and if anything appear less likely than women, to positively select on ability. Of course, that female but not male workers appear to positively select into negotiations on their ability is only suggestive as we may not be capturing the individual's true unobserved ability.[35]

In closing, we provide evidence against other mechanisms that could contribute to our results. First, measures of participants' fairness perceptions, risk aversion, or chat tendencies are not robustly predictive of entry decisions in the Choice treatment nor of the average profit in the Always treatment (see Appendix Table A.7).[36] Our main results are also robust to controlling for these fairness perceptions and risk aversion measures (see Appendix Tables A.2, A.4, and A.6).[37] Second, if workers dislike entering negotiations because they are uncomfortable with how their individual contribution levels are determined or fear the five-dollar impasse penalty, the high entry rate into negotiations at non-negative bonuses shows that the dislike is not sufficient to dissuade them from all negotiations. Third, if the observed evidence for positively selecting into negotiations is solely reflective of workers performing worse in negotiations because they have to negotiate, then non-self-selected negotiations from the Always treatment would yield worse outcomes than the self-selected negotiations from the Choice treatment regardless of the bonus. This is not the case (for instance, see the coefficient estimate on $Always^{*}b < 0$ in Column 12 of Table 4).

[34] While the ability measures are not differentially predictive of profits for men than women, for men only the second ability measure is significantly predictive of profits.

[35] For our ability measure to capture actual ability, we would at a minimum need to assume that a worker's bargaining ability is independent of the negotiating partner and does not change over time.

[36] There is marginally significant evidence for fairness concerns influencing the selection into negotiations by both women and men, although fairness concerns are only significantly correlated with the average profit in the Always treatment by women. For chat tendencies, we note that the types of chat messages that occur less than 10% of the time are not included in Appendix Table A.7. For a more extensive discussion of the effectiveness of negotiation communication strategies, see Bowles (2013).

[37] We do not examine if our main results are robust to controlling for chat tendencies because many of the observations examined in our main results do not involve chats.

Table 5: Considering the selection into negotiation on the bonus and on ability measures

	Linear probability model of entry into negotiation in Choice treatment			Ordinary least squares of profit in Forced treatment		
	(1)	(2)	(3)	(4)	(5)	(6)
b	-0.10***			-0.51***		
	(0.00)			(0.00)		
Ability measure 1		0.06***			0.20*	
		(0.01)			(0.05)	
Ability measure 2			0.08**			0.24**
			(0.02)			(0.03)
Male	0.11*	0.28***	0.31**	0.35	0.23	0.02
	(0.06)	(0.00)	(0.03)	(0.18)	(0.57)	(0.98)
*Male*b*	0.01			-0.02		
	(0.72)			(0.90)		
*Ability measure 1*Male*		-0.06*			-0.08	
		(0.06)			(0.49)	
*Ability measure 2*Male*			-0.06			-0.00
			(0.20)			(0.99)
Constant	0.91***	0.90***	0.72***	-2.89**	-2.22*	-2.25*
	(0.00)	(0.00)	(0.00)	(0.04)	(0.08)	(0.08)
b	any	$b > 0$	$b > 0$	any	$b > 0$	$b > 0$
Controls	yes	yes	yes	yes	yes	yes
N	820	410	401	640	314	314

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. *Ability measure 1* is a worker's average profit from negotiations involving a bonus of -4. *Ability measure 2* is a worker's average profit from negotiations involving a bonus of -4 that that reach agreements. *Male* is an indicator for being male. If the bottom b row indicates $b > 0$, then the data are restricted to include negotiation opportunities with non-negative bonuses. Columns 1 -3: results are from ordinary least squares regressions of an indicator for whether a worker chooses to enter a negotiation; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, and the difference between the worker's and firm's contributions if the firm contribution is known; and data include the observations from the 41 female workers and 41 male workers during the 10 rounds in the Choice treatment. Columns 4 - 6: results are from ordinary least squares regressions of a worker's profit; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, the difference between the worker's and firm's contribution, and the interaction between these last two variables; and data include the 33 female workers and 31 male workers during the 10 rounds of the Always treatment.

5 A Replication at the University of Pittsburgh

In September 2018, we replicated our study at the University of Pittsburgh Experimental Economics Laboratory (PEEL). Following precisely the design and procedures of the experiment at Stanford, we conducted a total of 20 sessions.[38] The location of the experiment was changed to secure a larger sample than that of our initial experiment; our sample of 398 Pittsburgh

[38]The only difference was that, as noted footnote 13, the previous coding error (resulting in Stanford participants receiving weakly more money that they should have from the risk aversion elicitation procedure) was corrected.

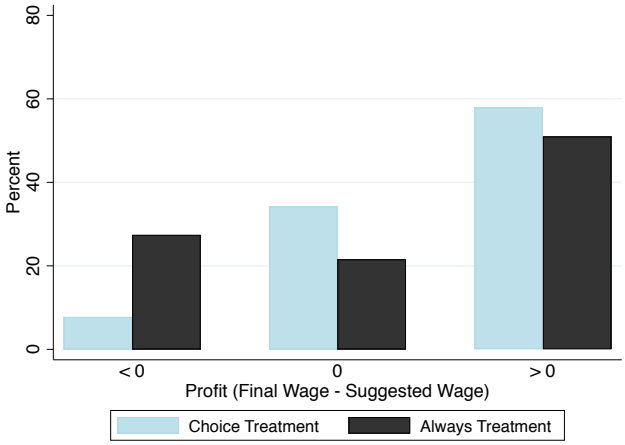
participants is 36% larger than our sample at Stanford.

The results at Pittsburgh replicate those at Stanford. The results for female workers can be summarized as follows. Women frequently avoid negotiations: they enter negotiations 70% of the time. Negotiations they choose to enter are largely beneficial: agreements are reached 92% of the time, 82% of negotiations result in gains while only 11% result in losses, and the average profit achieved from negotiating is $1.84. Yet, increased negotiations are not financially helpful: they do not result in additional gains (see Columns 1 - 2 of Table 6) but do result in additional losses (see Columns 3 - 4 of Table 6). Indeed, women positively select into negotiations (see Columns 11 - 12 of Table 6).

Figure 4 shows how always negotiating changes the distribution of gains and losses for women. The response at Pittsburgh is strikingly similar to that seen at Stanford (see Figure 1), and this is further confirmed when comparing the regression results in Table 6 to those shown in Table 2. While the regression results are similar in terms of magnitude, note that, as one may expect given the increase in sample size, we now easily reject a null effect on average profit of increasing negotiation. Specifically, when assessing whether increased negotiations fail to increase average profits in our Stanford experiment, Table 2 presents directional but not significant evidence of average profits decreasing ($p = 0.13$) when pooling across all bonuses (Column 5) and significant evidence when only considering the non-negative bonuses (Column 6). Table 6 shows that at Pittsburgh increased negotiations again fail to increase, and this time, significantly decrease average profits in both cases (Column 5 - 6). Indeed, forcing women to negotiate hurts them.

More generally, Appendix A.5 shows that our results further replicate in that (i) increased negotiations are not financially helpful to men, (ii) increased negotiations are not more helpful — or more accurately, less harmful — to men than they are to women, (iii) men do not positively select into negotiations to a greater degree than women do, and (iv) both women and men appear to positively select into negotiations off of the observable characteristic of the negotiation environment (i.e., the bonuses). Only two noteworthy, but slight, differences emerge relative to the initial study. First, while it is still the case that female workers do not enter negotiations more often than male workers, we do not find that men and women enter negotiations at different rates. Second, we do not find evidence of a gender gap in selection on ability. Men and women both appear to positively select on our measure of ability.

Figure 4: With Pittsburgh data, distribution of profits among female workers



Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0. Data include the observations from the 54 female workers during the 10 rounds in the Choice treatment, and the 51 female workers during the 10 rounds in the Always treatment.

Table 6: With Pittsburgh data, profits among female workers

	Ordinary least squares of											
	1(profit >0)		1(profit <0)		profit		profit, given profit >0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.07*	0.01	0.20***	0.30***	-0.52***	-0.54**	0.15	0.30	-0.63***	-0.94***	-0.68***	-0.91***
	(0.10)	(0.90)	(0.00)	(0.00)	(0.01)	(0.02)	(0.41)	(0.22)	(0.00)	(0.00)	(0.00)	(0.01)
$b<0$		0.52***		-0.02		1.89***		1.09***		-1.25***		1.68***
		(0.00)		(0.47)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.13*		-0.20***		0.17		-0.11		1.12**		0.38
$*b<0$		(0.06)		(0.00)		(0.64)		(0.68)		(0.02)		(0.33)
Constant	0.76***	0.22	-0.07	0.03	2.08**	-0.34	2.70***	1.45**	-1.22	-0.21	2.20**	-0.01
	(0.00)	(0.18)	(0.58)	(0.76)	(0.02)	(0.63)	(0.00)	(0.04)	(0.15)	(0.79)	(0.03)	(0.95)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1050	1050	1050	1050	1050	1050	573	573	477	477	890	890

* $p<0.10$, ** $p<0.05$, *** $p<0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b<0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b=-4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 54 female workers during the 10 rounds of the Choice treatment and the 51 female workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

6 An Online Experiment on the Paternalistic Demand for Workers to Lean-in

The widespread sentiment that "women should negotiate more" originates from the finding that women benefit from negotiating yet many women are reluctant to do so. Mirroring these two characteristics, the setting in our original Stanford experiment and the subsequent Pittsburgh experiment allows us to assess the counterfactual of increased negotiation. We find in both studies that increased negotiations do not benefit women. Our results demonstrate the central role of selection and serve as a caution against the recommendation that women should negotiate more.

Our results also shed light on the consequence of providing different negotiation advice to women and men. Since increased negotiations are neither more helpful nor less harmful for women than they are for men, we observe no evidence that justifies more frequently encouraging women, rather than men, to negotiate.

In considering the costs from increased negotiations, we note that they may be disproportionately imposed on women than men if the push for increased negotiations is greater for women than for men. To directly assess whether the push to negotiate varies by the gender of the potential negotiator and to determine the consequences of such differences, we conducted two additional experiments on Amazon Mechanical Turk. We conducted a modified version of our Choice and Always treatments, where workers can or cannot opt out of a negotiation with a firm. We refer to these as being in our "first-party" experiment. We also conducted a "third-party" experiment, where a third party can influence a worker's ability to opt out of a negotiation. We first describe the design and results of our third-party experiment and then briefly highlight the design and results from our first-party experiment (further details on the experiments are in Appendix A.6 and Appendix B).

For our third-party experiment, we recruited 400 participants to complete a 10-minute study for a guaranteed payment of $1.50 during January 2018. Out of the 400 participants, 399 participants completed the study. Participants were informed that they would be asked three questions and that their answer to one of the questions would be randomly selected to count for additional payment. Participants were randomly assigned to either a female or a male version of the experiment, where all three questions were about other female workers (n=214) or about other male workers (n=185), thus making them "third-party" participants.

The first question of the third-party experiment aimed to elicit lean-in norms and asked "Do you think women/men should negotiate their salary more often?" The third-party participants could answer "yes" or "no," and were informed that, if the question was selected for payment, they would receive 50 cents as an additional bonus payment if they provided the same answer as the answer given by most other participants. This payment procedure, following that in

Krupka and Weber (2013), allows us to elicit an incentivized measure of norms surrounding the propensity by which men and women should negotiate more.

Summarizing the responses to the first question, Column 1 of Table 7 reports results from a linear probability model of the likelihood that the third-party participants responded that women/men should negotiate their salaries more often. The coefficient estimate on the constant shows that 94% of the third-party participants who are asked about women respond affirmatively. The coefficient estimate on *Asked about men* shows a significant drop of 24 percentage points when the third-party participants are instead asked about men. That is, our results are consistent with a societal norm that favors increased negotiations for women more than for men.

The second question of the third-party experiment asks the third-party participants whether they are willing to pay to eliminate an individual's ability to opt out of a negotiation. In particular, each third-party participant is told, depending on the treatment, that they are matched with one male or female worker who will face a negotiation opportunity in a future study. While the third-party participant's payment is not influenced by the outcome from this future negotiation, the outcome of the negotiation may be affected by the third-party participant eliminating the matched worker's ability to opt out of a negotiation. In the event that the second question counts for payment, the third-party participant must decide whether to (i) receive 50 cents in additional payment, or instead (ii) pay 25 cents out of these 50 cents in additional payment to guarantee that the matched worker cannot opt out of a negotiation.

Prior to answering this second question, the third-party participants are provided with information on the negotiation opportunities their matched workers will face. The characteristics of the negotiation are similar to that of our laboratory studies: The worker will be paired with one firm; the worker and the firm each contribute 150 cents to a joint revenue for a total of 300 cents; the worker is provided with a suggested wage: a suggestion of how many cents, out of the joint revenue, the worker should receive as a wage; the suggested wage is randomly selected to equal 120, 150, 180, or 210 cents; the worker must choose whether to negotiate with the firm; if the worker does not negotiate with the firm, the worker receives a wage equal to the suggested wage, and the firm receives the joint revenue minus the suggested wage; if the worker negotiates the worker proposes a wage and may provide a justification; if the firm accepts the wage proposal, it is implemented; if instead the firm rejects the wage proposal, the suggested wage is implemented with a 30 cent penalty applied to both the payoffs received by the worker and by the firm for failing to reach an agreement.

The third-party participant is provided with no further information prior to deciding whether to prevent their matched worker from opting out of a negotiation. Notably, while the third-party participant knows that their matched worker will learn their suggested wage before deciding whether to enter a negotiation, the third-party participant does not know this suggested wage. The third-party participant only knows that suggested wages equal 120, 150, 180, or 210 cents.

The third-party participant also does not have any knowledge of the matched worker's preferences or negotiation ability.

Despite the limited information on the specific negotiation opportunities faced by their matched workers, we find that third-party participants pay to eliminate their matched workers' ability to opt out of negotiations and that this willingness is greater when the matched worker is female. The coefficient estimate on the constant in Column 2 of Table 7 shows that the majority of third-party participants (55% of them) forgo half of their additional payment to eliminate a female worker's ability to opt out of a negotiation. The coefficient on *Asked about men* shows that this willingness to restrict a worker's choice is cut by half — significantly reduced by 23 percentage points — if third-party participants are instead matched with a male worker. These results provide evidence that a paternalistic demand for eliminating a worker's ability to opt out of a negotiation is greater when the worker is female rather than male.

Table 7: Results from third-party experiment: paternalistic lean-in

	Linear probability model of answering yes to		
	women should negotiate more often	willing to pay for women to negotiate more often	
	(1)	(2)	(3)
Asked about men	-0.236***	-0.228***	-0.245***
	(0.037)	(0.048)	(0.049)
Entry belief			0.002**
			(0.001)
Constant	0.940***	0.545***	0.435***
	(0.017)	(0.035)	(0.066)
Observations	399	399	399

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are robust and shown in parentheses. In Column 1, results are from ordinary least squares regressions of an indicator for whether a participant indicates that women/men should negotiate their salaries more often. In Column 2, results are from ordinary least squares regressions of an indicator for whether a participant is willing to pay for a woman/man to be forced to enter a negotiation. Data include the observations from the 399 workers in our third-party experiment.

What gives rise to the greater push for women to negotiate more? Does it result from a perception that women negotiate less than men? To assess the potential role of these beliefs, we ask the third-party participants, in the third and final question, to predict the percent of male/female workers who voluntarily choose to negotiate in the setting detailed to them in the second question. The third-party participants had to indicate whether they believed that 0-10%, 11-20%, 21-30%, ..., or 91%-100% of male/female workers choose to negotiate. If the third question is selected as the question that counts for payments, third-party participants receive an additional 50 cents in bonus payment if their prediction is correct and no bonus payment if their prediction is incorrect. We find that third-party participants believe that male workers negotiate more frequently than female workers (58.06% vs 50.50%, two-sided t-test, $p < 0.01$), however, Column 3 of Table 7 shows that the greater willingness to restrict a woman's negotiation

decision persists and, if anything, strengthens when we control for the belief that the individual negotiates.[39]

If increased negotiations are costly in this setting, the greater tendency to push women to negotiate will impose a greater cost on women. To examine whether increased negotiations are costly in this setting, our first-party experiment involves negotiation opportunities between workers and firms like those described in the third-party experiment. The results in the first-party experiment replicate our main findings from the laboratory experiment (see Appendix A.6 for details): workers choose to frequently avoid negotiations (68% of the time in this case) and this avoidance is not to their detriment. Increased negotiations are neither helpful to women nor to men nor are they more helpful to women than they are to men. If anything, increased negotiations are more harmful to women than they are to men.

To summarize, these two additional experiments examine a setting where workers choose to avoid the majority of negotiation opportunities and where workers are significantly worse off financially if they do not have the opportunity to avoid negotiations. Finding that third-party participants are willing to pay to prevent workers from having the opportunity to avoid negotiations thus implies that they make workers worse off both from a revealed preference standpoint and from a financial standpoint. Third-party participants' greater willingness to pay to prevent female than male workers from having the opportunity to avoid negotiations further implies that female workers are more likely to suffer the consequences of such financially harmful and paternalistic decisions than male workers are. Indeed, while Appendix A.6 shows that the cost of always negotiating is 17 percent greater, but insignificantly so, for women than for men, this difference is magnified when including the third party's decision to restrict the worker's negotiation decision. With women more frequently being pushed to negotiate, the cost imposed on women is twice that of men (p=0.048). Thus, the introduction of a third-party "guidance" is more costly for women than it is for men.

7 Conclusion

Results related to the negotiation literature fall into one of two strands. The first strand abstracts away from the decision to enter negotiations and investigates what characteristics of the environment influence negotiation outcomes when negotiations are required. In relation to this first strand, we find that individuals achieve substantially and significantly better profits from negotiations as the bonus decreases. That is, individuals are more successful at securing more than their suggested wage when their suggested wage falls short of what they contribute to joint revenue. The second strand investigates what factors influence the negotiation-entry decisions and the outcomes conditional on entering negotiations. In relation to this second

[39] A participant's belief is estimated as the midpoint of the percentage range they selected as being most likely in terms of the percent of male/female workers who will choose to enter a negotiation. For instance, if they indicated that they believe 11-20% of male workers would enter a negotiation, their belief measure equals 15.

strand, we observe evidence that is consistent with positive selection: individuals are more likely to enter negotiations as the bonus decreases and thus as profits from negotiations are generally higher. In relation to the gender literature on both of these strands, we mostly do not observe significant gender differences in negotiation outcomes.[40] This is not surprising given that we used prior literature to guide our design decisions such that gender differences were expected to be minimal.

This paper distinguishes itself by addressing a question distinct from these two strands of the literature. We ask whether individuals — and specifically whether women in light of the lean-in advice that is targeted at them — would financially benefit from negotiating more often in an environment where they (i) generally secure positive profits in the negotiations they choose to enter but (ii) frequently avoid negotiations. We ask this question because its answer is not simply yes. The fact that individuals who choose to negotiate in select situations largely benefit from doing so does not imply that all individuals should negotiate all of the time. Understanding how individuals select into negotiations and what they would achieve from negotiations that they choose to avoid is crucial. We also note that a non-trivial answer to this question requires an environment where losses from negotiations are possible.[41]

Thus, to answer whether individuals would financially benefit from negotiating more often, we conduct a laboratory experiment that provides the first comparison of outcomes from a setting where individuals choose whether to negotiate to the counterfactual outcomes from a setting where individuals always negotiate. In particular, we examine how outcomes differ when individuals can select into negotiations in our Choice (of negotiation) treatment to when they always negotiate in our Always (negotiate) treatment. Our corresponding results, which we replicate at a different university with a larger sample, provide a clear caution to lean-in advice targeted towards women

While women largely gain when they choose to negotiate in the Choice treatment, increased negotiations in the Always treatment do not result in any additional gains for women. When given a choice, women enter negotiations that are financially beneficial and frequently avoid negotiations that are financially harmful. Indeed, women positively select into negotiations and forcing women to negotiate hurts them.

We find that increased negotiations are not more helpful, or less harmful, to women than they are to men. As supported by our additional online experiments, higher costs to women may further arise due to a greater paternalistic demand for preventing women, more so than men, from avoiding negotiations.

[40] The slight gender differences we observe in our initial Stanford experiment, but not in our Pittsburgh experiment, are as follows. In the Always treatment, negotiations by men are less likely to result in losses. In the Choice treatment, negotiations by men are more likely to result in losses and men are more likely to enter negotiations.

[41] In environments where negotiations always result in weakly positive profits, it follows the negotiating more often is weakly financially beneficial.

Investigating when a misguided desire for increased negotiations arises, particularly one directed disproportionately towards women, is an interesting avenue for future work. Determining if and when increased negotiations would instead benefit women is also an important avenue for future work.[42] In regard to this latter avenue, we note that exploring factors known to drive gender differences in negotiation outcomes, factors that our design purposefully eliminated, may prove fruitful. For instance, women may shy away from financially beneficial negotiations if they undervalue what they bring to the table because — unlike in our study — they may neither know their individual contributions nor their outside options. Even in these cases, however, one should be wary of blanket recommendations to women that they should negotiate more often.

[42]One approach is to consider interventions that seek to bolster women's negotiation skills. For instance, using the well-cited statistics that women earn less than men as motivation (Blau and Kahn, 2016), the United States Department of Labor encourages women to "aim higher and negotiate better" (see https://blog.dol.gov/2015/04/13/its-time-for-equal-pay-now). The Paycheck Fairness Act, a proposed amendment to the Equal Pay Act, even includes a provision that authorizes the Secretary of Labor "to make grants to eligible entities for negotiation skills training programs for girls and women." (see https://www.congress.gov/bill/114th-congress/house-bill/1619.) With the goal of helping to close the wage gap, universities and companies provide negotiation workshops, such as those via the Program for Research and Outreach on Gender Equity in Society at Carnegie Mellon University (see http://progress.heinz.cmu.edu/about-us).

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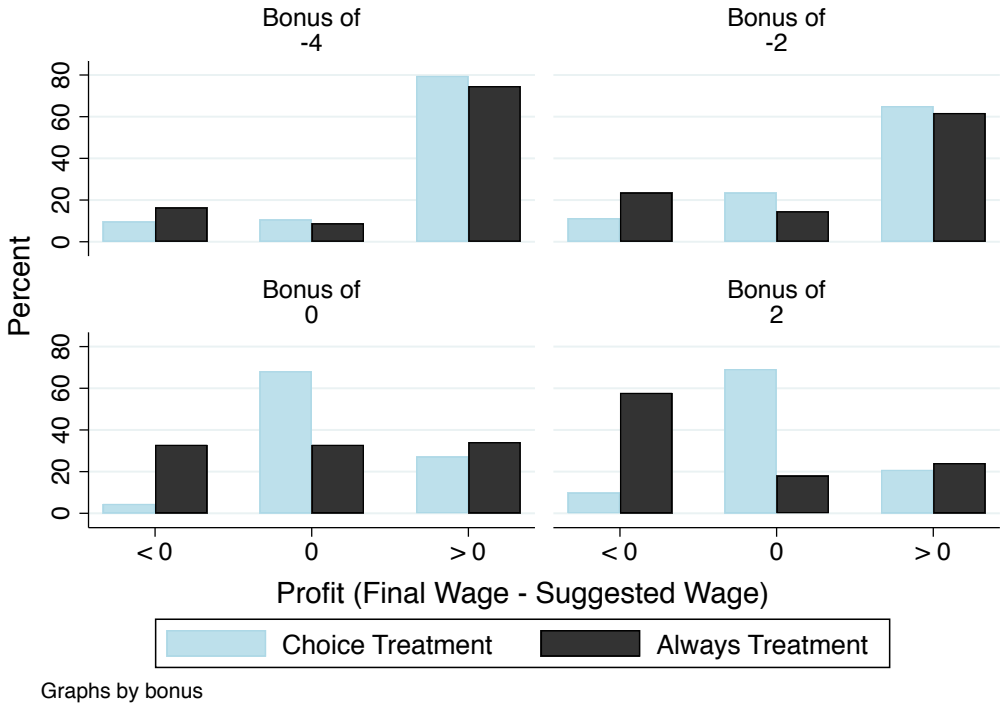
A Additional Results

Appendix A.1 - A.4 concern data from the 292 participants in the experiment at Stanford University that was run from May - October 2013. Appendix A.5 addresses additional results from the replication at University of Pittsburgh with 398 participants that was run in September 2018. Appendix A.6 contain data from our online experiments with 1,595 Amazon Mechanical Turk workers that was ran from December 2017 - January 2018.

A.1 Additional Results for Female Workers

Figure A.1: Profits among female workers by bonus



Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0 dependent on the bonus. Data include the 41 female workers during the 10 rounds in the Choice treatment, and the 33 female workers during the 10 rounds in the Always treatment.

Table A.1: With no controls, profits among female workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Forced	0.00	0.05	0.23***	0.39***	-0.42	-0.78***	0.18	-0.24	-0.94***	-1.17***	-0.59*	-1.15***
	(0.96)	(0.58)	(0.00)	(0.00)	(0.13)	(0.01)	(0.37)	(0.35)	(0.00)	(0.00)	(0.05)	(0.00)
$b < 0$		0.48***		0.04		1.31***		0.57**		-1.36***		1.17***
		(0.00)		(0.20)		(0.00)		(0.02)		(0.01)		(0.00)
*Always**$b <$ 0		-0.09		-0.29***		0.63*		0.55*		0.69		0.77*
		(0.29)		(0.00)		(0.09)		(0.06)		(0.29)		(0.08)
Constant	0.77***	0.24***	0.02	0.07***	2.39***	0.29**	3.39***	2.31***	-1.66***	-0.36***	2.59***	0.66**
	(0.00)	(0.00)	(0.35)	(0.00)	(0.00)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	740	740	740	740	740	740	361	361	379	379	601	601

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 41 female workers during the 10 rounds of the Choice treatment and the 33 female workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

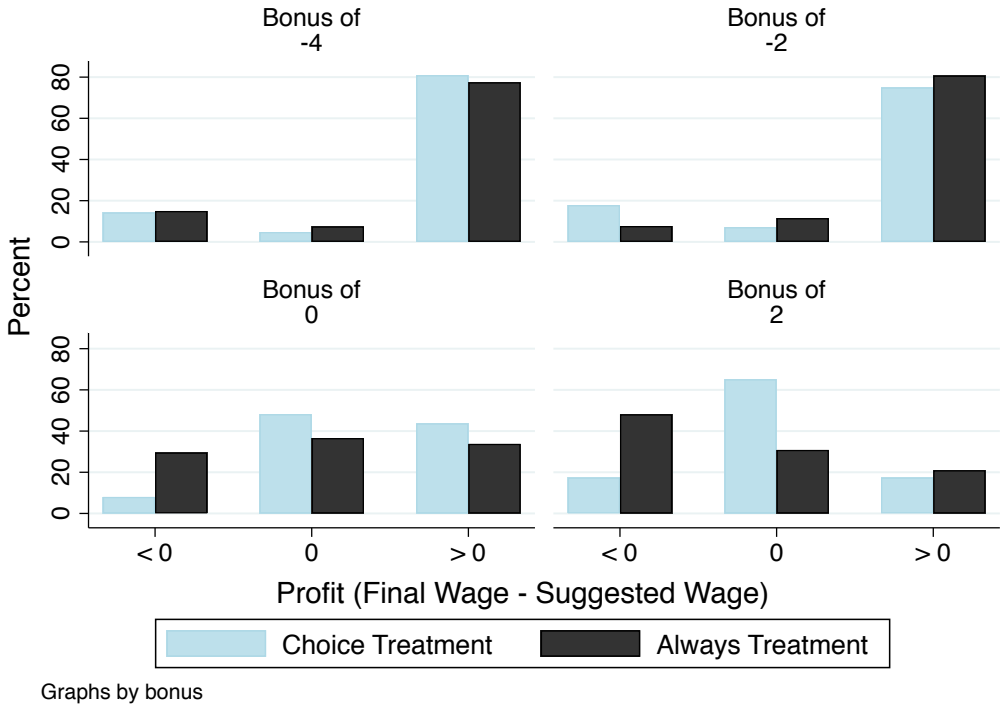
Table A.2: With additional controls, profits among female workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.02	0.02	0.26***	0.41***	-0.57**	-0.92***	0.08	-0.28	-0.93***	-1.14***	-0.81***	-1.35***
	(0.72)	(0.79)	(0.00)	(0.00)	(0.03)	(0.00)	(0.68)	(0.26)	(0.00)	(0.00)	(0.01)	(0.00)
$b < 0$		0.48***		0.04		1.31***		0.83***		-1.30**		1.16***
		(0.00)		(0.15)		(0.00)		(0.00)		(0.01)		(0.00)
Always		-0.09		-0.29***		0.60		0.45		0.60		0.74
$*b < 0$		(0.28)		(0.00)		(0.10)		(0.14)		(0.35)		(0.11)
Constant	0.68***	0.17	-0.07	-0.01	1.38	-0.67	1.73*	0.44	-1.16	0.15	1.54	-0.36
	(0.01)	(0.50)	(0.69)	(0.92)	(0.23)	(0.56)	(0.07)	(0.61)	(0.31)	(0.88)	(0.26)	(0.81)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	740	740	740	740	740	740	361	361	379	379	601	601

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 41 female workers during the 10 rounds of the Choice treatment and the 33 female workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

A.2 Additional Results for Male Workers

Figure A.2: Profits among male workers by bonus



Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0 dependent on the bonus. Data include the 41 male workers during the 10 rounds in the Choice treatment, and the 31 male workers during the 10 rounds in the Always treatment.

Table A.3: With no controls, profits among male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.01	-0.04	0.11***	0.27***	-0.06	-0.57**	0.03	-0.36	-0.08	-0.48*	-0.02	-0.71*
	(0.84)	(0.56)	(0.00)	(0.00)	(0.78)	(0.02)	(0.89)	(0.24)	(0.71)	(0.06)	(0.95)	(0.07)
$b < 0$		0.48***		0.03		1.46***		0.59***		-2.53***		1.37***
		(0.00)		(0.36)		(0.00)		(0.01)		(0.00)		(0.00)
Always		0.05		-0.31***		0.97***		0.46		1.78**		1.06**
$*b < 0$		(0.55)		(0.00)		(0.01)		(0.24)		(0.03)		(0.01)
Constant	0.80***	0.31***	0.10***	0.13***	2.16***	0.16	3.44***	2.41***	-2.96***	-0.84***	2.19***	0.30
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.40)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.39)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	720	720	720	720	720	720	382	382	338	338	615	615

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 41 male workers during the 10 rounds of the Choice treatment and the 31 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.4: With additional controls, profits among male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.02	-0.05	0.10**	0.25***	-0.01	-0.54**	-0.09	-0.43	0.07	-0.28	0.06	-0.65
	(0.72)	(0.52)	(0.01)	(0.00)	(0.95)	(0.05)	(0.60)	(0.16)	(0.82)	(0.26)	(0.84)	(0.11)
$b < 0$		0.47***		0.04		1.41***		0.84***		-2.37***		1.31***
		(0.00)		(0.24)		(0.00)		(0.00)		(0.00)		(0.00)
Always		0.05		-0.32***		1.01***		0.37		1.71**		1.11**
$*b < 0$		(0.53)		(0.00)		(0.01)		(0.28)		(0.05)		(0.01)
Constant	0.69***	0.20	0.09	0.14	1.45	-0.64	3.10***	1.66**	-2.07*	-0.26	1.44	-0.55
	(0.00)	(0.33)	(0.51)	(0.34)	(0.20)	(0.56)	(0.00)	(0.02)	(0.09)	(0.88)	(0.28)	(0.70)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	720	720	720	720	720	720	382	382	338	338	615	615

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 41 male workers during the 10 rounds of the Choice treatment and the 31 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

A.3 Additional Results for Female and Male Workers

Table A.5: With no controls, profits of female versus male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.01	0.01	0.24***	0.39***	-0.42	-0.86***	0.18	-0.21	-0.93***	-1.30***	-0.57*	-1.19***
	(0.94)	(0.86)	(0.00)	(0.00)	(0.12)	(0.00)	(0.37)	(0.40)	(0.00)	(0.00)	(0.06)	(0.00)
$b < 0$		0.48***		0.03		1.39***		0.58***		-1.87***		1.28***
		(0.00)		(0.14)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.02		-0.30***		0.79***		0.51**		1.17**		0.90**
$*b < 0$		(0.67)		(0.00)		(0.00)		(0.03)		(0.02)		(0.01)
Male	0.06	0.06	0.05**	0.06**	-0.05	-0.05	0.11	0.13	-0.68***	-0.75***	-0.22	-0.23
	(0.22)	(0.21)	(0.02)	(0.01)	(0.79)	(0.78)	(0.61)	(0.55)	(0.00)	(0.00)	(0.46)	(0.42)
Always	-0.01	-0.01	-0.12**	-0.13**	0.37	0.38	-0.15	-0.19	0.85***	0.95***	0.54	0.56
$*$*Male*	(0.85)	(0.86)	(0.02)	(0.01)	(0.32)	(0.31)	(0.59)	(0.48)	(0.01)	(0.00)	(0.19)	(0.17)
Constant	0.75***	0.24***	0.04*	0.07***	2.30***	0.25*	3.36***	2.29***	-1.96***	-0.22**	2.49***	0.58**
	(0.00)	(0.00)	(0.07)	(0.00)	(0.00)	(0.07)	(0.00)	(0.00)	(0.00)	(0.03)	(0.00)	(0.02)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	1460	1460	1460	1460	1460	1460	743	743	717	717	1216	1216

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 41 female workers and 41 male workers during the 10 rounds of the Choice treatment and the 33 female workers and 31 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.6: With additional controls, profits of female versus male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.01	-0.01	0.24***	0.40***	-0.50*	-0.95***	0.10	-0.23	-0.87***	-1.21***	-0.68**	-1.29***
	(0.83)	(0.91)	(0.00)	(0.00)	(0.07)	(0.00)	(0.62)	(0.33)	(0.00)	(0.00)	(0.02)	(0.00)
$b < 0$		0.48***		0.04*		1.37***		0.84***		-1.78***		1.28***
		(0.00)		(0.08)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.02		-0.30***		0.80***		0.41*		1.09**		0.89**
$*b < 0$		(0.67)		(0.00)		(0.00)		(0.06)		(0.03)		(0.01)
Male	0.07	0.07	0.04*	0.05**	-0.03	-0.02	0.15	0.18	-0.66***	-0.74***	-0.21	-0.22
	(0.15)	(0.14)	(0.05)	(0.02)	(0.88)	(0.89)	(0.41)	(0.29)	(0.00)	(0.00)	(0.45)	(0.44)
Always	-0.02	-0.02	-0.13**	-0.14**	0.40	0.41	-0.19	-0.24	0.84***	0.95***	0.60	0.62
$*$*Male*	(0.84)	(0.86)	(0.02)	(0.01)	(0.28)	(0.26)	(0.45)	(0.34)	(0.01)	(0.00)	(0.15)	(0.13)
Constant	0.66***	0.15	-0.02	0.03	1.48*	-0.59	2.31***	0.96	-1.30	0.32	1.69*	-0.26
	(0.00)	(0.32)	(0.84)	(0.80)	(0.07)	(0.47)	(0.00)	(0.11)	(0.11)	(0.65)	(0.08)	(0.78)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1460	1460	1460	1460	1460	1460	743	743	717	717	1216	1216

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 41 female workers and 41 male workers during the 10 rounds of the Choice treatment and the 33 female workers and 31 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.7: Considering the selection into negotiation on other measures

	Linear probability model of negotiation entry in Choice treatment			Ordinary least squares of profit in Forced treatment		
	(1)	(2)	(3)	(4)	(5)	(6)
Fairness measure	-0.03			-0.23**		
	(0.11)			(0.02)		
Risk measure		-0.02			0.12	
		(0.68)			(0.47)	
Agressive-chat			-0.25			-0.41
			(0.17)			(0.66)
Deferential-chat			-0.04			0.97
			(0.79)			(0.15)
Entitled-chat			-0.44**			0.20
			(0.01)			(0.66)
Fairness-chat			0.11			0.72*
			(0.58)			(0.10)
Male	0.17	0.11	-0.13	-0.28	-0.10	0.86
	(0.14)	(0.58)	(0.26)	(0.47)	(0.84)	(0.11)
Fairness measure	-0.01			0.19		
**Male*	(0.71)			(0.13)		
Risk measure		0.00			0.07	
**Male*		(0.92)			(0.73)	
Agressive-chat			0.20			0.59
**Male*			(0.44)			(0.65)
Deferential-chat			0.34**			-1.03
**Male*			(0.03)			(0.22)
Entitled-chat			0.43**			-0.16
**Male*			(0.03)			(0.85)
Fairness-chat			-0.14			-1.57*
**Male*			(0.48)			(0.07)
Constant	1.19***	1.17***	1.20***	-1.70	-2.58**	-2.60**
	(0.00)	(0.00)	(0.00)	(0.23)	(0.04)	(0.05)
b	$b > 0$	$b > 0$	$b > 0$	$b > 0$	$b > 0$	$b > 0$
Controls	yes	yes	yes	yes	yes	yes
Observations	422	422	410	314	314	314

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. *Fairness measure* is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey. *Risk measure* is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. *X-chat* is the fraction of an individual's negotiations involving a bonus of -4 that are coded as the chat-type X. *Male* is an indicator for male workers. Columns 1 - 3: results are from ordinary least squares regressions of an indicator for whether a worker chooses to enter a negotiation; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, and the difference between the worker's and firm's contributions if the firm contribution is known; and data include the observations from the 41 female workers and 41 male workers during the 10 rounds in the Choice treatment (and in Column 3, participants with non-missing chat tendency measures). Columns 4 - 6: results are from ordinary least squares regressions of a worker's profit; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, the difference between the worker's and firm's contribution, and the interaction between these last two variables; and data include the 33 female workers and 31 male workers during the 10 rounds of the Always treatment.

A.4 Additional Results for Female and Male Firms

Table A.8: Profits among female versus male firms

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.17***	0.32***	0.01	0.01	0.23	0.64***	-0.26	0.15	-0.30*	-0.37*	0.64***	1.56***
	(0.00)	(0.00)	(0.85)	(0.81)	(0.24)	(0.00)	(0.54)	(0.77)	(0.05)	(0.06)	(0.00)	(0.00)
$b < 0$		-0.00		0.51***		-1.73***		0.37		-1.76***		-0.99***
		(0.85)		(0.00)		(0.00)		(0.40)		(0.00)		(0.00)
Always		-0.29***		-0.02		-0.72***		-0.80		0.18		-1.46***
$*b < 0$		(0.00)		(0.61)		(0.00)		(0.14)		(0.40)		(0.00)
Male	-0.01	0.00	-0.03	-0.04	-0.03	0.03	-0.13	0.04	-0.00	0.04	-0.10	-0.03
	(0.68)	(1.00)	(0.39)	(0.31)	(0.87)	(0.83)	(0.77)	(0.91)	(1.00)	(0.77)	(0.63)	(0.89)
Always	0.03	0.03	-0.04	-0.04	0.26	0.22	0.56	0.36	0.03	0.00	0.32	0.28
$*$*Male*	(0.44)	(0.43)	(0.52)	(0.59)	(0.44)	(0.49)	(0.38)	(0.52)	(0.93)	(0.99)	(0.37)	(0.42)
Constant	-0.03	0.05	0.69***	0.16	-1.58**	0.73	2.61*	2.58**	-1.50***	0.61	-1.91**	-0.18
	(0.76)	(0.54)	(0.00)	(0.27)	(0.02)	(0.28)	(0.07)	(0.03)	(0.01)	(0.31)	(0.02)	(0.82)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1460	1460	1460	1460	1460	1460	147	147	1313	1313	1216	1216

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. *Male* is an indicator for male workers. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 38 female firms and 44 male firms during the 10 rounds of the Choice treatment and the 34 female firms and 30 male firms during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.9: With no controls, profits of female versus male firms

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.17***	0.32***	0.00	0.01	0.24	0.64***	-0.21	0.13	-0.30*	-0.39**	0.70***	1.65***
	(0.00)	(0.00)	(0.89)	(0.80)	(0.21)	(0.00)	(0.60)	(0.81)	(0.05)	(0.05)	(0.00)	(0.00)
$b < 0$		-0.00		0.51***		-1.71***		0.25		-1.74***		-0.90***
		(0.86)		(0.00)		(0.00)		(0.55)		(0.00)		(0.00)
Always		-0.29***		-0.03		-0.69***		-0.66		0.23		-1.51***
$*b < 0$		(0.00)		(0.57)		(0.00)		(0.20)		(0.31)		(0.00)
Male	-0.01	-0.00	-0.02	-0.03	-0.07	-0.01	-0.06	0.08	-0.05	-0.01	-0.15	-0.08
	(0.66)	(1.00)	(0.51)	(0.39)	(0.66)	(0.95)	(0.86)	(0.85)	(0.77)	(0.96)	(0.50)	(0.73)
Always	0.03	0.03	-0.05	-0.04	0.28	0.24	0.43	0.27	0.05	0.02	0.34	0.30
$*$*Male*	(0.45)	(0.44)	(0.48)	(0.57)	(0.43)	(0.49)	(0.43)	(0.61)	(0.89)	(0.95)	(0.36)	(0.40)
Constant	-0.04***	0.02**	0.90***	0.37***	-3.28***	-1.02***	1.46	1.57***	-3.20***	-1.08***	-3.58***	-2.03***
	(0.01)	(0.03)	(0.00)	(0.00)	(0.00)	(0.00)	(0.12)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	1460	1460	1460	1460	1460	1460	147	147	1313	1313	1216	1216

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 38 female firms and 44 male firms during the 10 rounds of the Choice treatment and the 34 female firms and 30 male firms during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.10: With additional controls, profits of female versus male firms

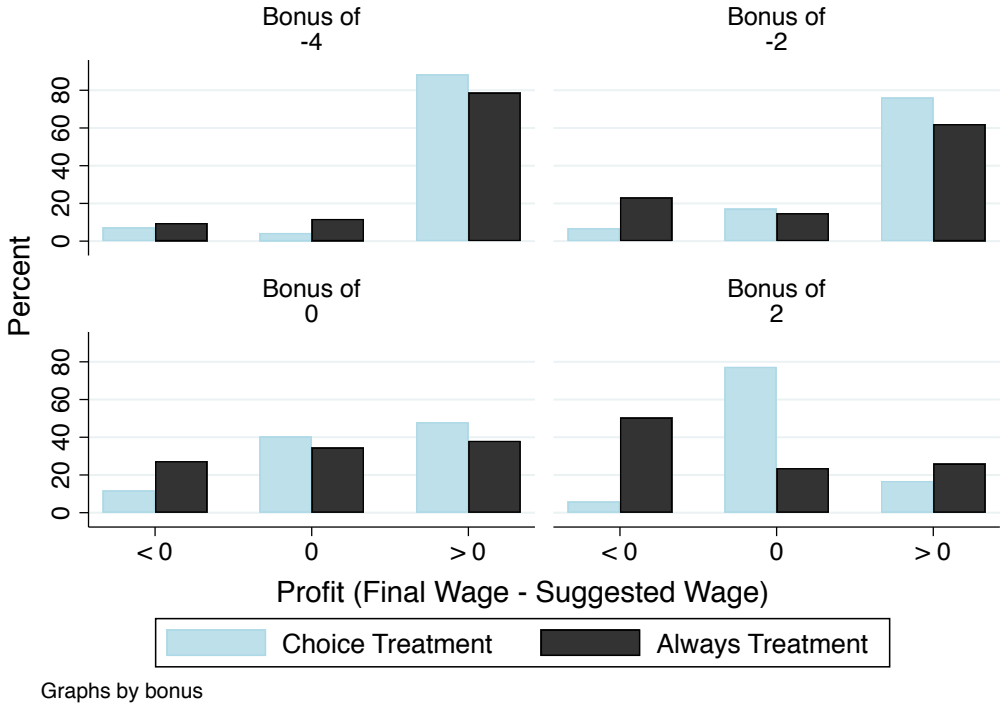
	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.17***	0.32***	0.00	0.01	0.22	0.63***	-0.29	0.11	-0.30*	-0.37*	0.63***	1.54***
	(0.00)	(0.00)	(0.92)	(0.86)	(0.30)	(0.00)	(0.56)	(0.85)	(0.06)	(0.05)	(0.01)	(0.00)
$b < 0$		-0.00		0.51***		-1.73***		0.33		-1.76***		-0.98***
		(0.87)		(0.00)		(0.00)		(0.45)		(0.00)		(0.00)
Always		-0.29***		-0.02		-0.72***		-0.78		0.18		-1.47***
$*b < 0$		(0.00)		(0.62)		(0.00)		(0.15)		(0.40)		(0.00)
Male	-0.01	-0.00	-0.04	-0.04	-0.05	0.01	-0.10	0.05	0.00	0.03	-0.14	-0.11
	(0.50)	(0.86)	(0.38)	(0.33)	(0.81)	(0.97)	(0.87)	(0.93)	(0.96)	(0.86)	(0.56)	(0.67)
Forced	0.04	0.03	-0.04	-0.04	0.28	0.24	0.50	0.32	0.05	0.03	0.35	0.33
$*$*Male*	(0.44)	(0.45)	(0.54)	(0.61)	(0.42)	(0.47)	(0.41)	(0.60)	(0.87)	(0.92)	(0.36)	(0.37)
Constant	-0.01	0.07	0.71***	0.19	-1.59**	0.73	2.73*	2.70**	-1.65***	0.49	-1.90**	-0.16
	(0.93)	(0.43)	(0.00)	(0.18)	(0.02)	(0.29)	(0.06)	(0.04)	(0.00)	(0.42)	(0.01)	(0.85)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1460	1460	1460	1460	1460	1460	147	147	1313	1313	1216	1216

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 38 female firms and 44 male firms during the 10 rounds of the Choice treatment and the 34 female firms and 30 male firms during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

A.5 Additional Results from our Replication at University of Pittsburgh

A.5.1 Additional Results for Female Workers from our Replication at University of Pittsburgh

Figure A.3: With Pittsburgh data, profits among female workers by bonus



Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0 dependent on the bonus. Data include the 54 female workers during the 10 rounds in the Choice treatment, and the 51 female workers during the 10 rounds in the Always treatment.

Table A.11: With Pittsburgh data and no controls, profits among female workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.06	0.01	0.20***	0.30***	-0.48**	-0.54**	0.20	0.27	-0.68***	-0.97***	-0.65***	-0.95***
	(0.13)	(0.84)	(0.00)	(0.00)	(0.02)	(0.03)	(0.27)	(0.26)	(0.00)	(0.00)	(0.00)	(0.00)
$b < 0$		0.51***		-0.02		1.80***		0.92***		-1.23***		1.55***
		(0.00)		(0.55)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.12*		-0.21***		0.25		-0.02		1.06**		0.50
$*b < 0$		(0.07)		(0.00)		(0.46)		(0.90)		(0.02)		(0.20)
Constant	0.87***	0.31***	-0.01	0.09***	2.83***	0.34***	3.41***	2.06***	-1.59***	-0.44***	2.96***	0.76***
	(0.00)	(0.00)	(0.56)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	1050	1050	1050	1050	1050	1050	573	573	477	477	890	890

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 54 female workers during the 10 rounds of the Choice treatment and the 51 female workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations..

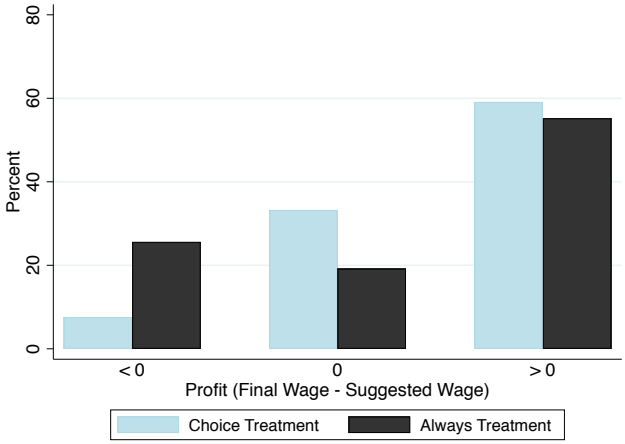
Table A.12: With Pittsburgh data and additional controls, profits among female workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.07*	0.01	0.20***	0.30***	-0.52***	-0.53**	0.18	0.37	-0.63***	-0.95***	-0.68***	-0.87**
	(0.09)	(0.82)	(0.00)	(0.00)	(0.01)	(0.03)	(0.35)	(0.17)	(0.00)	(0.00)	(0.00)	(0.01)
$b < 0$		0.53***		-0.02		1.92***		1.18***		-1.25***		1.74***
		(0.00)		(0.49)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.14**		-0.21***		0.14		-0.20		1.15**		0.31
$*b < 0$		(0.04)		(0.00)		(0.69)		(0.52)		(0.02)		(0.43)
Constant	0.81***	0.28*	-0.05	0.06	2.34**	-0.13	3.14***	1.79**	-1.63*	-0.67	2.45**	0.15
	(0.00)	(0.08)	(0.71)	(0.58)	(0.01)	(0.84)	(0.00)	(0.01)	(0.08)	(0.35)	(0.02)	(0.93)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1050	1050	1050	1050	1050	1050	573	573	477	477	890	890

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 54 female workers during the 10 rounds of the Choice treatment and the 51 female workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

A.5.2 Additional Results for Male Workers from our Replication at University of Pittsburgh

Figure A.4: With Pittsburgh data, distribution of profits among male workers



Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0. Data include the 46 male workers during the 10 rounds in the Choice treatment, and the 48 male workers during the 10 rounds in the Always treatment.

Figure A.5: With Pittsburgh data, profits among male workers by bonus

Notes: This figure shows how often participants' profits are less than 0, equal to 0, or greater than 0 dependent on the bonus. Data include the 46 male workers during the 10 rounds in the Choice treatment, and the 48 male workers during the 10 rounds in the Always treatment.

Table A.13: With Pittsburgh data, profits among male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.03	-0.00	0.18***	0.32***	-0.21	-0.67***	0.60**	0.41	-0.79***	-1.13***	-0.31	-1.14***
	(0.47)	(0.92)	(0.00)	(0.00)	(0.37)	(0.01)	(0.04)	(0.11)	(0.00)	(0.00)	(0.25)	(0.00)
$b < 0$		0.51***		0.02		1.75***		0.98***		-1.86***		1.39***
		(0.00)		(0.45)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.04		-0.28***		1.05***		0.34		1.34**		1.42***
$*b < 0$		(0.52)		(0.00)		(0.00)		(0.35)		(0.03)		(0.00)
Constant	0.57***	0.03	0.42***	0.51***	1.62	-1.26	5.10***	3.32***	-4.31***	-2.50***	1.59	-0.90
	(0.00)	(0.83)	(0.00)	(0.00)	(0.16)	(0.22)	(0.00)	(0.00)	(0.00)	(0.01)	(0.20)	(0.45)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	940	940	940	940	940	940	537	537	403	403	814	814

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 46 male workers during the 10 rounds of the Choice treatment and the 48 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.14: With Pittsburgh data and no controls, profits among male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.03	-0.00	0.18***	0.31***	-0.22	-0.67***	0.55**	0.28	-0.76***	-1.13***	-0.33	-1.15***
	(0.47)	(0.94)	(0.00)	(0.00)	(0.37)	(0.00)	(0.04)	(0.32)	(0.00)	(0.00)	(0.21)	(0.00)
$b < 0$		0.51***		0.02		1.74***		0.91***		-1.98***		1.37***
		(0.00)		(0.41)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.05		-0.27***		1.04***		0.46		1.37**		1.41***
$*b < 0$		(0.48)		(0.00)		(0.00)		(0.21)		(0.05)		(0.00)
Constant	0.86***	0.33***	0.02	0.07***	3.20***	0.46***	3.94***	2.16***	-2.40***	-0.39***	3.26***	0.94***
	(0.00)	(0.00)	(0.39)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	940	940	940	940	940	940	537	537	403	403	814	814

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 46 male workers during the 10 rounds of the Choice treatment and the 48 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations..

Table A.15: With Pittsburgh data and additional controls, profits among male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.04	-0.02	0.19***	0.33***	-0.28	-0.74***	0.58**	0.43	-0.81***	-1.17***	-0.36	-1.13***
	(0.30)	(0.75)	(0.00)	(0.00)	(0.24)	(0.01)	(0.04)	(0.11)	(0.00)	(0.00)	(0.19)	(0.00)
$b < 0$		0.52***		0.02		1.81***		1.15***		-1.88***		1.55***
		(0.00)		(0.44)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.04		-0.29***		1.05***		0.28		1.36**		1.31***
$*b < 0$		(0.52)		(0.00)		(0.00)		(0.44)		(0.03)		(0.00)
Constant	0.64***	0.10	0.38***	0.47***	2.03*	-0.86	5.47***	3.60***	-4.23***	-2.38**	2.11*	-0.49
	(0.00)	(0.56)	(0.00)	(0.00)	(0.07)	(0.38)	(0.00)	(0.00)	(0.00)	(0.01)	(0.09)	(0.63)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	940	940	940	940	940	940	537	537	403	403	814	814

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 46 male workers during the 10 rounds of the Choice treatment and the 48 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

A.5.3 Additional Results for Female and Male Workers from our Replication at University of Pittsburgh

Table A.16: With Pittsburgh, profits among female versus male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.06	-0.01	0.20***	0.31***	-0.50***	-0.74***	0.17	0.15	-0.59***	-0.93***	-0.63***	-1.16***
	(0.12)	(0.89)	(0.00)	(0.00)	(0.01)	(0.00)	(0.36)	(0.46)	(0.00)	(0.00)	(0.00)	(0.00)
$b < 0$		0.51***		-0.00		1.81***		1.03***		-1.54***		1.54***
		(0.00)		(0.88)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.09**		-0.24***		0.60**		0.15		1.25***		0.88***
$*b < 0$		(0.05)		(0.00)		(0.02)		(0.55)		(0.00)		(0.00)
Male	0.01	0.01	0.00	-0.00	0.04	0.05	0.08	0.07	-0.06	-0.08	0.03	0.02
	(0.85)	(0.71)	(0.91)	(0.95)	(0.73)	(0.69)	(0.52)	(0.56)	(0.75)	(0.65)	(0.80)	(0.88)
Always	0.03	0.03	-0.02	-0.01	0.30	0.30	0.43	0.39	-0.21	-0.19	0.32	0.34
$*$*Male*	(0.61)	(0.64)	(0.74)	(0.77)	(0.39)	(0.41)	(0.22)	(0.25)	(0.41)	(0.46)	(0.39)	(0.35)
Constant	0.68***	0.14	0.14	0.24***	1.91***	-0.71	3.74***	2.31***	-2.47***	-1.07*	1.94***	-0.37
	(0.00)	(0.29)	(0.12)	(0.01)	(0.00)	(0.28)	(0.00)	(0.00)	(0.00)	(0.06)	(0.00)	(0.60)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1990	1990	1990	1990	1990	1990	1110	1110	880	880	1704	1704

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. *Male* is an indicator for male workers. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables.Columns 1 - 6 include all outcomes from the 54 female workers and 46 male workers during the 10 rounds of the Choice treatment and the 51 female workers and 48 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.17: With Pittsburgh data and no controls, profits of female versus male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.06	-0.01	0.20***	0.31***	-0.47**	-0.72***	0.19	0.11	-0.66***	-0.99***	-0.61***	-1.18***
	(0.14)	(0.92)	(0.00)	(0.00)	(0.03)	(0.00)	(0.31)	(0.62)	(0.00)	(0.00)	(0.01)	(0.00)
$b < 0$		0.51***		-0.00		1.77***		0.91***		-1.56***		1.46***
		(0.00)		(1.00)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.08*		-0.24***		0.63**		0.22		1.20***		0.94***
$*b < 0$		(0.06)		(0.00)		(0.01)		(0.37)		(0.01)		(0.00)
Male	0.01	0.02	0.00	-0.00	0.07	0.08	0.11	0.09	-0.08	-0.11	0.07	0.05
	(0.78)	(0.66)	(0.96)	(0.91)	(0.59)	(0.58)	(0.41)	(0.44)	(0.64)	(0.54)	(0.62)	(0.72)
Always	0.02	0.02	-0.02	-0.01	0.25	0.25	0.37	0.34	-0.13	-0.11	0.25	0.28
$*$*Male*	(0.69)	(0.73)	(0.73)	(0.76)	(0.49)	(0.49)	(0.30)	(0.36)	(0.59)	(0.67)	(0.52)	(0.46)
Constant	0.86***	0.31***	0.00	0.08***	2.97***	0.36***	3.61***	2.07***	-1.92***	-0.36***	3.07***	0.82***
	(0.00)	(0.00)	(0.91)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	1990	1990	1990	1990	1990	1990	1110	1110	880	880	1704	1704

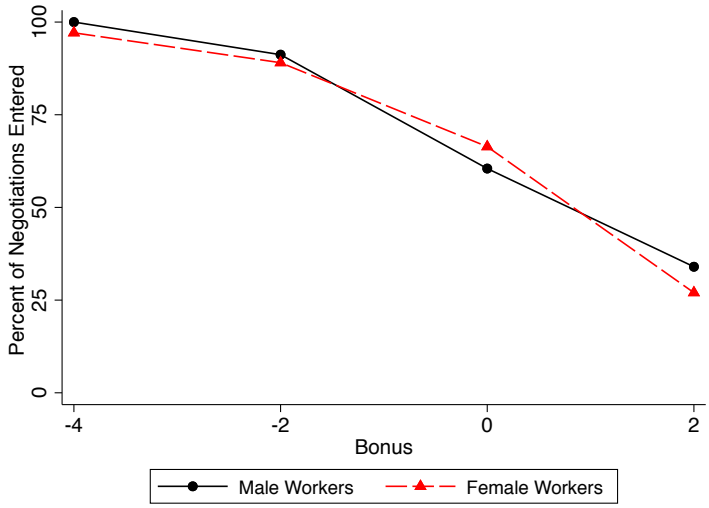
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 54 female workers and 46 male workers during the 10 rounds of the Choice treatment and the 51 female workers and 48 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.18: With Pittsburgh data and additional controls, profits of female versus male workers

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	-0.06	-0.01	0.19***	0.31***	-0.50**	-0.72***	0.18	0.19	-0.59***	-0.93***	-0.62***	-1.09***
	(0.12)	(0.93)	(0.00)	(0.00)	(0.01)	(0.00)	(0.33)	(0.36)	(0.00)	(0.00)	(0.01)	(0.00)
$b < 0$		0.52***		-0.00		1.85***		1.15***		-1.53***		1.64***
		(0.00)		(0.91)		(0.00)		(0.00)		(0.00)		(0.00)
Always		-0.09**		-0.24***		0.57**		0.08		1.25***		0.78***
$*b < 0$		(0.04)		(0.00)		(0.02)		(0.74)		(0.00)		(0.01)
Male	0.00	0.01	0.00	-0.00	0.02	0.03	0.07	0.06	-0.04	-0.07	0.01	-0.00
	(0.90)	(0.77)	(0.86)	(0.99)	(0.80)	(0.77)	(0.56)	(0.60)	(0.77)	(0.67)	(0.89)	(1.00)
Always	0.02	0.02	-0.01	-0.01	0.25	0.26	0.37	0.34	-0.20	-0.18	0.25	0.28
$*$*Male*	(0.68)	(0.73)	(0.82)	(0.86)	(0.48)	(0.49)	(0.28)	(0.32)	(0.41)	(0.49)	(0.52)	(0.47)
Constant	0.74***	0.20*	0.13	0.23**	2.28***	-0.37	4.15***	2.61***	-2.60***	-1.20**	2.37***	-0.05
	(0.00)	(0.08)	(0.16)	(0.01)	(0.00)	(0.55)	(0.00)	(0.00)	(0.01)	(0.05)	(0.00)	(0.90)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1990	1990	1990	1990	1990	1990	1110	1110	880	880	1704	1704

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 54 female workers and 46 male workers during the 10 rounds of the Choice treatment and the 51 female workers and 48 male workers during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Figure A.6: With Pittsburgh data, entry decisions into negotiations



Notes: This figure shows how often participants choose to enter negotiations given a bonus level. Data include the observations from the 54 female workers during the 10 rounds in the Choice treatment and the 46 male workers during the 10 rounds in the Choice treatment.

Table A.19: With Pittsburgh data, considering the selection into negotiation on the bonus and on ability measures

	Linear probability model of entry into negotiation in Choice treatment			Ordinary least squares of profit in Forced treatment		
	(1)	(2)	(3)	(4)	(5)	(6)
b	-0.12***			-0.51***		
	(0.00)			(0.00)		
Ability measure 1		0.03			0.18	
		(0.16)			(0.16)	
Ability measure 2			0.09**			0.18
			(0.04)			(0.27)
Male	0.02	0.03	0.08	0.17	0.00	-0.20
	(0.71)	(0.82)	(0.71)	(0.52)	(1.00)	(0.70)
Male$b$	0.00			-0.15		
	(0.77)			(0.12)		
Ability measure 1		-0.00			-0.00	
**Male*		(0.96)			(1.00)	
Ability measure 2			-0.01			0.04
**Male*			(0.87)			(0.77)
Constant	0.75***	0.74***	0.47*	-0.99	-1.68	-1.70
	(0.00)	(0.00)	(0.05)	(0.35)	(0.20)	(0.26)
b	any	$b > 0$	$b > 0$	any	$b > 0$	$b > 0$
Controls	yes	yes	yes	yes	yes	yes
N	1000	459	428	990	506	485

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. *Ability measure 1* is a worker's average profit from negotiations involving a bonus of -4. *Ability measure 2* is a worker's average profit from negotiations involving a bonus of -4 that that reach agreements. *Male* is an indicator for being male. If the bottom b row indicates $b > 0$, then the data are restricted to include negotiation opportunities with non-negative bonuses. Columns 1 -3: results are from ordinary least squares regressions of an indicator for whether a worker chooses to enter a negotiation; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, and the difference between the worker's and firm's contributions if the firm contribution is known; and data include the observations from the 54 female workers and 46 male workers during the 10 rounds in the Choice treatment. Columns 4 - 6: results are from ordinary least squares regressions of a worker's profit; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, the difference between the worker's and firm's contribution, and the interaction between these last two variables; and data include the 51 female workers and 48 male workers during the 10 rounds of the Always treatment.

Table A.20: With Pittsburgh data, considering the selection into negotiation on other measures

	Linear probability model of negotiation entry in Choice treatment		Ordinary least squares of profit in Forced treatment	
	(1)	(2)	(3)	(4)
Fairness measure	-0.05*		-0.13**	
	(0.05)		(0.02)	
Risk measure		-0.07*		0.04
		(0.08)		(0.83)
Male	0.05	-0.05	0.09	0.86
	(0.60)	(0.79)	(0.82)	(0.23)
*Fairness measure*Male*	-0.01		-0.03	
	(0.69)		(0.70)	
*Risk measure*Male*		0.03		-0.45
		(0.71)		(0.14)
Constant	0.92***	0.94***	-0.56	-1.15
	(0.00)	(0.00)	(0.67)	(0.38)
b	$b > 0$	$b > 0$	$b > 0$	$b > 0$
Controls	yes	yes	yes	yes
N	480	480	513	513

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. *Fairness measure* is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey. *Risk measure* is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. *X-chat* is the fraction of an individual's negotiations involving a bonus of -4 that are coded as the chat-type X. *Male* is an indicator for male workers. Columns 1 - 3: results are from ordinary least squares regressions of an indicator for whether a worker chooses to enter a negotiation; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, and the difference between the worker's and firm's contributions if the firm contribution is known; and data include the observations from the 54 female workers and 46 male workers during the 10 rounds in the Choice treatment (and in Column 3, participants with non-missing chat tendency measures). Columns 4 - 6: results are from ordinary least squares regressions of a worker's profit; the included controls are the negotiation round (from 1 to 10), the worker contribution, an indicator for whether the firm contribution is known, the difference between the worker's and firm's contribution, and the interaction between these last two variables; and data include the 51 female workers and 48 male workers during the 10 rounds of the Always treatment.

A.5.4 Additional Results for Female and Male Firms from our Replication at University of Pittsburgh

Table A.21: With Pittsburgh data, profits among female versus male firms

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.20***	0.30***	-0.06	0.01	0.53**	0.65***	0.98***	1.02***	-0.20	-0.48**	0.95***	1.64***
	(0.00)	(0.00)	(0.20)	(0.88)	(0.01)	(0.00)	(0.00)	(0.00)	(0.25)	(0.01)	(0.00)	(0.00)
$b < 0$		-0.02*		0.53***		-1.95***		-0.00		-1.94***		-1.21***
		(0.06)		(0.00)		(0.00)		(0.98)		(0.00)		(0.00)
Always		-0.21***		-0.11***		-0.35*		-0.19		0.36*		-1.09***
$*b < 0$		(0.00)		(0.01)		(0.06)		(0.69)		(0.07)		(0.00)
Male	0.02	0.03*	-0.03	-0.04	0.20	0.24*	0.35	0.44**	0.14	0.16	0.32**	0.36**
	(0.16)	(0.05)	(0.42)	(0.31)	(0.13)	(0.07)	(0.16)	(0.02)	(0.25)	(0.18)	(0.04)	(0.01)
Always	-0.04	-0.04	0.04	0.04	-0.55*	-0.59*	-0.63*	-0.75**	-0.43*	-0.45*	-0.67**	-0.72**
$*$*Male*	(0.37)	(0.30)	(0.48)	(0.46)	(0.08)	(0.08)	(0.07)	(0.02)	(0.09)	(0.08)	(0.05)	(0.04)
Constant	-0.06	0.05	0.88***	0.34***	-3.96***	-1.23*	-0.08	0.02	-3.76***	-1.32**	-4.44***	-2.37***
	(0.53)	(0.53)	(0.00)	(0.00)	(0.00)	(0.08)	(0.90)	(1.00)	(0.00)	(0.02)	(0.00)	(0.00)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1990	1990	1990	1990	1990	1990	218	218	1772	1772	1704	1704

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. *Male* is an indicator for male workers. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Columns 1 - 6 include all outcomes from the 50 female firms and 50 male firms during the 10 rounds of the Choice treatment and the 48 female firms and 51 male firms during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.22: With Pittsburgh data and no controls, profits of female versus male firms

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.20***	0.30***	-0.06	0.00	0.55***	0.68***	1.08***	1.12***	-0.19	-0.47**	1.00***	1.73***
	(0.00)	(0.00)	(0.17)	(0.91)	(0.01)	(0.00)	(0.00)	(0.00)	(0.25)	(0.02)	(0.00)	(0.00)
$b < 0$		-0.02*		0.52***		-1.93***		-0.04		-1.92***		-1.13***
		(0.07)		(0.00)		(0.00)		(0.86)		(0.00)		(0.00)
Always		-0.22***		-0.11**		-0.37**		-0.18		0.35*		-1.18***
$*b < 0$		(0.00)		(0.01)		(0.05)		(0.62)		(0.09)		(0.00)
Male	0.02	0.03*	-0.03	-0.04	0.23	0.26*	0.45*	0.53**	0.16	0.18	0.37**	0.40**
	(0.16)	(0.06)	(0.42)	(0.31)	(0.11)	(0.06)	(0.06)	(0.02)	(0.23)	(0.17)	(0.02)	(0.01)
Always	-0.04	-0.04	0.04	0.05	-0.59*	-0.63*	-0.66**	-0.77***	-0.44*	-0.46*	-0.73**	-0.76**
$*$*Male*	(0.34)	(0.28)	(0.45)	(0.41)	(0.07)	(0.06)	(0.05)	(0.01)	(0.09)	(0.08)	(0.03)	(0.03)
Constant	-0.07***	0.02**	0.94***	0.39***	-3.75***	-1.01***	0.79*	1.01***	-3.54***	-1.03***	-4.05***	-2.06***
	(0.00)	(0.02)	(0.00)	(0.00)	(0.00)	(0.00)	(0.05)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	no	no	no	no	no	no	no	no	no	no	no	no
N	1990	1990	1990	1990	1990	1990	218	218	1772	1772	1704	1704

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. Columns 1 - 6 include all outcomes from the 50 female firms and 50 male firms during the 10 rounds of the Choice treatment and the 48 female firms and 51 male firms during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

Table A.23: With Pittsburgh data and additional controls, profits of female versus male firms

	Ordinary least squares of											
	1(profit > 0)		1(profit < 0)		profit		profit, given profit > 0		profit, given profit ≤ 0		profit, given negotiation	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Always	0.20***	0.30***	-0.07	-0.01	0.56***	0.70***	0.71***	0.74***	-0.14	-0.41**	0.97***	1.67***
	(0.00)	(0.00)	(0.11)	(0.88)	(0.01)	(0.00)	(0.00)	(0.00)	(0.40)	(0.02)	(0.00)	(0.00)
$b < 0$		-0.02*		0.53***		-1.96***		-0.08		-1.95***		-1.22***
		(0.06)		(0.00)		(0.00)		(0.78)		(0.00)		(0.00)
Always		-0.21***		-0.11**		-0.37*		-0.13		0.33*		-1.10***
$*b < 0$		(0.00)		(0.02)		(0.05)		(0.71)		(0.09)		(0.00)
Male	0.02	0.03*	-0.03	-0.03	0.20	0.23*	0.28	0.37**	0.11	0.14	0.32*	0.36**
	(0.18)	(0.06)	(0.46)	(0.37)	(0.16)	(0.09)	(0.22)	(0.05)	(0.33)	(0.26)	(0.05)	(0.02)
Always	-0.04	-0.04	0.05	0.06	-0.59*	-0.63*	-0.48	-0.60**	-0.48**	-0.51*	-0.71**	-0.76**
$*$*Male*	(0.40)	(0.31)	(0.37)	(0.33)	(0.07)	(0.05)	(0.11)	(0.04)	(0.05)	(0.05)	(0.04)	(0.03)
Constant	-0.05	0.06	0.91***	0.36***	-4.08***	-1.36*	-0.27	-0.11	-3.84***	-1.40**	-4.57***	-2.51***
	(0.65)	(0.49)	(0.00)	(0.00)	(0.00)	(0.06)	(0.75)	(0.87)	(0.00)	(0.02)	(0.00)	(0.01)
Bonus FEs	yes	no	yes	no	yes	no	yes	no	yes	no	yes	no
Controls	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Controls 2	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
N	1990	1990	1990	1990	1990	1990	218	218	1772	1772	1704	1704

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are clustered at the participant-level and computed via the wild cluster bootstrap method with replacement 1,000 times. Since this method involves resampling t-statistics, p-values instead of standard errors are shown in parentheses. Results are from ordinary least squares regressions of the indicated measure of profits from negotiations: worker earnings - suggested wage. *Always* is an indicator for the Always treatment. $b < 0$ is an indicator for a negative bonus. Bonus FEs include indicators for each bonus level except for $b = -4$. The included controls are the negotiation round (from 1 to 10), the worker contribution, the difference between the worker's and firm's contributions, an indicator for whether the firm contribution is known, and the interaction between these last two variables. Controls 2 include a fairness measure that is a count of how many times an individual chooses the fair wage to be equal to their contribution out of the six scenarios in the fairness task of the follow-up survey, and a risk aversion measure that is a count of how many times an individual chooses the certain amount over the lotteries in the five scenarios in the risk task of the follow-up survey. Columns 1 - 6 include all outcomes from the 50 female firms and 50 male firms during the 10 rounds of the Choice treatment and the 48 female firms and 51 male firms during the 10 rounds of the Always treatment, while Columns 7 - 8 include all of those outcomes that result in positive profits and Columns 9 -10 include all of those outcomes that result in non-positive profits. Columns 11 - 12 restrict to only outcomes from negotiations.

A.6 Additional information on our third-party online experiment and on our first-party online experiment

Our first-party experiment involves "workers" and "firms" participating in negotiation opportunities like those described in the second question of our third-party experiment.[43] For our first-party experiment, we recruited 800 workers and 400 firms to complete a 15-minute study for a guaranteed payment of $2. Out of the 800 workers, 798 workers successfully completed our study.[44] Each worker was informed that they would make four negotiation decisions, one of which would be randomly selected to determine if, and how much, additional payment they would receive. Each worker was randomly assigned to either the Choice treatment (n = 399) or to the Always treatment (n = 398). Out of the 400 firms, 398 firms successfully completed our study.[45] Each firm was informed that they would be paired with 16 negotiation decisions made by 16 different workers, some number of which would be randomly selected to count for additional payment.[46]

More specifically, workers in our first-party experiment face four negotiation decisions. Across these four negotiation decisions, the suggested wage they face varies (in random order) such that each worker faces each of the four possible suggested wages of 120, 150, 180, and 210 cents. In the Choice treatment, workers can choose to accept the suggested wage or instead to enter a negotiation with their firm. In the Always treatment, workers are required to enter a negotiation with their firm. When workers negotiate, the response by their firms in turn determines their payoff.[47]

[43] Relative to the negotiation opportunities described in that question, however, our first-party experiment differs in two ways. First, workers may not have the choice to avoid a negotiation opportunity depending on their random treatment assignment. Second, the decisions by the workers in our first-party experiment could not be overruled by others — i.e., the participants in our third-party experiment — so that we could cleanly identify the outcomes from these negotiation opportunities. Thus, participants from our first-party experiment were not the same participants as the participants described in the second question of our third-party experiment. We recruited an additional 40 workers and 4 firms to partake in the version of our experiment described in the second question of our third-party experiment. This number of additional participants was determined by the weighted randomization of which question was selected to count for payments in our third-party experiment.

[44] Two recruited participants failed to complete the study. The study took place on December 18, 2017.

[45] Two recruited participants failed to complete the study. This study took place on December 19, 2017. We note that firms had to be recruited after workers made their decisions so that they could respond to the decisions made by workers.

[46] Since there were 798 workers who each made 4 negotiation decisions, there were 3,192 negotiation decisions made by workers. Since we recruited 400 firms to each face 16 negotiation decisions made by workers, we then expected to be able to assign 6,400 negotiation decisions to firms. We thus assigned each negotiation decision made by workers to two firms, or in a few cases, to three firms. For each negotiation decision that was randomly selected to count for payment for a worker, it also counted for payment for the first firm who was matched to that negotiation decision. For all firms, this resulted in them receiving additional payments according to at least one of the 16 negotiation decisions they faced. In the event that this did not work out, however, we also told firms that in the very unlikely event that none of the negotiation decisions they faced counted for additional payments, they would receive a fixed additional payment of 150 cents.

[47] Since each negotiation decision made by a worker is matched with multiple firms, we calculate the payoff a worker receives from an entered negotiation as the average payoff calculated from all firms that responded to that

The results from our first-party experiment can be summarized as follows. First, both female and male workers avoid negotiations the majority of the time. Female workers only enter 32% of the time, and male workers only enter 31% of the time. We note that this lack of a gender difference in entry is not surprising, as given the design constraints associated with running on Amazon Mechanical Turk, we implemented our "negotiations" as modified ultimatum games.[48] Indeed, as detailed in Hernandez-Arenaz and Iriberri (2018*a*), gender differences in ultimatum games are mixed, and in a setting like ours where there are clear norms in terms of how revenues should be split, may be less likely to arise.

Second, workers' entry decisions are consistent with positive selection on the observable characteristic of the negotiation environment: the bonus. Profits in the Always treatment significantly decrease in the bonus and workers choose to enter less often as the bonus increases in the Choice treatment.[49]

Third, increased negotiations result in significant decreases in average profits for both women and men. When clustering standard errors at the participant level, the average profits achieved by women are 11 cents lower in the Always treatment than in the Choice treatment ($p < 0.01$), and the average profits achieved by men are 9 cents lower in the Always treatment than in the Choice treatment ($p < 0.01$). Thus, the average reduction in profits accrued to women are 17 percent larger than those experienced by men, showing that increased negotiations are not more helpful, or less harmful, to women than they are to men.

The combined results from our first-party experiment and our third-party experiment allows us to make one additional observation. Even if increased negotiations are not more harmful to women than they are to men, it is essential that we account for the distortion that results from women more commonly being encouraged to negotiate. If it is costly to enter negotiations that otherwise would be avoided, then a greater push for women to negotiate will prove costly.

Indeed, while the impact of going from the Choice treatment to the Always treatment is similarly negative for women and men in our first-party experiment, a counterfactual estimate of a push to negotiate can be gauged by evaluating the impact of going from the Choice treatment to an environment where workers must negotiate whenever a third-party pays to force the worker into a negotiation. We find that a third-party push for negotiation results in significantly lower average profits for female workers than it does for male workers. That is, the impact of going

negotiation.

[48] In particular, since we had to first recruit the workers and then feed their decisions into a subsequent study for the firms, we had to restrict worker-firm interactions to the firm simply deciding whether to accept or to reject a worker's proposal.

[49] The average profit (in cents) by women in the Always treatment is -1.16 , -10.25, -22.48, and -28.17 when the bonus level is 120, 150, 180, and 210, respectively. The entry rate by women into negotiations in the Choice treatment is 61%, 35%, 22%, and 12% when the bonus level is 120, 150, 180, and 210, respectively. The average profit (in cents) by men in the Always treatment is 1.81, -11.70, -16.05, and -27.28 when the bonus level is 120, 150, 180, and 210, respectively. The entry rate by men into negotiations in the Choice treatment is 59%, 31%, 22% and 13% when the bonus level is 120, 150, 180, and 210, respectively.

from the Choice treatment to an environment where female workers are required to negotiate 54% of the time and male workers are required to negotiate 31% of the time introduces significantly greater costs on the female worker. Adding third-party restrictions on the ability to negotiate is twice as costly for women as it is for men ($p = 0.048$).[50]

[50]When clustering standard errors at the participant level, the average decrease in profits among women is 11.06 cents when they are always required to negotiate and thus 6.09 cents when they are required to negotiate 55% of the time. When clustering standard errors at the participant level, the average decrease in profits among men is 9.43 cents when they are always required to negotiate and thus 3.02 cents when they are required to negotiate 32% of the time. Note that the average decrease of 6.09 cents is slightly more than twice that of 3.02 cents.

B Instructions

B.1 Laboratory Experiment Instructions

Always Treatment, Common Knowledge

Instructions

This is an experiment on decision-making. The earnings you receive today will depend on the decisions and performance made by you and by other participants in this room. Please turn off your cell phones. If you have a question, please raise your hand and an experimenter will come to answer you in private.

Worker-Firm Pairs
Half of you will be assigned the role of a Worker and the other half will be assigned the role of a Firm. You will maintain your role throughout the experiment.

The experiment consists of two blocks: Block A and B. Each block lasts for 5 rounds (for a total of 10 rounds). At the beginning of each round, each worker and each firm is randomly paired with someone of the opposite role to form worker-firm pairs. You will not know the identity of the person you are paired with nor will he/she know your identity. Worker-firm pairs are randomly generated at the beginning of each round. Thus you are unlikely to be paired with the same person two rounds in a row.

Revenue
The worker-firm pair will have a revenue, which they must split between a wage for the worker and a profit for the firm. The revenue is the sum of a worker-contribution and a firm-contribution. The worker-contribution and firm-contribution result from initial performances by the worker and firm. The firm and the worker perform the same task. Performance is measured at the start of each block where you each have 5-minutes to complete a task. Your performance at the start of a block determines your contribution for the duration of the block. Since you may be in different worker-firm pairs across rounds, the contribution by the person you are paired with may change between rounds. The worker will know the firm-contribution, and the firm will know the worker-contribution.

Contributions
Individual contributions are held constant for the duration of a block and are determined by comparing the individual's performance to those of others in the same role. Individuals with a higher relative performance secure a greater contribution. For each firm the firm-contribution is determined by comparing the firm's performance to that of one other randomly selected firm. For each worker the worker-contribution is determined by comparing the worker's performance to those of two other randomly selected workers. The comparison group is randomly determined at the beginning of each new block.

The firm-contribution depends on how the firm's performance in the task compares to that of a randomly selected other firm in that block. The firm-contribution is:

$25 if the firm's performance is ranked first
$20 if the firm's performance is ranked second

The worker contribution depends on how the worker's performance compares to those of two randomly selected workers in that block. The worker-contribution is

$20 if the worker's performance is ranked first
$15 if the worker's performance is ranked second
$10 if the worker's performance is ranked third

Wage determination
In each round, the revenue is the sum of the worker-contribution and the firm-contribution. Together, the worker and firm have to determine what portion of the revenue will be spent on the worker's wage and what remaining revenue will be paid to the firm as profit.

The wage is determined as follows. The computer first generates a suggested wage S. Then, the worker and the firm will have 3 minutes to reach an agreement on a wage. If the worker and firm reach an agreement, the worker receives the agreed upon wage. We refer to the agreed upon wage as W. If the worker and the firm do not reach an agreement within 3 minutes, the suggested wage is implemented and the firm and worker each pay a $5 penalty for not reaching an agreement in time. In other words:

Negotiate and don't agree	**Negotiate and agree**
Worker's wage = S – 5	Worker's wage = W
Firm's profit = revenue – S – 5	Firm's profit = revenue – W

Negotiating
Negotiations take place using a negotiation screen. Samples of the negotiation screens for the worker and firm are shown on the next page. The top of the screen provides you with relevant information regarding the negotiation. The middle of the screen allows you to propose a wage. The bottom right of the screen keeps a history of wage offers, and allows you to accept offers made by the person you are paired with. The bottom left side of the screen allows you to chat with one another.

Negotiation Information
The top right corner of the screen reports how many seconds of the negotiation remains. If no agreement is reached at the end of the 3 minutes, the suggested wage is implemented with a $5 penalty for the worker and a $5 penalty for the firm.

The top line reminds you of your role (worker or firm), your contribution, and the block and round you are in. The box below that reviews how contributions are determined. The bold section reports the total revenue and the suggested wage. The revenue is the sum of the worker-contribution and firm-contribution. Finally, there is a reminder of the payoffs that result in the event that no agreement or an agreement is reached.

Wage proposal and acceptance
The middle of the screen contains a field where you can propose a wage. To propose a wage you type a number in the text box under "I propose the following worker's wage" and click OK. A history of proposed wages is listed on the bottom right of the screen. Once you propose a wage, it appears on your screen and on the screen of the person you are paired with. While past wage offers are still visible, only the most recently proposed wages are valid. The person you are paired with may accept your most recently proposed wage by clicking on the line with that wage to highlight it and then click the "I Accept this W" button. Likewise you may accept their most recently proposed wage offer by clicking on the line with that wage to highlight it and then click the "I Accept this W" button. Wage proposals accepted by the other person become the agreed upon wage and are implemented. The round ends when a wage offer is accepted. In the sample screens we blackened out all the proposed wages.

Wage proposals can be revised and accepted at any moment before the end of the three minutes. If no wage offers are accepted within three minutes, the suggested wage, S, is implemented with an individual $5 penalty

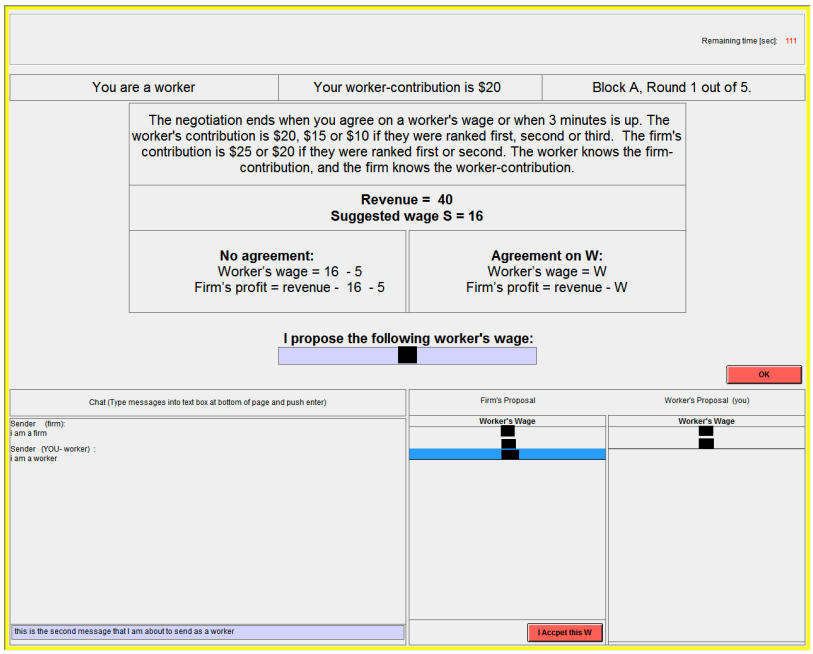
Chat
Workers and firms may chat via the chat box in the bottom left side of the screen. In the sample screen, the chat box displays the sent messages from the worker who said "I am a worker", and the firm who said "I am a firm." To enter messages like these type in the chat text box below the chat box. Note that the worker and firm have currently typed "this is my second message as a worker/firm that I have not yet sent." To send a chat message, push ENTER on your keyboard.

When chatting, you should not share any information that identifies (or helps to identify) who you are. That is, you should not share your name, age, gender, location in the lab, etc. If we discover that you have shared any such information, then you will not receive any earnings from the experiment.

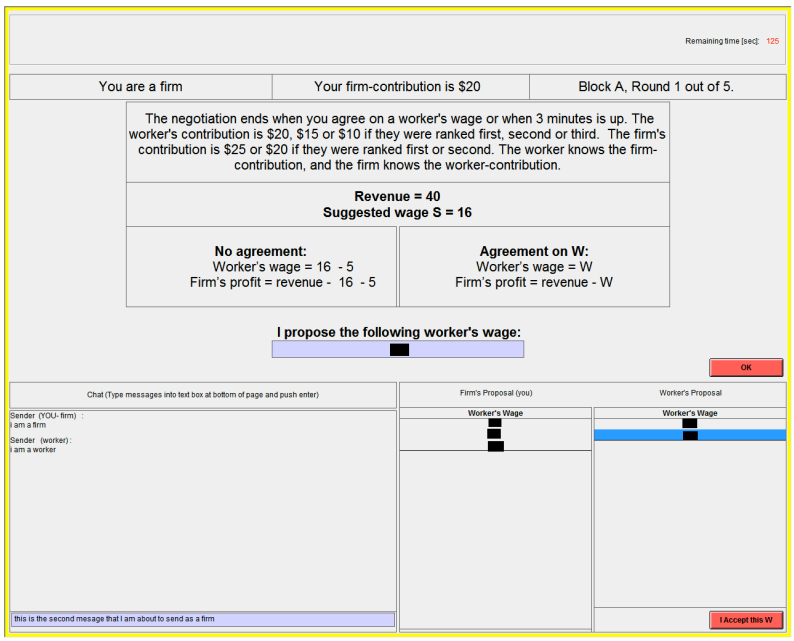
Payments
The experiment consists of two blocks of five rounds of negotiation. At the end of the experiment we will randomly select one negotiation round of each block to count for payment. Your payment for participating in the experiment will be the sum of your earnings from these two randomly selected rounds, payments from a few subsequent decisions, and $5 for showing up for today's experiment.

Final Notes
Throughout the experiment, please push OK on the computer screen to continue or to submit answers. When you are waiting for the experiment to continue, please quietly wait at your seat and refrain from using any electronic devices or partaking in any other activity. If you ever have a question, please raise your hand. Thank you for your participation and cooperation!

EXAMPLE SCREEN FOR A WORKER



EXAMPLE SCREEN FOR A FIRM



Instructions

This is an experiment on decision-making. The earnings you receive today will depend on the decisions and performance made by you and by other participants in this room. Please turn off your cell phones. If you have a question, please raise your hand and an experimenter will come to answer you in private.

Worker-Firm Pairs
Half of you will be assigned the role of a Worker and the other half will be assigned the role of a Firm. You will maintain your role throughout the experiment.

The experiment consists of two blocks: Block A and B. Each block lasts for 5 rounds (for a total of 10 rounds). At the beginning of each round, each worker and each firm is randomly paired with someone of the opposite role to form worker-firm pairs. You will not know the identity of the person you are paired with nor will he/she know your identity. Worker-firm pairs are randomly generated at the beginning of each round. Thus you are unlikely to be paired with the same person two rounds in a row.

Revenue
The worker-firm pair will have a revenue, which they must split between a wage for the worker and a profit for the firm. The revenue is the sum of a worker-contribution and a firm-contribution. The worker-contribution and firm-contribution result from initial performances by the worker and firm. The firm and the worker perform the same task. Performance is measured at the start of each block where you each have 5-minutes to complete a task. Your performance at the start of a block determines your contribution for the duration of the block. Since you may be in different worker-firm pairs across rounds, the contribution by the person you are paired with may change between rounds. The worker will not know the firm-contribution, but the firm will know the worker-contribution.

Contributions
Individual contributions are held constant for the duration of a block and are determined by comparing the individual's performance to those of others in the same role. Individuals with a higher relative performance secure a greater contribution. For each firm the firm-contribution is determined by comparing the firm's performance to that of one other randomly selected firm. For each worker the worker-contribution is determined by comparing the worker's performance to those of two other randomly selected workers. The comparison group is randomly determined at the beginning of each new block.

The firm-contribution depends on how the firm's performance in the task compares to that of a randomly selected other firm in that block. The firm-contribution is:

$25 if the firm's performance is ranked first
$20 if the firm's performance is ranked second

The worker contribution depends on how the worker's performance compares to those of two randomly selected workers in that block. The worker-contribution is

$20 if the worker's performance is ranked first
$15 if the worker's performance is ranked second
$10 if the worker's performance is ranked third

Wage determination
In each round, the revenue is the sum of the worker-contribution and the firm-contribution. Together, the worker and firm have to determine what portion of the revenue will be spent on the worker's wage and what remaining revenue will be paid to the firm as profit.

The wage is determined as follows. The computer first generates a suggested wage S. Then, the worker and the firm will have 3 minutes to reach an agreement on a wage. If the worker and firm reach an agreement, the worker receives the agreed upon wage. We refer to the agreed upon wage as W. If the worker and the firm do not reach an agreement within 3 minutes, the suggested wage is implemented and the firm and worker each pay a $5 penalty for not reaching an agreement in time. In other words:

Negotiate and don't agree	**Negotiate and agree**
Worker's wage = S – 5	Worker's wage = W
Firm's profit = revenue – S – 5	Firm's profit = revenue – W

Negotiating
Negotiations take place using a negotiation screen. Samples of the negotiation screens for the worker and firm are shown on the next page. The top of the screen provides you with relevant information regarding the negotiation. The middle of the screen allows you to propose a wage. The bottom right of the screen keeps a history of wage offers, and allows you to accept offers made by the person you are paired with. The bottom left side of the screen allows you to chat with one another.

Negotiation Information
The top right corner of the screen reports how many seconds of the negotiation remains. If no agreement is reached at the end of the 3 minutes, the suggested wage is implemented with a $5 penalty for the worker and a $5 penalty for the firm.

The top line reminds you of your role (worker or firm), your contribution, and the block and round you are in. The box below that reviews how contributions are determined. The bold section reports the total revenue and the suggested wage. The revenue is the sum of the worker-contribution and firm-contribution. Finally, there is a reminder of the payoffs that result in the event that no agreement or an agreement is reached.

Wage proposal and acceptance
The middle of the screen contains a field where you can propose a wage. To propose a wage you type a number in the text box under "I propose the following worker's wage" and click OK. A history of proposed wages is listed on the bottom right of the screen. Once you propose a wage, it appears on your screen and on the screen of the person you are paired with. While past wage offers are still visible, only the most recently proposed wages are valid. The person you are paired with may accept your most recently proposed wage by clicking on the line with that wage to highlight it and then click the "I Accept this W" button. Likewise you may accept their most recently proposed wage offer by clicking on the line with that wage to highlight it and then click the "I Accept this W" button. Wage proposals accepted by the other person become the agreed upon wage and are implemented. The round ends when a wage offer is accepted. In the sample screens we blackened out all the proposed wages.

Wage proposals can be revised and accepted at any moment before the end of the three minutes. If no wage offers are accepted within three minutes, the suggested wage, S, is implemented with an individual $5 penalty

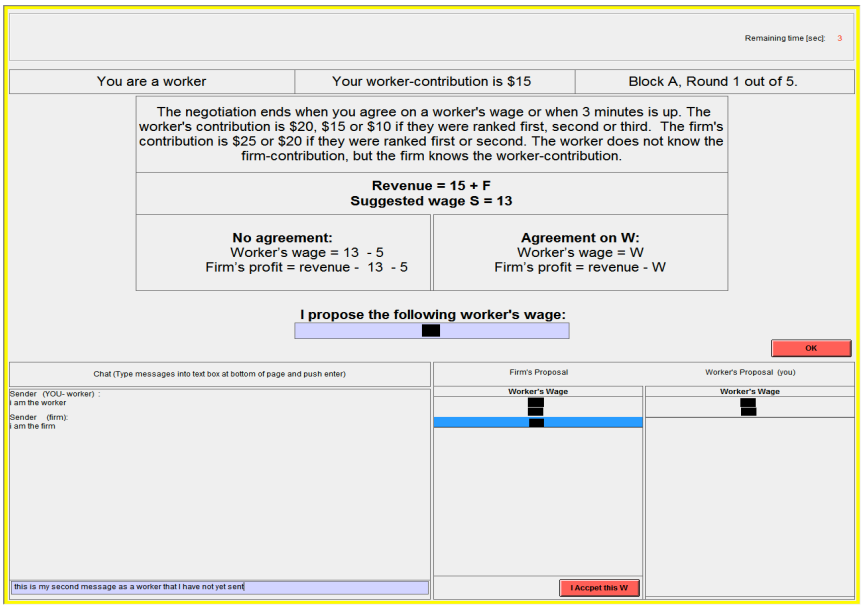
Chat
Workers and firms may chat via the chat box in the bottom left side of the screen. In the sample screen, the chat box displays the sent messages from the worker who said "I am a worker", and the firm who said "I am a firm." To enter messages like these type in the chat text box below the chat box. Note that the worker and firm have currently typed "this is my second message as a worker/firm that I have not yet sent." To send a chat message, push ENTER on your keyboard.

When chatting, you should not share any information that identifies (or helps to identify) who you are. That is, you should not share your name, age, gender, location in the lab, etc. If we discover that you have shared any such information, then you will not receive any earnings from the experiment.

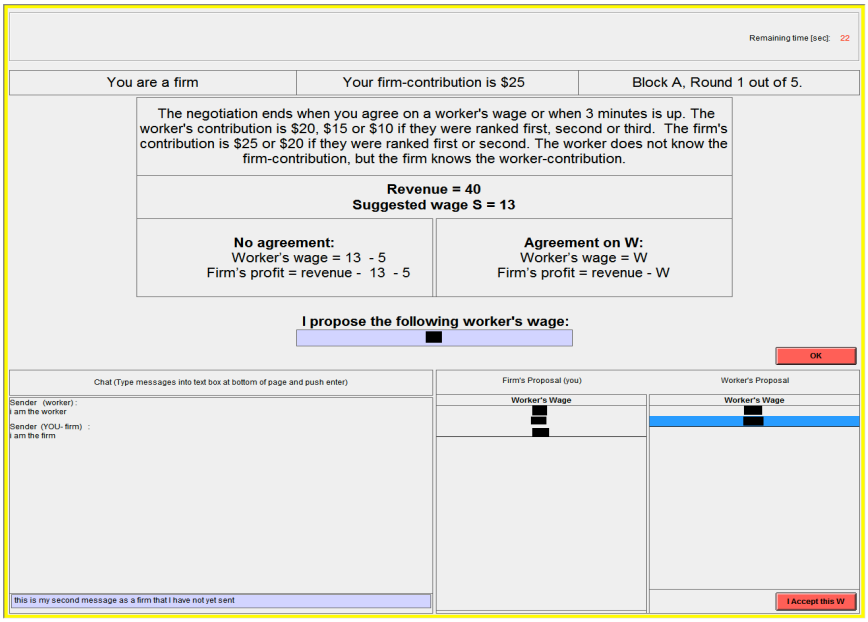
Payments
The experiment consists of two blocks of five rounds of negotiation. At the end of the experiment we will randomly select one negotiation round of each block to count for payment. Your payment for participating in the experiment will be the sum of your earnings from these two randomly selected rounds, payments from a few subsequent decisions, and $5 for showing up for today's experiment.

Final Notes
Throughout the experiment, please push OK on the computer screen to continue or to submit answers. When you are waiting for the experiment to continue, please quietly wait at your seat and refrain from using any electronic devices or partaking in any other activity. If you ever have a question, please raise your hand. Thank you for your participation and cooperation!

EXAMPLE SCREEN FOR A WORKER



EXAMPLE SCREEN FOR A FIRM



Instructions

This is an experiment on decision-making. The earnings you receive today will depend on the decisions and performance made by you and by other participants in this room. Please turn off your cell phones. If you have a question, please raise your hand and an experimenter will come to answer you in private.

Worker-Firm Pairs
Half of you will be assigned the role of a Worker and the other half will be assigned the role of a Firm. You will maintain your role throughout the experiment.

The experiment consists of two blocks: Block A and B. Each block lasts for 5 rounds (for a total of 10 rounds). At the beginning of each round, each worker and each firm is randomly paired with someone of the opposite role to form worker-firm pairs. You will not know the identity of the person you are paired with nor will he/she know your identity. Worker-firm pairs are randomly generated at the beginning of each round. Thus you are unlikely to be paired with the same person two rounds in a row.

Revenue
The worker-firm pair will have a revenue, which they must split between a wage for the worker and a profit for the firm. The revenue is the sum of a worker-contribution and a firm-contribution. The worker-contribution and firm-contribution result from initial performances by the worker and firm. The firm and the worker perform the same task. Performance is measured at the start of each block where you each have 5-minutes to complete a task. Your performance at the start of a block determines your contribution for the duration of the block. Since you may be in different worker-firm pairs across rounds, the contribution by the person you are paired with may change between rounds. The worker will know the firm-contribution, and the firm will know the worker-contribution.

Contributions
Individual contributions are held constant for the duration of a block and are determined by comparing the individual's performance to those of others in the same role. Individuals with a higher relative performance secure a greater contribution. For each firm the firm-contribution is determined by comparing the firm's performance to that of one other randomly selected firm. For each worker the worker-contribution is determined by comparing the worker's performance to those of two other randomly selected workers. The comparison group is randomly determined at the beginning of each new block.

The firm-contribution depends on how the firm's performance in the task compares to that of a randomly selected other firm in that block. The firm-contribution is:

$25 if the firm's performance is ranked first
$20 if the firm's performance is ranked second

The worker contribution depends on how the worker's performance compares to those of two randomly selected workers in that block. The worker-contribution is

$20 if the worker's performance is ranked first
$15 if the worker's performance is ranked second
$10 if the worker's performance is ranked third

Wage determination
In each round, the revenue is the sum of the worker-contribution and the firm-contribution. Together, the worker and firm have to determine what portion of the revenue will be spent on the worker's wage and what remaining revenue will be paid to the firm as profit.

The wage is determined as follows. The computer first generates a suggested wage S. The worker may accept or reject the suggested wage S. If the worker rejects the suggested wage S, then the worker and the firm will have 3 minutes to reach an agreement on a wage. If the worker and firm reach an agreement, the worker receives the agreed upon wage. We refer to the agreed upon wage as W. If the worker and the firm do not reach an agreement within 3 minutes, the suggested wage is implemented and the firm and worker each pay a $5 penalty for not reaching an agreement in time. In other words:

Negotiate and don't agree
Worker's wage = S – 5
Firm's profit = revenue – S – 5

Negotiate and agree
Worker's wage = W
Firm's profit = revenue – W

Don't Negotiate and accept S
Worker's wage = S
Firm's profit = revenue - S

Negotiating
Negotiations take place using a negotiation screen. Samples of the negotiation screens for the worker and firm are shown on the next page. The top of the screen provides you with relevant information regarding the negotiation. The middle of the screen allows you to propose a wage. The bottom right of the screen keeps a history of wage offers, and allows you to accept offers made by the person you are paired with. The bottom left side of the screen allows you to chat with one another.

Negotiation Information
The top right corner of the screen reports how many seconds of the negotiation remains. If no agreement is reached at the end of the 3 minutes, the suggested wage is implemented with a $5 penalty for the worker and a $5 penalty for the firm.

The top line reminds you of your role (worker or firm), your contribution, and the block and round you are in. The box below that reviews how contributions are determined. The bold section reports the total revenue and the suggested wage. The revenue is the sum of the worker-contribution and firm-contribution. Finally, there is a reminder of the payoffs that result in the event that no agreement or an agreement is reached.

Wage proposal and acceptance
The middle of the screen contains a field where you can propose a wage. To propose a wage you type a number in the text box under "I propose the following worker's wage" and click OK. A history of proposed wages is listed on the bottom right of the screen. Once you propose a wage, it appears on your screen and on the screen of the person you are paired with. While past wage offers are still visible, only the most recently proposed wages are valid. The person you are paired with may accept your most recently proposed wage by clicking on the line with that wage to highlight it and then click the "I

Accept this W" button. Likewise you may accept their most recently proposed wage offer by clicking on the line with that wage to highlight it and then click the "I Accept this W" button. Wage proposals accepted by the other person become the agreed upon wage and are implemented. The round ends when a wage offer is accepted. In the sample screens we blackened out all the proposed wages.

Wage proposals can be revised and accepted at any moment before the end of the three minutes. If no wage offers are accepted within three minutes, the suggested wage, S, is implemented with an individual $5 penalty

Chat
Workers and firms may chat via the chat box in the bottom left side of the screen. In the sample screen, the chat box displays the sent messages from the worker who said "I am a worker", and the firm who said "I am a firm." To enter messages like these type in the chat text box below the chat box. Note that the worker and firm have currently typed "this is my second message as a worker/firm that I have not yet sent." To send a chat message, push ENTER on your keyboard.

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Payments
The experiment consists of two blocks of five rounds of negotiation. At the end of the experiment we will randomly select one negotiation round of each block to count for payment. Your payment for participating in the experiment will be the sum of your earnings from these two randomly selected rounds, payments from a few subsequent decisions, and $5 for showing up for today's experiment.

Final Notes
Throughout the experiment, please push OK on the computer screen to continue or to submit answers. When you are waiting for the experiment to continue, please quietly wait at your seat and refrain from using any electronic devices or partaking in any other activity. If you ever have a question, please raise your hand. Thank you for your participation and cooperation!

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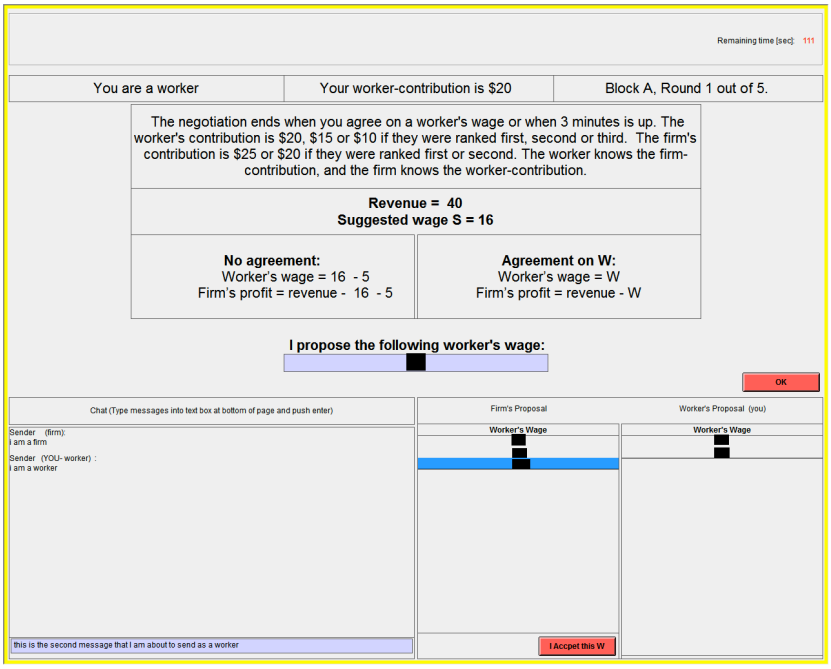

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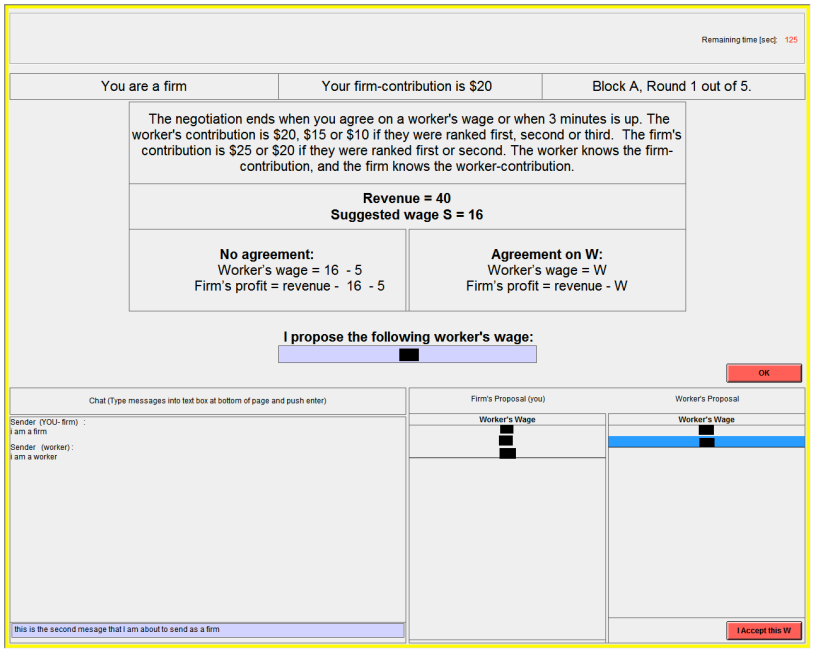

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Revenue
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The firm-contribution depends on how the firm's performance in the task compares to that of a randomly selected other firm in that block. The firm-contribution is:

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The wage is determined as follows. The computer first generates a suggested wage S. The worker may accept or reject the suggested wage S. If the worker rejects the suggested wage S, then the worker and the firm will have 3 minutes to reach an agreement on a wage. If the worker and firm reach an agreement, the worker receives the agreed upon wage. We refer to the agreed upon wage as W. If the worker and the firm do not reach an agreement within 3 minutes, the suggested wage is implemented and the firm and worker each pay a $5 penalty for not reaching an agreement in time. In other words:

Negotiate and don't agree
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Negotiate and agree
Worker's wage = W
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Don't Negotiate and accept S
Worker's wage = S
Firm's profit = revenue - S

Negotiating
Negotiations take place using a negotiation screen. Samples of the negotiation screens for the worker and firm are shown on the next page. The top of the screen provides you with relevant information regarding the negotiation. The middle of the screen allows you to propose a wage. The bottom right of the screen keeps a history of wage offers, and allows you to accept offers made by the person you are paired with. The bottom left side of the screen allows you to chat with one another.

Negotiation Information
The top right corner of the screen reports how many seconds of the negotiation remains. If no agreement is reached at the end of the 3 minutes, the suggested wage is implemented with a $5 penalty for the worker and a $5 penalty for the firm.

The top line reminds you of your role (worker or firm), your contribution, and the block and round you are in. The box below that reviews how contributions are determined. The bold section reports the total revenue and the suggested wage. The revenue is the sum of the worker-contribution and firm-contribution. Finally, there is a reminder of the payoffs that result in the event that no agreement or an agreement is reached.

Wage proposal and acceptance
The middle of the screen contains a field where you can propose a wage. To propose a wage you type a number in the text box under "I propose the following worker's wage" and click OK. A history of proposed wages is listed on the bottom right of the screen. Once you propose a wage, it appears on your screen and on the screen of the person you are paired with. While past wage offers are still visible, only the most recently proposed wages are valid. The person you are paired with may accept your most recently proposed wage by clicking on the line with that wage to highlight it and then click the "I

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Wage proposals can be revised and accepted at any moment before the end of the three minutes. If no wage offers are accepted within three minutes, the suggested wage, S, is implemented with an individual $5 penalty

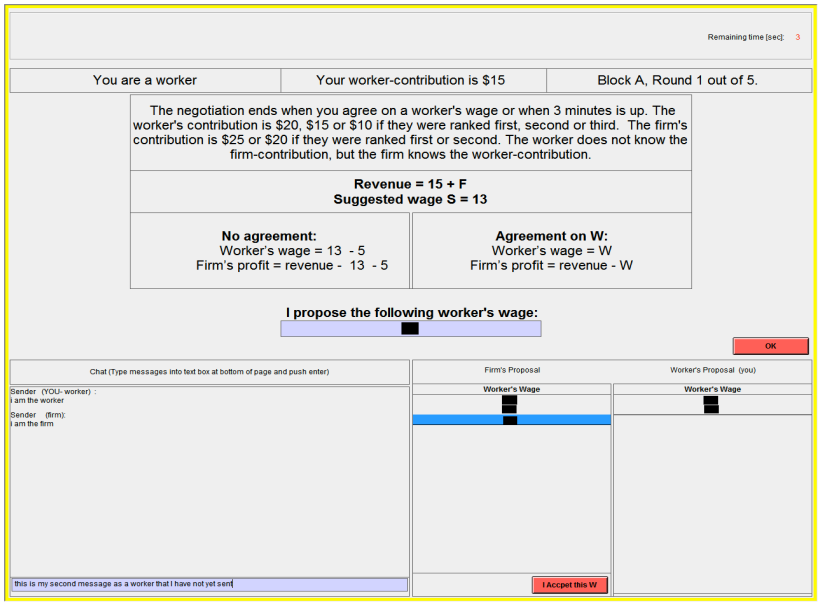
Chat
Workers and firms may chat via the chat box in the bottom left side of the screen. In the sample screen, the chat box displays the sent messages from the worker who said "I am a worker", and the firm who said "I am a firm." To enter messages like these type in the chat text box below the chat box. Note that the worker and firm have currently typed "this is my second message as a worker/firm that I have not yet sent." To send a chat message, push ENTER on your keyboard.

When chatting, you should not share any information that identifies (or helps to identify) who you are. That is, you should not share your name, age, gender, location in the lab, etc. If we discover that you have shared any such information, then you will not receive any earnings from the experiment.

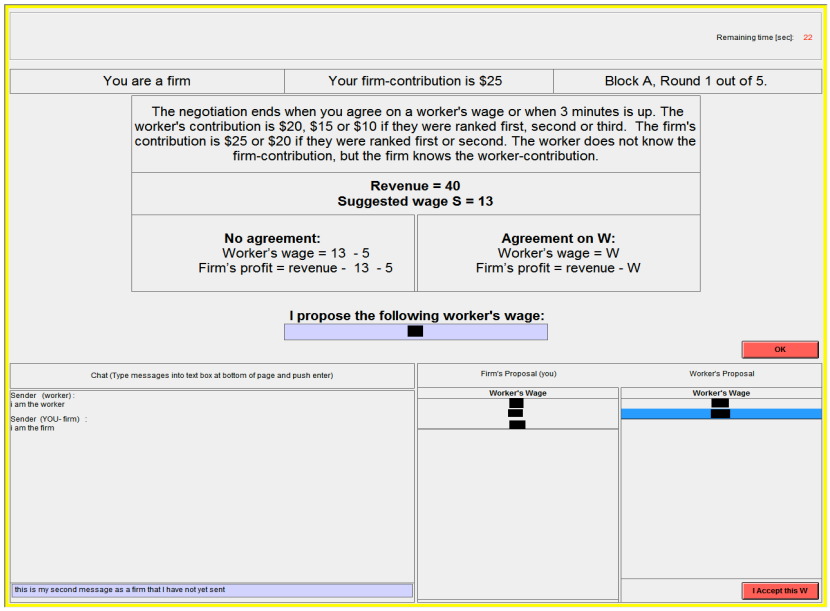
Payments
The experiment consists of two blocks of five rounds of negotiation. At the end of the experiment we will randomly select one negotiation round of each block to count for payment. Your payment for participating in the experiment will be the sum of your earnings from these two randomly selected rounds, payments from a few subsequent decisions, and $5 for showing up for today's experiment.

Final Notes
Throughout the experiment, please push OK on the computer screen to continue or to submit answers. When you are waiting for the experiment to continue, please quietly wait at your seat and refrain from using any electronic devices or partaking in any other activity. If you ever have a question, please raise your hand. Thank you for your participation and cooperation!

EXAMPLE SCREEN FOR A WORKER



EXAMPLE SCREEN FOR A FIRM



B.2 Third-Party Online Experiment Instructions

Payment Screen

Your Payment: For completing this study, you will receive a minimum payment of $1.50 within 24 hours. You may also earn additional payment. In particular, after making the 3 decisions in this study, one decision will be selected as the decision-that-counts. The money you earn, if any, in the decision-that-counts will be distributed to you as a bonus payment within two weeks.

Question: Which of the following statements is true?

All of my decisions will influence my payment from this study.

None of my decisions will influence my payment from this study.

The money I earn, if any, from the decision-that-counts will determine the bonus payment that I receive. The bonus payment is paid within two weeks.

Decision 1 Screen

Decision 1 below requires you to answer yes/no to a question.

If Decision 1 is selected as the decision-that-counts for payments, you will receive 50 cents as additional bonus payment only if your answer in that decision is the same as the answer given by most MTurk workers who complete this study.

Decision 1: Do you think **women** should negotiate their salaries more often?

No	Yes

Decision 2 Screen

Decision 2 below involves a future MTurk study. In this future MTurk study, participants will make several negotiation decisions. Some participants will be assigned to the role of a worker and other participants will be assigned to the role of a firm. The participants will be assigned to pairs that involve one worker and one firm for each negotiation decision.

In each negotiation decision:

- The worker and the firm will each contribute 150 cents to the joint revenue for a total of 300 cents.

- The worker will be provided with a suggested wage: a suggestion of how many cents, out of the joint revenue, the worker should receive as their wage. The suggested wage will be randomly selected to equal 120, 150, 180, or 210 cents.

If the worker does not to negotiate with the firm:

- The worker will receive a wage equal to their suggested wage. Also, the firm will receive the joint revenue minus the suggested wage.

If the worker negotiates with the firm:

- The worker must make a wage proposal: a request to receive a certain number of cents, out of the joint revenue, as their wage. Along with the wage proposal, the worker will have the opportunity to write a brief message to argue in favor of their wage proposal.

- If the firm accepts the wage proposal, the worker will receive a wage equal to the proposed wage. Also, the firm will receive the joint revenue minus the proposed wage.

- If the firm rejects the wage proposal, the worker will receive the suggested wage minus a 50 cent penalty for failing to reach an agreement in the negotiation. Also, the firm will receive the joint revenue minus the suggested wage minus a 50 cent penalty for failing to reach an agreement in the negotiation.

Decision 2: If this is selected as your decision-that-counts, you will receive 50 cents as additional bonus payment and will be matched with a **female worker** in the study described above who will be paid for this negotiation.

Are you willing to sacrifice 25 cents (and thus will only receive 25 cents) to guarantee that this female worker leans-in and negotiates her salary with her firm instead of letting her have the option of just accepting the suggested wage?

Yes, I am willing to sacrifice 25 cents to guarantee that the female worker leans-in and negotiates her salary with her firm.

No, I am not willing to sacrifice 25 cents to guarantee that the female worker leans-in and negotiates her salary with her firm.

Decision 3 Screen

Decision 3 below involves a MTurk study as the one described for Decision 2. There is one change: workers alone choose whether to negotiate with their firms. No one but the worker decides whether a worker negotiates. Instead, Decision 3 below requires you to make a prediction about how often workers choose to negotiate with their firms.

If Decision 3 is selected as the decision-that-counts for payments, you will receive 50 cents as additional bonus payment only if your prediction in that decision is correct.

Decision 3: Please indicate the percent of **female** workers you think choose to lean-in and negotiate with their firms.

0-10%	11-20%	21-30%	31-40%	41-50%	51-60%	61-70%	71-80%	81-90%	91-100%

B.3 First-Party Online Experiment Instructions for Firms

Payment Screen

Your Payment: For completing this study, you will receive a minimum payment of $2 within 24 hours. You may also earn an additional payment. Any additional payment you earn will be paid to you within two weeks.

You have been assigned the role of a **firm**, and will be paired with other MTurk workers who in a previous study were assigned to the role of a **worker**. Your additional payment will depend on this pairing.

In particular, you will be paired with 16 negotiation decisions made by 16 different workers. The outcomes for these negotiations will depend on the workers' decisions, and may for some decisions depend on your responses to the workers' negotiation decisions. Some number of the 16 negotiation decisions will be randomly selected to be a negotiation-that-counts. The outcomes of each negotiation-that-counts determine the additional payments given to you and to the worker. In the rare event that none of these 16 negotiation decisions are selected as a negotiation-that-counts, you will instead receive a fixed additional payment of 150 cents.

Question: Which of the following statements is true?

I have been assigned to the role of a worker. I will be paired with the same firm in each of the 16 negotiations.

I have been assigned to the role of a worker. I will be paired with a different firm in each of the 16 negotiations.

I have been assigned to the role of a firm. I will be paired with the same worker in each of the 16 negotiations.

I have been assigned to the role of a firm. I will be paired with a different worker in each of the 16 negotiations.

Question: What payments will you receive?

I will receive a guaranteed payment of $2, and I have no chance of earning additional payment.

In addition to receiving a guaranteed payment of $2, I will receive an additional payment from all 16 negotiations that I face.

In addition to receiving a guaranteed payment of $2, I will receive an additional payment from each negotiation-that-counts or instead 150 cents.

I will receive no payment from this study.

Instructions (Top Half of) Screen

Recall that you have been paired with 16 different workers, and that for each worker you will face one of their negotiation decisions. For some of these negotiations, the outcome for you and the worker will depend on your response to the worker's negotiation decision. In each of those negotiations:

- You and the worker each contribute 150 cents to the **joint revenue** for a total of 300 cents.

- You will be given a **suggested wage**: a suggestion of how many cents, out of the joint revenue, the worker should receive as their wage.

- You will also be given a **wage proposal** from the worker: a request to receive a certain number of cents, out of the joint revenue, as their wage. If the worker sent you a brief message to argue in favor of the wage proposal, you will also see the worker's message.

- If **you accept** the wage proposal, the worker will receive a wage equal to the proposed wage. Also, you will receive the joint revenue minus the proposed wage.

- If **you reject** the wage proposal, the worker will receive the suggested wage minus a 30 cent penalty for failing to reach an agreement in the negotiation. Also, you will receive the joint revenue minus the suggested wage minus a 30 cent penalty for failing to reach an agreement in the negotiation.

Question: The joint revenue in a negotiation decision equals...

- my contribution of 150 cents
- my contribution of 150 cents + the worker's contribution of 100 cents
- my contribution of 150 cents + the worker's contribution of 150 cents

Question: If you accept the wage proposal in a negotiation, the worker will receive...

- the suggested wage
- the suggested wage minus 30 cents
- the proposed wage
- the proposed wage minus 30 cents

Instructions (Bottom Half of) Screen

Question: If you accept the wage proposal in a negotiation, you will receive...

- the joint revenue minus the suggested wage
- the joint revenue minus the suggested wage minus 30 cents
- the joint revenue minus the proposed wage
- the joint revenue minus the proposed wage minus 30 cents

Question: If you reject the wage proposal in a negotiation, the worker will receive...

- the suggested wage
- the suggested wage minus 30 cents
- the proposed wage
- the proposed wage minus 30 cents

Question: If you reject the wage proposal in a negotiation, you will receive...

- the joint revenue minus the suggested wage
- the joint revenue minus the suggested wage minus 30 cents
- the joint revenue minus the proposed wage
- the joint revenue minus the proposed wage minus 30 cents

Example Decision Screen

Given your contribution of 150 cents and the worker's contribution of 150 cents, the joint revenue is 300 cents.

The suggested wage is 180 cents.

The worker's wage proposal is 180 cents. Also, the worker did not send a message along with their wage proposal.

Below, you must decide to either accept or reject the worker's wage proposal. If you accept the wage proposal, the worker will receive the proposed wage and you will receive the joint revenue minus the proposed wage. If you reject the wage proposal, the worker will receive the suggested wage minus a penalty of 30 cents for failing to reach an agreement and you will receive the joint revenue minus the suggested wage minus a penalty of 30 cents for failing to reach an agreement.

Would you like to accept or reject the worker's wage proposal?

I would like to accept the worker's wage proposal.

I would like to reject the worker's wage proposal.

B.4 First-Party Online Experiment Instructions for Workers

Payment Screen

Your Payment: For completing this study, you will receive a minimum payment of $2 within 24 hours of submitting your validation code. You may also earn additional payment. Any additional payment you earn will be paid to you within two weeks.

You have been assigned the role of a **worker**, and will be paired with other MTurk workers who in a subsequent study will be assigned to the role of a **firm**. Your additional payment will depend on this pairing.

In particular, you will make 4 negotiation decisions that will involve 4 different firms. The outcome for these negotiations will depend on your decisions and will depend on the firms' responses to your decisions. One of the 4 negotiation decisions will be randomly selected as the negotiation-that-counts. The outcome of the negotiation-that-counts determines the additional payments given to you and to the firm.

Question: Which of the following statements is true?

I have been assigned to the role of a worker. I will be paired with the same firm in each of the 4 negotiations

I have been assigned to the role of a worker. I will be paired with a different firm in each of the 4 negotiations.

I have been assigned to the role of a firm. I will be paired with the same worker in each of the 4 negotiations.

I have been assigned to the role of a firm. I will be paired with a different worker in each of the 4 negotiations.

Question: What payments will you receive from this study?

I will receive a guaranteed payment of $2, and I have no chance of earning additional payment.

In addition to receiving a guaranteed payment of $2, I will receive an additional payment from all negotiations that I face.

In addition to receiving a guaranteed payment of $2, I will receive an additional payment from the negotiation-that-counts.

I will receive no payment from this study

Instructions (Top Half of) Screen

Recall that you will be paired with 4 different firms, and that for each firm you will make a negotiation decision. The outcome for you and the firm will depend on your negotiation decision.

In each negotiation:

- You and the firm will each contribute 150 cents to the **joint revenue** for a total of 300 cents.

- You will be given a **suggested wage**: a suggestion of how many cents, out of the joint revenue, you should receive as your wage.

- You will have 60 seconds to negotiate.

- During the 60 seconds you have to negotiate, you must make a **wage proposal**: a request to receive a certain number of cents, out of the joint revenue, as your wage. You may also write a brief message to the firm to argue in favor of your wage proposal.

- If the **firm accepts** your wage proposal, you will receive a wage equal to your proposed wage. Also, the firm will receive the joint revenue minus your proposed wage.

- If the **firm rejects** your wage proposal, you will receive the suggested wage minus a 30 cent penalty for failing to reach an agreement in the negotiation. Also, the firm will receive the joint revenue minus the suggested wage minus a 30 cent penalty for failing to reach an agreement in the negotiation.

Question: The joint revenue in a negotiation opportunity equals...

- my contribution of 150 cents
- my contribution of 150 cents + the firm's contribution of 100 cents
- my contribution of 150 cents + the firm's contribution of 150 cents

Question: If the firm accepts your proposed wage in a negotiation, you will receive...

- the suggested wage
- the suggested wage minus 30 cents
- your proposed wage
- your proposed wage minus 30 cents

Instructions (Bottom Half of) Screen

Question: If the firm accepts your proposed wage in a negotiation, the firm will receive...

- the joint revenue minus the suggested wage
- the joint revenue minus the suggested wage minus 30 cents
- the joint revenue minus your proposed wage
- the joint revenue minus your proposed wage minus 30 cents

Question: If the firm rejects your wage proposal in a negotiation, you will receive...

- the suggested wage
- the suggested wage minus 30 cents
- your proposed wage
- your proposed wage minus 30 cents

Question: If the firm rejects your proposed wage in a negotiation, the firm will receive...

- the joint revenue minus the suggested wage
- the joint revenue minus the suggested wage minus 30 cents
- the joint revenue minus your proposed wage
- the joint revenue minus your proposed wage minus 30 cents

Question: In each negotiation, you will have the following amount of time to make your wage proposal and write a message that will be sent to the firm along with your wage proposal:

- 0 seconds
- 60 seconds
- As much time as you like

Example Decision Screen

Given your contribution of 150 cents and the firm's contribution of 150 cents, the joint revenue is 300 cents.

Your suggested wage is 210 cents.

Below, you must select a wage proposal (otherwise, the default wage proposal shown below will be implemented). You may also write a brief message to the firm in favor of your wage proposal. If the firm accepts your wage proposal, you receive that wage and the firm receives the joint revenue minus that wage. If the firm rejects your wage proposal, you receive the suggested wage minus a penalty of 30 cents for failing to reach an agreement and the firm receives the joint revenue minus the suggested wage minus a penalty of 30 cents for failing to reach an agreement.

Please make your wage proposal.

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If you would like to, please write a brief message that will be sent to the firm along with your wage proposal.

You will automatically advance to the next screen after 60 seconds. The wage proposal and message you have written at that time, if any, will be submitted to the firm.