

Gender Differences in Experimental Wage Negotiations

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Abstract

We examine behavioral gender differences and gender pairing effects in a laboratory experiment with face-to-face alternating-offers wage bargaining. Our results suggest that male players are able to obtain better bargaining outcomes than female players. Male employees get higher wages than female employees. Male employers pay lower wages to female employees than female employers pay to male employees. Moreover, we find gender differences in the first offers of the bargaining game.

JEL-Code: C720, C910, J160.

Keywords: gender differences, wage bargaining, labor market experiment.

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1. Introduction

Gender wage gaps have been the subject of extensive research in labor economics. Although this gap has narrowed in the last decades, Blau and Kahn (2003) report that women still receive lower wages than men in many countries. Traditionally, differences in the accumulation of human capital and discrimination are seen as the main factors responsible for this wage gap (Bertrand, 2011). However, even after controlling for various measures of human capital, the wages of men and women differ significantly and this wage gap persists over time. Recently, alternative explanations have been analyzed more closely, such as gender differences in preferences (Croson and Gneezy, 2009), risk attitudes (Eckel and Grossman, 2008), and responses to competitive situations (Gneezy et al., 2009).

In many labor relationships, wages are determined by bilateral bargaining. Hence, another source of the persistent gender wage gap could be differences in bargaining behavior between women and men. Babcock and Laschever (2003) find that 57 % of male graduate business students bargain over their starting salaries, while only 7 % of women do so. Consequently, male starting salaries are 7.6 % higher than those obtained by women. Investigating the salary negotiating behaviors and starting salary outcomes of graduating MBA students, Gerhart and Rynes (1991) find that women obtain lower monetary returns to negotiation than men. Wood et al. (1993) report significant male-female pay differences of law school graduates, both one year and 15 years after graduation. Apart from wages, team production, hiring, and promotion decisions are further domains where significant gender differences emerge (Sutter, 2009). At least some of these differences might also be related to differences in the bargaining behavior of men and women.

This paper studies whether men and women behave differently in wage negotiations. The analysis is based on a laboratory experiment with face-to-face alternating-offers wage bargaining. By allowing experimental subjects to see each other in face-to-face negotiations, and thus to easily identify their bargaining partner's gender, allows us to analyze gender differences.¹ Our results suggest that gender and gender pairing play an important role in bargaining processes. In our experimental wage negotiations, male employees are able to negotiate higher wages than female employees. Moreover, male employers pay lower wages to female employees than female employers pay to male employees. One reason why men achieve more

¹ Even though our experiment was originally designed to analyze how minimum wages affect wage negotiations, we will only briefly comment on the impact of minimum wages in this paper. A more detailed analysis and non-gender specific results are reported in a companion paper (Dittrich et al., 2011).

favorable outcomes might be that already their first offers in the bargaining process are more favorable to themselves when negotiating with a female partner, while women do not behave this way. These results provide further evidence that part of the gender wage gap can be attributed to behavioral differences in wage negotiations.

The paper is organized as follows. Section 2 provides a brief review of the literature on gender differences in bargaining experiments. In section 3, we present our experimental design. Section 4 discusses the effects of gender and gender pairing in the bargaining process. Section 5 concludes.

2. Gender differences and bargaining

Differences in the economic behavior of women and men can be observed in various fields, e.g., consumption, investments, or labor markets. In a controlled field study, Ayres and Siegelman (1995) analyze the bargaining outcomes of men and women negotiating the price of a new car. They report that car sellers offer male buyers lower prices than female buyers. Ayres (1991) finds that women obtain worse bargaining outcomes than men negotiating with a female seller. Säve-Söderbergh (2009) finds that female university graduates propose lower wage bids than male university graduates and also receive lower wage offer than male students.

Gender effects on bargaining behavior have also been studied in laboratory experiments where driving forces of men's and women's behavior can be isolated (for an overview see Eckel and Grossman, 2008; Croson and Gneezy, 2009). Applying a dictator game, Bolton and Katok (1995) and Carpenter et al. (2005) find no differences in behavior of men and women. On the other hand, some studies report that women are more inequality averse and less selfish than men in dictator games (Selten and Ockenfels, 1998; Eckel and Grossmann, 1996, 1998; Fehr et al., 2006). Andreoni and Vesterlund (2001) shed light on the mixed results varying the price of being altruistic. Women tend to equalize payoffs and are more generous when giving is expensive while men are more generous when giving is rather cheap (see also Dickinson and Tiefenthaler, 2002). Ben-Ner et al. (2004) report no difference in giving of men and women when the gender of the second person is unknown. However, they find that women give less if playing with a woman than with a man.

Gender effects have also been examined in ultimatum games, as a stylized representation of bargaining. Eckel and Grossman (2001) apply a repeated design where partners face each

other. Players are matched with partners of both the same and the opposite gender. Similarly, Solnick (2001) applies a one-shot game with two treatments using the strategy method, where the proposer makes an offer and the receiver simultaneously notes the minimum acceptable offer. In the first treatment, the partner is unknown. In the second treatment, players know the partner's first name but they do not face each other. Neither Eckel and Grossman (2001) nor Solnick (2001) find significant differences in overall mean offers between men and women. Concerning the gender pairing, they find lower offers proposed to women than to men. In both studies, the rate at which women reject an offer depends on the proposers' gender. Eckel and Grossman (2001) observe the lowest rejection rates for women paired with women, whereas Solnick (2001) reports the highest rejection rates for this group. These conflicting results could be due to differences in the experimental design (Eckel and Grossman, 2001), driven by effects of visual expression (Sutter et al., 2009) or due to the larger context sensitivity of women (Croson and Gneezy, 2009). Güth et al. (2007) conducted a three-person ultimatum newspaper experiment and find that women prefer the equal split solution more often than men. García-Gallego et al. (2012) apply an ultimatum game framed as a firm-worker bargaining situation and focus on risk attitudes. Their results suggest that both gender and risk-related effects co-exist, but differences in risk-attitudes cannot explain gender effects. Castillo and Cross (2008) find, in a series of ultimatum and dictator games, that male behavior exhibits more variation than female behavior. These gender differences are due not only to social preferences, as e.g. altruism, but also to beliefs about others players' strategic behavior.

Apart from dictator and ultimatum games, gender effects have also been studied in the trust game. In this game, the first player can transfer money to a second person. The sum sent is multiplied by three. After that, the second player can send any amount back to the first player. While some studies report that men send more money than women, other studies report the opposite result or find no differences (for an overview see Croson and Gneezy, 2009).

Sutter et al. (2009) conduct a power-to-take game in order to study gender pairing effects. This bargaining game is played by two persons over two stages. In the first stage, a "take authority" defines the take rate, i.e. the proportion of the responder's endowment that the take authority receives at the end of the game. In the second stage, the responder decides how much of the endowment he will destroy. Sutter et al. (2009) find no significant differences between women and men concerning take and destruction rates or frequency of destruction. When bargaining with the same gender, however, take authorities claim more from responders and destruction rates are higher. Sutter et al. (2009) note that these gender pairing results

are in line with predictions from evolutionary psychology as human behavior complies with survival and reproductive success. Persons with the same gender see themselves as competitors for the opposite gender, which explains the observed competitive behavior in the experiment towards the same gender.

Summing up, the evidence on gender differences in laboratory bargaining experiments does not provide a clear-cut picture (Camerer, 2003). Croson and Gneezy (2009) suppose that mixed results might occur because women are more risk-averse than men. A second explanation is the higher context-sensitivity of women, i.e. their social preferences vary stronger within experimental treatments and over different experiments than those of men (Croson and Gneezy, 2009). Moreover, men and women differ in their inclination to engage in competitive interactions, i.e. women have a smaller propensity to enter competitive situations (Gneezy et al., 2003; Niederle and Vesterlund, 2007; Gupta et al., 2011) which has a strong impact on bargaining behavior (Croson and Gneezy, 2009).

In this paper, we provide more evidence for the existence of gender differences in bargaining behavior. In contrast to the previously used dictator, ultimatum, and trust games, we apply a multi-stage alternating-offer bargaining game in a labor market context. With multi-stage bargaining, we aim to represent real-life bargaining which is characterized by a range of offers and counteroffers and, consequently, with a process of bilateral convergence. The multi-stage design allows testing a variety of labor market and bargaining aspects. In addition to bargaining outcomes, we also examine first offers of employers and employees, their counteroffers, and the impact of an external breakdown on the bargaining process. Finally, we study possible gender differences in the labor market when a minimum wage is introduced or increased.

3. Experimental design

Experimental wage negotiations

In our experiment, a “worker” and a “firm” bargain over the division of a rent. Participants are told that the firm is offered a contract by some customer worth 300 experimental currency units (“tokens”). To fulfill the contract, the firm needs to hire a worker. There is only one worker available, with whom the firm has to agree on a wage before hiring. The rent of 300 tokens can be split between the firm and the worker via bargaining over the worker’s wage w . If there is a bargaining agreement, the worker is hired by the firm and the contract is fulfilled.

The worker receives the bargained wage w and the firm's profit is $300 - w$. If both parties are unable to agree on a wage (i.e. bargaining breaks down), the firm is assumed to have some alternative production possibility. This outside option, for which employing the worker is not needed, generates a payoff of 110 tokens for the firm. The worker stays unemployed and receives nothing, i.e. his outside option is assumed to be zero.

In contrast to other bargaining experiments by, e.g., Castillo and Cross (2008), García-Gallego et al. (2012) or Sutter et al. (2009), the wage is determined via alternating-offers bargaining (as in Rubinstein 1982). In the first round, the firm offers a wage which can be accepted or rejected by the worker. If the worker accepts the offer, he will be hired, the contract will be fulfilled, and the game ends. If the worker rejects, he can make a counteroffer in round 2 which can then be accepted or rejected by the firm. Bargaining is over if an offer is accepted in any round or if bargaining breaks down exogenously after an offer has been rejected. The probability of such a breakdown is 20 percent for each bargaining round in which an offer is rejected. To give the participants the chance to make their first offer and counteroffer without having to fear the breakdown of negotiations, rejections could only lead to breakdowns after round 3.

Subjects and procedures

The experiments were conducted on a single day at the Technical University Dresden with a total of 122 participants (72 men, 50 women). All participants were undergraduate students with various majors. Before the start of the experiment, half of the subjects were randomly assigned to the role of a worker and the others to the role of a firm. These roles remained fixed for the whole experiment. Each participant bargained in 20 separate negotiations ("periods"). The right to make the first offer alternated after a negotiation concluded, i.e. in period 1 the firm made the first offer, in period 2 the worker made the first offer, and so on. Subjects were randomly matched into bargaining pairs (one worker, one firm) in each period and could only sign a wage agreement within their respective pair. Participants were randomly re-matched after each period. During the experiment, the bargaining partners were facing each other directly (face-to-face bargaining) but were not allowed to communicate except in writing via a prepared form. This setup ensured that each subject was able to identify its bargaining partner's gender through visual contact.

To make sure that the subjects understood the bargaining procedures and the payoff consequences of their actions, each subject was given a detailed set of instructions before the ex-

periment started.² The players were asked to read through the written instructions. Afterwards, each participant had the possibility to ask questions. These were answered privately by the experimenter. No additional questions were answered and any form of uncontrolled communication was made impossible during the actual experiment. Whenever the players had to act, they had to fill out prepared forms. The basic setup was as follows: In round 1, the first player offered a wage by entering the offer into the prepared form. Then the form was passed to the other player and round 2 started. Now the other player could either put a check mark in a specific box if he accepted the wage offered or he could enter a new wage in the form. The form was passed back to the first player. This procedure went on until an agreement was reached or bargaining broke down (with a probability of 20 percent starting after round 3).

Treatments

We conducted five treatments directly one after another, where each treatment was played for four periods, respectively. In each period, the worker and the firm bargained over the wage via alternating offers as described above. The various treatments only differed in the level of the legal minimum wage. Treatment 1 (periods 1-4) had no minimum wage, i.e. the range of permissible wages was $0 \leq w \leq 300$. In treatment 2 (periods 5-8), a minimum wage of 70 tokens was introduced. Even though wages below the minimum could be offered, the eventual agreement had to obey the wage constraint $70 \leq w \leq 300$. Agreements below the minimum wage were regarded as breakdowns. However, the minimum wage of 70 was a non-binding restriction for almost all wage agreements in treatment 1. In treatment 3 (periods 9-12), the minimum wage was raised to 95. Again, this minimum was non-binding for most wage agreements in the previous periods. In treatment 4 (periods 13-16), the minimum wage was raised to 160 implying a binding restriction for most wage agreements in previous periods. Finally, the minimum wage was abolished in treatment 5 (periods 17-20).³

Payments

The exchange rate between tokens and real money was 50 tokens = EUR 1. At the end of the experiment, one out of the four bargaining agreements in each treatment was randomly cho-

² The Appendix contains translated versions of the experimental instructions and the negotiation forms.

³ Due to time restrictions when conducting the experiment, 30 students participated in treatments 3 to 5 only for two instead of four periods. We checked that our results are robust to excluding this group from the analysis and also to restricting our analysis to the periods in which all subjects participated.

sen. These agreements were relevant for the payoffs in the respective treatment. The experiment lasted approximately 90 minutes and subjects earned on average EUR 17.50, including a show-up fee of EUR 6.⁴ All participants were paid in cash directly after the experiment.

4. Experimental Results

Table 1, Column 1, shows mean negotiated wages, i.e. bargaining outcomes, across all five minimum wage treatments. Our results illustrate the general impact of outside options and the minimum wage on negotiated wages. First, employers earn, on average, a larger share of the total rent. The main reason for this inequality is that employers have a positive outside option, whereas employees would earn nothing if negotiations failed. While a wage of 150 would ensure an equal split of the entire rent among both players, actual negotiated wage are below this level. The only exception is treatment 4, where the minimum wage of 160 ensures that employees receive more than half of the total rent. Our second observation is that the introduction of a minimum wage and its subsequent increases lift up negotiated wages. This even holds for very low – in fact, non-binding – levels of the minimum wage (see Dittrich et al., 2011, for an in-depth discussion of this effect).

Table 1: Bargaining outcomes by employers' and employees' gender

Treatment	min. wage	overall	male employer, bargaining with		female employer, bargaining with	
			a male employee	a female employee	a male employee	a female employee
		(1)	(2)	(3)	(4)	(5)
Bargaining outcome						
1	-	124.4	123.0	117.0	127.6	127.0
2	70	129.9	135.7	124.3	131.5	122.7
3	95	134.5	136.4	133.7	136.1	128.2
4	160	170.4	169.6	168.8	172.8	169.2
5	-	128.7	132.6	125.7	129.8	119.9

To analyze gender differences in wage negotiations, Table 1 provides information on mean negotiated wages for different gender pairings. In all treatments, male employees are able to negotiate higher wages than female employees, both when bargaining with male em-

⁴ The comparable market wage for undergraduate students in Dresden is approximately EUR 8 per hour.

ployers (columns 2 and 3) and female employers (columns 4 and 5). Wage differences between male and female employers when bargaining with male employees (columns 2 and 4) or female employees (columns 3 and 5) are less pronounced and vary in sign. Strong differences appear when comparing the wage outcomes in cases where a male employer negotiates with a female employee to the wage outcomes when a female employer negotiates with a male employee (columns 3 and 5). The latter constellation results in higher wages than the former gender pairing in all treatments. These results suggest that men bargain more successfully than women, which is consistent with empirical findings (Säve-Söderbergh, 2009).

Table 2: First offers by employers' and employees' gender

Treat- ment	min. wage	Employers' first offer				Employees' first offer			
		male employer, bargaining with		female employer, bargaining with		male employer, bargaining with		female employer, bargaining with	
		a male employee	a female employee	a male employee	a female employee	a male employee	a female employee	a male employee	a female employee
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	-	78.6	76.7	80.2	81.5	176.0	163.8	177.6	164.4
2	70	87.6	76.7	81.8	84.0	170.1	161.3	177.2	170.3
3	95	105.5	101.5	101.9	100.4	170.8	163.2	169.6	166.5
4	160	162.5	162.0	159.2	154.6	186.8	194.2	195.0	184.2
5	-	89.4	67.9	88.6	68.6	164.2	175.0	175.5	164.9

There are two (not mutually exclusive) potential explanations for the observed differences in negotiated wages. The first potential explanation is that men and women have different negotiation skills. Given the same initial conditions, it could be that women are less able to use the process of alternating offers to obtain favorable outcomes. The second explanation is that initial conditions differ. Men might enter negotiations with offers or demands that are more in their own favor than women.

The first explanation is not supported by our data. Weaker negotiation skills could mean, for example, that women are more risk-averse and are more ready to accept their bargaining partner's offer. In our experiment, however, 53 percent of all bargaining rounds with mixed gender pairs (where the distribution of men and women among employers and employees is about equal) are terminated by an acceptance by the male partner. Another manifestation of weaker bargaining skills could be that women are able to obtain only a smaller share of the initial bargaining range (the distance between the initial offers and demands made by employers and employees, respectively). We do not find strong support for this type of gender bias

either. In the bargaining rounds where the employer makes the first offer, male employers obtain 60 percent of the initial bargaining range, female employers obtain 57 percent. When the employees make the first move, male employees receive 69 percent of the bargaining range, female employees receive 63 percent. In both cases, the observed gender differences are not statistically significant ($p > 0.1$).

The second explanation can be tested by looking at the first offers that the bargaining parties make in the negotiations. In half the rounds of our experiment, employers had the chance to make the first offer. In the other half, employees made the first move. Table 2 presents descriptive statistics on average first wage offers or demands. When employers made the first move, the average first wage offer made by male employers to male employees was higher than offers to female employees (columns 1 and 2). This is suggestive of wage discrimination because the bargaining partner's gender appears to affect wage offers even before he or she has actively participated in the negotiation. Female employers do not seem to systematically discriminate in their first offers. Average first offers made to men are lower than those made to women in the first two treatments and higher in the last three treatments. A similar pattern can be observed in employees' first demands in those negotiation rounds in which they could make the first move. Male employees state higher initial wage demands when facing a female employer than a male employer in four of the five treatments (columns 5 and 7). Female employees demand higher wages in their first offers when negotiating with a female employer than with a male employer in three of the five treatments. The results presented in Table 2 indicate that part of the reason why men achieve more favorable bargaining outcomes is that they already start the negotiation process by making more offers that are more favorable to themselves when negotiating with a female partner. Women do not seem to behave in such a discriminatory way.

Due to the multiplicity of gender combinations and treatments, the number of observations in each cell in Tables 1 and 2 is rather small, so the observed gender differences are typically not statistically significant. To get around this problem, we assume that the relationship between observed negotiated wages (or initial wage offers, respectively) follows the following parametric functional form:

$$w_i = \alpha + \gamma' S_i + \beta' P_i + \varepsilon_i, \quad (1)$$

where w_i is the negotiated wage (or initial wage offer) in the i -th observed negotiation, S_i is a vector of dummy variables indicating the minimum-wage treatment which applied during this

negotiation, P_i is a vector of dummy variables for the gender pairing of employers and employees, and ε_i is an error term.

Table 3: Regression results

	Bargaining outcome	first-mover: employer first-round wage offer	first-mover: employee first-round wage demand
Treatment 1 (no minimum wage)	reference	reference	reference
Treatment 2 (MW = 70)	5.71*** (2.00)	4.01 (3.77)	-1.57 (2.75)
Treatment 3 (MW = 95)	10.28*** (2.36)	23.50*** (3.62)	-4.03 (2.97)
Treatment 4 (MW = 160)	45.78*** (2.23)	80.51*** (4.27)	17.81*** (3.82)
Treatment 5 (no minimum wage)	4.24* (2.37)	2.86 (4.87)	-2.82 (3.77)
Gender pairing			
<u>employer</u>	<u>employee</u>		
male	male	reference	reference
male	female	-5.14** (2.14)	-8.06** (3.42)
female	male	0.27 (3.01)	-2.24 (4.62)
female	female	-5.57** (2.71)	5.47** (2.54)
constant	126.05*** (2.73)	82.38*** (4.05)	-3.36 (4.61)
Number of observations	778	492	171.65*** (3.62)
Number of clusters	61	61	
R^2	0.53	0.57	0.11

Note: Standard errors reported in parentheses (clustered at the individual level); *** p<0.01, ** p<0.05, * p<0.1

We estimate equation (1) for bargaining outcomes and first offers by employers and employees using OLS with clustered standard errors. Table 3 presents the regression results. The treatment indicators show that minimum wages exert a positive influence on negotiated wages. A positive effect of minimum wages is also found on employers' initial wage offers, but not on employees' initial wage demands (cf. Dittrich et al., 2011). Negotiated wages are significantly smaller for female employees than for male employees, independently of the employer's gender. The wages paid by female employers do not differ significantly from those paid by male employers to employees of a given gender.

When employers make the first move (column 2), male employers offer significantly lower wages to female employees than to male employees. Female employers also seem to offer lower wages to female employees, but this difference is not statistically significant. In cases where employees are first-movers, wage demands by male employees are significantly higher

when negotiating with a female than with a male employer. There is no significant difference between the wages demanded by female employees from male or female employers. These regression results support our findings that there are gender differences in bargaining behavior. While men demand (and obtain) wages that are more in their own favor when bargaining with women, we did not find similar discriminatory behavior among women.

5. Conclusion

This paper examines gender and gender pairing effects in an experimental labor market. In a face-to-face situation framed as wage bargaining between an employer and an employee, we show that men obtain better bargaining results than women. Moreover, our experimental results suggest that the gender pairing affects the bargaining outcome. When male employees bargain with female employers, they obtain higher wages compared to bargaining with male employers. This result also holds for male employers. When bargaining with female employees, they are on average able to press wages down more than when bargaining with male employees.

The results have some implications for labor market policies that aim at reducing the gender wage gap. We provided evidence for behavioral differences in bargaining between women and men. At least a part of the gender wage gap might be attributable to these differences. Since we did not find that women's bargaining skills in the process of making offers and counteroffers were worse than those of men, our findings suggest that it is not necessarily the lack of bargaining skills that leads to less favorable outcomes for women. Gender differences rather occur in how women and men approach the negotiation (see also Babcock and Lascherver, 2003 and Säve-Söderbergh, 2009). Therefore, policy recommendations should not necessarily focus on improving women's bargaining skills, but rather on encouraging women to negotiate in the first place and not just accept what is offered to them. Moreover, women could be encouraged to be more demanding and tough in how they approach a negotiation. These measures could, at least partly, help to reduce the gender wage gap.

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Appendix: Experimental instructions (translated from German)

General instructions

Dear participant,

Thank you very much for participating in this economic experiment. The following experiment consists of different decision-making situations which will be described below. Depending on your actions and decisions in the experiment, you can earn some real money. Please read carefully through the written instructions. If you have any questions, they will be answered privately by the experimenter. During the experiment, any form of uncontrolled communication is not allowed.

Economic background

A firm is offered a contract by some customer worth 300 experimental currency units (“tokens”). To fulfill the contract, it needs to hire a worker. There is only one, currently unemployed worker available, with which the firm has to agree on a wage before hiring. The firm and the worker bargain over the worker’s wage. If there is a bargaining agreement, the worker is hired by the firm and the contract is carried out. The worker receives the bargained wage and the firm’s profit is 300 minus the wage. As long as there is no bargaining agreement, the contract cannot be carried out. Moreover, there is some pressure to come to an agreement quickly since the contract might be withdrawn by the customer, resulting in a breakdown of the negotiation, if the bargaining process takes too long. If bargaining breaks down, the firm is assumed to have some alternative production possibility for which employing the worker is not needed. This alternative yields a payoff of 110 tokens to the firm. After negotiations break down, the worker stays unemployed and receives 0 tokens. Over the course of the experiment, various labor market policy measures, such as, e.g., the introduction of or the increase in a minimum wage, will be integrated.

Experimental procedure

In the following experiment, you are either assigned to the role of a firm or a worker. In each period, a firm and a worker bargain over the worker's wage and, thus, how to share the 300 tokens. After each period, firms and workers are randomly re-matched in each period, i.e. you will generally not negotiate with the same partner again. Each participant will play 20 periods as firm or as worker, maintaining this role throughout the experiment. The experiment will be conducted using „Paper & Pen“. On the following page, you will see the negotiation form which you are asked to fill out together with your bargaining partner by making alternating offers.

- Please enter your personal ID, which you received at the beginning of the experiment, in the upper left part of the negotiation form.
- In the box below you can see the amount of the rent which is bargained over. In subsequent periods, you might be given additional information about labor market policy measures in this part of the form.
- In the table below you find details on the payoffs both bargaining partners may receive.
- The active part of the bargaining game starts following the heading “Negotiation“. If the firm makes the first offer, the firm offers a wage to the worker by entering this offer into the box at “Offer no. 1“. The form then is passed to the worker on the experimenter's command.
- Now the worker can either put a check mark in the designated box if he wants to accept the wage offer. In this case, the negotiation concludes. Alternatively, the worker can enter a new wage into the box at “Offer no. 2“ and return the form to his negotiation partner, who can then either accept (concluding the negotiation) or reject (making another counteroffer).
- Starting in round 3, rejecting an offer may lead to a breakdown of the current negotiation. The probability that the rejection of an offer causes a breakdown is 20%.

Printed negotiation form that subjects had to fill out (Period 5)

Firm (ID) Period 5
 Worker (ID)

Rent to be split: 300 tokens
minimum wage for employees: 70 tokens

Payoff table

	Firm	Worker
Agreement	300 minus wage	wage
No agreement	110	0

Negotiation

Offer (No.)	Who makes the offer?	Accept last offer?	Offer by	
			Firm	Worker
1	Firm		<input type="text"/>	
2	Worker	<input type="checkbox"/>		<input type="text"/>
3	Firm	<input type="checkbox"/>	<input type="text"/>	

PLEASE NOTE: From now on, the negotiation could break down if the last offer is not accepted (probability of breakdown: 20%)!

4	Worker	<input type="checkbox"/>		<input type="text"/>
5	Firm	<input type="checkbox"/>	<input type="text"/>	
6	Worker	<input type="checkbox"/>		<input type="text"/>
7	Firm	<input type="checkbox"/>	<input type="text"/>	
8	Worker	<input type="checkbox"/>		<input type="text"/>
9	Firm	<input type="checkbox"/>	<input type="text"/>	
10	Worker	<input type="checkbox"/>		<input type="text"/>
11	Firm	<input type="checkbox"/>	<input type="text"/>	
12	Worker	<input type="checkbox"/>		<input type="text"/>
13	Firm	<input type="checkbox"/>	<input type="text"/>	
14	Worker	<input type="checkbox"/>		<input type="text"/>
15	Firm	<input type="checkbox"/>	<input type="text"/>	
16	Worker	<input type="checkbox"/>		<input type="text"/>
17	Firm	<input type="checkbox"/>	<input type="text"/>	
18	Worker	<input type="checkbox"/>		<input type="text"/>
19	Firm	<input type="checkbox"/>	<input type="text"/>	
20	Worker	<input type="checkbox"/>		<input type="text"/>

Payoff

Depending on your decisions during the experiment, you have the opportunity to earn some money.

- In each period, the rent to be split is 300 tokens.
- If there is an agreement, both bargaining partners gets the respective share of the rent – the worker receives the wage and the firm receives 300 tokens minus the wage.
- If there is no agreement or bargaining breaks down, the firm receives 110 tokens and the worker receives 0 tokens.
- 1 token = EUR 0.02, i.e. the rent which is bargained over in each period has a value of EUR 6. However, only one out of the four bargaining rounds in each treatment is relevant for the payoff. These rounds are randomly chosen at the end of the experiment.

At the end of the experiment, please confirm the receipt of your payments. All data and results collected in the experiment are treated anonymously. Please contact Marcus Dittrich (marcus.dittrich@wirtschaft.tu-chemnitz.de) with any questions you may have.