ECONSTOR
Make Your Publications Visible.

A Service of

ZBW Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Hennig-Schmidt, Heike; Bosman, Ronald; van Winden, Frans

Conference Paper

Emotion at Stake – The role of stake size and emotions in a power-to-take game experiment in China with a comparison to Europe

Beiträge zur Jahrestagung des Vereins für Socialpolitik 2016: Demographischer Wandel - Session: Experimental Economics: Social Preferences, No. D05-V2

Provided in Cooperation with:
Verein für Socialpolitik / German Economic Association

Suggested Citation: Hennig-Schmidt, Heike; Bosman, Ronald; van Winden, Frans (2016) : Emotion at Stake – The role of stake size and emotions in a power-to-take game experiment in China with a comparison to Europe, Beiträge zur Jahrestagung des Vereins für Socialpolitik 2016: Demographischer Wandel - Session: Experimental Economics: Social Preferences, No. D05-V2, ZBW - Deutsche Zentralbibliothek für Wirtschaftswissenschaften, Leibniz-Informationszentrum Wirtschaft, Kiel und Hamburg

This Version is available at:
https://hdl.handle.net/10419/145592

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Emotion at Stake

The role of stake size and emotions in a power-to-take game experiment in China with a comparison to Europe

Abstract

This paper experimentally investigates how monetary incentives and emotions influence behaviour in a two-player power-to-take game. In this game, one player can claim any part of the other's endowment (take rate), and the second player can respond by destroying his or her own endowment. We focus on how stake size (endowment) and emotions influence responses in China. Our main findings are the following. First, average (median) take and destruction rates are not influenced by a large or small stake size. Second, emotions related to anger and joy mediate the impact of the take rate on destruction. Third, monetary incentives matter for the reaction function of the responder regarding the take rate: when stakes are low there is more destruction for low and intermediate take rates (smaller than 80%), while, when stakes are high, there is more destruction for high take rates (larger than 80%). This result is explained in terms of the amount of behavioural control that the responder has over his or her actions via emotion regulation. Finally, comparing our data with existing data for countries in Europe, it turns out that average (median) take and destruction rates are similar, while a similar set of emotions mediates destruction in both regions.

Key words: cross-cultural experiment, emotions, expectations, incentives, high and low stakes

JEL-classification: A12, C72, C91, F00, O52,O53, Z10

Acknowledgement: We are grateful to Zhu-Yu Li for providing the opportunity to run the experiment at Sichuan University, Chengdu. We are further grateful to Chaoliang Yang for valuable research assistance as well as for translating instructions and questionnaires and his assistance in running the experiment. We thank Hong Geng, Fang-Wen Li, Wan-Bo Lu and Jing Yu, for their support in conducting the experiment and Ying Wang and Ying Shen for transcribing the questionnaire entries. Comments and suggestions that improved the paper substantially were given by participants attending the following meetings: SABE Behavioral Economics Conference in New York, ACCER Workshop on Cross-Cultural Experimental Economics Research in Duisburg, CESifo Workshop on Behavioral Political Economy in Venice. Financial support by EU-TMR Research Network ENDEAR (FMRX-0238) and by Deutsche Forschungsgemeinschaft is gratefully acknowledged. .

1. Introduction

That people respond to changes in incentives concerns one of the most basic assumptions in economic theory (Gneezy and Rustichini 2000, Andersen et al. 2011). In experimental economics incentives are an important issue in the discussion about the validity of experimental results. In many experiments the financial incentives offered to subjects are relatively modest; this raises the question whether experimental results are valid outside the laboratory where incentives are often much larger. A growing number of experimental studies have therefore focussed on the role of incentives, for example in the context of dictator, ultimatum, trust and public good games. Early meta-studies (e.g. Jenkins et al. 1998, Camerer and Hogarth 1999, Hertwig and Ortmann 2001, see also Camerer 2003) found that financial incentives matter, in particular for judgmental tasks, but not so much for other domains like bargaining, games and markets. In such domains incentives typically have no effect on mean performance or behaviour although the variance is usually somewhat reduced by larger incentives. A recent review on dictator games (Engel 2011), however, finds a small effect of higher incentives on reducing the willingness to give: dictators keep more, not only in absolute term, but also in relative terms. Oosterbeek et al. (2004) conclude in their meta study of ultimatum games that bigger financial incentives do not affect the share offered, but reduce rejection rates. More recent ultimatum bargaining experiments provide mixed evidence.[1] Testing the effect of stake sizes in trust games, Johansson-Stenman et al. (2005) found that the amount sent decreased significantly when the financial incentives were increased. In a public goods experiment by Kocher et al. (2008) stake size did not have any significant effect on cooperation and punishment.

The impact of incentives on retaliation and emotional experience in situations where people are deprived of part or all of their endowments is an important research topic. In this paper we contribute further to this literature by studying the role of incentives in a two-player power-to-take game (PTTG). The basic version of the game consists of two stages. First, one player (the take authority) can claim any part of the other player's endowment, the take rate. Next, the second player (the responder) can react by destroying part or all of her endowment, which is then lost for both. The responder can only destroy her own prior-to-the-take endowment and not that of the take authority. In addition, responders self-report the intensity of a set of positive and negative emotions when being informed about the take rate. Experimental work of Bosman and van Winden (2002) and various follow-up studies found that emotions are important for destruction in such settings and that they affect destruction in a non-linear way (see also van Winden, 2015, for an overview).[2] The

[1] A field experiment in India involving stakes up to a little more than participants' average yearly income (Andersen 2011 et al.) revealed offer proportions significantly lower in the higher stakes compared to the lowest stakes treatment. For responders, rejection rates were significantly lower in the former than in the latter, with those under low stakes being in the range of the existing literature. Novakova and Flegr (2013) report similar findings on dictator and ultimatum game experiments with rather high stakes that are not incentivised, however. Munier and Zaharia (2002) observe responders' lowest acceptable offers to be proportionally lower in the high-stake condition. No evidence for an effect was found by Carpenter et al. (2005, dictator and ultimatum) and List and Cherry (2008, dictator) who provided stakes up to 100$ in the US that are still relatively much lower than in Anderson et al. (2011).

[2] E.g. Bosman et al. (2005) study whether having to earn the endowment by real effort influences behaviour compared to a no-effort setting. Bosman et al. (2006) analyse a group version of the power-to-take game (PTTG). Ben-Shakhar et al. (2007) employ physiological measures of emotional arousal as well as self-report measures of emotional responses. Reuben and van Winden (2008) investigate how social ties influence behaviour in a three-player PTTG with one take authority and two responders. The impact of gender and gender pairing is studied by Sutter et al. (2009). Reuben and van Winden (2010) examine how proposers adjust their behaviour depending on their fairness perceptions, experienced emotions, and their interaction with responders. Galeotti (2013) study the impact of waiting time on economic decision-making in a PTTG.

question of how the size of the endowment influences the underlying emotion process and, possibly, behaviour in PTTG is a novel feature of our study. Bigger incentives may cause responders to experience negative emotions more intensely, which may then lead to more destruction. Our main research question, therefore, is whether stakes matter for emotional experience and behaviour in the power-to-take game.

We have run our power-to-take game experiment in China. From a practical point of view this makes the experiment less costly, since wages are much lower in China. In this way it was possible to give the subjects significant financial incentives, as they could earn at least 50% of the average monthly urban net income and more than 100% of the monthly rural net income[3]. The experiment also allows to study possible cross-cultural differences in emotional experience and behaviour. This is relevant because Chinese people are assumed to control their emotions rather well. To compare the Chinese to Westerners we use data collected in a previous study of Bosman et al. (2005) for the EU (Netherlands and Austria).

Our main findings are as follows. First, there is no evidence that average (median) take and destruction rates differ between the low-stake treatment and the high-stake treatment. Second, the probability of destruction as a function of the take rate differs between the two treatments. Specifically, for take rates lower than 80% the probability of destruction is lower when the stakes are high than when they are low, while for take rates above 80% the opposite holds. Third, the take rate triggers the same set of emotions. Fourth, emotions mediate the impact of the take rate on destruction, albeit not fully when the stakes are high. In that case we observe an additional negative shift towards less destruction (treatment effect) together with an increasing effect of the take rate (interaction effect). Finally, regarding cross-cultural differences between China and the EU, for comparable (low) stake sizes, there is no evidence that average (median) take and destruction rates differ. Also, with respect to emotions, we find no clear differences: (i) in both regions, the intensity of negative (positive) emotions is positively (negatively) related to the take rate; (ii) the same set of emotions is elicited by the take rate; (iii) anger-type emotions and joy are important for destruction in both, and (iv) emotions fully mediate the impact of the take rate on destruction.

The remainder of the paper is organized as follows. In section 2 we discuss our research questions and present our experimental design and procedures. In section 3 the results are presented, and section 4 concludes.

2. Research questions, experimental design and procedures

2.1 Research questions

Our main research question is whether stakes matter for emotional experience and behaviour in a power-to-take game. When the stakes increase two effects potentially play a role. On the one hand individuals may become more emotional when the same share of money is taken from them, increasing the propensity to destroy. On the other hand, destruction becomes more costly (and less efficient) when the stakes are high, giving individuals an incentive not to destroy. Whether these opposing forces will cancel out is hard to say in advance. It is possible that one of these forces dominates the other. The experiment will shed more light on this mechanism.

Our second research interest is concerned with the question whether culture matters in the PTTG. Our experiment allows studying possible cross-cultural differences in emotional experience and behaviour. Since there is evidence that a universal set of primary emotions exists (see the

---

Grosskopf and López-Vargas (2014) analyse the impact the demand for expressing emotions has on behaviour. Galeotti (2015) studies whether negative emotions can explain punishment in PTTG experiments.

[3] Take authorities actually earned up to 77% of the urban and up to 204% of the average rural monthly income.

overview by Russell and Yik 1996), there is a priori no reason to expect major differences between Chinese and European subjects in the context of the power-to-take game.[4] Yet, cultural differences seem to exist concerning the absolute intensity levels attributed to expression and perception of emotions (Shaver et al. 1992). Chinese are assumed to control their emotions rather well (Yang 1986, Matsumoto 1989, Russell and Yik 1996, Wu 1996). Therefore, they may be inclined to suppress their emotions more easily. Whether this would result in different emotional experience and behaviour is explored in this study as well.

2.2 Experimental design and procedures

As our vehicle of research we use the two-player power-to-take game. One player can be considered as the 'take authority', who is paired to another player, the 'responder'. Each participant in the experiment has an endowment, E_i. The game has two stages. At the first stage, the randomly chosen take authority decides on the so-called take rate $t \in [0,1]$, which is the part of the responder's endowment E_{resp} that will be transferred to the take authority after the second stage. At the second stage, the only action the responder can take is to decide on $d \in [0,1]$, the part of E_{resp} that will be destroyed. For the take authority the payoff of the game is thus equal to the transfer: $t(1-d)E_{resp}$, generating total earnings from the experiment of: $E_{take} + t(1-d)E_{resp}$. For the responder, the payoff equals: $(1-t)(1-d)E_{resp}$, which also determines this player's total earnings. Note that the responder can only destroy her own prior-to-the-take endowment (E_{resp}) and not that of the take authority (E_{take})[5]. Furthermore, it follows that only if $t = d = 0$, experimental earnings for both players will be equal to the initial endowment; otherwise, the responder will always get less than E_{resp}, whereas the take authority gets at least E_{take}. The standard game theoretic model, assuming rational selfish players, predicts that the responder will not destroy any of her endowment if the take rate is less than 100%. She is indifferent between all percentages of destruction if the take rate is 100%. Anticipating this behaviour, the take authority will take virtually all of the responder's endowment (except for an epsilon).

We have three treatments: CHINA LOW, CHINA HIGH and EU. CHINA LOW and HIGH were conducted at Sichuan University, Chengdu (China). EU was run at two European universities, half of the sessions at the University of Amsterdam (The Netherlands) and the other half at the University of Innsbruck (Austria).[6] All sessions in all countries were run according to the same procedural protocol. Table 1 summarizes the parameters of the three treatments.

In EU, subjects' endowment was 15 Dutch guilders/90 Austrian Schillings (approximately EURO 7). In China, the endowment was 30 Yuan (RMB) in CHINA LOW, and 300 Yuan in CHINA HIGH (approximately EURO 4 and EURO 40, respectively, at the time of the experiment). In both regions the endowments of the take authority and the responder were identical ($E_{resp} = E_{take}$). Independent of their earnings in the experiment, subjects received a show-up fee of approximately EURO 7 in EU and EURO 4 (30 RMB) in both CHINA LOW and HIGH.

Before subjects played the one-shot power-to-take game, they were randomly divided into two groups. One group was referred to as participants A (the take authorities) and the other as

[4] According to Mesquita and Frijda (1992, p198) "there appears to exist a universally human set of emotion reaction modes both at the central level [modes of action readiness] and at that of specific responses (facial expression, voice intonation […])."

[5] In this respect, the power-to-take game differs from the convex ultimatum game by Andreoni et al. (2003).

[6] Data regarding EU are taken from Bosman et al. (2005). No behavioural difference across countries in EU was found. We, therefore, pooled the data.

participants B (the responders). Then a native experimenter read the instructions followed by two individual exercises to check participants' understanding of the game. The game was framed as neutral as possible, avoiding any suggestive terms like, e.g., take authority[7]. Subsequently, random pairs of one responder and one take authority were formed by letting take authorities draw a coded envelope. The envelope contained a form on which the endowment of both participant A and participant B was stated. The take authorities then had to fill in a take rate[8] and put the form back in the envelope. After having collected the envelopes, we asked the take authorities to report their expectation of what the responder would do. The envelopes were brought to the matched responders who filled in the percentage of their endowments to be destroyed. The envelopes containing the forms were then returned to the take authorities for their information.

Table 1: Experimental treatments

Treatment Abbreviation	Sessions run in	Endowment	Show-up fee	Number of independent observations	Number of take authorities	responders
CHINA LOW	China	EURO 4 (30 RMB)	EURO 4 (30 RMB)	36	36	36
CHINA HIGH	China	EURO 40 (300 RMB)	EURO 4 (30 RMB)	36	36	36
EU	The Netherlands/ Austria	EURO 7	EURO 7	40	40	40

We finally asked subjects to fill out questionnaires with, for the responders, questions concerning their prior expectation of the take rate, and, for all subjects, the emotions they experienced when they learned about the decision of the other player. Moreover, participants also answered questions regarding their motivations and social background. After completion of the questionnaires, envelopes were collected and brought to the cashier, who paid out the subjects in private.

Emotions were measured in the following way. We used a list of emotion names[9] and asked subjects to report the experienced intensity of each emotion on a 7-point scale, ranging from "no emotion at all" to "high intensity of the emotion". Note that negative and positive emotions are included in order to avoid 'pushing' subjects in a particular direction.

In total 224 subjects took part in the experiment, almost all undergraduate students. 144 Chinese students participated in two sessions at Sichuan University, Chengdu (China), half of them in CHINA LOW and the other half in CHINA HIGH. 80 European students participated, half of them at the

[7] For instructions, see Appendix B. Instructions for China were translated into Chinese using the back translation method. Full instructions in Chinese as well as the script of the experimental protocol are available from the authors upon request.

[8] To facilitate the task for the participants we asked them to put in a percentage of B's endowment to be taken or to be destroyed; see the instructions in Appendix B. We, therefore, report and analyse percentages throughout the paper.

[9] Anger, contempt, envy, fear, irritation, joy, sadness, shame, surprise. In the study of Bosman et al. (2005) eleven emotion names were used. Two of those emotions – happiness and jealousy – were skipped in the present study due to substantial differences in their meaning in China and Europe.

University of Amsterdam (The Netherlands) and the other half at the University of Innsbruck (Austria). Sessions were run in Innsbruck in November 1999, in Amsterdam in January 2000, and in Chengdu in August 2002. Slightly more than half of the subjects were students of economics. The others were students from various other fields. Including the show-up fee, subjects on average earned EURO 13 in EU, EURO 7 (RMB 57) in CHINA LOW and EURO 37 (RMB 296) in CHINA HIGH. The stakes in HIGH were rather substantial. According to the official statistical data[10], the monthly net income in urban Chengdu in 2002 was about EURO 93 (748 RMB), and for rural Chengdu it was EURO 35 (281 RMB). As take authorities' payoffs in CHINA HIGH ranged from 330 to 574 RMB, they earned between 44% and 77% of the urban and between 117% and 204% of the monthly rural net income.[11] The whole experiment took about 75 minutes in EU and 110 minutes in China[12].

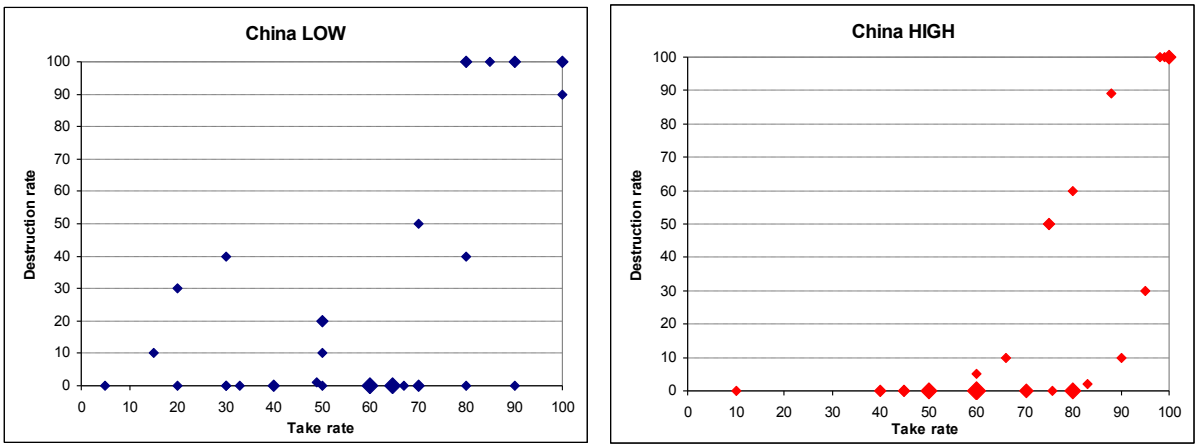
3. Results

In this section, we first present the behavioural results concerning take rates and destruction rates (3.1). Then, we go into experienced emotions (3.2) and their mediating role between taking and destroying (3.3). Finally, we discuss cross-cultural differences between China and EU (3.4).

3.1. Behaviour: take rates and destruction rates

We first look at behaviour in CHINA LOW and CHINA HIGH. A summary of the data on take and destruction rates is given in Table A1 in the Appendix. Figure 1 shows a scatter plot of take and destruction rates in the two treatments.

Figure 1: Take rates and destruction rates in CHINA LOW and CHINA HIGH



Note: The size of symbols is proportional to the underlying number of observations.

Overall, there appears to be quite some variation in behaviour. In CHINA LOW, take rates range from 5% to 100%, with an average rate of 59%. The median rate equals 63%. The average take rate in CHINA HIGH is 69%, about 10 percentage points higher than in CHINA LOW. The median is

[10] C.f. www.cdstats.chengdu.gov.cn.

[11] Responders were paid between 30 to 300 RMB. They earned from 4% to 40% of the urban and from 11% to 110% of the monthly rural net income.

[12] For each treatment in China, we ran only one session with 72 subjects. It, therefore, took longer than in EU to individually answer participants' questions and check the exercises, to collect and distribute take authorities' and responders' decisions to their counterparts, and to have the subjects fill in the final questionnaires.

70%. A Mann-Whitney U-test and a Kolmogorov-Smirnov test render no significant difference in take rates ($p = 0.12$ and $p = 0.38$, respectively. Note that throughout the paper we use two-tailed tests if not denoted otherwise). A t- test shows weakly significantly higher take rates in CHINA HIGH ($p = 0.08$).

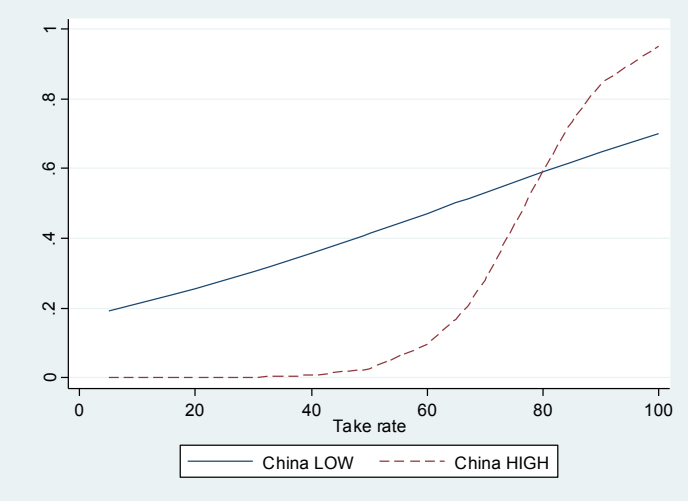
In both CHINA LOW and CHINA HIGH, destruction rates d range from 0% to 100%. Note that the fraction of responders who destroy (part of) their endowment is considerable, amounting to 47% in CHINA LOW and 39% in CHINA HIGH. Furthermore, 53% of the destroyers in CHINA LOW choose to destroy 50% and more; in CHINA HIGH this ratio is even higher at 64%. Clearly, neither take authorities nor responders behave according to the standard economic model which predicts to take nearly everything and to destroy nothing.

In CHINA LOW, responders on average destroy 28% of their endowment, while in CHINA HIGH they destroy about 6 percentage points less (22%). The median destruction rate is zero in both treatments. The difference in destruction rates is not significant (Mann-Whitney test, $p = 0.47$, t- test, $p=0.54$)**.** In line with the high stakes literature discussed in the Introduction, the variance in CHINA LOW is larger than in CHINA HIGH for both the take rate (661.05 vs. 436.15) and the destruction rate (1,637.39 vs. 1,417.27).

Result 1: *Overall, there is no evidence that take and destruction rates differ between CHINA LOW and CHINA HIGH.*

To assess the relation between the take rate and the probability of destruction we run an ordered logit regression with destruction as the dependent and the take rate t as the independent variable. It turns out that t has a positive and highly significant impact on destruction. The coefficients for t are significantly different between CHINA LOW and HIGH ($p < 0.01$). This also holds for the intercept dummy ($p < 0.01$). Figure 2 shows this relationship graphically. For low and intermediate take rates, the destruction probability is higher in CHINA LOW than in CHINA HIGH. Noticeably, in the latter the probability of destroying is zero for take rates up to 40%. The take rate's marginal effect on destruction becomes larger in CHINA HIGH relative to CHINA LOW when the take rate is larger than 60%. At a take rate of around 80%, the destruction probability in CHINA HIGH gets higher than in CHINA LOW.

Figure 2: Take rates and probability of destruction in CHINA LOW and CHINA HIGH



Result 2: *The probability of destruction differs between CHINA LOW and CHINA HIGH. Specifically, for take rates lower than 80% the probability of destruction is lower in CHINA HIGH than in CHINA LOW; for take rates above 80% the opposite holds.*

Previous research on the power-to-take game found that expectations, in particular the violation of expectations, matters for destruction. Responders whose expectations regarding the take rate turned out to be optimistic typically destroyed part or all of their income (see Bosman and van Winden 2002, and Bosman et al. 2005, 2006). The idea behind this mechanism is that frustrated expectations, which may be related to a social norm, motivate a responder to punish the take authority. Surprisingly, in CHINA LOW and HIGH expectations do not play any significant role for destruction. When expectations are included in the above-mentioned ordered logit model, they turned out to be insignificant. This holds for both the expected take rate as well as the difference between the take and expected take rate. Possibly, the weight attached to expectations or social norms relating to what constitutes a reasonable (fair) take rate differs between China and Europe where previous power-to-take experiments were run[13] (see also Section 3.4 on cross-cultural differences).

3.2 Experienced emotions

The first two columns in Table A2 show the intensity scores of experienced emotions. Anger and irritation are prominent in both CHINA LOW and HIGH. Sadness, envy and fear rank higher in CHINA HIGH than in CHINA LOW. High stakes trigger stronger emotions as, except for surprise, average intensities are higher in CHINA HIGH than in CHINA LOW (binomial test, $p = 0.04$ for all emotions; $p = 0.02$ for negative emotions only).

We next look at the relation between take rate and experienced emotion. For each emotion, we estimated an ordered logit model, with emotion as the dependent variable and the take rate as the explanatory variable. The intensity of negative (positive) emotions is positively (negatively) related to the take rate (Table A3). We found the same set of positive and negative emotions to be significant in CHINA LOW and CHINA HIGH. Also the estimated coefficients are very similar. We

[13] Chinese may have lower trust than Westerners in what may happen (for explanations that may apply see e.g. Hsu 1981, Bond and Hwang 1986, Leung 1996, Hofstede 2001, Nisbett et al. 2001, Nisbett and Norenzayan 2002).

cannot reject the hypothesis that coefficients for the shared negative emotions are the same. The coefficients for joy differ marginally ($p = 0.052$), suggesting that when the stakes are high the negative impact of t on experienced joy is higher.

When destruction is regressed on emotion, anger-type emotions and joy are significant in both treatments (Table A4). Note that the (negative) coefficient of joy is significantly larger in CHINA HIGH ($p < 0.05$, Chi2 test), which suggests that responders in CHINA HIGH react more strongly to self-reported changes in joy than those in CHINA LOW. Contempt appears to be important for destruction in CHINA HIGH but not in CHINA LOW, where instead irritation (anger) and fear are influential. Apparently, when stakes get higher responders become less motivated by fear and irritation and more by contempt.

Result 3: *High monetary incentives generate stronger emotions experienced by the responder. Anger and joy appear to be important for destruction in both CHINA LOW and HIGH. The take rate triggers a similar set of emotions that are of importance for destruction.*

3.3 Emotions are mediators

A key question regarding the role of emotions is whether the impact of the take rate on destruction is *mediated* by emotions. And, if so, whether the association between take rate and destruction can be completely accounted for by the mediating emotions or leaves a role for the take rate as such.

Mediation of the impact of t on d via emotions requires that the following conditions hold (see e.g. MacKinnon et al. 2007): (i) t influences d; (ii) emotions influence d; (iii) t influences emotions; (iv) when both emotions and t are included in the regression the coefficient of t loses significance and impact. If in (iv) the coefficient of t remains significant there is so-called partial mediation. In the previous subsections we have already provided evidence satisfying the conditions (i) – (iii). Therefore, we will now concentrate on the remaining condition (iv).

As a first step, we create an index that captures the aggregated impact of emotions on destruction. To this end, we generate an Emotion Aggregate (EA) for each experimental treatment composed of the emotions that showed a significant influence on destruction (see table A3), weighted by their estimated impact. Not surprisingly, we find a clear positive correlation between EA and t (Spearman coefficient: China LOW 0.53, China HIGH 0.66; both significant at $p < 0.01$) as well as EA and d (0.53 and 0.71, respectively, both significant at $p<0.01$).

To explore the mediating role of EA, an ordered logit model using the pooled data is estimated with destruction again as the dependent variable and t and EA as explanatory variables. In addition, two other variables are added to capture the possible effect of higher monetary stakes (a dummy which is 1 for HIGH; zero otherwise) and the interaction term between this dummy and t.

Table 2: Ordered logit model with pooled data (n=72)

D	Coeff.	Std. Error	Z	P>|z|	[95% Conf.	Interval]
EA	1.185	0.303	3.91	0.000	0.591	1.779
CHINA HIGH (=1)	-6.937	2.803	-2.47	0.013	-12.430	-1.443
CHINA HIGH*t	0.106	0.034	3.16	0.002	0.040	0.172

We have investigated various specifications of this model. It turns out that the best-fitted model includes EA, a dummy for stake, and the interaction term dummy stake*take rate.[14] In the model emotions partially mediate destruction, i.e. also the monetary incentives matter. When stakes are high there is initially less destruction but when the take rate increases destruction also increases. These results do not change when only take rates higher than or equal to 50% are used in estimating the model.[15] We, thus, find that condition (iv) is partially fulfilled while conditions (i) – (iii) are satisfied.

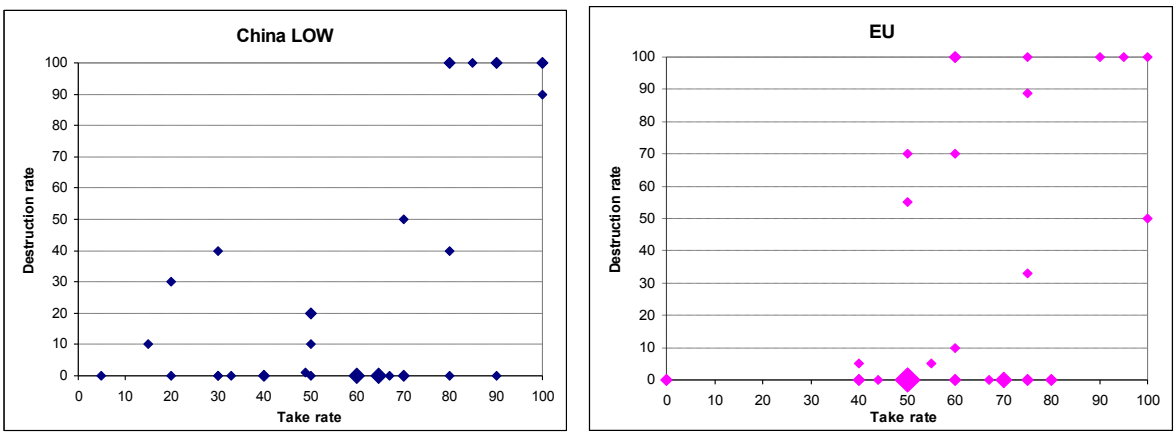
Result 4: *Emotions captured by the EA-index fully mediate destruction in China Low, and partially so in CHINA HIGH.*

An explanation of this result is that when the monetary incentives are high, responders have more *behavioural control* over their actions. Such control involves emotion regulation, which "refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions" (Gross 1998, p. 275). A distinction can be made between behavioural and cognitive regulation. The first relates to suppressing expressive behaviour or actions, whereas the latter is about attending to or interpreting emotion-eliciting situations in ways that limit emotional responses. Note that behavioural regulation of negative emotions might limit expressive action of the responder, here destruction, but does not neutralize the unpleasant experience of emotion, as is observed in our data.

3.4 Cross-cultural differences

The experiment in China offers the opportunity to explore whether behaviour and emotions differ between our Chinese and the two Western subject pools. As noted before, previous experiments on the power-to-take game were run in Western countries. We have compared the data from Bosman et al. (2005) – conducted in Austria and The Netherlands and denoted as EU – with CHINA LOW where stakes are comparable in size.

Figure 3: Take rates and destruction rates in CHINA LOW and EU



Note: The size of symbols is proportional to the underlying number of observations. EU data are from Bosman et al. (2005).

[14] If the model includes both the take rate and EA, note that the former is not significant; not surprisingly, the model with EA has a higher pseudo R2 than the model with only the take rate (0.17 versus 0.22).
[15] The same holds for a take-rate cut-off point of 80% or 70% .

In treatment EU the range of take rates is similar as in CHINA LOW, going from 0% to 100%. The average take rate in EU is 60% (median: 60%). There is no evidence that the take rates differ between CHINA LOW and EU (p = 0.98, Mann-Whitney U-test).[16] Although the distributions of take rates are similar, the rates in EU are more clustered around 50%. In fact, 27.5% of the take authorities in EU choose a rate of exactly 50% while in China the corresponding figure is 11% only.

In both CHINA LOW and EU, destruction rates d range from 0% to 100%. In CHINA LOW, responders on average destroy 28% of their endowment. The median destruction rate is zero. In EU, average destruction is somewhat lower at 25% (median: 0%). The difference in destruction rates is not significant (p = 0.475, Mann-Whitney U-test; p=0.7, t-test). An ordered logit regression with destruction as the dependent and the take rate as the independent variable shows that the impact of the take rate is significant but does not differ between EU and CHINA LOW (p = 0.60, Chi2 test).

Result 5: *Overall, there is no evidence that take and destruction rates differ between CHINA LOW and EU.*

The first and third column in Table A2 show the intensity scores of experienced emotions, ranked from high to low intensity. Overall, the ranking of emotions is similar in CHINA LOW and EU. Envy, however, appears to be somewhat of an exception. It is ranked relatively high in EU but low in China. Anger, irritation, surprise and contempt are prominent in both regions. Fear and joy score higher in CHINA LOW than in EU. Fear is the only emotion that has been experienced more strongly in CHINA LOW than in EU. The intensity of (negative) emotions appears to be weakly significantly lower in China than in EU (binomial test, p = 0.09 (0.06) for all (negative) emotions).

We next look at the relation between the take rate and experienced emotions. For each emotion, we estimated an ordered logit model, with emotion as the dependent variable and the take rate as the explanatory variable. The intensity of negative (positive) emotions is positively (negatively) related to the take rate. We found the same set of emotions, related to anger and joy, to be significant in both China and EU. Moreover, the estimated coefficients are very similar. In fact, we cannot reject the hypothesis that coefficients are the same in China and EU.

It further turns out that these anger-type emotions and joy are also important for destruction, in CHINA LOW as well as EU. Not surprisingly, while anger has a positive impact, for joy the reverse holds.[17] Mediation analysis shows that in both EU and CHINA LOW emotions fully mediate destruction.[18]

Result 6: *The intensity of negative (positive) emotions is positively (negatively) related to the take rate, in both CHINA LOW and EU. The same set of emotions, concerning anger and joy, is related to the take rate in both subject pools. In CHINA LOW as well as in EU, a similar set of emotions is important for destruction. Emotions, furthermore, fully mediate destruction.*

[16] A t-test shows a similar picture (p=0.93). Furthermore, a Kolmogorov-Smirnov-test shows that we cannot reject the hypothesis that the distributions of take rates are the same (p = 0.54).

[17] In both regions, anger and irritation are correlated suggesting that these emotions refer to a similar underlying emotion.

[18] The EA-index shows a significant impact in each region but not the take rate. We cannot reject the hypothesis that the estimated coefficients regarding EA are the same in both regions (p = 0.16, Chi2 test).

4. Conclusion

We have studied the impact of emotions in a power-to-take experiment with small and large monetary incentives in China. We also compared behaviour and experienced emotions between subjects in China and Europe (Netherlands and Austria).

Our results show that subtle interactions between monetary incentives and behaviour have to be taken into account. Even though overall behaviour in the two treatments in China is similar and we find no evidence that average (median) take rates and destruction rates differ – the reaction function of the responder appears to be contingent on monetary incentives: for take rates lower than (above) 80% the probability of destruction is lower (higher) in CHINA HIGH than in CHINA LOW. The explanation we offer is that larger incentives increase behavioural control related to emotion regulation, which makes the responder more restrained when it comes to destroying his or her endowment, but only up to a certain point (a take rate of 80%). Beyond that point this behavioural control seems to wear out, and a more emotional action tendency is followed. The implication of this result is that increasing monetary incentives can lead to less dispersion in behaviour, as we in fact observed comparing the variance in take rates and in destruction rates in CHINA HIGH and CHINA LOW. However, apparently, larger stakes need not make responders more 'rational' in the sense that they (on average) destroy less, as suggested by the findings of Oosterbeek et al. (2004) for ultimatum games and Rabin's (1993) reciprocity model.

Furthermore, our data show that cross-cultural differences in behaviour and experienced emotions appear to be small in case of the power-to-take game. We find similar behaviour in both China and Europe and similar emotions mediate the impact of the take rate on destruction. There is only weak support that overall the Chinese experience (negative) emotions less intensely compared to Europeans. All in all, we find evidence that behaviour and emotions in the power-to-take game are fairly universal across subject pools in China and the EU.

What makes the evidence presented here of particular potential relevance is that the power-to-take game captures in a simple way a wide variety of economic situations where one agent can appropriate resources of another agent. Taxation is an obvious case in point, but one can also think of monopoly pricing affecting the division of economic surpluses, or principal-agent relationships where incentive schemes may affect effort levels (see Bosman and van Winden 2002, Bosman et al. 2005).

References

Andersen. B.S., Ertac¸ S., Gneezy, U., Hoffman, M., and List, J.A. (2011). 'Stakes matter in ultimatum games', *American Economic Review,* vol. 101, pp. 3427–3439.

Andreoni, J., Castillo, M., and Petrie, R. (2003). 'What do bargainers' preferences look like? Experiments with a convex ultimatum game', *American Economic Review*, 93, pp. 672-685.

Ben-Shakhar, G., Bornstein, G., Hopfensitz, A., and van Winden, F. (2007). 'Reciprocity and emotions in bargaining using physiological and self-report measures', *Journal of Economic Psychology*, vol. 28(3), pp. 314–323.

Bond, M. H., and Hwang, K.-K. (1986). The social psychology of Chinese people, in: Bond, M. H. (ed.): *The Psychology of Chinese People*, Oxford: Oxford University Press, pp. 211-266.

Bosman, R. and F. van Winden (2002). 'Emotional hazard in a power-to-take game experiment', *The Economic Journal*, vol. 112, pp. 146-69.

Bosman, R., H. Hennig-Schmidt and F. van Winden (2006). 'Exploring group decision making in a power-to-take experiment', *Experimental Economics*, vol. 9, pp. 35 – 51.

Bosman, R., Sutter, M. and van Winden, F. (2005). 'The impact of real effort and emotions in the power-to-take game', *Journal of Economic Psychology,* vol. 26, pp. 407-427.

Camerer, C.F. (2003). *Behavioral Game Theory*. Princeton: Princeton University Press.

Camerer, C.F., and Hogarth, R. M. (1999). 'The effects of financial incentives in economics experiments: A review and capital-production-labor framework', *Journal of Risk and Uncertainty*, vol. 18, pp. 7-42.

Carpenter J., Verhoogen, E., and Burks, S. (2005). 'The effect of stakes in distribution experiments, *Economics Letters,* 86, pp. 393–398.

Engel C (2011) Dictator games. A meta study. *Experimental Economics*, vol. 14, pp. 583–610.

Galeotti, F. (2013). An experiment of waiting time and punishing behavior, *Economics Bulletin*, vol. 33(2), pp. 1383–1389.

Galeotti, F. (2015). 'Do negative emotions explain punishment in power-to-take game experiments?' *Journal of Economic Psychology,* 49, pp. 1–14

Gneezy, U., and Rustichini, A. (2000). 'Pay enough or don't pay at all', *Quarterly Journal of Economics*, vol. 115, pp. 791–810.

Gross, J.J. (1998). 'The emerging field of emotion regulation: an integrative review', *Review of General Psychology*, vol. 2, pp. 271–299.

Grosskopf, B., López-Vargas, K. (2014). 'On the demand for expressing emotions', Working Paper, Exeter: University of Exeter.

Hertwig, R., and Ortmann, A. (2001). 'Experimental practices in economics: A methodological challenge for psychologists?' *Behavioral and Brain Sciences*, vol. 24, pp. 383–403.

Hofstede G. (2001). *Culture's Consequences. Comparing Values, Behaviors, Institutions, and Organizations across Nations.* Second Edition. Thousand Oaks, California : Sage Publications, Inc.

Hsu, F. L. K. (1981). *Americans and Chinese: Passage to differences* (Third Edition). Honolulu: University of Hawaii Press.

Jenkins, G. D., Jr., Mitra, A., Gupta, N., and Shaw, J. D. (1998). 'Are financial incentives related to performance? A meta-analytic review of empirical research', *Journal of Applied Psychology,* vol. 83, pp. 777-787.

Johansson-Stenman, O., Mahmud, Mi., and Martinsson, P. (2005). 'Does stake size matter in trust games?', *Economics Letters,* vol. 88, pp. 365–369.

Kocher, M., Martinsson, P., and Visser, M. (2008). 'Does stake size matter for cooperation and punishment?', *Economics Letters*, vol. 99, pp. 508–511.

Leung, K. (1996). The role of beliefs in Chinese culture, in: Bond, M. H. (ed.) *Handbook of Chinese Psychology*. Oxford, New York: Oxford University Press, pp. 247-262.

List J.A., and Cherry, T. (2008). 'Examining the role of fairness in high stakes allocation decisions', *Journal of Economic Behavior and Organization*, vol. 65, pp. 1–8.

MacKinnon, D. P., Fairchild, A. J. and Fritz, M.S. (2007). 'Mediation analysis', *Annual Review of Psychology*, vol. 58, pp. 593–614

Matsumoto, D. (1989). 'Cultural influences on the perception of emotion', *Journal of Cross-Cultural Psychology*, vol. 20, pp. 92-105.

Mesquita, B., and Frijda, N. H. (1992). Cultural variations in emotions: A review, *Psychological Bulletin*, vol. 112, pp. 179-204.

Munier B., and Zaharia, C. (2002). 'High stakes and acceptance behavior in ultimatum bargaining', *Theory and Decision*, vol. 53, pp. 187–207.

Nisbett, R. E., Peng, K., Choi, I., and Norenzayan, A. (2001). 'Culture and systems of thought: Holistic vs. analytic cognition', *Psychological Review* vol. 108, pp. 291-310.

Nisbett, R.E., and Norenzayan, A. (2002). Culture and cognition, in: Pashler, H., and Medin, D. L., (eds.), *Stevens Handbook of Experimental Psychology: Cognition* (Third Edition, vol. 2) New York: John Wiley & Sons, pp. 561-597.

Novakova, J., and Flegr, J. (2013). 'How much is our fairness worth? The effect of raising stakes on offers by proposers and minimum acceptable offers in dictator and ultimatum games, PLoS one, vol. 8, e60966DOI: 10.1371/journal.pone.0060966.

Oosterbeek, H., Sloof, R., and de Kuilen, G. (2004). 'Cultural differences in ultimatum game experiments: Evidence from a meta-analysis', *Experimental Economics,* vol. 7, pp. 171-188.

Rabin, M. (1993). 'Incorporating fairness into game theory and economics', *American Economic Review*, vol. 83, pp. 1281–1302.

Reuben, E., and van Winden, F. (2008). 'Social ties and coordination on negative reciprocity: The role of affect', *Journal of Public Economics*, vol. 92(1–2), pp. 34–53.

Reuben, E., and van Winden, F. (2010). 'Fairness perceptions and prosocial emotions in the power to take game', *Journal of Economic Psychology*, vol. 31(6), pp. 908–922.

Russell, J.A., and Yik, M.S.M (1996). 'Emotions among the Chinese', in: Bond, M. H. (ed.) *Handbook of Chinese Psychology*. Oxford, New York: Oxford University Press, pp. 166-188.

Shaver, P.R., Wu, S., and Schwartz, J.C. (1992). 'Cross-cultural similarities and differences in emotion and representation. A prototype approach', in: M.S. Clark (ed.): *Review of Personality and Social Psychology,* vol. 13: Emotion, Newbury Park, CA: Sage, pp. 175-212

Sutter, M., Bosman, R., Kocher, M. G., and van Winden, F. (2009). 'Gender pairing and bargaining – beware the same sex!', *Experimental Economics*, vol. 12(3), pp. 318–331.

van Winden, Frans (2015). 'Political economy with affect: On the role of emotions and relationships in political economics', *European Journal of Political Economy,* vol. 40, pp. 298-311.

Wu, D.Y.H. (1996). 'Chinese childhood socialization', in: Bond, M. H. (ed.) *Handbook of Chinese Psychology*. Oxford, New York: Oxford University Press, pp. 143-154

Yang, K.-S. (1986). 'Chinese personality and its change', in: Bond, Michael Harris (ed.): *The Psychology of Chinese People*, Oxford: Oxford University Press, pp. 106-170.

Appendix A: Tables

Table A1: Summary of behavioural data

	EU					CHINA LOW			CHINA HIGH		
Case (#)	*t* (%)	*d* (%)	Case (#)	*t* (%)	*d* (%)	Case (#)	*t* (%)	*d* (%)	Case (#)	*t* (%)	*d* (%)
1	0	0	*21*	0	0	*41*	5	0	*77*	10	0
2	50	0	*22*	40	0	*42*	15	10	*78*	40	0
3	50	0	*23*	40	5	*23*	20	0	*79*	40	0
4	50	0	*24*	40	0	*44*	20	30	*80*	45	0
5	50	0	*25*	44	0	*45*	30	40	*81*	45	0
6	50	55	*26*	50	0	*46*	30	0	*82*	50	0
7	50	0	*27*	50	0	*47*	30	0	*83*	50	0
8	50	0	*28*	50	70	*48*	33	0	*84*	50	0
9	60	100	*29*	50	0	*49*	40	0	*85*	50	0
10	60	0	*30*	55	5	*50*	40	0	*86*	60	0
11	60	100	*31*	60	0	*51*	49	1	*87*	60	0
12	67	0	*32*	60	70	*52*	50	20	*88*	60	5
13	70	0	*33*	60	10	*53*	50	20	*89*	60	0
14	70	0	*34*	70	0	*54*	50	10	*90*	60	0
15	75	0	*35*	70	0	*55*	50	0	*91*	60	0
16	75	33	*36*	75	88.8	*56*	60	0	*92*	66	10
17	75	100	*37*	80	0	*57*	60	0	*93*	70	0
18	75	0	*38*	90	100	*58*	60	0	*94*	70	0
19	80	0	*39*	100	50	*59*	65	0	*95*	70	0
20	95	100	*40*	100	100	*60*	65	0	*96*	75	50
						61	65	0	*97*	75	50
						62	67	0	*98*	75	0
						63	70	0	*99*	80	0
						64	70	50	*100*	80	0
						65	70	0	*101*	80	0
						66	80	40	*102*	80	60
						67	80	100	*103*	80	0
						68	80	0	*103*	83	2
						69	80	100	*105*	88	89
						70	85	100	*106*	90	10
						71	90	100	*107*	95	30
						72	90	100	*108*	98	100
						73	90	0	*109*	99	100
						74	100	100	*110*	100	100
						75	100	100	*111*	100	100
						76	100	90	*112*	100	100
Mean				59.9	24.7		59.4	28.1		69.3	22.4
(s.d.)				(21.2)	(39.3)		(25.7)	(40.5)		(20.9)	(37.6)
Median				60.0	0		62.5	0		70	0

Note: Data of EU are taken from Bosman et al. (2005). E_{take}=E_{resp}=15 guilders/90 Schilling/30 (300) Chinese Yuan (RMB). t: take rate; d: part of E_{resp} destroyed by the responder; cases are ordered by the take rate. Cases 1-20 refer to Amsterdam, 21-40 to Innsbruck, 41 – 76 to CHINA LOW and 77-112 to CHINA HIGH. Numbers in parentheses are standard deviations.

Table A2: Ranking of averaged experienced emotions

CHINA LOW		CHINA HIGH		EU	
Emotion	Intensity	Emotion	Intensity	Emotion	Intensity
Surprise	3.14	Anger	3.58	Anger	3.88
Anger	2.89	Irritation	3.30	Irritation	3.58
Irritation	2.64	Sadness	3.19	Surprise	3.43
Contempt	2.61	Envy	3.17	Envy	3.18
Joy	2.58	Fear	2.97	Contempt	2.93
Sadness	2.28	Surprise	2.83	Sadness	2.33
Fear	2.17	Contempt	2.83	Joy	2.15
Envy	1.86	Joy	2.72	Fear	1.40
Shame	1.22	Shame	1.61	Shame	1.40

Table A3: Relation between take rate and responders' emotions

CHINA LOW		CHINA HIGH		EU	
Emotion	Coefficient of *t*	Emotion	Coefficient of *t*	Emotion	Coefficient of *t*
Irritation	0.05***	Irritation	0.04**	Irritation	0.03**
Anger	0.04***	Anger	0.05***	Anger	0.08***
Contempt	0.04***	Contempt	0.04**	Contempt	0.03*
Joy	-0.04***	Joy	-0.05***	Joy	-0.04***

Note: ordered logit estimation for each emotion; ***p<.01; **p<.05; *p<.10

Table A4: Relation between destruction and responders' emotions

CHINA LOW		CHINA HIGH		EU	
Emotion	Coefficient of *d*	Emotion	Coefficient of *d*	Emotion	Coefficient of *d*
Anger	0.27**	Happiness	-1.62**	Anger	0.46***
Irritation	0.42**	Contempt	0.42**	Contempt	0.43***
Joy	-0.43**	Joy	- 0.85***	Joy	-0.69*
Fear	-0.46**			Happiness	-1.7**

Note: ordered logit estimation for each emotion; ***p<.01; **p<.05; *p<.10

Appendix B: Instructions for treatment China LOW

Note: Text in [brackets] refers to treatment China HIGH, in {} to treatment EU. In [[double brackets]] clarifying notes are found not provided to participants.

Show-up fee
The show-up fee is 30 Yuan {Euro 4} for all participants in the experiment. You will receive the show-up fee, independently of the decisions taken in the experiment. The show-up fee is to be included in the calculation of your individual earnings at the end of the experiment.

Two phases of the experiment
The experiment consists of *two phases*. In phase 1, each participant A must make a decision whereas in phase 2, each participant B must make a decision. Every participant, be it A or B, makes only one decision. No other decisions will follow.

Phase 1: Participant A chooses a percentage
Each participant A will be paired with a participant B by letting each participant A draw an envelope. Each envelope among others contains a different code. By means of these codes, each participant A will be paired with just one participant B. Because of this procedure, participants A as well as participants B remain *anonymous*. **No other participant will find out during or after the experiment** with whom he or she is paired. In the envelope, you will also find a form with a ***black-framed*** block that must be filled in by participant A, and a ***gray-framed*** block that must be filled in by participant B (**see sample form**).

Each participant A and each participant B receives an endowment of 30 [300] Yuan {Euro 7}. In the ***black-framed*** block of participant A you will find the endowments of participant A and of participant B. Participant A must then choose a ***percentage*** and fill this in on the ***black-framed*** **block of the form**. This percentage determines how much of participant B's endowment of **30 [300] Yuan {Euro 7}** after phase 2 should be transferred to participant A. The percentage chosen by participant A must be an integer between 0 and 100 including these numbers.

After having filled in the form, each participant A must put it back into the envelope. We will then collect the envelopes and transfer them to the participant B that is paired with the respective participant A.

Phase 2: Participant B chooses a percentage
In this phase, participant B must fill in on the form which *percentage* of his/her endowment should be **destroyed**. ***What is left after destruction is participant B's remaining endowment***. The percentage chosen by participant B must be an integer between 0 and 100 including these numbers. The transfer from participant B to participant A will be based on the endowment of participant B that is left after destruction, i.e. ***participant B's remaining endowment***. I will clarify the above terms by means of an example shortly. {The previous sentence was not provided in EU}. Participant B must transfer the percentage of his/her remaining endowment to participant A that was chosen by participant A.

After having filled the percentage of **destruction into the *grey-framed* block** participant B has to put the form back into the envelope. We then will collect the envelopes and return them to the paired participant A for his/her information.

Example for determining the individual total earnings at the end of the experiment
[[In the following we give examples for CHINA LOW only.]] An example is going to clarify the procedure. Remember that each participant gets an endowment of 30 Yuan. Suppose that in the first phase of the experiment, participant A decides that 60% of participant B's total earnings shall be

transferred to participant A. In the second phase, participant B can destroy part or all of his/her endowment. Suppose participant B decides to destroy 0%. The transfer from participant B to participant A amounts to 18 Yuan (60% of 30 Yuan).

The **total earnings** of participant B at the end of the experiment are calculated as follows:

Show up fee		**30 Yuan**
+ Remaining endowment	**(100% - 0%) * 30 Yuan = 30 Yuan**	**+ 30 Yuan**
– Transfer	**60% * (100% - 0%) * 30Yuan = 18 Yuan**	**– 18 Yuan**
Total earnings		***42 Yuan***

The **total earnings** of participant A at the end of the experiment are calculated as follows:

Show up fee		**30 Yuan**
+ Initial endowment		**+ 30 Yuan**
+ Transfer	**60% * (100% - 0%) * 30 Yuan = 18 Yuan**	**+ 18 Yuan**
Total earnings		***78 Yuan***

Suppose now that participant B in the above example decided not to destroy 0% but 50% of his/her own endowment. The individual total earnings of *participant B* at the end of the experiment are now calculated as follows:

Show up fee		**30 Yuan**
+ Remaining endowment	**(100% - 50%) * 30 Yuan = 15 Yuan**	**+ 15 Yuan**
– Transfer	**60% * (100% - 50%) * 30 Yuan = 9 Yuan**	**– 9 Yuan**
Total earnings		***36 Yuan***

The **total earnings** of participant A at the end of the experiment are now calculated as follows:

Show up fee		**30 Yuan**
+ Initial endowment		**+ 30 Yuan**
+ Transfer	**60% * (100% - 50%) * 30 Yuan = 9 Yuan**	**+ 9 Yuan**
Total earnings		***69 Yuan***

Further Information

Filling in the form

The decisions of both participant A and participant B are filled in on a form a sample of which you have been provided with. You must only use **the pens we gave you**. In case any other pen is used to fill in a form, this form will be invalid and you will receive no payment at the end of the experiment. If you want to make any calculations, please use the calculator **we gave you**.

Payment

After participant A has been informed on participant B's decision in phase 2, the envelope containing the form will be collected and brought to the cashier. **The cashier determines the payment of each participant with the help of the form and the codes that are linked to the seats**. **After having filled in some questionnaires** the participants will go one by one to receive their total earnings. The cashier is not present during the experiment. This procedure guarantees anonymity with regard to who earned what and also the experimenter cannot assign any earnings to specific participants. Please take the card indicating your seat number when you are being paid.

Exercises

In order to familiarize yourself with the experiment, we now ask you to complete two exercises. You will have to complete the form for a hypothetical situation and to calculate the corresponding total earnings. During the exercises, you are not matched with another participant. The total earnings from the exercises will *not* be paid to you. After having finished the exercises, you again will have the opportunity to ask questions. Then, the experiment will start.

Finally

We would like to stress again that the pairing of participants A with participants B is anonymous. You will neither during nor after the experiment find out with whom you are matched. In order to guarantee anonymity between participants A and B we will install a sight protection. Instructions will be available during the experiment. Please complete some short questionnaires during the experiment. **Please enter your seat number into each of the questionnaires. As we do not know which seat number is assigned to which participant we also guarantee anonymity with regard to the questionnaires**. At the end of the experiment please leave the room one by one and proceed to being paid.

Please stay quietly on your seat and do not communicate with other participants before you have left the room.

Decision Form

Code: …….

<u>Participant A</u> fills in this block:

Endowment participant A: 30 [300] Yuan {Euro 7}.

Endowment participant B: 30 [300] Yuan {Euro 7}.

I (participant A) decide that ……. % of the endowment of participant B will be transferred to me.

<u>Participant B</u> fills in this block:

I (participant B) destroy ……. % of my endowment.