Proactive or reactive? Experimental analysis of procedural preferences for redistribution

Serhiy Kandul[*][1] and Olexandr Nikolaychuk[†][2]

[1]Institute of Biomedical Ethics and Medical History, University of Zurich, Switzerland

[2]Faculty of Economics and Business Administration, Friedrich Schiller University Jena, Germany

Abstract

Everyday life produces many inequalities that both the disadvantaged and advantaged parties may be willing to reduce. Even in case of a general agreement on the level of redistribution, there need not be one on the procedure. We use a real-effort task to generate income inequality in pairs of participants and permit either the dictator or recipient to initiate a transfer in the context of a modified dictator game.

[*]serhiy.kandul@ibme.uzh.ch

[†]olexandr.nikolaychuk@uni-jena.de, corresponding author

We find that all recipients accept dictator transfers but not all
are willing to solicit for one, especially if other opportunities for re-
distribution are available. The dictators punish such solicitations by
lowering the transfer amount even if the recipients had their hand
forced. This punishment is not anticipated by the recipients, though.

Keywords: social preferences, procedural preferences, redistribution,
inequality, dictator game

JEL Codes: D31, D64, D91.

1 Introduction

The Internal Revenue Service for the U.S. federal government estimates that
more than a million of low to medium income households do not claim their
tax refunds from the Earned Income Tax Credit (EITC) program[1]. Perhaps
the most obvious explanation is that the recipients are not informed. How-
ever, as Bhargava & Manoli (2015) show, about half of eligible households
are in fact aware of their entitlement to EITC social benefits.

While it is conceivable that a considerable fraction of eligible and informed
individuals simply do not desire to reduce inequality, notwithstanding them
being at a disadvantage, we suspect that both recipients and contributors
to the social security system care not only about the level of redistribution
but also about the way of achieving it. In particular, one may experience
disutility from having to actively 'acquire' social benefits rather than having
an opportunity to 'receive' them.

---

[1]https://www.eitc.irs.gov/eitc-central/statistics-for-tax-returns-with-eitc/statistics-
for-tax-returns-with-eitc

This disutility can have both personal and social origins and has been discussed in the social welfare literature (Bhargava & Manoli, 2015; Li & Walker, 2017; Friedrichsen *et al.*, 2018). Our conjecture is that people would appear less accepting of income inequality were they offered financial aid instead of being required to initiate the redistribution process themselves. Or to put it differently, we suspect that one's preference over the level of redistribution may be separable from one's preference over the redistribution procedure.

This distinction goes beyond the financial context of course. In certain knowledge transfer scenarios, knowledge seekers are known to be held back by the prospect of 'losing face' or being viewed as incompetent (Hoffmann, 2008; Haas & Cummings, 2015). Although various psychological barriers have been suggested among factors impeding successful knowledge transfers within organizations, little is known as far as how these barriers relate to the act of transferring the knowledge as opposed to the act of initiating the transfer itself.

It would also be illuminating to know how providers respond to various redistribution protocols. Some may not like being asked to share in fact. Existing research shows that dictators avoid environments with social pressure to share (Lazear *et al.*, 2012; Greiner *et al.*, 2012) or effectively punish recipients requesting high transfers (Yamamori *et al.*, 2008; Andreoni & Rao, 2011). In the knowledge transfer context, some providers have been observed to hide information from their 'annoying' colleagues (Webster *et al.*, 2008).

As such, both the recipient and provider can have preferences over the redistribution procedure that are distinct from their preferences over the

3

level of redistribution. An important consequence of this distinction is that the parties may appear to 'disagree' on the appropriate level of redistribution due to a mismatch between their attitudes towards a particular redistribution procedure.

We test this proposition in a controlled laboratory experiment. First, we create income inequality by making the participants compete in a real-effort task. Then, we let them play a modified dictator game, where the winner is assigned dictatorship, and manipulate the ability of the recipient to initiate the monetary transfer. We also provide the recipients with an explicit choice as far as being able to initiate the redistribution and elicit their beliefs regarding the expected transfer.

Our main focus is on the relation between one's willingness to initiate a transfer and willingness to accept a transfer initiated by someone else. Or to put it differently, we want to investigate if one's preferences over the level of redistribution are separable from one's preferences over the redistribution procedure.

We find that both players differentiate between the redistribution procedures. Most recipients accept the transfer and are willing to initiate it if that is the only opportunity for redistribution yet a considerable fraction shy away from doing so if other options are available. The dictators share significantly more with reactive recipients even if it is not up to the recipient, which is in line with the dictators seeking to justify their self-centered interests. Despite the observed differences in redistribution outcomes, the recipients do not expect the dictators to be affected by our manipulation.

The rest of this paper is organized as follows. Section 2 provides an

4

overview of the related literature. Section 3 describes the experimental de- ₈₈

sign. Section 4 presents the results. Section 5 concludes. ₈₉

2   Related Literature

Experimental literature on other-regarding preferences shows that people

generally dislike income inequality (Fehr & Schmidt, 1999; Ockenfels & Bolton,

2000) and the desire to reduce it is often used as an explanation for sharing

with a stranger in the dictator game (see Engel (2011) for a meta study).

Interestingly, however, people do not seek to reduce inequality brought about

by effort (Cherry *et al.*, 2002) or as a result of a fair competition (Fershtman

et al., 2012).

We suggest that one's preferences for redistribution can be affected not

only by the source of inequality but also by the properties of the associated

redistribution process. As perhaps the most important such property, we

distinguish between the dictator and recipient being the first mover as far as

bringing about the transfer between the two.

Traditionally, the recipient is considered as either a passive or active *sec-*

ond mover (dictator or ultimatum games, respectively) where it is the dicta-

tor who initiates the redistribution process if at all. In contrast, many real

life scenarios require the recipient to be the one to apply for redistribution.

Even though the recipient usually cannot determine the transfer amount,

one tends to act as a *first* mover. Our conjecture is that the general attitude

towards redistribution (and consequently, the amount transferred) may be

affected by which party gets to *initiate* the process.

5

A typical way of enabling the recipient to initiate the redistribution process is by way of communicating with the dictator. In dictator games with pre-play communication, the recipient can either speak freely (Greiner *et al.*, 2012) or send basic numerical requests indicating the desired transfer amount (Yamamori *et al.*, 2008; Andreoni & Rao, 2011). This literature shows that communication can have both positive and negative effects on the resulting level of redistribution. More importantly, the transfer amount appears to be influenced both by *what* is communicated (e.g., requested amount) and by *how* it is communicated (e.g., one- or two-way communication).

Although studies of pre-play communication provide important insights, there is more to learn about the recipient role as far as actually initiating the transfer. In a typical setting, the redistribution process is still very much under the control of the dictator despite the possibility for communication. In addition, it is not trivial to draw general conclusions in light of considerable variation in message realization (e.g., particular wording used) and recipient's aptitude to use the communication opportunity strategically.

As such, we construct situations where the recipient can initiate the redistribution process without communicating anything of substance to the dictator[2]. As a *first* mover in our setup, the recipient can choose whether or not to initiate a transfer and only if that happens to be the case, can the dictator determine the amount. This design enables the recipient to initiate the redistribution process while ruling out potential confounding effects of any particular feature of a given communication protocol.

---

[2]Strictly speaking, there may be signaling between the two depending on the game but there is no communicating, e.g., the desired transfer amount.

To this end, when the recipient rejects an unknown transfer or decides not to initiate one in our setup, there are no adverse payoff consequences for the dictator. This is in contrast to impunity games (Güth & Huck, 1997; Kritikos & Tan, 2016) or ultimatum games with unknown offers (Gehrig *et al.*, 2007; Güth & Kirchkamp, 2012) where the overall pie size shrinks whenever the recipient exercises their veto power.

In a separate treatment, we provide the recipient with an explicit choice between two redistribution protocols: (i) where one can initiate the redistribution process as the *first* mover; and (ii) where one can accept an unknown transfer as the *second* mover. We thus contribute to a broader literature on procedural preferences (Sen, 1995; Frey *et al.*, 2004; Frey & Stutzer, 2005) where the key proposition is that people derive utility not only from outcomes but also from procedures that bring those about.

3   Experimental Design

The experiment is comprised of two parts: a real-effort task and a variation of the dictator game. The instructions for the second part are only given to the participants upon completion of the real-effort task (see Supplementary Information).

In the first part of the experiment, the participants are randomly matched in pairs to compete in the slider task (Gill & Prowse, 2012). They have four minutes to place as many sliders as possible exactly in the middle of their respective tracks and the better performing contestant receives 10 EUR while the other receives 5 EUR. The participants are informed about the outcome

of the competition but not about the absolute performance scores[3]. ₁₅₇

The motivation behind the competition in the form of a real-effort task ₁₅₈ is twofold. First, income is earned and not given for free in real life. Second, ₁₅₉ winning a fair competition grants entitlement and as such, allows for some ₁₆₀ moral ambiguity as far as one's attitude towards the resulting inequality ₁₆₁ (Kandul & Nikolaychuk, 2023). ₁₆₂

In the second part, both participants have an opportunity to reduce the ₁₆₃ inequality in a number of ways. Each is a variation of the dictator game and ₁₆₄ constitutes a separate treatment condition (see Fig. 1). ₁₆₅

Fig. 1 Overview of experimental conditions. Each condition preceded by a slider task; dictator transfer denoted as t, recipient actions denoted as {*accept*; *reject*; *random*}, final payoffs in parentheses (dictator; recipient)
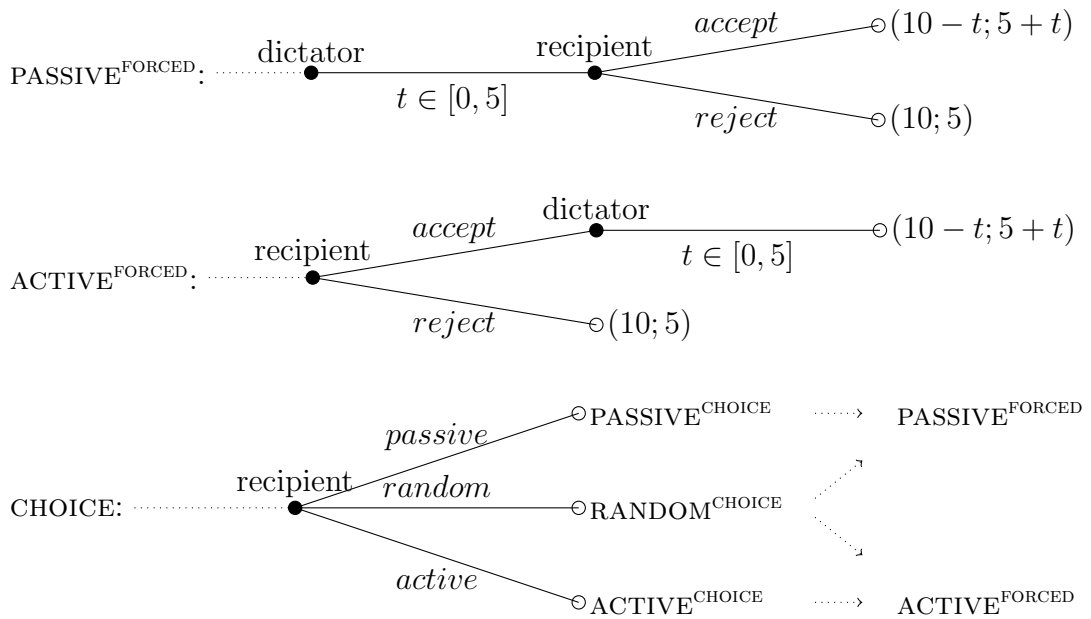
Treatment PASSIVE^FORCED is similar to the ultimatum game in that the ₁₆₆ dictator can send any amount between 0 and 5 EUR to the recipient who ₁₆₇

---

[3]Ties broken randomly.

in turn, can either accept or reject the transfer. In our setup, however, the recipient makes this choice without knowing the actual amount and rejecting the transfer renders it invalid without any adverse payoff consequences for the dictator[4].

In treatment ACTIVE^FORCED, it is the recipient who is to initiate the redistribution process. The dictator is informed about this choice and can decide how much to transfer only if the recipient wants it. Another way to describe this treatment would be to say that the recipient can decide whether or not they would like to play a standard dictator game.

In treatment CHOICE, the recipient can self-select into either of the two conditions (hereafter referred to as 'PASSIVE^CHOICE' and 'ACTIVE^CHOICE') or leave that decision to chance (hereafter referred to as 'RANDOM^CHOICE'). The dictator is not informed about the recipient's decision. Once the resulting condition has been determined, the game proceeds accordingly.

Before the payoffs are realized, we elicit the recipients' beliefs about the expected transfer by asking them to guess the average amount sent by all dictators in their experimental session (not incentivized).

4 Results

The experiment was conducted with 188 participants at the economics laboratory of the Friedrich Schiller University Jena. It was programmed in z-Tree (Fischbacher, 2007) and the recruitment was done with the help of ORSEE

---

[4]This feature keeps our setup efficiency neutral, makes this treatment condition more comparable with the others and also distinguishes it from impunity games, where rejecting the transfer reduces the payoff of the dictator (Güth & Huck, 1997).

(Greiner, 2015).

The participants interacted with each other using computer terminals preserving their anonymity and no repeat participation was allowed. There were 12 sessions in total, under 30 minutes each, and the average payment was 7.5 EUR. The collected sample includes 80 females and 25 Business Administration and Economics majors. The average age is 26.5 years (SD 6.4) and the average laboratory experience is 3.1 experiments (SD 1.5).

We first analyze the behavior of the recipients and then compare the dictator transfers across the treatment conditions. The general results are summarized in Table 1.

Table 1 General results

Treatment condition	Recipient decision in CHOICE	Number of pairs	Transfer accepted or initiated	Expected transfer in EUR, mean (s.e.)	Observed transfer in EUR, mean (s.e.)
PASSIVE[FORCED]		37	37	1.04 (0.16)	0.85 (0.17)
ACTIVE[FORCED]		31	29	1.03 (0.20)	0.52 (0.16)
PASSIVE[CHOICE]	5	8[†]	8	0.95 (0.44)[‡]	0.62 (0.34)
ACTIVE[CHOICE]	15	18[†]	18	0.93 (0.21)	0.32 (0.16)
RANDOM[CHOICE]	6				

[†] including the realized assignments from RANDOM[CHOICE];
[‡] pooled with RANDOM[CHOICE].

4.1 Recipient behavior and expectations

As one can see, every single one recipient accepted the transfer (37 out of 37 in PASSIVE[FORCED] and 8 out of 8 in PASSIVE[CHOICE]), which leads to the first result.

10

Result 1 *Given the opportunity, all recipients are willing to accept redistribution*[5]

On the other hand, not all recipients were willing to initiate the redistribution process. Out of 31 recipients in treatment ACTIVE^FORCED, 2 decided not to play the dictator game, and only 15 out of 26 self-selected into the ACTIVE^CHOICE condition in treatment CHOICE .

Result 2 *Not all recipients are willing to initiate the redistribution process*[5]

In addition, there is a difference between effectively being forced to initiate the transfer in treatment ACTIVE^FORCED and deciding to solicit for one by self-selecting into condition ACTIVE^CHOICE as the difference between the associated fractions (i.e., 29/31 versus 15/26) is statistically significant at the 1% level (two-tailed $p = 0.004$; binomial test of proportions).

Result 3 *Recipients are less willing to solicit for a transfer if other opportunities for redistribution are available*

Altogether, these three results confirm our conjecture that preferences over the level or redistribution are separable from preferences over the redistribution procedure.

From this point onward, we consider the recipient self-selection into conditions PASSIVE^CHOICE and RANDOM^CHOICE to reflect various degrees of *not* willing to solicit for a transfer and as such, pool the associated data together.

We then proceed to investigate if the recipients expect to receive the same amount irrespective of the condition they find themselves in. This is

---

[5]Due to the nature of the hypothesis, a test statistic is trivial here.

particularly interesting in treatment CHOICE where the recipients are allowed ₂₂₅ to self-select into a particular condition if they so desire. Fig. 2 provides an ₂₂₆ overview of the recipient expectations regarding the average dictator transfer ₂₂₇ by treatment condition. ₂₂₈

Fig. 2 Distribution of the recipient expectations regarding the average dictator transfer by treatment condition. Median value indicated by the bold horizontal line, interquartile range indicated by the box height, most extreme data point within 150% of the interquartile range indicated by the whisker. Data from PASSIVE^{CHOICE} and RANDOM^{CHOICE} pooled together
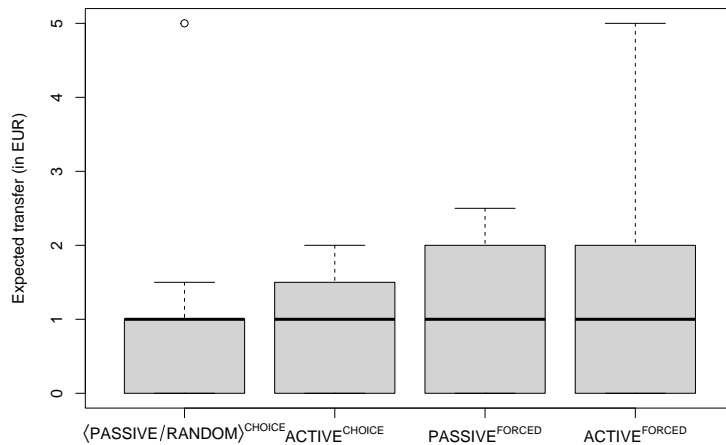
If we compare the expectations of those recipients who self-select into ₂₂₉ the active condition against the others (i.e., various degrees of *not* willing to ₂₃₀ solicit for a transfer), then both groups expect to receive virtually the same: ₂₃₁ 0.93 and 0.95 (EUR) on average in ACTIVE^{CHOICE} and ⟨PASSIVE/RANDOM⟩^{CHOICE} ₂₃₂ respectively (two-tailed $p = 0.526$; Mann-Whitney U test). This finding ₂₃₃ is further reinforced when we compare the recipient expectations between ₂₃₄ treatments ACTIVE^{FORCED} and PASSIVE^{FORCED}. Here, too, both groups expect ₂₃₅ to receive virtually the same: 1.03 and 1.04 (EUR) on average, respectively ₂₃₆ (two-tailed $p = 0.758$; Mann-Whitney U test). We therefore conclude that ₂₃₇

12

the recipients do no expect the dictator to make the redistribution level contingent on the procedure and that their own preferences over the procedure are reflective of the underlying psychological costs.

Result 4 *Recipients expect the same level of redistribution irrespective of the procedure*

The psychological motivation of the recipient preferences over the redistribution procedure is further supported by their answers in the post-experimental questionnaire where those who decided not to solicit for a transfer frequently made explicit references to 'begging' and 'dishonorable behavior'.

4.2   Dictator behavior

Now, let us analyze the behavior of the dictators. As one can see in Fig. 3, the dictators tend to make lower transfers to those recipients who solicit for one. For example 3 out of 8 dictators make positive transfers in condition PASSIVE$^{\text{CHOICE}}$ while only 4 out 18 follow suit in condition ACTIVE$^{\text{CHOICE}}$. The same pattern holds as far as treatments PASSIVE$^{\text{FORCED}}$ and ACTIVE$^{\text{FORCED}}$ where the choice of the redistribution procedure is not even up to the recipient and yet positive transfers are sent by 19 out of 37 and 9 out of 31 dictators, respectively.

The average transfer is 0.52 in ACTIVE$^{\text{FORCED}}$ versus 0.85 in PASSIVE$^{\text{FORCED}}$ and 0.32 in ACTIVE$^{\text{CHOICE}}$ versus 0.62 (EUR) in PASSIVE$^{\text{CHOICE}}$, which indicates that the dictators effectively penalize the very act of soliciting for a transfer even if that is the only way to bring about redistribution. This difference

13

Fig. 3 Empirical distribution function of the dictator transfer by experimental condition
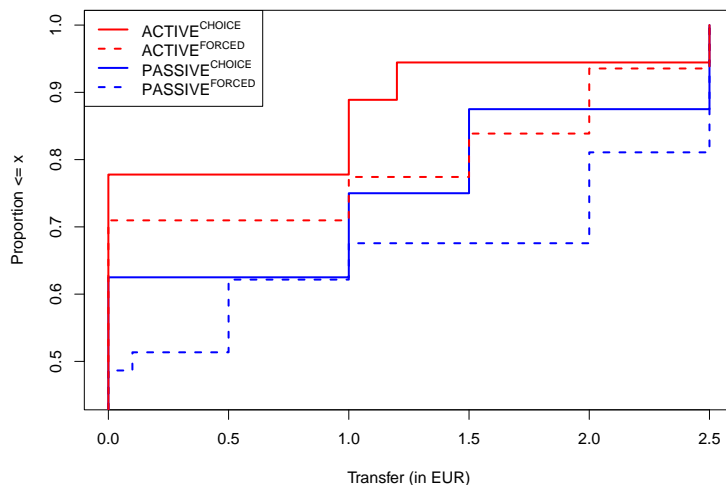
is statistically significant at the 10% level (two-tailed $p = 0.078$; Mann-Whitney U test) in the first case, where the treatment condition is determined exogenously, as well as at the 5% level (two-tailed $p = 0.029$; Mann-Whitney U test) overall when we pool the data from the exogenous treatments and treatment CHOICE.

Result 5 *Dictators share less if the redistribution process is initiated by the recipient even if the recipient is forced to do so*

There is no statistical difference in the average transfer between conditions ACTIVE[FORCED] and ACTIVE[CHOICE] (two-tailed $p = 0.513$; Mann-Whitney U test), nor between conditions PASSIVE[FORCED] and PASSIVE[CHOICE] (two-tailed $p = 0.522$; Mann-Whitney U test), which indicates that the dictators effectively disregard whether it was the recipient's decision to become the first mover or whether their hand was forced[6].

---

[6]This also motivates our pooling of the data leading to Result 5.

Result 6 *Dictators do not take into account the recipient's degree of respon-*₂₇₄
*sibility as far as having to initiate the redistribution process*₂₇₅

Both results are consistent with the dictators interpreting the very act of ₂₇₆ soliciting for a transfer in a self-serving manner (Dana *et al.*, 2007), which ₂₇₇ is rather unfortunate in light of the psychological costs of doing so on the ₂₇₈ recipient side. It is also noteworthy that the recipients are not privy to this ₂₇₉ reaction as indicated by their expectations earlier. ₂₈₀

5   Conclusion ₂₈₁

We use a fair competition based on real effort to generate income inequality ₂₈₂ within pairs of participants. We then rely on the basic mechanic of the ₂₈₃ dictator game to allow for welfare redistribution and manipulate the ability ₂₈₄ of the recipient to initiate said redistribution. ₂₈₅

We find evidence of psychological costs of initiating the redistribution ₂₈₆ process on the recipient side. Even though all of our participants are willing ₂₈₇ to accept the transfer and most do solicit for one if that is the only oppor- ₂₈₈ tunity for redistribution, about 42% shy away from doing so if other options ₂₈₉ are available. Numerous anecdotes from the post-experimental questionnaire ₂₉₀ suggest that a considerable fraction of the recipients are not comfortable with ₂₉₁ what they refer to as 'begging' or 'dishonorable behavior'. ₂₉₂

These results resonate with earlier experiments on pre-play communica- ₂₉₃ tion in dictator games. For example, Yamamori *et al.* (2008) show that some ₂₉₄ recipients choose not to send any requests to the dictator, Greiner *et al.* ₂₉₅ (2012) document that barely anyone mentions money in a free-form chat ₂₉₆

15

with the dictator, Langenbach (2016) observes rather low willingness to pay for the very opportunity to communicate with the dictator. In so far as the society as a whole cares about the psychological costs of its members (and consequently, their behavioral repercussions), our findings add to the discussion by raising awareness about forcing anyone to ask for help and showing the importance of alternative options.

We also document an unfortunate 'disagreement' between the two parties as far the interpretation of the proactiveness of the recipient. When given the choice over the redistribution scenarios, the recipients do not anticipate their decision to affect the transfer amount and so their preferences are anything but strategic. The dictators, however, effectively penalize their proactiveness even if there are no other possibilities for redistribution. Perhaps, the dictators tend to have incorrect beliefs regarding the motivation of the recipient. Or perhaps, the dictators are merely looking for a way to justify their own self-centered interest, something along the lines of 'punishing the greed' as shown in Yamamori *et al.* (2008) and Andreoni & Rao (2011).

Regardless of the underlying mechanism, our findings have important policy implications. The very logistics of aid provision can have a considerable effect on the level provided. More specifically, it is not in the interest of the recipient to (have to) be the prime mover and therefore, an equity seeking social planner should design institutions accordingly. For example, many charities offer basic support like food or clothes without prior registration. Perhaps, benefactors would end up donating more if they were approached by a third party instead of the recipient. Perhaps, it is even the benefactor who should be actively looking for an opportunity to donate.

16

6   Statements and Declarations ₃₂₂

References ₃₂₆

Andreoni, J. & Rao, J.M. (2011). The power of asking: How communication   327
affects selfishness, empathy, and altruism. *Journal of Public Economics*,   328
95(7-8), pp. 513–520.   329

Bhargava, S. & Manoli, D. (2015). Psychological frictions and the incomplete   330
take-up of social benefits: Evidence from an irs field experiment. *American*   331
Economic Review, *105*(11), pp. 3489–3529.   332

Cherry, T., Frykblom, P. & Shogren, J. (2002). Hardnose the dictator. *The*   333
American Economic Review, *92*(4), pp. 1218–1221.   334

Dana, J., Weber, R. & Kuang, J. (2007). Exploiting moral wiggle room: 335
experiments demonstrating an illusory preference for fairness. *Economic*   336
Theory, *33*(1), pp. 67–80.   337

Engel, C. (2011). Dictator games: a meta study. *Experimental Economics*,   338
14(4), pp. 583–610.   339

Fehr, E. & Schmidt, K.M. (1999). A theory of fairness, competition, and   340
cooperation. *Quarterly Journal of Economics*, *114*(3), pp. 817–868.   341

Fershtman, C., Gneezy, U. & List, J.A. (2012). Equity aversion: Social norms   342

17

and the desire to be ahead. *American Economic Journal: Microeconomics*, *4*(4), pp. 131–44.

Fischbacher, U. (2007). z-tree: Zurich toolbox for ready-made economic experiments. *Experimental Economics*, *10*(2), pp. 171–178.

Frey, B., Benz, M. & Stutzer, A. (2004). Introducing Procedural Utility: Not Only What, but Also How Matters. *Journal of Institutional and Theoretical Economics (JITE)*, *160*(3), pp. 377–401.

Frey, B.S. & Stutzer, A. (2005). Beyond outcomes: measuring procedural utility. *Oxford Economic Papers*, *57*(1), pp. 90–111.

Friedrichsen, J., König, T. & Schmacker, R. (2018). Social image concerns and welfare take-up. *Journal of Public Economics*, *168*, pp. 174–192.

Gehrig, T., Güth, W., Levati, V., Levinsky, R., Ockenfels, A., Uske, T. & Weiland, T. (2007). Buying a pig in a poke: An experimental study of unconditional veto power. *Journal of Economic Psychology*, *28*(6), pp. 692–703.

Gill, D. & Prowse, V. (2012). A structural analysis of disappointment aversion in a real effort competition. *American Economic Review*, *102*(1), pp. 469–503.

Greiner, B. (2015). Subject pool recruitment procedures: organizing experiments with orsee. *Journal of the Economic Science Association*, *1*(1), pp. 114–125.

Greiner, B., Güth, W. & Zultan, R. (2012). Social communication and discrimination: a video experiment. *Experimental Economics*, *15*(3), pp. 398–417.

18

Güth, W. & Huck, S. (1997). From ultimatum bargaining to dictatorship: An experimental study of four games varying in veto power. *Metroeconomica*, *48*(3), pp. 262–299.

Güth, W. & Kirchkamp, O. (2012). Will you accept without knowing what? the yes-no game in the newspaper and in the lab. *Experimental Economics*, *15*(4), pp. 656–666.

Haas, M. & Cummings, J. (2015). *Journal of International Business Studies*, *46*, pp. 36–62.

Hoffmann, A. (2008). Building a framework for actions and roles in organizational knowledge transfer, in (M. Ackerman, R. Dieng-Kuntz, C. Simone & V. Wulf, eds.), *Knowledge Management In Action*, pp. 67–79, Boston, MA: Springer US.

Kandul, S. & Nikolaychuk, O. (2023). I win it's fair, you win it's not. selective heeding of merit in ambiguous settings. *PLOS ONE*, *18*(1), pp. 1–11.

Kritikos, A.S. & Tan, J.H. (2016). Influence in the face of impunity. *Economics Letters*, *141*, pp. 119–121.

Langenbach, P. (2016). The values of ex-ant and ex-post communication in dictator games. *Max Planck Institute for Research on Collective Goods, Working paper 2014/7; revised version: April 2016.*

Lazear, E.P., Malmendier, U. & Weber, R.A. (2012). Sorting in Experiments with Application to Social Preferences. *American Economic Journal: Applied Economics*, *4*(1), pp. 136–63.

Li, M. & Walker, R. (2017). Shame, stigma and the take-up of social assistance: Insights from rural china. *International Journal of Social Welfare*,

26(3), pp. 230–238.

Ockenfels, A. & Bolton, G.E. (2000). ERC: A Theory of Equity, Reciprocity,
and Competition. *American Economic Review, American Economic Asso-*
ciation, 90(1), pp. 166–193.

Sen, A. (1995). Rationality and social choice. *American Economic Review*,
85(1), pp. 1–24.

Webster, J., Brown, G., Zweig, D., Connelly, C., Brodt, S. & Sitkin, S. (2008).
Beyond knowledge sharing: Withholding knowledge at work. *Research in*
Personnel and Human Resources Management, 27, pp. 1–37.

Yamamori, T., Kato, K., Kawagoe, T. & Matsui, A. (2008). Voice matters
in a dictator game. *Experimental Economics*, 11(4), pp. 336–343.