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# JENA ECONOMIC RESEARCH PAPERS



# 2016 – 011

## **Do I care if others lie? Current and future effects of delegation of lying**

by

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# Do I care if others lie? Current and future effects of delegation of lying<sup>\*</sup>

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May 17, 2016

The aim of this study is to find out why people are telling the truth: is it a desire to respect trust, to avoid losses for others, or a mere distaste for lying per se? To answer this question we study a sender-receiver game where it is possible to delegate the act of lying and where it is possible to take pro-social actions in a subsequent dictator game. We examine how delegation affects the outcomes of people's current and future ethical decisions. We find that a non-trivial fraction of participants delegate their decision. However, delegation is associated with higher transfers in the subsequent dictator game

JEL: C72, D82

Keywords: Sender-Receiver games, moral balancing, guilt aversion.

## 1 Introduction

### 1.1 Motivation

Lying brings benefits but may come at a cost. *Lying aversion*, i.e. the desire to send truthful information in an anonymous setting, is of continuing interest in behavioral economics. Many empirical and theoretical studies investigate why people are telling the truth: do people respect trust, do they avoid losses of others, or do they dislike lying per se (Gneezy, 2005, Fischbacher & Heusi, 2013, Erat & Gneezy, 2011, Kartik, 2009)?

Baron & Ritov (2004), Spranca *et al.* (1991), Royzman & Baron (2002) distinguish direct and indirect negative consequences of actions. They find that negative outcomes from a direct

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<sup>\*</sup>We would like to thank the Max Planck Society for financial support through the International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World. We use R (2016) for the statistical analysis. Data and methods can be found at <http://www.kirchkamp.de/research/delegation.html>

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action are perceived as more harmful than those from an indirect action. In this paper we suspect a similar distinction between the consequences of direct and indirect lies. People might generally prefer not to lie. However, people might consider an indirect lie, i.e. a lie through an intermediary, more acceptable than an own lie.

Hamman *et al.* (2010), Bartling & Fischbacher (2012), Coffman (2011), find that delegation reduces responsibility and that delegation facilitates reaching self-interested or immoral allocations. Still, people might view delegation differently *ex-ante* and *ex-post*. In line with Nisan & Horenczyk (1990), Sachdeva *et al.* (2009), Gneezy *et al.* (2014) we suspect that delegation could influence people's *ex-post* compensatory behavior. After delegation people might still be willing to cleanse their past wrongdoing.

We study a game where it is possible to delegate the act of lying and where it is possible to take pro-social actions subsequently. We examine how delegation affects the outcomes of people's current and future ethical decisions.

## 1.2 Related literature

**Cause and effect of delegation in the positive and the negative domain** Efficiency could be a standard reason to delegate: an agent could be better equipped with resources, time, or expertise. A different mechanism has been brought forward by Hamman *et al.* (2010): People who are reluctant to implement painful decisions themselves (selfish allocations, discriminatory judgments, outright lies) might find that delegation reduces the disutility which they would otherwise obtain from a direct harmful act and frees them to act in their best interest. Hamman *et al.* compare a standard dictator game with and without the possibility of delegation. Without delegation they find a substantial fraction of fair allocations. When delegation is possible, many principals delegate to agents. These agents, who have no direct incentive to favour their principal, act more in the interest of their principals than the principals themselves. As a result, delegation substantially increases inequality. Hamman *et al.* suggest that shifting (and diffusion of) responsibility explain their result: principals and agents share and thereby reduce the joint responsibility for their actions.

Bartling & Fischbacher (2012) use delegation as a workhorse to compare different reasons for punishment: outcome, intention, and responsibility. They observe that delegation reduces punishment. Furthermore, responsibility has a larger impact on punishment than outcome and intention. In line with Hamman *et al.*, delegation shifts and dilutes responsibility.

Coffman (2011) distinguishes two causes for punishment: responsibility and intermediation. Coffman studies a situation where intermediation does not affect responsibility. Still (and in line with Hamman *et al.*, 2010, Bartling & Fischbacher, 2012) Coffman observes that intermediation, i.e. indirect interaction, reduces punishment.

Drugov *et al.* (2014) use a bribery game to study how intermediation affects the moral cost of a transaction. Drugov *et al.* find that intermediaries facilitate corruption not by reducing the responsibility for the outcome but rather by replacing a direct with an indirect link.

The concept of "moral distance" from a negative outcome mentioned by Drugov *et al.* is long known in moral psychology. Here, the detrimental effects of such distancing, whether through an indirect action or through an omission, are well-documented for both self- and other-regarding decisions (Baron & Ritov, 2004, Spranca *et al.*, 1991, Royzman & Baron, 2002,

Hayashi, 2013). Inasmuch as dictators are held less responsible if they delegate (Hamman *et al.*, 2010, Bartling & Fischbacher, 2012, Coffman, 2011, Drugov *et al.*, 2014), allocations by *omission* trigger less blame by the recipients (DeScioli *et al.*, 2011).

But not only for morally questionable actions, also for desirable actions we find a distinction between the direct and the indirect. While decision makers prefer to implement unethical actions indirectly, i.e. through an intermediary, the same decision makers prefer to implement benevolent activities (generous donations, non-discriminatory judgments, honesty) rather directly. Patt & Zeckhauser (2000), for example, model willingness to attribute positive outcomes to one's own actions and provide the evidence of 'action bias' in environmental decisions: people prefer actively implementing environmentally friendly policies even though inaction would lead to better environmental outcomes. Coffman (2011) compares direct (donor-recipient) and indirect (donor-fund-recipient) donations and finds that people reward donors much less if they donate to a cause through an intermediary. Eisenkopf & Fischbacher (2015) investigate the same reward pattern in a trust game. In their setting with two trustors and one trustee, delegation by the first trustor to the second one can potentially increase efficiency. They find that trustees seem not to recognize the efficiency gain due to delegation by the first trustor and do not reward the first trustor correspondingly.

**Lying aversion and delegation** People do not always lie even if lying secures high monetary reward. In a seminal experiment, Gneezy (2005) employs a deception-game to test for (non-strategic) *lying aversion*, i.e. the reluctance to get an otherwise desired outcome through lying. In his setting, a sender learns about the distributions of payoffs behind two options, A and B. The sender advises a receiver which of the two options to choose: 'Option A (B) will earn you more than Option B (A)'. Since the senders' payoffs are high when receivers' payoffs are low and vice versa, and since receivers do not know this, senders have an interest to lie. Gneezy compares choices in deception and in dictator games with equivalent payoffs and finds that the fraction of selfish choices in dictator games is higher than the fraction of lies in deception games. Gneezy concludes that lying is not neutral.

Since then a number of studies on various aspects of lying aversion have appeared (see Erat & Gneezy, 2011, Vanberg, 2008, Fischbacher & Heusi, 2013, Sutter, 2009). It has been shown that the expectations of the receiver, the damage from lying, and the ability to observe lies shape but do not fully explain preferences for truth-telling.

Although different motivations for lying aversion have been addressed, it remains unclear whether preferences distinguish between direct (own) lies and indirect lies (lies by an intermediary).

To shed light on this issue, Erat (2013) studies a three-person sender-receiver game where senders can delegate. Erat observes that roughly 30% of senders delegate the decision. Erat also finds that an increase in the receiver's cost of deception does not increase truth-telling but does increase delegation.

**Compensatory behavior and lying** Based on Erat's finding that senders delegate even when receivers do not know who sent a message we suspect that one motive for delegation might be the preservation of a self image. In this case deception could also be linked to

subsequent compensatory behavior of the sender.

According to moral balancing theories (Nisan & Horenczyk, 1990, Meritt *et al.*, 2010, Sachdeva *et al.*, 2009) people form a (subjective) benchmark of acceptable morale and allow for positive as well as negative deviations as long as the balance is appropriate. Doing extra good (creating a surplus to the moral account) may license a subsequent bad action, and doing extra bad (creating a moral debt) may be cleansed or compensated by a future good deed to balance the account.

Moral cleansing, the desire to compensate a bad action with a following good act, is sometimes explained within self-signaling models (Benabou & Tirole, 2011), where individuals with no perfect access to their deep preferences might ‘invest’ in a bad behavior to get a signal of their true (good) type prompting higher goodness in a subsequent task. Similarly, Loewenstein (2000) sees moral cleansing as a result of a prior underestimation of future negative emotions. If regret after lying is higher than expected, the initial choice turns out to be ex-post suboptimal, requiring a compensation.

Gneezy *et al.* (2014) discuss how the feeling of guilt urges transgressors of a norm to behave more pro-socially. In Gneezy *et al.*’s experiment subjects who cheated in a first task contributed more to a charity than truth-tellers. Gneezy *et al.* conclude that an unannounced opportunity for pro-social behavior right after a transgression may serve as a conscience cleansing instrument and advise this technique for charitable fund-raising.

If people exercise moral balancing, seek to cleanse a transgression, but account indirect harm differently, the possibility to delegate lying may decrease the positive compensatory behavior in a subsequent task.

In this project we want to examine the effects of delegation in a dynamic setting: first, we extend Erat (2013) and study how delegation affects the intensity of lying (current effect); second, we investigate how delegation of lying affects subsequent compensatory behavior (future effect).

## 2 Experimental design

Our experiment lasts for four periods. In each period participants play a three-person sender-receiver game followed by a dictator game. In period 1 participants do not know about the upcoming dictator game; in periods 2 to 4 they know about it. We use z-Tree (Fischbacher, 2007) to implement the experiment and ORSEE (Greiner, 2004) to recruit participants.<sup>1</sup> During the experiment payoffs are described as ECU. At the end of the experiment one period is chosen for payment. ECUs are converted into Euros at a rate of 10:1.

In the sender-receiver game, participants interact in groups of three: two senders (player 1 and player 2) and one receiver (player 3). In each period groups are assigned to one of the two experimental treatments: “conflict” or “no conflict”. The computer randomly allocates a fixed prize for the senders (80 ECU) and for the receiver (40 ECU) among five virtual boxes. In the no conflict condition, prizes for senders and receivers are in the same box; in the conflict condition, prizes for senders are placed in a box different from the receiver’s box. Figure 1 gives an example of possible allocations of prizes in the two conditions.

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<sup>1</sup>Instructions can be found at <http://www.kirchkamp.de/research/delegation.html>

Example for an allocation in the “no conflict” condition:

Box 1	Box 2	Box 3	Box 4	Box 5
Prize 1: 0	Prize 1: 0	Prize 1: 80	Prize 1: 0	Prize 1: 0
Prize 2: 0	Prize 2: 0	Prize 2: 80	Prize 2: 0	Prize 2: 0
Prize 3: 0	Prize 3: 0	Prize 3: 40	Prize 3: 0	Prize 3: 0

Example for an allocation in the “conflict” condition:

Box 1	Box 2	Box 3	Box 4	Box 5
Prize 1: 0	Prize 1: 0	Prize 1: 80	Prize 1: 0	Prize 1: 0
Prize 2: 0	Prize 2: 0	Prize 2: 80	Prize 2: 0	Prize 2: 0
Prize 3: 0	Prize 3: 0	Prize 3: 0	Prize 3: 0	Prize 3: 40

Figure 1: Information provided to senders in the two conditions  
Prize  $i$  denotes the prize for player  $i$

Box 1	Box 2	Box 3	Box 4	Box 5
Prize 1: ?	Prize 1: ?	Prize 1: ?	Prize 1: ?	Prize 1: ?
Prize 2: ?	Prize 2: ?	Prize 2: ?	Prize 2: ?	Prize 2: ?
Prize 3: ?	Prize 3: ?	Prize 3: ?	Prize 3: ?	Prize 3: ?

Figure 2: Information provided to receivers in both conditions  
Prize  $i$  denotes the prize for player  $i$

All players are informed about the two conditions, but only the two senders know the exact allocation of prizes to boxes; receivers are told they will be assigned to one of the two conditions with equal probability and will learn the exact allocation only after their decisions (See Figure 2).

After learning the allocation of prizes to boxes, senders are asked to specify the box they advise receiver to open: “Your prize is in Box  $x$ ”. Together with the number of the box they advise, both senders are asked who should send the message: they themselves or the other sender (delegation). Then one of the senders is selected randomly (we will call this an “effective” sender later) and this sender’s decision is implemented: if the selected sender has chosen to delegate (prefers the other to send the message), the number of the box advised by the other sender is sent to the receiver; if the selected player has chosen ‘myself’, the number of the box selected by this sender is sent.<sup>2</sup>

The receiver then obtains a message stating ‘Your prize is in Box  $x$ ’ from one of the two senders, chooses a box and, thus, determines the payoffs for all three players. Different from Erat (2013), in our experiment receivers learn in the feedback whether the signal was truthful and whether delegation took place.

In the (subsequent) dictator game, participants keep their roles, but groups are re-matched. Each participant meets two other participants he or she did not interact with in the sender-

<sup>2</sup>The feature that even the delegating senders have to choose a message allows us to learn more about their preferences over lying.

receiver game. Participants in the role of senders do not know what the new receiver earned in part 1. Senders decide how much out of their 80 ECU earnings they would like to transfer to the new receiver. The computer then randomly selects one of the two senders and implements this sender's decision.

Participants repeat this interaction for four periods with random matching. Each sender played twice in each of the two conditions in the following order: C-C-NC-NC (half of the groups) or NC-NC-C-C (half of the groups), where C stands for "conflict" and NC stands for "no conflict" condition; receivers were randomly assigned to one of the two conditions in each period.

### 3 Hypotheses

#### 3.1 Hypotheses for the sender-receiver game:

Since psychological costs are more likely to arise in the "conflict" and not in the "no conflict" condition, we expect more delegation in the "conflict" condition as a means to reduce psychological costs behind lying.

**Hypothesis 1** *The frequency of delegation is higher in "conflict" than in "no conflict".*

Let us now look at the differences in delegation behaviour of senders who lie and senders who tell the truth. For a sender who would otherwise lie delegation has two effects: own responsibility and the related psychological cost are reduced but, since only some delegates will lie, also the expected payoff is reduced. For a sender who would otherwise tell the truth delegation still means a lower responsibility but, since at least some delegates will lie, the expected payoff increases. Hence, delegation should be more attractive for senders who tell otherwise the truth than for senders who otherwise lie.

**Hypothesis 2** *In the "conflict" condition, senders who themselves tell the truth are more likely to delegate than senders who lie.*

#### 3.2 Hypotheses for the dictator game:

Truth telling implies no norm violation and thus does not call for moral cleansing. However, lying is a norm violation and induces negative feelings calling for cleansing. If our manipulation works and many participants lie in the "conflict" condition, we should observe different shared amounts in the dictator game. This hypothesis is consistent with the observation of lower donations by truth-tellers in Gneezy *et al.* (2014).

**Hypothesis 3** *Senders who have lied in the sender-receiver game share more in the dictator game than truth tellers.*

Since we expect more lying in the "conflict" situation, we also hypothesize the following:

**Hypothesis 4** *Senders share more in the "conflict" than in the "no conflict" condition.*



Since all players get feedback who actually sent the message, senders can assess their own responsibility and can distinguish between indirect and direct outcomes. We expect that compensatory behavior is sensitive not only to outcomes but also to procedures. If, as we expect, indirect lying has a lower psychological cost than direct lying, we will see less cleansing behavior in the case of indirect decisions. For senders with positive earnings from the sender-receiver game we hypothesize the following:

**Hypothesis 5** *Senders who delegate share less than senders who lie directly.*

## 4 Results

We ran 7 sessions at the laboratory of the Max Planck Institute of Economics in Jena in November-December 2013.<sup>3</sup> In total 204 subjects participated in the experiment. Sessions lasted for approximately 50 minutes. The average payment (including show-up fee) was 7.47€.

### 4.1 Lying and truth-telling

The frequency of truth-telling in the two conditions is presented in Figure 3.

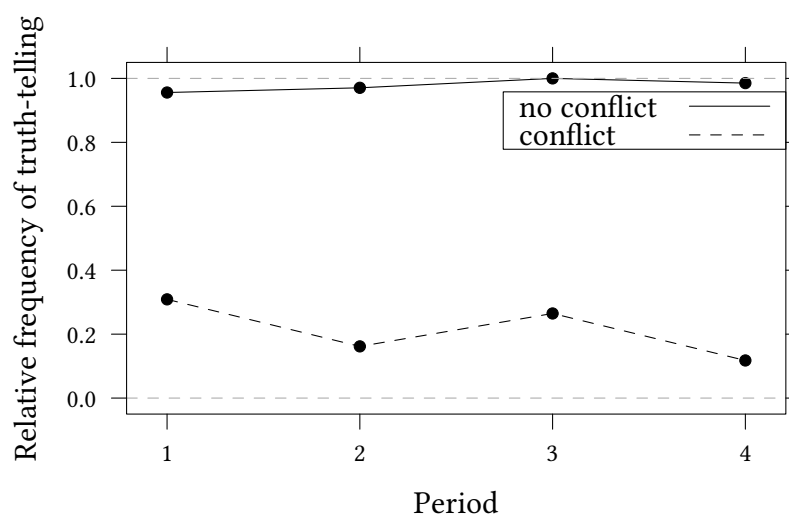


Figure 3: Truth-telling by Condition, n=68 in each period

Figure 3 shows the relative frequency of truth telling in the four periods of the experiment. We see a clear treatment effect., our manipulation had a desired effect on the level of truth-telling. In the “no conflict” condition, almost all (98%) participants send truthful messages.

<sup>3</sup>The raw data and methods can be found at <http://www.kirchkamp.de/research/delegation.html>

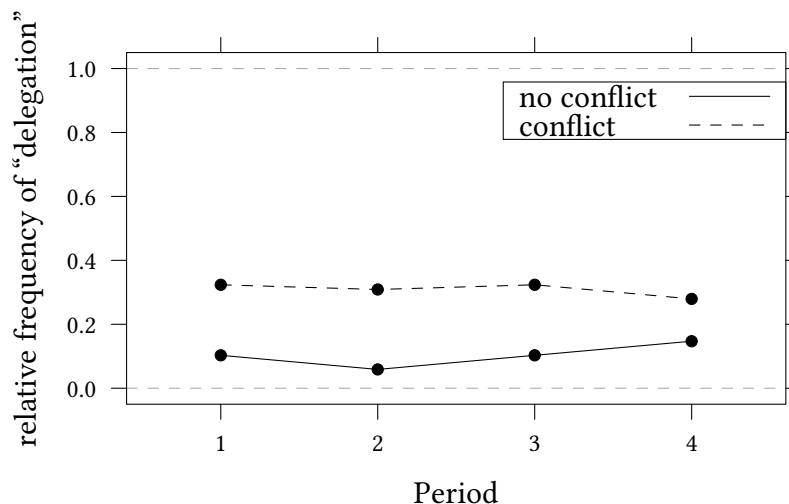


Figure 4: Delegation in "conflict" and "no conflict"

In the "conflict" condition only 21% messages are truthful. We should also note that even in "conflict" not all senders are lying. Consistent with the literature on lying aversion, we observe 21% who still tell the truth.<sup>4</sup>

## 4.2 Delegation

**Delegation in conflict (Hypothesis 1)** Figure 4 shows the fraction of senders who delegated their decision.

There are 31% of all senders in "conflict" who delegate and only 10% in "no conflict" who delegate. To compare the two situations we use a mixed effects logistic model where we include a random effect for the participant and a random effect for the matching group.

$$P(\text{delegation}) = \mathcal{L} (\beta_0 + \beta_{\text{Conflict}} d_{\text{Conflict}} + \gamma_t + \epsilon_i + \epsilon_g) \quad (1)$$

Here  $\mathcal{L}$  is the logistic function,  $d_{\text{Conflict}}$  is a dummy which is one for truth tellers,  $\gamma_t$  is a fixed effect for period  $t$ ,  $\epsilon_i$  is a random effect for the individual, and  $\epsilon_g$  is a random effect for the matching group. The 95% confidence interval for  $\beta_{\text{Conflict}}$  is [1.34,2.54].<sup>5</sup> We can, thus, confirm hypothesis 1.

**Delegation by truth-tellers (Hypothesis 2)** Figure 5 shows the fractions of delegating truth-tellers and liars. In the "conflict" condition 47% of all senders who otherwise tell the

<sup>4</sup>Although one can argue that some of the choices might be interpreted as revealed preference over the outcomes (0,0,40) vs. (80,80,0), for example, for strong inequality averse individuals, lie aversion still seems to manifest itself for a significant minority of participants.

<sup>5</sup>Based on a percentile bootstrap with 500 replications.

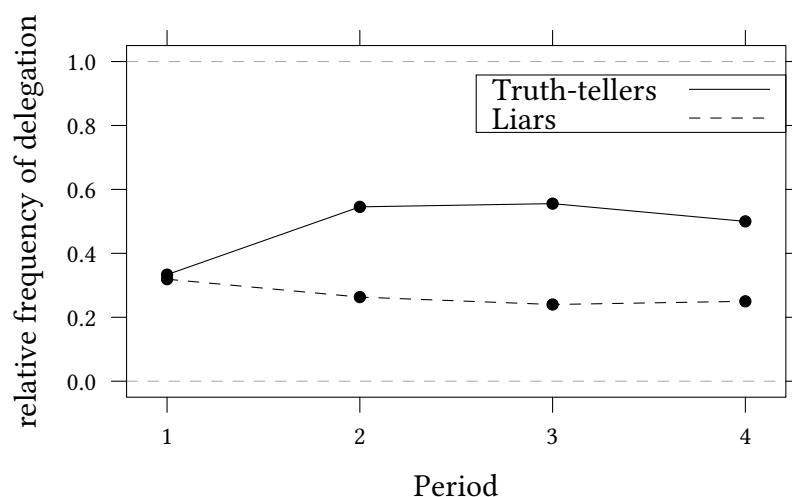


Figure 5: Delegation among truth tellers and liars in the “conflict” condition

truth delegate. In contrast, only 27% or all senders who otherwise lie delegate. This difference in behaviour emerges only during the experiment. To compare the two types we use a mixed effects logistic model where we include a random effect for the participant and a random effect for the matching group.

$$P(\text{delegation}) = \mathcal{L}(\beta_0 + \beta_{\text{Truth}}d_{\text{Truth}} + \gamma_t + \epsilon_i + \epsilon_g) \quad (2)$$

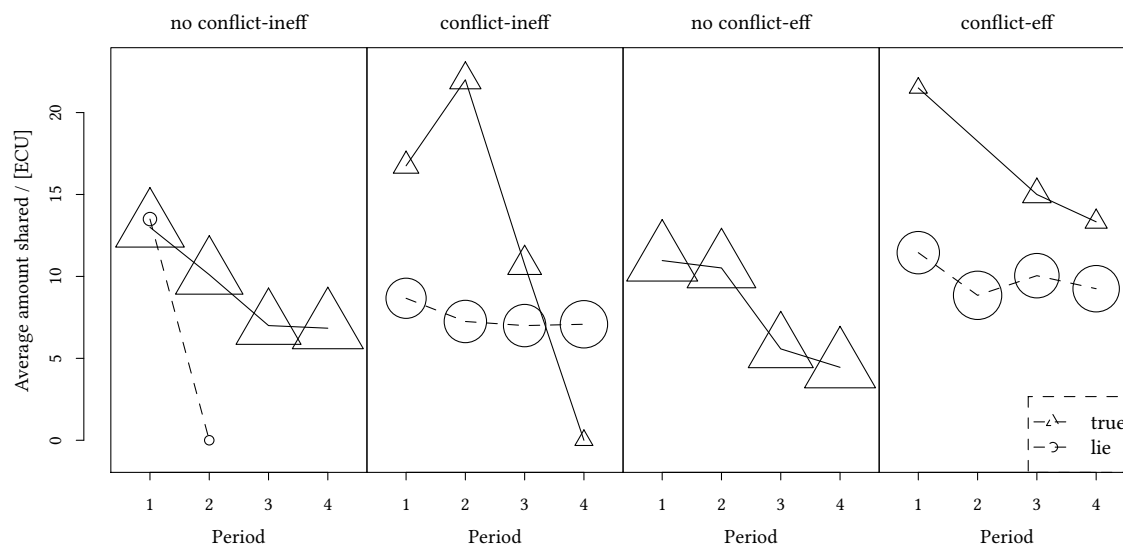
Here  $\mathcal{L}$  is the logistic function,  $d_{\text{Truth}}$  is a dummy which is one for truth tellers,  $\gamma_t$  is a fixed effect for period  $t$ ,  $\epsilon_i$  is a random effect for the individual, and  $\epsilon_g$  is a random effect for the matching group. The 95% confidence interval for  $\beta_{\text{Truth}}$  is  $[0.169, 5.47]$ .<sup>6</sup> We can, thus, confirm Hypothesis 2.

### 4.3 Compensatory behavior

We measure compensatory behavior as willingness to share money with a stranger in a dictator game. In the following we do not consider the 106 decisions of senders which obtained a profit of zero in the sender-receiver game. These senders had nothing which they can share in the dictator game. We still elicited hypothetical decision for these senders to keep them busy. However, senders knew their earnings from the first round. We restrict our sample to the 438 senders with positive earnings from the sender-receiver game.

First, we have found a relatively high willingness to share money: as many as 53.2% of the senders who earned 80 ECU in part 1 gave away positive amounts to the receiver. Among those senders who shared positive amounts the average was 17 ECU or about 21.2% of the senders' earnings.

<sup>6</sup>Based on a percentile bootstrap with 500 replications.



Sizes (areas) of the symbols are proportional to the number of observations. Graphs show only senders with positive earnings from the first round.

Figure 6: Average amount shared

**Do liars share more than truth-tellers? (Hypothesis 3)** The average amounts shared by the senders in the two conditions are compared in Figure 6. The two panels in the left part of Figure 6 show the ineffective senders, i.e. those which were not selected for a delegation decision by the computer. The two panels on the right show the effective senders. In each group of two panels the left one shows the “no conflict” situation, the right one shows the “conflict” situation.

Interesting are, in particular, the effective players, i.e. those whose delegation decision was actually implemented. Here in the “no conflict” case (third panel from the left), all players told the truth. Shared levels are lower than in the “conflict” case (fourth panel). In the “conflict” case shared amounts are particularly high for truth telling players and intermediate (but higher than in the conflict case) for liars.

Clearly, telling the truth in a situation with or without conflict are two different matters. In our experiment each player experiences both situations: players either start with conflict and conclude the experiment with no conflict or they do just the opposite. To better understand the impact of the treatments, we estimate the following mixed effects regressions:

$$\text{Share} = \beta_0 + \beta_{\text{Truth}}d_{\text{Truth}} + \gamma_t + \epsilon_i + \epsilon_g + \epsilon_{igt} \quad (3)$$

$d_{\text{Truth}}$  is a dummy which is one for senders who tell the truth,  $d_{\text{Conflict}}$  is a dummy which is one in the “conflict” condition,  $\gamma_t$  is a fixed effect for period  $t$ ,  $\epsilon_i$  is a random effect for the individual,  $\epsilon_g$  is a random effect for the matching group, and  $\epsilon_{igt}$  is the residual.

The first two columns in Table 1 show estimation results for Equation (3). We find that senders who tell the truth share an amount significantly smaller than those who lie—regardless whether we consider all senders with a positive income from the first stage or only

Table 1: Mixed-effect regression estimates for Equations 3 and 4

	all Eq. (2)	effective Eq. (2)	all Eq. (3)	effective Eq. (3)
$\beta_{\text{Conflict}}$			1.80 [0.66,3.04]	2.90 [0.94,5.04]
$\beta_{\text{Truth}}$	-1.78 [-3.03,-0.35]	-2.21 [-4.26,-0.27]		
( $\beta^{\text{FE}}$ )	-2.24 [-3.57,-0.91]	-2.72 [-5.08,-0.36]	1.93 [0.69,3.17]	3.00 [0.68,5.31]
N	438	219	438	219
$\sigma_g$	0.00 [0.00,2.40]	0.00 [0.00,2.76]	0.00 [0.00,2.57]	0.00 [0.00,2.91]
$\sigma_i$	8.70 [7.45,9.89]	8.59 [6.98,10.15]	8.61 [7.36,9.70]	8.54 [6.92,10.13]

Estimates are based on senders who could share a positive income from the first stage. Confidence intervals are given in brackets and are based on a percentile bootstrap with 500 replications. Fixed effects for periods are not shown in the Table.  $\beta^{\text{FE}}$  in parentheses gives (for comparison) the fixed effects estimator (subject specific dummies for  $i$  included as a fixed effect) for the treatment (Conflict or Truth, respectively).

the effective senders. This supports Hypothesis 3. The Table also includes (for comparison) the estimate of  $\beta_{\text{Truth}}$  for a model with fixed effects for each player, yielding qualitatively the same result.

**Do senders share more in conflict? (Hypothesis 4)** To assess Hypothesis 4, we estimate the following equation:

$$\text{Share} = \beta_0 + \beta_{\text{Conflict}}d_{\text{Conflict}} + \gamma_t + \epsilon_i + \epsilon_g + \epsilon_{igt} \quad (4)$$

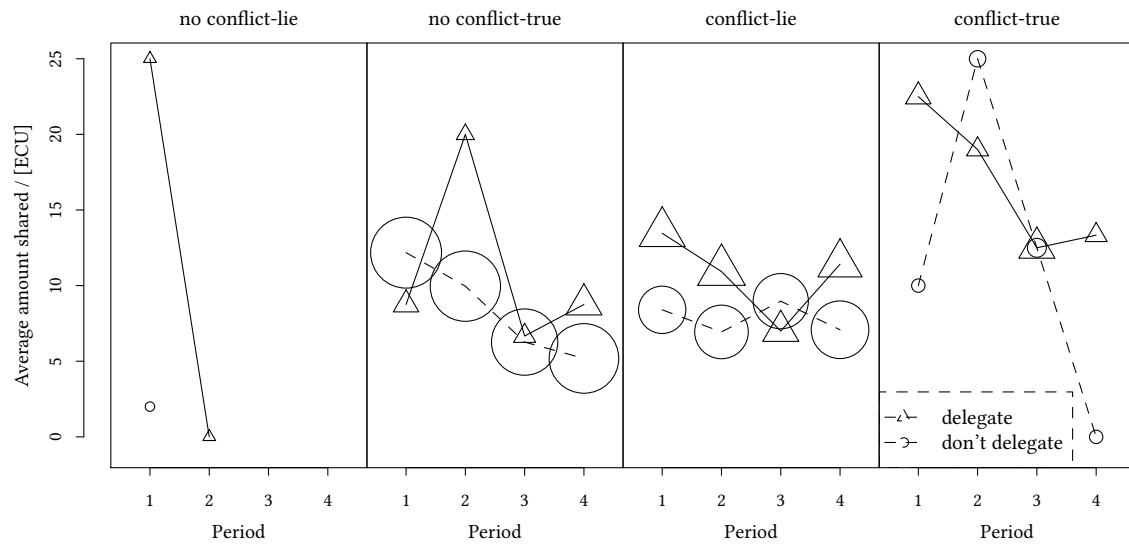
The two columns on the right of Table 1 provide estimation results for Equation (4). We find that in both cases, all senders and effective senders, the coefficient for the “conflict” condition is significantly different from zero. This supports Hypothesis 4:

**Does delegation produce less compensation? (Hypothesis 5)** Figure 7 compares the shared amounts for senders who delegate with those who do not delegate in different situations. Most interesting is the third panel: Players in the “conflict” treatment who “lie”. In Hypothesis 5 we expected senders who delegated to share less, since delegation reduced already some of their burden. Here we see that these senders actually share more than senders who have chosen to send the message themselves.

To more precisely assess the effect of delegation, we estimate the following mixed effects regression:

$$\text{Share} = \beta_0 + \beta_{\text{Delegation}}d_{\text{Delegation}} + \gamma_t + \epsilon_i + \epsilon_g + \epsilon_{igt} \quad (5)$$

$d_{\text{Delegation}}$  is a dummy which is one for senders who delegate,  $\gamma_t$  is a fixed effect for period  $t$ ,  $\epsilon_i$  is a random effect for the individual,  $\epsilon_g$  is a random effect for the matching group, and  $\epsilon_{igt}$  is the residual. Estimation results for senders with a positive income from the first stage (the others have no income to share) in the conflict treatment (the non-conflict senders have no specific reason to share) are shown in Table 2. Regardless whether we look at all senders in the “conflict” treatment (leftmost column of the Table) or only at the effective senders (second column): senders who delegate share, on average, substantially higher amounts than those



Sizes (areas) of the symbols are proportional to the number of observations. Graphs show only senders with positive earnings from the first round.

Figure 7: Average amounts shared in the “conflict” condition.

Table 2: Mixed-effect regression estimates for Equation 5

	all conflict Eq.	eff. conf.
$\beta_{\text{Delegation}}$	4.65 [0.70,8.24]	5.47 [0.19,10.68]
$(\beta^{\text{FE}})$	6.30 [0.01,12.59]	6.43 [-3.39,16.25]
N	204	102
$\sigma_g$	0.00 [0.00,3.20]	0.00 [0.00,4.40]
$\sigma_i$	9.04 [7.28,10.74]	9.20 [6.67,12.25]

Confidence intervals are given in brackets, based on a percentile bootstrap with 500 replications. Fixed effects for periods are not shown in the Table.  $\beta^{\text{FE}}$  in parentheses gives (for comparison) the fixed effects estimator (subject specific dummies for  $i$  included as a fixed effect) for Delegation.

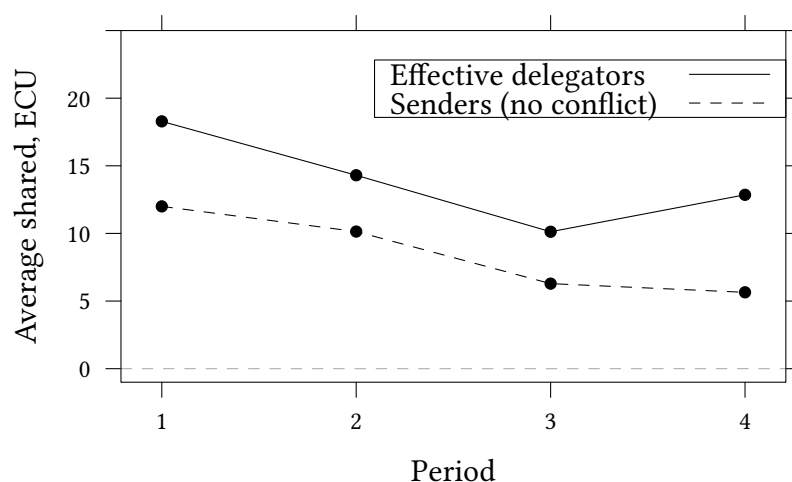


Figure 8: Sharing: Effective delegators in the “conflict” vs. senders in the “no conflict” condition

who do not delegate. It is hence not, as we had hypothesized above in Hypothesis 5, that senders who delegate share less. Instead, the delegation opportunity seems rather to serve as a screening device for senders with different psychological costs of lying. Senders with a low cost of lying don’t delegate and don’t have to compensate for their lies. Senders with a high cost have to use both instruments to reduce this cost: They delegate and, in addition, they also compensate in the second stage.

## 5 Conclusions and Discussion

In our experiment we allowed senders to make a choice either directly (themselves) or indirectly (through a delegate). Although we create strong incentives for senders to make a direct choice, a significant share of senders prefers to delegate unpopular decisions. Among various explanations of why senders delegate, distancing from the moral consequence of the decision remains a promising candidate.

Our results add to the discussion of lying aversion and suggest that for some people it is not the (net) social losses to the affected parties (in our setting net social effect of lying was positive) but rather the direct interaction that lying senders try to avoid.

In our setting, many senders who prefer to delegate would chose a truthful message otherwise. This suggests that institutions which allow what looks like innocent delegation could benefit if delegation was restricted.

In line with the literature on moral balancing, we find that lying generates compensatory behavior. After a lie participants share a larger fraction of their earnings with a stranger with whom they did not interact before. Participants who told the truth share less.

Perhaps most interestingly, indirect liars (delegators) share more than direct liars if there is

a conflict between senders and receivers. As an explanation we suggest that delegation serves as a screening device: people with a low psychological cost of lying select into direct lying. People with a high psychological cost of lying reduce this cost at least partially by delegation. To reduce this cost furthermore they also share more in the dictator game.

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