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Doing good with other people's money: an experiment on people's (un)willingness to grant others the freedom to choose

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Abstract We augment a standard allocation experiment to investigate how preferences for an environmental project relate to the willingness to limit others' choices. We ask the allocator to choose his own donation level, a donation level for him and his group, and the minimum donation level for the group members (excluding the allocator). We find that donations dictated to the whole group are, on average, lower than individual donations and that this decrease is consistent with the expectations of what others would like to donate. Moreover, most allocators force the others to donate a positive, though low, amount. Thus, unlimited freedom of choice is rejected by the majority of the subjects.

Keywords Allocation decisions · Charitable giving · Social preferences · Freedom of choice

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“The power to do good is also the power to do harm.”

Milton Friedman (Capitalism and Freedom, 1962)

1 Introduction

There are many areas in society where people make decisions that directly affect others' welfare. Examples include policy makers, household decision makers, community leaders, and firm managers. Relatively little is known, however, about individual willingness to decide for others, and the trade-offs decision makers face when either they are given or they take the responsibility for the actions of others.

In the present paper, we experimentally investigate the behavior of individuals when they either are given or could voluntarily assume responsibility for others' decisions. We place each allocator in a group with three other subjects and augment the standard allocation task so that each allocator makes three choices.¹ Each allocator decides on his own donation to a WWF project aimed to save the orangutans. He also chooses a donation for *all* members of his group (including himself). Finally, he is given the opportunity to dictate the other group members' *minimum* donation, thereby restricting their choice of how much to keep for themselves.² This creates, for the allocator, a tension between granting the others freedom of choice and assuming responsibility by imposing a restriction on their decisions for the sake of a “good” outcome (in the form of donations to the WWF project). Trading off the welfare of one group against that of another is a decision that both individuals and policy makers around the world often face. Our experiment captures this and allows us to assess the allocators'

¹ In the basic version of the allocation task, one player is endowed by the experimenter with a certain amount of money and then asked to allocate it between himself and the recipient. If the latter is a person with no choice to make, the minimalist allocation task is known as the dictator game.

² To be able to control for a possible order effect in the three decisions, our experiment features three different decision sequences.

preferences between leaving the others free to decide and restricting their choices so as to obtain “good” outcomes.

As suggested by the opening quote, Milton Friedman contemplated this issue and took a clear position against “doing good with other people’s money” (Friedman, 1962). Friedman was skeptical that one would spend other people’s money as carefully as he spends his own. While our paper focuses on the tension between allowing freedom of choice and imposing a minimum donation on others, it is related to other strands of research. For instance, economics has recently taken a renewed interest in paternalism. A pro-paternalist would argue that interventions affecting individuals are necessary as individuals have numerous self-distorting biases (see, e.g., the seminal paper by O’Donoghue and Rabin 2003), but that these interventions should be as non-coercive as possible. This position is known as soft paternalism³ in the economic literature (Camerer et al. 2003; Sunstein and Thaler 2003a,b). Hence, the economists’ view on restricting people’s freedom of choice is considerably more diverse today than when Milton Friedman took his position.⁴

We also take a closer look at what drives the allocator’s choice when deciding for the group and when setting a restriction. Will the allocator care about what he thinks other group members’ preferences are? Or will he impose his individual donation choice on others? Consider an allocator who is willing to donate some money to the WWF project but expects the others to be payoff-maximizers and donate nothing. Then, when dictating a choice for all members of his group and having strong opinions on how others should behave, he may not respect others’ preferences and instead decide in line with his own preferences. On the other

³ Soft paternalism targets people who are unfit to achieve their own goals due to cognitive limitations, while strong paternalism targets people who have goals that are perceived to be misguided in some way.

⁴ Interestingly, some three decades ago, when Littlechild and Wiseman (1986) discussed the political economy of restriction of choice, they clearly distinguished three different ways to approach this question: the economic framework (based on market failures), the paternalist framework, and finally the libertarian framework. Today the distinction between the economic and paternalistic framework is less clear.

hand, a less strong opinion on how others should behave may induce the allocator to compromise and impose a lower collective donation compared to his own individual donation. More specifically, we measure the difference between the allocator's individual donation and the donation he chooses for the others and investigate to what extent this difference is driven by the allocator's expectations about the others' individual donations. In this way, we can measure to what extent the allocator cares about the preferences of his group members.

A few experimental studies have been conducted on the willingness to limit others' choices. In a public goods experiment, Bolle and Vogel (2011) observe that giving one group member the power to decide on all group members' contributions enhances efficiency, but at the same time creates inequality because the allocator forces the others to contribute more than himself. Similarly, Hamman et al. (2011) find that having group members elect an allocator boosts contributions to a public good. Fleiss and Palan (2013) find that subjects in a public goods game voluntarily give up their rights to decide and let another participant decide for the whole group. Again, this has a positive effect on contribution levels. Oxoby (2013) confirms that individuals in a public goods experiment are willing to exchange liberty (i.e., unlimited choices) for efficiency. Contrary to these previous studies, in the present paper there is no clear trade-off between efficiency and individual liberty because we use a charitable giving experiment in which Pareto-improvements are not obvious.

Our results show that about 60% of the subjects do not modify their individual donation when their decision involves the whole group including themselves. We also find that around 60% of the subjects decide to restrict others' choices by setting a minimum donation level when the decision only involves the other group members. Hence, unlimited freedom of choice is rejected by a majority of the individuals. Instead they coerce others to donate at least an

amount they presumably perceive as just and responsible. We do, however, also find that an allocator who expects the others to donate, on average, less than him decreases the donation when donating on behalf of the group as well as when setting a minimum donation for the others, compared to his individual donation.

2 The experiment

2.1 Subject pool

Our sample consists of 216 undergraduate students enrolled at the University of Gothenburg, Sweden. Most students in our sample study economics and business administration and some major in other disciplines such as political science, human ecology, or engineering.

2.2 Decision tasks

Subjects, placed in groups of four, are confronted with three independent allocation decisions, all related to the amount to be donated to a WWF project aimed to save the orangutans.⁵ For each decision, they receive an endowment of 150 SEK.⁶ One decision is *individual* and the other two are *collective* in the sense that subjects decide on behalf of their group members.

- In the individual decision task, each subject decides, independently of the others, how much of his 150 SEK he wants to donate to the orangutan project, keeping the rest for himself. We regard this choice as revealing a person's preferences for the environmental good.
- In one of the two collective decisions, each subject decides unilaterally about the donation level that must be applied to every group member *including himself*.

⁵ In a pilot study, we tested and confirmed that students deemed this WWF project important enough to make positive donations.

⁶ At the time of the experiment, 7 SEK = 1 USD.

- In the other collective decision, each subject decides the *minimum* amount that the other persons in his group, *excluding himself*, have to donate. Thus, the subjects can impose a restriction on the others' choices without direct monetary consequences for themselves. The subjects were also given the opportunity not to restrict the others.

For each of the three allocation decisions, we discretize the choice set of each subject to sixteen alternatives: {0, 10, 20, ..., 130, 140, 150}.

Although the order in which decisions were made differed across subjects (we will return to this design feature later), for the sake of presentation we will refer to the individual decision involving only the allocator as “Choice 1,” the collective decision that concerns both the allocator and the other group members as “Choice 2,” and the collective decision that only affects the others as “Choice 3.”

2.3 Experimental design and procedures

The paper-and-pencil experiment was conducted over three sessions in May 2013 at the University of Gothenburg.⁷ The students were recruited in classrooms during lectures. In the recruitment process, they were told that the experiment concerned the environment and that they would earn a show-up fee of 60 SEK. The possibility of earning additional money in the experiment was also announced.

Each experimental session had four parts. The first three parts were devoted to the three donation decisions outlined above. The fourth part involved a questionnaire assessing the students' background and political views.

⁷ A pilot study was conducted in late 2009 and early 2010. Unlike the experiment reported here, the pilot presented all choices at once without varying the presentation order.

At the beginning of the experiment, the subjects were instructed that they would each be randomly assigned to a group of four people and that their fellow group members could be from any of the sessions we were conducting, including the one they were participating in.⁸ By this we wanted to make it more unlikely for the subjects to believe that they would be matched with people they knew.

Since we are interested in how one's own preferences for a specific WWF project relate to one's own willingness to limit others' choices, we administered the three choices in a within-subject design, i.e., we exposed each subject to all three decision tasks. Each decision was presented separately in separate envelopes. Only after all subjects had made their decisions in one part could they read the instructions for the next part. Subjects had to make the collective decisions (namely Choice 2 and Choice 3) prior to knowing whether or not they would be randomly drawn to be in the role of the allocator.⁹

Since exposure to multiple choices might generate demand effects (if, e.g., subjects understand the experimenters' purposes and change behavior accordingly) and/or carry-over effects (if, e.g., a choice faced at a later stage is biased by exposure to the earlier choice), we varied the order of the three choices across subjects. Instead of considering all six possible permutations of our three decision tasks, we concentrated on treatment sequences where individual Choice 1 was made before collective Choice 3. We wanted subjects to know that they were free to donate the amount they preferred when they set their restriction in Choice 3 and therefore we always kept Choice 1 before Choice 3. Additionally, our design does not allow us to confront subjects with Choice 3 without, concurrently, informing them of Choice

⁸ An English translation of the instructions and the decision forms is provided in Appendix B.

⁹ In modified dictator games, Iriberry and Rey-Biel (2011) test whether dictators make different choices depending on whether they know, before deciding, that they will be the dictator. They find that role uncertainty raises the occurrence of altruism and warned against its use in experiments aiming to identify different non-selfish motives. Since this is not the purpose of the present study, we do not regard the warning as a cause for concern. Additionally, our results show that allocators tend to reduce their individual donations when deciding on behalf of the group under role uncertainty.

1 as the restriction is binding only if it exceeds the individual decision. This leaves us with three treatment sequences implemented in a between-subject design: Choice 1 before Choice 2 before Choice 3 (henceforth referred to as T123); Choice 1 before Choice 3 before Choice 2 (henceforth T132); and Choice 2 before Choice 1 before Choice 3 (henceforth T213). Using the first choice of each sequence, we can make a better comparison between individual and collective choices, i.e., a comparison not confounded by potential demand and/or carry-over effects. Furthermore, if the choices are not affected by the order in which they are elicited, we can pool the data from the three sequences and compare the choices using the pooled data (for a thorough discussion of the issues arising from within-subject and between-subject designs, see Charness et al. 2012).

Final earnings were based on only one of the three choices that was selected at random. If a collective decision (i.e., either Choice 2 or Choice 3) was drawn for payment, one of the four group members was randomly assigned the role of group allocator. If the payoff-relevant decision was Choice 3, then the random allocator donated an amount equal to his Choice 1 and determined the minimum amount that his fellow members had to donate. If any of the other group members were willing to give more than this minimum, their preferences were respected in the sense that they donated according to their Choice 1. Subjects received feedback about the total amount donated to the WWF and their individual donations when they came to collect their earnings. To ensure credibility, a receipt from the WWF for the total amount donated was posted on a university announcement board. All subjects knew about these payment procedures prior to making their decisions.

In addition to the three main donation tasks, we elicited the subjects' beliefs about the other group members' donations. We used a simple monetary incentive scheme – subjects earned

10 SEK for each correct guess – which should minimize the possible effects of belief elicitation on choices (see, e.g., Rutström and Wilcox 2009).

Sessions lasted about 25 minutes and average earnings were 111 SEK (including the 60 SEK show-up fee).

2.4 Logistics of the sessions

The sequence of events in a session was as follows. At the beginning of each session, the subjects received general instructions explaining, step-by-step, the procedures to be followed. Four big envelopes (labeled “part 1,” “part 2,” “part 3,” and “part 4”) and one small envelope were handed out. Each big envelope contained the experimental instructions and decision form for the corresponding part. The small envelope contained a slip of paper with a code for later identification in order to be able to distribute earnings. On the experimenter’s signal, the subjects could remove all contents from the envelope marked “part 1,” read the enclosed instructions, and complete the decision form. After completing the decision form, they had to put it back into the “part 1” envelope. Once this had been done, the subjects could take the instructions and decision form out of the envelope marked “part 2” and go on as they did for part 1. The same procedure was used for parts 3 and 4. Finally, once everyone had completed the questionnaire, the subjects had to return the four envelopes to the experimenter. Payments were made some days later, following the formation of the four-person groups.

3 Model and research hypotheses

In this section we present a model and derive a set of research hypotheses. Let $I = \{1, \dots, n\}$ represent a group of n individuals. Each individual $i \in I$ has income M , which he can either consume privately or donate to a charity (here, the WWF project). Let d_i denote individual i ’s donation to the charity (i.e., the allocator’s donation), with $d_i \in [0, M]$, and let $D = d_i + (n -$

1) $E(d_j)$ be the total amount that i expects his group to donate, where $E(d_j) = \frac{1}{n-1} \sum_{j \neq i} d_j^e$ is the others' expected individual donation. Each individual i is supposed to care about his own private consumption, $M - d_i$, and the expected group donation to the charity, D . For simplicity, we assume that the utility function is linear in $(M - d_i)$ and D and takes the form

$$U_i = \alpha(M - d_i) + \beta D,$$

where $\alpha, \beta > 0$. Note that $\frac{\partial U_i}{\partial D} = \beta$, so that i 's utility increases with D irrespective of whether the total group donation varies because of i 's own or another group member's donation.¹⁰ The linearity of the utility function implies that the marginal rate of substitution between private consumption and donation is constant. Although this may not be realistic, it fits our purpose as we are mainly interested in qualitative predictions. Individual i 's optimal donation (for all $i \in I$) is then given by:

$$d_i^* = \begin{cases} M & \text{if } \beta > \alpha \\ 0 & \text{if } \beta < \alpha \end{cases}$$

Thus, if $\beta > \alpha$ the individual will donate everything to the charity, whereas if $\beta < \alpha$ the individual will not donate anything.

Suppose now that allocator i can influence the other group members' donations by choosing the amount that everyone in the group, including himself, must donate (Choice 2 in our experimental setting). Let us denote this amount by d_i^G , with $d_i^G \in [0, M]$. In this case, the total donation of the group is $D = n d_i^G$. We take into account the fact that allocator i may dislike imposing a choice on others and write his utility function as

$$U_i = \alpha(M - d_i^G) + \beta n d_i^G - \sigma (d_i^G - E(d_j))^2,$$

¹⁰ This assumption is made purely for convenience. The predictions of the model are similar if we allow for differences in utility depending on who donates to the charity.

where $\sigma \geq 0$. The third term captures the idea that i 's utility loss increases with the deviation of the imposed donation d_i^G from the others' expected individual donation $E(d_j)$. Assuming an interior optimum, allocator i 's optimal choice on behalf of the group then is

$$d_i^{G*} = E(d_j) + \frac{n\beta - \alpha}{2\sigma}$$

Thus, d_i^{G*} is greater or less than $E(d_j)$ depending on whether $n\beta$ is greater or less than α , respectively. Additionally, ceteris paribus, the difference between d_i^{G*} and $E(d_j)$ increases as σ tends to zero. At the limit, when $\sigma = 0$, allocator i 's optimal decision for the group coincides with his individual donation d_i^* . Hence, i 's collective donation can differ from his own donation and be closer to his expectations about the others' average donation, provided that the individual finds it costly to coerce the others.

Let us now turn to the situation where allocator i can set a minimum restriction on what all others should donate (Choice 3 in our experimental setting). Call R_i the minimum restriction chosen by i , with $R_i \in [0, M]$. For simplicity, we assume that the other group members are identical from i 's perspective so that a restriction either binds all the others or does not bind any of them. There are two important differences between this situation and the one concerning d_i^G . First, R_i is a minimum restriction and, as such, is binding only if it exceeds the individual donations chosen by the other group members, or – from the allocator's perspective – if it exceeds the others' expected individual donation, namely if $R_i > E(d_j)$. Second, the allocator can decide not to restrict, which implies that everyone can donate according to their individual preferences. We assume that there is a fixed cost associated with setting a positive restriction, irrespective of the size of the restriction. We denote this cost by Ω and assume that Ω is non-negative for all $R_i > 0$; otherwise it is 0. In order to keep the model as simple as possible, we also assume that Ω is independent of R_i , except that it is zero

for $R_i = 0$.¹¹ As in the previous situation, there is also a cost σ of setting a restriction that depends on the difference between the restriction and the expected donation of others. Thus, the total cost of setting a restriction will still vary with R_i . We will see that σ causes the restriction to vary with the allocator's beliefs about the others' donation and, depending on the beliefs, it can make the restriction either lower or higher than the individual donation. In contrast, Ω will always lower the restriction independently of the beliefs. Ω can be thought of as capturing the psychological cost of restricting others for individuals who are aware that they could hold biased beliefs and therefore would like to avoid imposing their choice on others.¹²

The decision about R_i can be viewed as a two-step problem. First, the allocator has to decide whether to set a restriction ($R_i \neq 0$) or not ($R_i = 0$); so the first decision is discrete. Then, if $R_i \neq 0$, the allocator must decide on the level of R_i ; the second decision is therefore contingent on the first decision, and it is continuous.

Let us begin with the first (discrete) decision problem: whether to set a restriction or not. The expected utility function can be written as

$$U_i = \alpha(M - d_i) + \beta D - \sigma \left(R_i - E(d_j) \right)^2 - \Omega,$$

where now $D = d_i + (n - 1)\max\{E(d_j), R_i\}$. The third term in the equation above is zero if the restriction is expected to be non-binding, i.e., if i would like to choose a value of R_i that is smaller than $E(d_j)$. In this case, setting $R_i = 0$ is optimal. To see this, suppose that $R_i < E(d_j)$. Then if allocator i decides for $R_i = 0$, his expected utility is $\alpha(M - d_i) +$

¹¹ In an alternative formulation we specified a model with continuous cost as function of the probability that the restriction is binding. The qualitative predictions of the alternative model do not differ from those of the model presented here.

¹² The existence of a cost associated with restricting others' decisions is of course an assumption. This may not be true for some individuals who may even experience a positive utility when they set a positive restriction. This would reverse some of the predictions of our model, and we would observe in the data a large fraction of restrictions, and restrictions that are higher than individual donations.

$\beta[d_i + (n - 1)E(d_j)]$, while if i decides for $R_i \neq 0$, his expected utility is $\alpha(M - d_i) + \beta[d_i + (n - 1)E(d_j)] - \Omega$. The difference between these two expected utilities equals $-\Omega (< 0)$, implying that if the restriction is expected to be non-binding, all positive restrictions result in a disutility of Ω .¹³

In the more general case where allocator i expects the restriction to be binding, choosing a positive rather than a zero value for R_i is optimal if i 's expected utility from restricting the others (U_i^B) is higher than i 's expected utility from not restricting them (U_i^{NB}). The difference between these expected utilities is:

$$U_i^B - U_i^{NB} = (n - 1)\beta(R_i - E(d_j)) - \sigma(R_i - E(d_j))^2 - \Omega.$$

This is a quadratic polynomial in the difference between the restriction R_i and the others' expected individual donation $E(d_j)$. Technically, the polynomial will be positive or negative depending on the sign of its discriminant. It can be shown that in order for $(U_i^B - U_i^{NB})$ to be positive, Ω must be less than $\frac{((n-1)\beta)^2}{4\sigma}$. This inequality makes good sense: for a given n , the lower the value of β (the marginal utility of expected group donation) and/or the higher the value of σ (the unit loss suffered by i if $R_i \neq E(d_j)$), the lower the value of Ω (the fixed cost of a positive restriction) should be in order for $R_i \neq 0$ to be optimal.

Thus, the allocator is predicted to opt for a restriction equal to zero either if he expects the restriction to be non-binding or if he expects the restriction to be binding and the parameter that captures the fixed cost of restricting is sufficiently large.

¹³ Using the utility difference approach, we avoid solving for the optimal restriction as a complicated nonlinear optimization problem since the utility function includes the discrete variable Ω in addition to continuous variables.

Let us now suppose that allocator i decides to restrict the others. Then the second (continuous) decision problem that i has to confront concerns the optimal value of R_i . In order to find the optimal restriction R_i^* , given that the restriction is expected to be binding (i.e., $R_i > E(d_j)$), we must solve $\frac{\partial U_i^B}{\partial R_i} = 0$. This yields

$$R_i^* = E(d_j) + \frac{(n-1)\beta}{2\sigma}.$$

As one could reasonably expect, *ceteris paribus*, the higher the marginal utility of the expected group donation and/or the lower the unit loss suffered by i if $R_i \neq E(d_j)$, the higher the optimal value of the restriction. Furthermore, we note that the restriction optimally imposed on the others, R_i^* , is smaller than the donation optimally chosen for the whole group, d_i^G , whenever $\beta > \alpha$. Thus, if the latter inequality holds, the restriction should be lower than the donation dictated to the group. The intuition behind this prediction is that when the allocator prefers giving money to the charity, he can do so independently of R_i^* , but not independently of d_i^G ; hence, he is willing to set a restriction lower than the donation he chooses for all group members (including himself).

To summarize, the aim of our simple model was to derive a set of research hypotheses that we are empirically able to test. Based on our model, these are:

Hypothesis 1 *The allocators who decide to restrict the others will choose, on average, a value of the restriction (Choice 3) lower than their own individual donation (Choice 1).*

Note that the model assumes that there is a fixed cost associated with setting a positive restriction on the others' choices.

Hypothesis 2 *The differences between individual (Choice 1) and collective donations (Choice 2 and 3) can be explained by the allocators' expectations about the group members' donations.*

The second prediction assumes that the allocator cares about the group members' opinion about how much to donate. For example, should the allocator expect his group members to individually donate less than himself, he may compromise and reduce the donation in the collective choices compared to his individual choice.

4 Results

Table 1 displays means (with standard deviations in parentheses) of the amounts donated to the WWF project in each of the three choices, separately for each treatment sequence as well as for all sequences. For ease of exposition, regardless of the order in which the choices were elicited, rows 1 and 2 refer, respectively, to Choices 1 and 2, and rows 3 and 4 refer to Choice 3. Additionally, the fifth row (i.e. Choice 4) details the share of subjects who set a positive restriction, and the sixth row reports descriptive statistics of the beliefs about the others' average individual donations.

Table 1 Average response for each choice

Choice	Description	T123	T132	T213	Overall
		Mean			
1	Individual donation	119 (45)	113 (47)	89 (53)	107 (50)
2	Donation for the whole group	109 (47)	100 (51)	95 (49)	102 (49)
3	Restricting other group members' choices, full sample	53 (54)	50 (55)	40 (48)	48 (53)
3	Restricting other group members' choices, only those that set a restriction	84 (45)	91 (40)	68 (45)	81 (44)
4	Share of subjects who set a positive restriction	0.63	0.55	0.59	0.59
5	Beliefs about the others' average individual donations	94 (36)	96 (34)	71 (42)	87 (39)
	Number of subjects	72	73	71	216

Note: Standard deviations in parentheses.

The results are organized in two subsections. First, we will present results regarding the relationship between individual and collective decisions; we shall utilize both the between- and within-subject comparisons. Then, we will investigate the role of beliefs about the others' decisions in explaining the differences between individual and collective decisions.

4.1 The relationship between the individual decision and the collective decisions

4.1.1 Between-subject comparisons

We begin with between-subject comparisons so as to mitigate concerns of confounds due to potential demand and/or carry-over effects, which may be present in within-subject comparisons. We first compare Choice 1 (the individual decision) and Choice 2 (the collective decision involving both the allocator and the others) and investigate whether having to decide for the whole group changes one's own donation behavior.

As shown in Table 1, donations dictated to the whole group are, on average, lower than individual donations involving only the allocator. The average individual donation (Choice 1) in T123 and T132 amounts to 116 SEK (the weighted average of 119 and 113), while the average donation dictated to the group (Choice 2) in T213 is 95 SEK. A Wilcoxon rank-sum test comparing the 145 individual Choices 1 (in T123 and T132) with the 71 collective Choices 2 (in T213) confirms that the difference between the two decisions is highly significant (p-value = 0.002).¹⁴

Next, we explore how decisions differ depending on whether the allocator dictates the whole group's donation (Choice 2) or the other group members' minimum donation (Choice 3). Table 1 shows that donations dictated to the whole group are, on average, higher than the

¹⁴ In T123 and T132 Choice 1 is made before Choice 2, and in T213 Choice 2 is made before Choice 1. The result also holds if we compare only the 72 individual Choices 1 (in T123) or the 73 individual Choices 1 (in T132) with the 71 collective Choices 2 (in T213).

minimum donations imposed on the others. The average minimum donation (Choice 3) in T132 equals 50 SEK, which is 45 SEK lower than the average donation dictated to the group (Choice 2) in T213. The difference is statistically significant (p -value < 0.001 ; Wilcoxon rank-sum test).¹⁵ Note that the results concerning the differences between Choice 1 and Choice 2 and between Choice 2 and Choice 3 also convey information about the relationship between individual donations (Choice 1) and restrictions (Choice 3): subjects prefer restricting others to donate a minimum amount that is much smaller than their individual donations. However, in Choice 3 subjects had the choice between setting a positive minimum donation and granting the others freedom of choice. We have the following main result.

Result 1 *A small majority of allocators opt for restricting the other subjects' decisions. The restriction imposed on the others is lower, on average, than the individual donation.*

Table 1 indicates that between 55% and 63% of the subjects (depending on the treatment) set a positive restriction, and the average minimum restriction is well above zero (see the third and fourth rows of Table 1). If we exclude individuals who did not restrict others (approximately 30 individuals in each treatment) and again compare Choice 2 in T213 with Choice 3 in T132, the average donation in Choice 2 is basically unaffected – it goes down to 94 SEK – while the average minimum donation in Choice 3 increases to 91 SEK. The difference between the two collective choices is, in this case, not statistically significant (p -value = 0.744; Wilcoxon rank-sum test), suggesting that such a difference can be largely explained by the allocators who did not force others to donate anything. At the same time, for the individuals who did restrict, the average minimum restriction (Choice 3) in T132 is still well below the individual donation (Choice 1) in T123 (p -value < 0.001 ; Wilcoxon rank-sum

¹⁵ Since in our experiment subjects are asked to impose a minimum restriction on the others' donations after choosing their own individual donations (practically, Choice 3 always follows Choice 1), the restrictions elicited in sequence T132 suffer less from confounds than those elicited in sequence T213. This explains why we use the former sequence for Choice 3 when comparing it with Choice 2. The results also hold if we compare Choice 2 in T123 with Choice 3 in T132, i.e., if either collective decision immediately follows Choice 1.

test). In Appendix A, we report the average response for each choice and treatment excluding subjects who did not set a restriction in Choice 3.

4.1.2 Within-subject comparisons

Using a within-subject comparison, we can obtain much richer information on the relationship between the different decisions. Figure 1 shows the distributions of the differences between Choice 1 and Choice 2 (top panels) and between Choice 2 and Choice 3 (bottom panels) for each of the three treatment sequences separately.

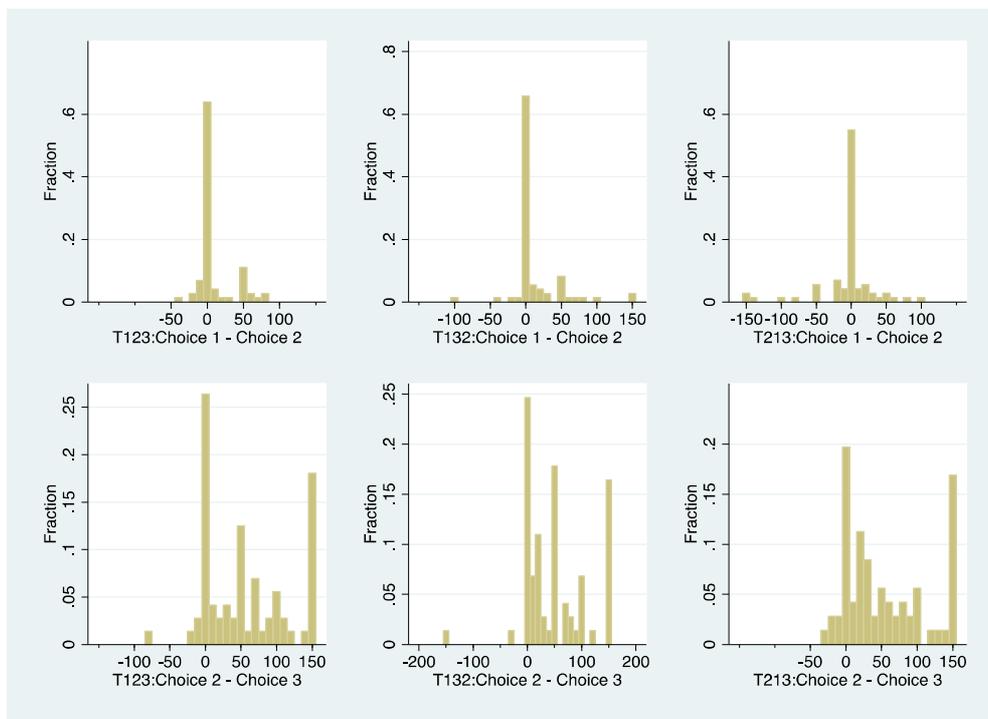


Fig. 1 Histograms of the differences between choices by treatment sequence

The top panels in Figure 1 reveal that all three distributions have some mass at zero, meaning that, regardless of the order in which choices are made, most subjects (about 60%) donate the same amount when deciding for themselves and for the whole group. However, there are some differences across sequences. In fact, there are more negative observations (i.e.,

observations with Choice 1 lower than Choice 2) in treatment T213, where subjects decide first for the whole group and then for themselves, than in treatments T123 and T132, where they make choices in the reverse order. We cannot reject the null hypothesis of no difference between Choice 1 and Choice 2 for T213 (p -value = 0.640; Wilcoxon signed-rank test), but we can reject it at the 5 percent level for T123 and T132.¹⁶

Turning to the differences between Choice 2 and Choice 3 (bottom panels of Figure 1), two observations are worth noting. First, whatever the treatment sequence, around 20% of the subjects set the minimum restriction for others at the same level as the donation they dictate to the whole group (including themselves). Second, all three distributions are positively skewed (there are relatively few negative values). As a matter of fact, for all three treatment sequences, Choice 3 is significantly lower than Choice 2 at any conventional significance level according to Wilcoxon signed-rank tests.

The results of the within-subject analysis therefore corroborate those obtained with the between-subject analysis, with the exception of the equality between Choices 1 and 2 in T213. Specifically, our results so far indicate that the allocators reduce, on average, the individual donations when choosing for the whole group. The reduction is even more pronounced when they are asked to restrict the choices of others without bearing any personal monetary consequences. Yet, the difference between the two collective choices is mainly explained by the share of subjects deciding not to impose a restriction at all.

So far we have addressed one of our main research questions, namely whether and to what extent allocators restrict the others' choices. We do know that a small majority of the allocators impose a positive restriction. We now turn to our second question and shed light on

¹⁶ One possible explanation for why individual donations are lower than donations for the whole group in T213 is that some kind of group identity is created when the first donation choice is a collective one (Choice 2). The individual donation is then made after the group identity has been formed. In contrast, in the other two treatments, a subject first states his own donation level and then, in the next choice, is told to decide for others.

what drives the allocators' choice when deciding for the group and when setting a restriction. Does the allocator care about the group members' preferences? Or does he impose his individual donation choice on the others? To answer these questions we consider the beliefs about the others' preferences and how these beliefs can influence decisions. Moreover, we investigate whether there are individual characteristics that can explain the differences between individual and collective donations.

4.2 The role of beliefs in the difference between individual and collective decisions

Let us first examine the subjects' beliefs about what the others on average donate. Comparing the first and sixth rows in Table 1, we see that expected individual donations are, on average, lower than one's own individual donations.

Statistical corroboration of this result is provided by a series of Wilcoxon signed-rank tests showing that, in all treatment sequences, the beliefs concerning the others' average individual donations are significantly different from individual donations (all three p-values < 0.001). This result is in line with previous studies on positive self-image, according to which people tend to think they are superior to others for instance because they overestimate their own abilities, or because a positive self-image increases happiness (see, e.g., Svenson 1981; Taylor and Brown 1988; Santos-Pinto and Sobel 2005).

The next and more important question is whether the shift in donations from the individual to the collective choices hinges on the difference between the allocators' own preferences (as revealed by their individual donations) and their beliefs about the others' preferences. In order to address this question we estimate a SUR model: in the first equation the dependent variable is the difference between own donation and collective donation in Choice 2; in the second equation the dependent variable is the difference between own donation and restriction on the others' choices (Choice 3). These two equations are estimated

simultaneously. We use the differences between choices as dependent variables because a non-zero difference indicates that the allocator adjusts his choice when making a collective decision. In Model 1 there are two main independent variables, apart from three dummy variables for the three treatment sequences. The first independent variable is the difference between own individual donation and beliefs regarding the others' donations for the group of subjects where this difference is positive. The second independent variable is the same difference, but in absolute value, for the group of subjects where the difference is negative. Thus, the first variable measures the distance between own decision and beliefs for those who believe that they donate more than the others, and the second variable measures the same distance for those who believe that they donate less than the others. In Model 2 we add a set of subject characteristics: *right-wing* (which takes the value 1 if the student has right-wing political orientations and 0 otherwise), *woman* (which is 1 for women and 0 for men), *env. organization* (which equals 1 if the student is member of an environmental organization and 0 otherwise), and field of study.¹⁷ As for field of study, we use students in economics as the reference case and have two other categories: *environmental science students* (which equals 1 if the student studies environmental sciences) and *other students* (which equals 1 if the student studies a subject other than economics and environmental science).¹⁸ We include field of study since the available empirical evidence indicates that economists behave differently from other students (for a survey of relevant work, see Lanteri 2008). Already in the early 1980s, Marwell and Ames (1981) observed that in public goods experiments, economists free-ride more than non-economists. They offered two explanations for this finding: a

¹⁷ As the students are very homogenous with respect to age and income, these characteristics are not included in the analysis.

¹⁸ There are three groups of undergraduate students participating in our experiment: economists, environmental science students, and other students. The numbers of observations for the three groups are 146, 31, and 39, respectively. The student groups differ considerably in political preferences, gender, and membership in environmental organizations. More specifically, there are significantly more right-wing supporters among economists (64%) and other students (51%) than among environmental science students (10%). Compared to economists, students majoring in disciplines other than economics/business administration are more likely to be women (51% vs. 69%). Finally, only 2% of the economists belong to an environmental organization, while 15% of the other students and 58% of the environmental science students do.

selection hypothesis (according to which students who are particularly concerned with economic incentives self-select into economics) and a learning hypothesis (claiming that economics students adapt their behavior over time to the basic axioms of the theories they study). Results are presented in Table 2.

Table 2 SUR models: impact of beliefs on the difference between individual and collective decisions

	Model 1		Model 2	
	Ch. 1–Ch. 2	Ch. 1–Ch. 3	Ch. 1–Ch. 2	Ch. 1–Ch. 3
(Choice 1–Beliefs about others’ donations) when difference is positive	0.259*** (0.072)	0.358*** (0.123)	0.263*** (0.073)	0.378*** (0.125)
(Choice 1–Beliefs about others’ donations) when difference is negative	-0.338** (0.136)	-0.777*** (0.231)	-0.343** (0.136)	-0.803*** (0.231)
right-wing			8.71* (4.73)	7.78 (8.03)
woman			3.34 (4.50)	9.55 (7.65)
env. organization			-4.98 (8.27)	-16.17 (14.05)
environmental science students			4.629 (8.29)	-0.63 (14.09)
other students			-4.93 (5.97)	2.35 (10.15)
T123	3.656 (4.50)	59.13*** (7.63)	-1.680 (5.87)	51.08*** (10.17)
T132	8.553* (3.89)	59.32*** (7.44)	2.170 (5.87)	51.61*** (9.98)
T213	-9.632** (4.57)	46.06*** (7.76)	-15.98*** (6.24)	35.87*** (10.61)
Correlation	0.22		0.21	
Breusch-Pagan test of independence	Chi = 10.4 p-value = 0.001		Chi = 9.3, p-value = 0.002	
No. of obs.	216	216	216	216
R ²	0.18	0.57	0.20	0.58

Note: *, **, and *** denote significance at the 10%, 5%, and 1% level, respectively.
Std. errors are reported in parentheses.

Let us begin with Model 1. For both equations we find that the larger the absolute difference between own individual donations and beliefs about the others’ individual donations, the larger the difference between Choice 1 and either collective choice. Thus, for example, compared to an individual who believes that the others’ individual donations are in line with

his own, an individual who expects the others to donate less than him decreases his own individual donation both when deciding on behalf of the group and when setting a minimum donation on the others. For a person who expects others to donate more than him, the effect is the opposite. This establishes our second main result.

Result 2. *Allocators adjust the decisions that affect others based on their expectations of what others will donate.*

The signs and significance of the treatment dummy variables indicate that for an individual who believes that the others' individual donations are in line with his own, i.e., for whom the two first independent variables are zero, there is still a statistically significant difference between individual decisions and collective decisions involving the whole group (Choice 2) in two out of three treatments, although the size of the difference is not very large and its sign varies across treatments. The difference between individual decisions and collective decisions restricting others (Choice 3) is, however, much larger and statistically significant in all three treatments.

Model 2, controlling for background characteristics, shows that the difference between Choice 1 and Choice 2 is larger for right-wing supporters than for students with other political preferences, meaning that those voting for right-wing parties reduce the donation level in Choice 2 more. No other individual characteristic can explain the variation in the differences between individual and collective choices. This means, among other things, that we do not observe any significant difference between economics students and students majoring in other subjects.

5 Conclusions

We have considered an augmented allocation experiment with a WWF project as the recipient. Allocators in each group of four were asked, in separate steps, to choose their own donation, the mandatory donation for each group member including themselves, and the minimum donation for the other group members. By using this design, we mainly aimed at answering the following two research questions: Will the allocator restrict the others' choices by setting a minimum donation level for them when such a restriction bears no monetary consequences for the allocator but does affect the WWF project? Will the allocator care about the group members' opinions or will he tend to impose his own preferences on the others when he chooses on behalf of the group?

We find that around 40% of the subjects do not choose to restrict others. Among those who do apply a restriction, the imposed average restriction is similar to the decision involving the whole group. This result suggests that there are two types of individuals: those willing to grant complete freedom of choice (via larger choice sets) and those willing to set rather strict limits on others' behavior (to some extent, they decide in favor of the environmental project at the expense of the payoff-maximizing choice of their fellow members). Hence, unlimited freedom of choice is rejected by a majority of the individuals, as they coerce others to donate an amount they presumably perceive as just and responsible. We also find that about 60% of the subjects do not modify their individual donation when their decision involves the whole group. However, the average difference between the two decisions is significant in two out of the three implemented treatment sequences: on average people tend to decrease their own individual donation when deciding on behalf of the group. This result does not confirm the concern by Friedman (1962) that people would spend others' money less carefully than their own money.

As regards our second research question, the regression analysis shows that this decrease is positively correlated with the expected difference between one's own donation and the others' average donation: allocators decrease their individual donation more the less giving behavior they expect from the others.

References

- Bolle F., Vogel C. (2011). Power comes with responsibility – or does it? *Public Choice* 148: 459–470.
- Camerer C., Issacharoff S., Loewenstein G., O'Donoghue T., Rabin, M. (2003). Regulation for conservatives: Behavioral economics and the case for 'asymmetric paternalism'. *University of Pennsylvania Law Review* 151: 1211–1254.
- Charness G., Gneezy U., Kuhnc M. A. (2012). Experimental methods: Between-subject and within-subject design. *Journal of Economic Behavior & Organization* 81: 1–8.
- Fleiss J., Palan S. (2013). Of coordinators and dictators: A public goods experiment. *Games* 4: 584–607.
- Friedman, M. (1962). *Capitalism and Freedom*. University of Chicago Press, Chicago.
- Hamman J.R., Weber R.A., Woon J. (2011). An experimental investigation of electoral delegation and the provision of public goods. *American Journal of Political Science* 55: 738–752.
- Iriberry N., Rey-Biel P. (2011). The role of uncertainty in modified dictator games. *Experimental Economics* 14: 160–180.
- Lanteri A. (2008). (Why) do selfish people self-select in economics? *Erasmus Journal for Philosophy and Economics* 1: 1–23.
- Littlechild S.C., Wiseman J. (1986). The political economy of the restriction of choice, *Public Choice* 51: 161–172.
- Marwell G., Ames R. (1981). Economists free ride, does anyone else? Experiments on the provision of public goods, IV. *Journal of Public Economics* 15: 295–310.
- O'Donoghue T., Rabin M. (2003). Studying optimal paternalism, illustrated by a model of sin taxes, *American Economic Review (Papers and proceedings)* 93: 186–191.

- Oxoby, R. J. (2013). Paretian dictators: constraining choice in a voluntary contribution game. *Constitutional Political Economy* 24, 125–138.
- Rutström E., Wilcox N. (2009). Stated beliefs versus inferred beliefs: a methodological inquiry and experimental test. *Games and Economic Behavior* 67: 616–632.
- Santos-Pinto L., Sobel, J. (2005). A model of positive self-image in subjective assessments. *American Economic Review* 95: 1386–1402.
- Sunstein C., Thaler R. (2003a). Libertarian paternalism. *American Economic Review* 93: 175–179
- Sunstein C., Thaler R. (2003b). Libertarian paternalism is not an oxymoron. *The University of Chicago Law Review* 70: 1159–1202
- Svenson O. (1981). Are we less risky and more skillful than our fellow drivers? *Acta Psychologica* 47: 143–148.
- Taylor S. E., Brown J. D. (1988). Illusion and well-being: A social psychological perspective in mental health. *Psychological Bulletin* 103: 193–210.

Appendix A

Table A.1 Average response for each choice (only subjects who did restrict in Choice 3)

Choice	Description	T123	T132	T213	Overall
		Mean			
1	Individual donation	116 (45)	121 (37)	91 (47)	109 (45)
2	Donation for the whole group	108 (47)	110 (44)	94 (46)	104 (45)
3	Restricting other group members' choice	84 (45)	91 (40)	68 (45)	81 (44)
4	Beliefs about the others' average individual donations	94 (37)	93 (30)	71 (39)	86 (37)
	Number of subjects	45	40	42	127

Note: Standard deviations in parentheses.

Appendix B. Instructions (originally in Swedish)

Welcome! You are about to participate in an experimental study carried out by researchers at the School of Business, Economics and Law at the University of Gothenburg and the Max Planck Institute of Economics in Germany.

The experiment consists of four parts. When all four parts have been completed, you will receive a show-up fee of 60 SEK. You can earn additional money depending on your decisions in the experiment. In order for us to be able to use your decisions and to give you the additional money you may earn during the experiment, you have to answer ALL questions. All answers will be treated anonymously and cannot be traced to your name.

It is important that you remain silent and refrain from looking at other people's responses. If you have questions or need assistance of any kind, please raise your hand.

The experiment will be carried out in the following steps:

1. When everyone has finished reading, we will give you four large and one small envelope. The large envelopes are labeled "Part 1" to "Part 4." Each envelope contains instructions and a decision sheet. The small envelope contains a strip with your **identification number**. Do not reveal your identification number to any other subject.
2. When the experimenter tells you to do so, open the big envelope (marked "Part 1") and take out the contents. The envelope contains instructions that we want you to read through. Please raise your hand if you have any questions. Then answer the questions on the decision sheet.
3. After you have made all the required decisions, please put the completed decision sheet back into the big envelope marked "Part 1" and make sure to seal it.

4. Then continue in the same way with “Part 2,” “Part 3,” and “Part 4.” It is important that you answer the different parts in the correct order.
5. As soon as you have answered all the questions, please give your four envelopes to the experimenter. The experimenter will also give you the show-up fee of 60 SEK as a thank you for your participation.
6. Keep the strip with your identification number. You will be asked to show it when you collect the money you may have earned from the experiment. You can pick up your money on Thursday, May 30th from 12 noon to 3pm in the conference room at the Department of Economics, School of Business, Economics and Law, Building E, 6th floor.

Part 1: INSTRUCTIONS

In this part of the experiment, you will be randomly assigned to a group of four people. You will not be present when we form the groups and you will never be able to identify any of the other members of your group. Your group members will be other students from the School of Business, Economics and Law but not necessarily those who are here with you now.

Each subject receives an endowment of 150 SEK in addition to the 60 SEK show-up fee. You have to decide how much of your endowment of 150 SEK you want to donate to a project aimed to save the orangutans. You must make this decision individually and independently of the others' donation decisions. The money that you do not want to donate you will keep for yourself.

The amount of money that you and the other members of your group might decide to donate to the orangutan project will be paid in full to WWF, which is in charge of the project. When you come and collect your earnings you will be informed about the total donation to the WWF and your individual contribution to the project. A copy of the receipt will also be made available on the bulletin board of the Department of Economics once the money has been paid to the WWF.

Orangutan project

The orangutan is in serious danger of becoming extinct. The reason for this is to a large extent that two million hectares of rainforest have been harvested annually for the last ten years.

Another problem is the illegal hunting for meat. In the last 100 years, 90% of the orangutans have disappeared. According to WWF, something has to be done now or the orangutan will soon be extinct. As part of the work to save the orangutans, the WWF continuously collects money from the public.

Your earnings

The amount of money you earn will be based on only *one* of the decisions you will make in Parts 1, 2, and 3. More specifically, upon completion of the experiment, we will randomly select one of the three decisions as the decisive one. Thus, you will be paid according to your decision in the part that will be randomly chosen. Each decision (in Part 1, Part 2, and Part 3) has the same probability of being selected as the decisive decision. The decisive decision will be the same for all groups.

Please try to make your decisions in all parts carefully since you do not know which part will determine your earnings in the experiment. If Part 1 is randomly selected for payment, then both you and the other members of your group will donate to the project the amount each of you has individually specified. This means that each group member will keep for him/herself the difference between 150 SEK and his/her own individual donation in Part 1.

Once you have made your choice and guess, please put the decision sheet back into the envelope labeled “Part 1” and continue with “Part 2.”

Your identification number:

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Part 1: DECISION SHEET

Decision 1: Your first decision is to decide how much of your 150 SEK endowment you want to donate to the orangutan project. You will keep for yourself the money you do not want to donate. Think carefully before making this decision as it can be decisive for your earnings from the experiment and the money paid to the orangutan project.

Of the 150 SEK that I have been endowed with, I want to donate the following amount to the orangutan project (please mark one of the boxes below):

- | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 0 SEK | <input type="checkbox"/> 10 SEK | <input type="checkbox"/> 20 SEK | <input type="checkbox"/> 30 SEK | <input type="checkbox"/> 40 SEK |
| <input type="checkbox"/> 50 SEK | <input type="checkbox"/> 60 SEK | <input type="checkbox"/> 70 SEK | <input type="checkbox"/> 80 SEK | <input type="checkbox"/> 90 SEK |
| <input type="checkbox"/> 100 SEK | <input type="checkbox"/> 110 SEK | <input type="checkbox"/> 120 SEK | <input type="checkbox"/> 130 SEK | <input type="checkbox"/> 140 SEK |
| <input type="checkbox"/> 150 SEK | | | | |

We will now ask you to make guesses regarding the other group members' choices.

Guess 1. How much do you think the three other members of your group are willing to donate to the orangutan project in Decision 1? Please indicate how many of your group members you think will donate according to the amounts below by writing the appropriate number in the corresponding blank. Remember that the number of group members should sum up to three. Each correct guess will give you an extra 10 SEK.

I think that:

..... individual(s) will donate 0 SEK

..... individual(s) will donate 10 or 20 SEK

..... individual(s) will donate 30 or 40 SEK

..... individual(s) will donate 50 or 60 SEK

..... individual(s) will donate 70 or 80 SEK

..... individual(s) will donate 90 or 100 SEK

..... individual(s) will donate 110 or 120 SEK

..... individual(s) will donate 130 or 140 SEK

..... individual(s) will donate 150 SEK

Part 2: INSTRUCTIONS

In the second part of the experiment, you will face a situation similar to that encountered in the first part. As before:

- Your group members are other students from the School of Business, Economics and Law, but are not necessarily any of those who participate in the experiment at the same time as you.
- You and the other three members of your group will receive an endowment of 150 SEK in addition to the show-up fee of 60 SEK as a thank you for your participation.
- You will decide how much of the 150 SEK you want to donate to the project aimed to save the orangutans.

The difference is that now you decide the amount that **every person in your group** (including yourself) has to donate to the orangutan project. That is, everyone in your group has to pay the same amount according to your decision.

Think carefully before making your decision as it can be decisive for how much you and your group members will earn during the experiment and how much money will be paid to the orangutan project.

Your earnings from the experiment

If Decision 2 is selected for the payment, then a randomly chosen individual from each group will determine how much every member (including him/herself) has to donate to the project and therefore how much every member can keep for him/herself.

Once you have made your choice and guess, please put the decision sheet back into the envelope labeled “Part 2” and then continue with “Part 3.”

Your identification number:

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Part 2: DECISION SHEET

Decision 2: You will now decide how much of the 150 SEK endowment you want to donate to the orangutan project when **everyone** in your group must donate **the same** amount as you. Think carefully before making your decision as it can be decisive for how much you and your group members will earn during the experiment and how much money will be paid to the orangutan project.

Of the 150 SEK that I have been endowed with, I want to donate the following amount to the orangutan project, which implies that **everyone** in my group (including myself) must donate **this** amount to the project (please mark one of the boxes below).

- | | | | | |
|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| <input type="checkbox"/> 0 SEK | <input type="checkbox"/> 10 SEK | <input type="checkbox"/> 20 SEK | <input type="checkbox"/> 30 SEK | <input type="checkbox"/> 40 SEK |
| <input type="checkbox"/> 50 SEK | <input type="checkbox"/> 60 SEK | <input type="checkbox"/> 70 SEK | <input type="checkbox"/> 80 SEK | <input type="checkbox"/> 90 SEK |
| <input type="checkbox"/> 100 SEK | <input type="checkbox"/> 110 SEK | <input type="checkbox"/> 120 SEK | <input type="checkbox"/> 130 SEK | <input type="checkbox"/> 140 SEK |
| <input type="checkbox"/> 150 SEK | | | | |

We will now ask you to make guesses regarding the other group members' choices.

Guess 2. How much do you think the three other members of your group are willing to donate to the orangutan project in Decision 2 when every group member has to donate the same amount? Please indicate how many of your group members you think will donate according to the amounts below by writing the appropriate number in the corresponding blank. Remember that the number of group members should sum up to three. Each correct guess will give you an extra 10 SEK.

I think that:

- individual(s) will donate 0 SEK
- individual(s) will donate 10 or 20 SEK
- individual(s) will donate 30 or 40 SEK
- individual(s) will donate 50 or 60 SEK
- individual(s) will donate 70 or 80 SEK
- individual(s) will donate 90 or 100 SEK
- individual(s) will donate 110 or 120 SEK
- individual(s) will donate 130 or 140 SEK
- individual(s) will donate 150 SEK

Part 3: INSTRUCTIONS

In the third part of the experiment, you will face a situation similar to that encountered in the first two parts. As before:

- Your group members are other students from the School of Business, Economics and Law, but are not necessarily any of those who participate in the experiment at the same time as you.
- You and the other three members of your group will receive an endowment of 150 SEK in addition to the 60 SEK show-up fee as a thank you for your participation.

The difference is that, of the 150 SEK that your group members are endowed with, you will decide the **minimum amount** that the other persons in your group (but not yourself) have to donate (if at all) to the orangutan project.

Your earnings from the experiment

If Decision 3 is selected for payment, then a randomly chosen individual from each group will determine the minimum amount that the other members have to donate to the project while the randomly chosen group member him/herself will donate according to his/her individual choice in Part 1. If any of the other group members in Part 1 were willing to donate more than this minimum amount, then the higher amount will be used and he/she will donate according to his/her decision in Part 1. If the randomly chosen group member decides not to set a minimum amount, then each member will donate according to his/her choice in Part 1.

Once you have made your choice, please put the decision sheet back into the envelope labeled “Part 3” and continue with “Part 4.”

Your identification number:

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Part 3: DECISION SHEET

Decision 3: Your third choice is to decide how much of their 150 SEK endowment the other persons in your group *at a minimum* have to donate to the orangutan project. If you think that the decision of how much to donate is something each individual should decide for him/herself (according to his/her answer in Part 1), choose the alternative “I think everyone should decide for themselves how much to donate.” Think carefully before making your decision as it can be decisive for how much you and your group members will earn during the experiment and how much money will be paid to the orangutan project.

Of the 150 SEK that they have been endowed with, I want the other group members to donate the following amount at a **minimum** to the orangutan project (please mark one of the boxes below).

- 0 SEK 10 SEK 20 SEK 30 SEK 40 SEK
- 50 SEK 60 SEK 70 SEK 80 SEK 90 SEK
- 100 SEK 110 SEK 120 SEK 130 SEK 140 SEK
- 150 SEK

I think that everyone should decide for themselves how much to donate.