Who delegates? Evidence from dictator games*

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Abstract

We conduct and compare two binary dictator experiments in which the available payoff profiles are identical. In one of the games, selfish payoffs can be probabilistically implemented either via a delegate or directly; in the other game, the same payoffs can only be implemented by direct choice. We find that (1) the delegation option is almost entirely chosen by those who would otherwise be generous dictators, (2) the delegation option thereby leads to a greater overall propensity for selfish payoffs, and (3) in the delegation game, selfish dictators exhibit a net preference for direct vs. delegated decisions, consistent with recent research on decision rights.

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1 Introduction

Agency relationships are ubiquitous in economic interchange, for example in outsourcing, intermediation, and representation services. Recent research identifies impacts of delegation - when a decision is implemented via another person - on the moral content of the decision. When compared with direct decisions by a principal, delegation can attenuate a principal's preference for generosity/fairness (Hamman, Loewenstein & Weber, HLW, 2010) and shift the blame for outcomes that are harmful to others (Bartling & Fischbacher, 2012; Coffman, 2011; Fershtman & Gneezy, 2001; Oexl & Grossman, 2013).

Such effects provide a motive for principals to make decisions through delegates, with a degree of separation that permits selfish outcomes to have lower moral costs. However, recent research documents a countervailing preference for direct decisions (Fehr, Herz & Wilkening, 2013; Bartling, Fehr & Herz, 2014; Owens, Grossman & Fackler, 2014). The two competing forces will lead to delegation when the separation benefit exceeds the cost of foregoing direct choice.

In this paper, we are interested in who chooses to delegate payment decisions in a binary dictator game with no scope for blame or punishment (or reciprocity / betrayal). While an exogenous assignment to a delegated situation can make players less generous (HLW), will those who are otherwise generous *choose* a delegated decision over a direct one? If not, a delegation option will not increase selfishness overall.

We find that those choosing to delegate are almost entirely players who would otherwise be generous when there is no delegation option. One interpretation is that the generous differentially sort into delegation, akin to the Lazear, Malmendier & Weber (2012) finding that the otherwise-generous sort into an available exit option. The difference here is that delegation does not avoid an allocation decision, but rather makes it through another player.

2 The Experiment

We conduct two strategically identical dictator experiments in economics classrooms. Each experiment involves a dictator who makes a decision and an anonymous matched Receiver. In both, baseline payments are $3 to each player. There are two payment options, one of which is implemented based on the dictator's decision:

Option 1: Give the dictator $2 more ($5 total) and the Receiver $2 less ($1 total).

Option 2: Make no change, so that the two players obtain $3 each.

In one treatment (DIR for "direct"), the dictator chooses between the two options. In the other treatment (DEL for "delegated"), each dictator chooses between the two direct choice options and a third alternative in which the decision of a randomly selected (anonymous) dictator from the DIR treatment is implemented for the dictator and his/her Receiver. In both treatments, the selfish Option 1 (if chosen) is implemented with probability Q, where Q is an overall proportion of DIR dictators choosing Option 1.[1] Option 2 (if chosen) is implemented with probability one. The option order is randomly varied. Sample instructions are contained in an online Appendix.[2]

In DEL, the probabilities of the two payment options are identical when the dictator directly chooses Option 1 or delegates. This probabilities are also the same for a DIR dictator choosing Option 1. The available payment profiles is therefore identical in the two treatments.

Our question is: How does the availability of the delegation option in DEL affect decisions? Neither those who are generous in DIR, nor those who are selfish, have a reason to choose the other direct decision in a DEL situation. We can therefore estimate the extent to which the otherwise-generous delegate by taking the difference between proportions choosing the direct generous Option 2 in DIR vs. DEL; likewise for the otherwise-selfish.

[1] Potential delegates for DEL subjects, and Q probabilities for all dictators, are drawn from DIR treatments in different classrooms than the dictators themselves. DIR subjects are not told that their own session could be used to construct Q for another session.

[2] Dictators are each told that the Receiver (player C or D) does not know the payment options and "only knows that someone else will make a choice that determines payments to both of you."

If delegation attenuates the preference for generosity (the HLW effect), then both those who would otherwise be generous in a DIR situation, and those who would otherwise be selfish, have a motive to delegate in order to obtain the attenuation benefit. Competing with this benefit is any net preference for direct decision-making. If the attenuation benefit is greater for the otherwise-generous who have "more" generosity to attenuate, and there is no distributional difference in baseline preferences for direct decision rights, then the otherwise-generous will have a greater propensity to delegate in DEL. By this logic, we expect that the difference between the propensities for a direct generous decision in the DIR vs. DEL treatment – our measure of delegation by the otherwise-generous – is positive and larger than the propensity to delegate by the otherwise-selfish.

Although it is not their focus, Bartling & Fischbacher (BF, 2012) present an experiment that is most closely related to the comparisons we make here. BF conduct two control treatments in which there is no punishment and, respectively, a delegation option and no delegation option. Comparing the two, an almost identical share of subjects are directly selfish in both treatments and 17 percent delegate in the delegation treatment, entirely those who otherwise would be generous. Unlike the present experiment, delegation in BF has two costs for selfish-preferring subjects: the lost benefit of direct decisions and a reduced probability of the selfish allocation. Our experiment controls for the second effect, and makes the games strategically identical, by structuring direct selfish payoffs that mimic payoffs under delegation.

3 Logistics

The experiment is run in five upper and lower division economics classes at U.C. Merced, enrolling a total of 234 dictators, 117 each for the two treatments. Treatments are randomly assigned within each classroom, producing a virtually identical gender distribution, 58.1 percent male in DEL and 56.9 percent male in DIR. No communication is allowed during the experiment. Students are spaced facing forward as in an exam and monitored to ensure privacy. Subjects are anonymous, identified for payment by a registration number/tag attached to each experimental questionnaire. Each student is paid the week following the experiment using a closed envelope identified by the student's registration number. To avoid potential experimenter demand, or desire to please, subjects are told verbally that the experiment is part of our research and we would like students to make the decisions they prefer under the indicated circumstances. Matched Receivers and potential delegates are anonymous players in other classrooms.

4 Results

Table 1 and Figure 1 present raw results from the experiment, both overall and broken down by gender. Overall, 22.2 percent of DEL subjects opt to delegate. An estimated 19.7 percent of subjects delegate in DEL who would otherwise be generous in DIR ($z=3.005$, $p<0.01$, Table 1 column 4) - over 88 percent of the delegators.[3] Conversely, only 2.6 percent of subjects delegate in DEL who would otherwise be selfish in DIR ($z=0.397$, column 5). Differences between the percentages of otherwise-generous and otherwise-selfish delegators - the 17.1 percent difference-in-difference in column 7 - is weakly significant (one tail $p<0.10$). This pattern of behavior is broadly similar across the two genders and robust to regressions that control for classroom and gender fixed effects (Table 2).

Result 1. Delegation is almost entirely attributable to those who would otherwise be generous (without a delegation option). The delegation option (in DEL) therefore increases the propensity for selfish decisions (column 4, Table 1; panel A, Table 2).

A related conclusion is that the otherwise selfish almost entirely prefer the *directly* selfish option over the equivalent delegation option in the DEL treatment: they have a prevailing preference for retaining direct decision rights (c.f., Bartling et al., 2014). To test for this effect, note that the choice between these two payment options would be a matter of chance (i.e., equally likely) if there were *no* differential preference for direct decision making. However, consistent with the decision rights literature, the difference in proportions choosing

[3] z-statistics in Table 1 are normalized values from the Mann-Whitney-Wilcoxon rank sum U test (columns 4-7) and the one sample Wilcoxon signed rank test (column 8). Parametric difference-in-mean analogs are similar.

direct selfish (40.2%) and delegation (22.2%) in the DEL treatment is large (18%), significant (z=2.453, p=0.028), and similar across the two genders (Table 1, column 8).

Result 2. Among selfish-preferring subjects in the (DEL) delegation game, there is a prevailing preference for a direct vs. delegated decision.

5 Conclusion

One motive for a principal to delegate a decision to others is to avoid moral costs of "dirty work" - decisions that harm others to one's own benefit. Prior literature documents (1) the attenuation of concern for others when a selfish decision is made by a delegate, rather than directly (e.g., HLW), and (2) a countervailing preference for direct decision-making. This tension motivates the question we pose: Who delegates? In the binary dictator experiments presented here, we find that delegation occurs almost entirely by those who would otherwise be generous; benefits of delegation in attenuating generous impulses are greater when these impulses/preferences are stronger.

Bartling & Fischbacher (2012) obtain a similar result. However, in their experiment, "selfish" subjects could be reluctant to delegate because delegates may or may not implement the preferred selfish payoffs. This effect is absent in our experiment because direct selfish and delegated decisions implement payment allocations with exactly the same probabilities. The similarity between our respective results suggests that the selfish tend not to delegate in either experiment because, for them: (1) delegation produces a small moral attenuation effect that (2) is dominated by their preference to retain decision rights.

Overall, our results indicate that the presence of opportunities to delegate selfish decisions promotes "dirty work" by attracting clients who would otherwise be virtuous.

6 References

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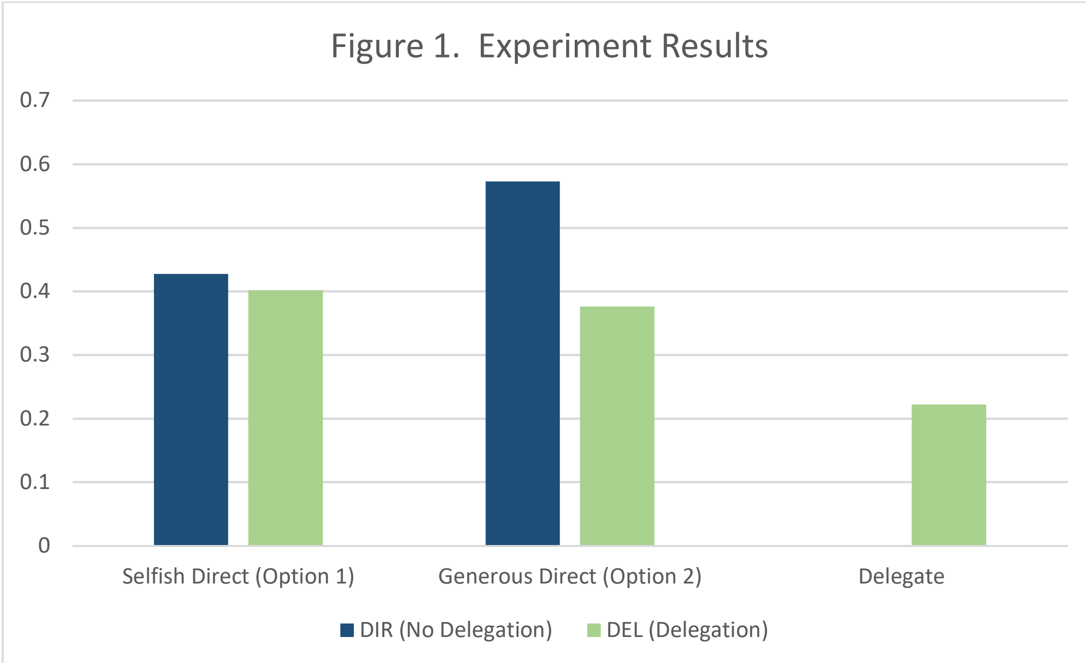
Figure 1. Experiment Results
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Selfish Direct (Option 1)
Generous Direct (Option 2)
Delegate
DIR (No Delegation)
DEL (Delegation)

Table 1. Summary Statistics[A]

(1) Sample ↓	(2) Treatment↓	(3) N	Percent Choosing ↓ (4) Generous NC (No Change)	(5) Selfish MC (Make Chg.)	(6) Delegate	(7) Diff-in-Diff (z stat)[B]	(8) Diff: MC – Delegate (z stat)[C]
Full	DIR	117	0.5726	0.4274	--	--	--
	DEL	117	0.3761	0.4017	0.2222	--	0.1795 (2.453)**
	Diff (DIR-DEL) (z stat)[B]		0.1966 (3.005)***	0.0256 (0.397)	--	0.1709 (1.483)+	--
Male	DIR	66	0.5303	0.4697	--	--	--
	DEL	68	0.3676	0.4118	0.2206	--	0.1912 (1.975)**
	Diff (DIR-DEL) (z stat)[B]		0.1626 (1.886)*	0.0579 (0.673)	--	0.1047 (0.650)	--
Female	DIR	50	0.6400	0.3600	--	--	--
	DEL	49	0.3878	0.3878	0.2245	--	0.1633 (1.451)+
	Diff (DIR-DEL) (z stat)[B]		0.2522 (2.498)**	-0.0278 (-0.284)	--	0.2800 (1.633)+	--

Notes: [A] +p<0.10 (one tail), *p<0.10 (two tail), **p<0.05 (two tail), ***p<0.01 (two tail).
[B] z statistics (columns 4-7) are normalized Mann-Whitney-Wilcoxon ranked sum U values.
[C] z-statistics (column 8) are normalized values for the one-sample Wilcoxon signed rank test.

Table 2. OLS Regressions

Coefficient On ↓		(A) Difference Regressions (Dep. Var. = NC)		(B) Diff-in-Diff Regressions (Dep. Var. = MC-NC)	
DEL Dummy	X Male	-0.2046 (-3.184)***	-0.1562 (-1.816)*	0.1882 (1.536)+	0.0824 (0.500)
	X Female		-0.2702 (-2.794)***		0.3316 (1.812)*

Notes: NC = No Change / Option 2 dummy, MC = Make Change / Option 1 dummy. Robust t-stats in parentheses. All models include course fixed effects and the gender (male) dummy. +p<0.10 (one tail), *p<0.10 (two tail), ***p<0.01 (two tail).

Online Appendix

Sample Instructions for the DEL Experiment

In this experiment, you (player A) are matched with another student in a different economics classroom (player C). **Each of you obtains a base payment of $3** for this experiment. Based on a decision that you make, this initial set of payments can be changed in the following way:

> **Payment Change**: You can earn $2 more, with player C earning $2 less, for total payments of **$5 to YOU and $1 to PLAYER C**.

You will also be matched with two other students, players B and D, who are in a similar situation as you and player C, but in different economics classrooms. Both players B and D also get a base payment of $3 each, and player B decides whether to make the Payment Change, so that B earns $2 more (total of $5) and D earn $2 less (total of $1).

For your matched Player B's classroom, we will calculate the percentage of *all* "player B's" who choose to make the Payment Change (vs. not). We will call this percentage Q. For example, if half of the player B's choose to make the Payment Change, and half do not, then Q will be 50 percent.

YOU have three options:

> Option 1: YOU choose to MAKE the Payment Change directly ($2 more for you and $2 less for player C).
> *In this case, the Payment Change will be implemented for you and player C with probability Q.*
>
> Option 2: DO NOT make the Payment Change (so that you and C each obtain the initial $3).
> *In this case, your choice – NO PAYMENT CHANGE – will be implemented with 100 percent probability.*
>
> Option 3: Implement PLAYER B's decision.
> *In this case, if your matched player B chooses to make the Payment Change for himself/herself and his/her player D, then the Payment Change will be made for you and player C as well. Likewise, if your player B chooses not to make the change, then the Payment Change will NOT be implemented for you and player C.*

You know what the Options are, but your player C **DOES NOT**. Player C only knows that someone else will make a choice that determines payments to both of you. Your decision does not affect Players B and D in any way.

YOUR DECISION: I choose ***PLEASE CIRCLE ONE***

Option 1	**Option 2**	**Option 3**
(MAKE the Payment Change directly)	(Do NOT make the Payment Change)	(Implement PLAYER B's decision)

Variations in Option Order: A variation on the above instructions switches the order of Options 1 and 3 (with Option 1 becoming the delegation option and Option 3 becoming the Payment Change option).

Sample Instructions for DIR Parallel Dictator Game

In this experiment, you (player A) will be matched with another student in a different economics classroom (player C). **Each of you obtains a base payment of $3** for this experiment. Based on a decision that you make, this initial set of payments can be changed in the following way:

> **Payment Change**: You can earn $2 more, with player C earning $2 less, for total payments of **$5 to YOU and $1 to PLAYER C**.

For another session of this experiment (in another economics classroom), we will calculate the percentage of *all* "A players" who choose to make the Payment Change (vs. not). We will call this percentage Q. For example, if half of player A's choose to make the Payment Change, and half do not, then Q will be 50 percent.

YOU have two options:

> Option 1: MAKE the PAYMENT CHANGE ($2 more for you and $2 less for player C).
> *In this case, the Payment Change will be implemented for you and player C with probability Q.*
>
> Option 2: DO NOT make the Payment Change (so that you and C each obtain the initial $3).
> *In this case, your choice – NO PAYMENT CHANGE – will be implemented with 100 percent probability.*

You know what the Options are, but your player C **DOES NOT**. Player C only knows that someone else will make a choice that determines payments to both of you.

YOUR DECISION: I choose ***PLEASE CIRCLE ONE***

Option 1	**Option 2**
(MAKE the Payment Change)	(Do NOT make the Payment Change)