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Radu Vranceanu

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Angela Sutan[(a] and Radu Vranceanu[(b]

a) LESSAC, ESC Dijon-Bourgogne and LAMETA

29, rue Sambin, 21000 Dijon, France. E-mail: angela.sutan@escdijon.eu

b) Corresponding author. ESSEC Business School and THEMA

105, av. Bernard Hirsch, 95021 Cergy, France. E-mail: vranceanu@essec.fr

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Abstract

This paper reports results from a three-player variant of the ultimatum game in which the Proposer can delegate to a third party his decision regarding how to share his endowment with a Responder with a standard veto right. However, the Responder cannot verify whether the delegation is effective or the third party merely plays a "scapegoat" role while the decision is made by the Proposer himself. In this imperfect information setting, the Proposer can send an unverifiable message declaring his delegation strategy. The most interesting strategy is "false delegation", in which the Proposer makes the decision but claims to have delegated it. In our sample, the recourse to false delegation is significant, and a significant number of potential Delegates accept serving in the scapegoat role. However, there are many honest Proposers, and 20% of all Delegates will refuse to be the accomplices of a dishonest Proposer. Responders tend to more readily accept poor offers in a setup that permits lying about delegation; the acceptance rate of the poor offer is the highest when Delegates can refuse the scapegoat role.

Keywords: delegation of responsibility, lies, communications strategy, ultimatum game, dishonesty.

JEL Classification: C91, C72, D82

1. Introduction

Decision makers often have no choice but to implement unpopular reforms and occasionally have to pay a high price for them in terms of declining popular support. Delegation can help them to reduce the negative consequences. Nicolas Machiavelli outlined the merits of this solution five centuries ago. In his masterpiece, *The Prince*, Machiavelli wrote, "Princes should delegate to others the enactment of unpopular measures…" Contemporary examples of such delegations abound. As depicted in the Hollywood block-buster *Up in the Air* (2010), which features George Clooney as an HR consultant who flies from town to town to "clean house" and then leaves without a sigh, many US companies specialize in staff restructuring advice, such as *Right Management Inc*. or *Lee Hecht Harrison*. At a higher decision level, European governments (in France, Italy, and Spain) are passing badly needed but unpopular reforms (higher taxes, increasing labor market flexibility), and many political leaders contend that their choices are being imposed by the "technocratic" *European Commission*. For many years, governments in developing countries blamed the "dictatorship" of the *IMF* or *World Bank* for imposing tough but much needed structural adjustments (Vreeland, 2004; Smith and Vreeland, 2004).

The mainstream literature in economics has emphasized that a decision-maker may consider it sensible to hire a delegate to take action on his behalf on the grounds of increased efficiency. There are multiple possible reasons for this behavior: the delegate can possess better expertise or ability, have a lower opportunity cost of time, or stricter preferences that make his threats more credible, thereby strengthening his power in a negotiation process. The delegation problem is nonetheless complex, particularly when the principal cannot perfectly monitor the agent (the delegate). In this case, the latter might well attempt to pursue his own objective, which might diverge from that of the principal. Holmström (1977; 1984) was the first to analyze the delegation problem in an imperfect information framework and provide conditions for delegation to be optimal. Following pioneering papers by Lazear and Rosen (1981) and Grossman and Hart (1983), a significant strand of literature has analyzed what compensation schemes allow for the greatest possible alignment between the goals of principals and agents (see Bolton and Dewatripoint, 2005).

In experimental economics, the analysis has shifted beyond efficiency motives to note that decision makers occasionally resort to delegation to "shift the blame" or "shirk on responsibility", which in turn allows them to extract more surplus in negotiations. Coffman (2011), Bartling and Fischbacher (2012) and Oexl and Grossman (2013) provide empirical evidence in support of this conjecture. They study a variant of the classical dictator game, in which a third party can punish the "greedy" dictator. The results indicate that individuals are prone to punish unfair or unkind behavior, but punishment is lower if the unkind decision was delegated. The severity of the sanction appears to be related to both unkindness and the causal responsibility of the delegator. Hamman et al. (2010) construct an experiment demonstrating that even if punishment is not possible, principals in a dictator game delegate their decision to "diffuse responsibility"; as noted, "principals do not feel that they are behaving unfairly because they do not directly take immoral actions; they simply hire agents" (p. 1843).

The ultimatum game, introduced by Güth et al. (1982), is currently quite popular among economists.[1] A Proposer is invited to share a "pie" he receives at the outset of the game with a Responder. Should the latter accept the distribution selected by the Proposer, the payoffs are due. If the Responder does not accept, both payoffs are set to zero. Fershtman and Gneezy (2001) analyze an ultimatum game in which Proposers can delegate the offer to a third party; offers are of the standard take-it-or-leave-it type. Thus, the benefit of delegation is neither informational (the delegate does not have superior information) nor of the commitment type. Proposers' payoffs appear to be significantly higher when Delegates are used, likely because Responders can no longer blame the Proposer for the "unfair" outcome or potentially because Responders are reluctant to punish the delegate.

If delegation provides some benefit for the principal, then a principal might lie about delegation to reap the benefits related to the transfer of authority while simultaneously avoiding the risk that the delegate pursues a goal that diverges from his own goal.

There is a growing body of experimental economics literature on lying and deception that seeks to reveal what motivates individuals to resort to such questionable communication methods. In an influential paper, Gneezy (2005) employs an original sender-receiver experiment to demonstrate that when subjects can reap a positive benefit from lying, many subjects do so, even if this involves a loss for their partner. Another important finding of these empirical studies is that humans exhibit some form of aversion to lying, although its extent can vary greatly from one individual to another. Individuals are prone to deceive others to achieve their personal objectives but not in all cases and not to a substantial extent.[2]

Our aim in this paper is to determine whether individuals would lie about delegation in the specific context of the ultimatum game and how potential Delegates would behave when asked to play a "scapegoat" role. The analysis is thus situated at the intersection of two strands of experimental research: research on lies and research on delegation. Our paper can be regarded as an extension of the above-mentioned paper by Fershtman and Gneezy (2001). While they analyze the impact of effective delegation, in this paper we allow the Proposer to lie that he has delegated the allocation decision to a third party, the Delegate, while he has actually made the decision himself. Of course, he also can tell the truth. The message is genuine "cheap talk", in the sense that it is not binding and the Responder has no means to verify it. As in a standard ultimatum game, the Responder can accept or reject the offer. When delegation is authentic, the delegate has an active role: he determines the allocation of the pie between the Proposer and the Responder. When the Proposer lies about delegation, the delegate acts as a scapegoat; he makes no decision and merely represents a straw man who serves as an alibi for the principal. Hiring a Delegate comes with a cost. The Delegate's compensation scheme is transparent, as is the distribution of gains.

To focus on the key strategic choices, we choose to restrict the set of feasible strategies to the efficient ones. For instance, in this experiment we do not allow a Proposer who delegates his

[1] See Güth and Kocher (2013) for a review of the key advances in choice theory delivered by thirty years of experiments with the ultimatum game, and Oosterbeek et al. (2004) for an interesting meta-analysis of 37 papers with 75 results from ultimatum games.

[2] As a non-exhaustive list of relevant papers, see: Croson et al. (2003), Sánchez-Pagés (2006), Vanberg (2008), Mazar et al. (2008), Lundquist et al. (2009), Charness and Dufwenberg (2006), (2010), Erat and Gneezy (2012), Kriss et al. (2013), Besancenot et al. (2013).

decision to claim the opposite. We take it for granted that delegation raises chances that the Responder accepts a lower offer, to the benefit of the Proposer. Thus, it is not efficient for him to claim that he did not delegate the decision when he actually did so. Additionally, to keep the decision simple, we will use predetermined allocations that can be more or less favorable to the Responder. In all the cases, we will ensure that the Responder, who observes the offer and the message, *cannot detect lies*.

The goal of the experiment is twofold. *First*, it is intended to contribute to the literature on lying and deception by analyzing an original lie concerning delegation. Notice that the goals of the Proposer and the Responder are completely divergent (a benefit for the former represents a loss for the latter). Crawford and Sobel (1982) have demonstrated that unverifiable and unbinding messages (or "cheap talk") between players with divergent goals are entirely uninformative; not only should the Responder discard these messages but the Proposer also cannot engage in any strategic communication.[3] Crawford and Sobel's (1982) proof was developed in a framework where there are no costs of lying. However, if there are at least some honest persons in the population of Proposers (who would never lie), then the message has signaling value, as shown in the traditional analysis by Spence (1973); with Bayesian Responders, the message should reveal some information about the delegation strategy implemented by the Proposer.[4]

As we will show, in our experiment the recourse to *false delegation* appears to be quite substantial, and this is accompanied by a larger payoff (on average) for the dishonest Proposers relative to the case in which false delegation is forbidden. However, a non-negligible proportion of subjects will choose to truthfully announce that they did not delegate the decision, although it would have been in their narrow interest to state the opposite. Furthermore, in line with signaling logic, as there are honest persons in our sample, it is worthwhile for a less ethical person to lie about delegation insofar as he knows that the Responder will assign a positive probability to the event that his message is true.

Second, we also analyze the behavior of the Delegate in interaction with the Proposer. Interestingly, a non-negligible number of Delegates refuse to occupy the morally ambiguous scapegoat role; they simply do not wish to be "accomplices" of a dishonest Proposer. As there are "naturally" honest Proposers, there are "naturally" honest Delegates.

These results have meaningful policy implications; they suggest that when policymakers claim that their actions were imposed on them by "external expert advice", the likelihood that they are lying to us is not zero.

Note that in the above-mentioned studies on delegation, delegation was effective. In our study, the focus is on false delegation. Erat (2013) also studies a related but different delegation and lying problem: in his study, the proposer/first mover can delegate the decision to an agent, and the agent can tell the truth or lie. Thus delegation is effective and allows the cost of lying to be shifted to the Delegate. In our analysis, it is the Proposer who would lie. The Delegate can accept or reject the

[3] If the goals of the two agents are only slightly divergent, then Crawford and Sobel (1982) have demonstrated that a multiplicity of (imperfectly) informative "partition equilibria" can also exist next to an uninformative "bubbling" equilibrium.

[4] For models of strategic communication with lying costs, see: Ottaviani and Squintani (2006), Kartik et al. (2007), Kartik (2009), Besancenot et al. (2013).

"straw man" role, but the cost of lying is borne by the principal. One important difference between our study and that by Fershtman and Gneezy (2001) concerns the compensation of the Delegate. In their paper, resources used to compensate the Delegate are provided in addition to the endowment of the Proposer. This design is justified because their aim is to study the impact of the nature of the compensation scheme on the Proposer's benefit from resorting to delegation. In our experiment, delegation has a cost that reduces the size of the pie. This alternative design is more similar to real-life situations in which a Proposer weighs the benefit of using a Delegate against the cost of hiring him, as in the examples provided above. This can be considered a "conservative" design for our problem, insofar as this cost should dissuade Proposers from resorting to false delegation.

The text is organized in the standard way. The next section introduces the design of the experiment, and Section 3 presents the results. The last Section summarizes the main findings and offers some policy implications.

2. An experiment about false delegation

2.1. Experimental design

Our experimental design is a variant of the ultimatum game featuring three players: a Proposer, a Responder and a Delegate. At the beginning of the game, the Proposer receives a predetermined and known endowment. He must decide how to divide this amount between himself and a Responder. If the Responder accepts the allocation, payments are due, if the Responder rejects the offer, all payoffs are zero.

As an original development, a third player can hold the role of the Delegate if the Proposer chooses this option. Specifically, the Proposer must choose whether to delegate the decision of how to divide the endowment to the Delegate, or determine distribution himself. Formally, if he delegates, he takes action (*D*), if not, he takes action (*N*).

The Proposer also must send a message to the Responder. If he delegates (*D*), the Responder automatically receives the message (*d*) for "delegated". As mentioned above, a Proposer who delegates the decision has no reason to claim the he did not delegate.[5] If he does not delegate (takes action *N*), he can state this honestly by sending the message *n* or lie and claim that he has delegated the decision by sending the message (*d*) (see the Decision Tree in Figure 1). Note that the message (*n*) perfectly reveals the strategy (*N*) of the Proposer. Thus in this case we restrict the choice of the Proposer to only the High offer (80 for Responder), taking for granted that the likelihood that the Responder rejects the low offer is quite high (in the non delegation context).

In the event of delegation, the Delegate will determine the offer. If there is no delegation, the Delegate simply waits for the end the game. Crucially, in this experiment, the Delegate's compensation is included in the endowment to emphasize that delegation comes at a cost (for the Proposer, the Responder, or both). The "active" Delegate is incentivized to make offers favorable to the Proposer (his compensation is higher if he chooses an allocation more favorable to the Proposer, at the expense of the Responder). Even under the false delegation strategy (when the Delegate is merely a "straw man"), the Delegate receives compensation for accepting to play the scapegoat role.

[5] We choose to suppress this dominated strategy to focus on the most salient choices. If we were to allow this strategy, it is probable that in an experimental setting a few subjects will choose it despite its disadvantages.

In company life, if an immoral CEO hires a “consultant” in restructuring merely to shift the blame for layoffs that he has already decided, the consultant nevertheless must “simulate” analyzing the company’s situation and deliver recommendations.

Turning to payoffs, throughout the experiment, the initial endowment of the Proposer is 200 ECU (Experimental Currency Units). To keep the analysis as simple as possible, the potential allocations of the initial endowment among the three players are predetermined. Specifically, depending on the strategy adopted by the Proposer and Delegate, the Receiver can obtain either a *High* offer (80 ECU) or a *Low* offer (30 ECU). The High offer is close to the “fair” equal division; doubtless, this offer has a very high likelihood of being accepted. The Low offer corresponds to a 15% share of the pie.

In general, in ultimatum games with “continuous pies”, the likelihood of accepting a share close to 50% is nearly one, while the likelihood of accepting a share below 20% is nearly zero (Güth and Kocher, 2013). However, in a discrete two-choice game, as implemented in this experiment, the acceptance rate of our *Low* offer (30 for the Responder, more than 100 for the Proposer) can be positive and relatively significant because Responders might realize that the Proposer was not able to make a slightly better offer.[6]

Notice that the experiment is run under asymmetric information. Whatever the treatment, the Responder sees only: (i) his specific offer (can be 30 ECU or 80 ECU) and (ii), eventually, the message sent by the proposer (*d* or *n*).

The Responder makes the decision of whether to accept (in this case, the payment is effective) or to reject (in this case, all payoffs are zero) the offer.

The Delegate’s compensation depends on his role (active or scapegoat) and is included in the total amount to be shared. An active Delegate, who truly makes the decision, will earn 20 when selecting Option B, that which is less favorable to the Proposer, but will earn 30 when selecting Option A, providing 140 ECU to the Proposer (if the offer is accepted). If the decision is not delegated, the delegate simply has to wait and earns nothing. However, a “scapegoat” delegate, who makes no decision but acts as a straw man, will earn 10 ECU for endorsing this false delegation role.

Table 1 indicates the possible payoffs depending on various choices.

Proposer choice	*Delegate (**D**)*		*Do not delegate (**N**)*	
Proposer message	*(**d**) (Truth)*		*(**n**) Truth*	*(**d**) Lie*
Delegate choice	*Option A (30)*	*Option B (80)*	--	--
Payoff Proposer	140	100	120	160
Payoff Delegate	30	20	0	10
Payoff Responder	30	80	80	30

Table 1. Possible allocations (if the Responder accepts the offer)

[6] To provide a benchmark for the results of the delegation game, we run a "calibration" experiment, in which 24 subjects were paired and asked to play a simple two-choice ultimatum game, three times in the role of Proposer and three times in the role of Responder, using a stranger design (thus we collected 84 observations). Proposers face a choice between option {170 ECU for them; 30 ECU for the Responder} and option {120 ECU for them; 80 ECU for the Responder}. In a second step, the Responder can accept or reject the offer. Proposers chose the (170;30) option 44% of the time, and Responders accepted it 54% of the time.

Let us emphasize that, in the experiment, this payoff matrix was common knowledge (and was displayed on the computer screen).

Figure 1 presents the Decision tree of the experiment. The dotted line shows that a Responder receiving the offer 30 and the message *d* cannot infer the true strategy (either *D* or *N*) of the Proposer.

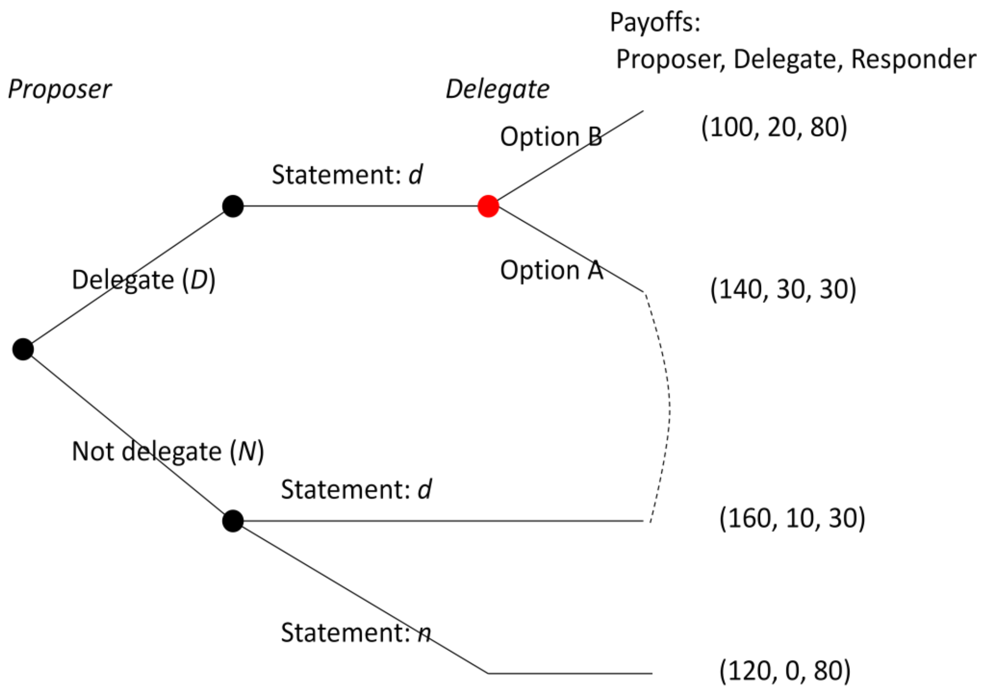

Figure 1. Decision tree for the Proposer and the Delegate. Payoffs if Responder accepts.

It is worth commenting on the information structure of this game. In general, observing the offer does not allow to the Responder to infer the strategy of the Proposer. A High offer (80) can be submitted by either a Proposer who does not delegate (N) or by a Proposer that delegates, provided that the Delegate selects Option A. The Low offer (30) can be issued by a Proposer who lies on delegation or by a Delegate who chooses Option B.

However, the message (*n*) signals without ambiguity that the principal has not delegated (i.e., he played N); such a message would systematically be associated with a High offer for the responder (80).[7] For the sake of parsimony, we excluded the possibility that a Proposer who delegates sends a message (*n*). Such a strategy would be inefficient: because delegation is attractive to the Responder, there is no reason to delegate and claim the opposite.

Conversely, the message (*d*) does not reveal the strategy of the Proposer when it is associated with the Low offer (30). It could have been issued by an honest Proposer, if the Delegate had selected option A, or by a dishonest Proposer. To the opposite, message (*d*) and a High offer reveals that the Proposer has delegated the decision.

[7] We excluded on purpose the strategy (N, n, Low offer), that has poor chances of being accepted.

2.2. Experimental procedures

The experiments were performed at the LESSAC - Burgundy Business School, in Dijon, with a total of 255 participants in nine sessions during October and November 2014.[8] Participants were selected from the population of the school's students who responded to a call for paid experiments. The experiment was computerized; participants make their decisions behind the computer screen.[9] Anonymity is guaranteed.

Each experiment had nine rounds. At the beginning of each round, subjects were randomly placed in groups of three and each subject was assigned a given role: Proposer, Delegate or Responder. From one round to another, groups are re-matched (stranger design) and roles are permutated. Thus each subject will play each of the three roles three times and will be matched with different partners each time. The motivation for allowing each subject to play the same role three times (with different partners) was to gather a larger number of observations. The cost of this strategy is that we no longer dispose of independent observations. Below, we will provide evidence indicating that the order of plays did not alter the decisions in a significant way.

We organized the experiment into three treatments, in a between-subjects design. A subject would play only one treatment.

(i) The first treatment (T1) serves as the benchmark. There is no message (and no lie possible). The Proposer chooses between delegation (*D*) and non-delegation (*N*). Non-delegation involves a favorable offer to the Responder. In the case of delegation, the Delegate chooses between an option A and an option B.

(ii) The second treatment (T2) corresponds to the decision tree presented above (Figure 1). The Proposer can delegate (*D*) or not (*N*) and must send a message that, if he did not delegate, can be the truth (*n*) or a lie (*d*). When he tells the truth, he also makes an offer favorable to the Responder. If he lies, he makes a poor offer. In the case of true delegation, the Delegate chooses between an Option A and an Option B.

(iii) The third treatment (T3) is identical to T2 except that a delegate can refuse the scapegoat role. In this case, if he refuses, the Principal automatically selects the non-delegated and truthful (*N, n*) offer favorable to the Responder.

On average, the experiment lasted for one hour, including instructions and payment. At the beginning of each round, the "pie" was 200 ECU. The exchange rate was of 50 ECU = 1 euro. On average, a participant earned between 8 and 12 euros.

[8] We had 99 participants in 3 sessions in T1, 90 participants in T2 in 3 sessions, and 66 participants in T3 in 2 sessions. One additional session was dedicated to the "calibration" experiment. If we include the simple "calibration" ultimatum game, the number is of 283 participants.

[9] The computer program was developed in Z-tree (Fischbacher, 2007) by Delphine Dubart at the ESSEC Experimental Lab (http://behavioralresearchlab.essec.edu/).

3. Results

Treatment 1: Optional truthful delegation for the Proposer, compulsory Delegate role

In T1, the Proposer faces a choice between truly delegating or not; he is not allowed to send a message. If the Proposer delegates the decision, the Delegate faces a choice between Option A and Option B. The Responder sees the offer and decides whether to accept it.

Table 2 presents the payoff matrix in this narrower problem, which nonetheless has an imperfect information structure. When called to make the decision (accept/reject), the Responder only sees the amount of his offer, which can be 30 or 80. Thus, if he receives 30, he can infer that that the offer was delegated because the non-delegated option is always 80. If he sees an offer of 80, he does not know whether the offer is direct (*N*) or was made by a Delegate choosing Option B.

Assuming that the offer 80 is accepted by the Responder with unit probability, a Proposer would delegate the offer if he assigns a high likelihood to the Delegate choosing option A and a high likelihood to the Responder accepting this (Low) offer.

Decision Proposer	*Delegate (D)*		*Do not delegate (N)*
Decision Delegate	*Option A (30)*	*Option B (80)*	
Proposer	140	100	120
Delegate	30	20	0
Responder (accepts)	30	80	80

Table 2. The Payoff matrix of the simplified game (T1)

Notice that in the delegated option, there is a payment incentive for the Delegate to select the high-risk offer (option A brings 30, while option B brings 20) but also a higher risk, as if the Responder rejects this offer, the Delegate receives nothing.

Tables 3a and b present the number and frequency, respectively, of each strategic choice:

Proposer	*Delegate (N)*				*Do not delegate (N)*	
- Number	116				181	
Delegate	*Option A (30)*		*Option B (80)*			
- Number	70		46			
Responder – accepted	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
- Number	46	24	46	0	173	8

Table 3 a: Number of choices in each option

Proposer	*Delegate (N)*				*Do not delegate (N)*	
- Frequency	39%				61%	
Delegate	*Option A (30)*		*Option B (80)*			
- Frequency	60%		40%			
Responder – accepted	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
- Frequency	66%	**34%**	100%	0	96%	4%

Table 3 b: Frequency of choices in each option

The main results from this table are the following:

Result 1: In this treatment where lies are not possible, a majority of Proposers (61%) choose not to delegate the decision and propose the high offer (120/80) to Responders.

This result contrasts with the findings of Fershtman and Gneezy (2001): in a treatment with optional delegation, 73% of Proposers chose the opportunity to delegate. However, in their setting, the "compensation" of the Delegate was not, as in our case, part of the pie. In our experiment, Proposers may be reluctant to hire the Delegate at this reduces the pie (and their expected payoff).

Result 2: However, for the 39% of the Proposers who choose delegation, 60% of the Delegates choose the low offer (Option A), the best outcome for Proposers and the worst outcome for Responders.

Result 3: 66% of the Responders who receive the low offer (30) accept it.

Notice that in the "calibration" experiment, in which subjects played a two-choice discrete ultimatum game (170;30 vs. 120;80), the acceptance rate of the low offer was relatively high, at 54%. However, the increase in acceptance rate to 66% corroborates the assumption that a poor offer becomes "more acceptable" when it is delegated to a third party, a result first emphasized by Fershtman and Gneezy (2001), albeit with a higher proportion of accepted offers in our case.

Result 4: The high offer (80) is always accepted in the case of delegation and in 96% of instances in the case of non-delegation; notice that the individual only observes his offer (80) and does not know whether the Proposer or the Delegate made it. The difference between 100% and 96% is not statistically significant (p=0.36)[10].

Is we compare the ex-post payoff (average) of the Proposers, we notice that in the case of delegation the average payoff was 140*0.60*0.66+ 100*0.40*1=95.44 while it was of 120*0.96=115.2 in the non-delegation case. In contrast to the result obtained by Fershtman and Gneezy (2001), *truthful delegation is not beneficial to Proposers*. As noted above, this difference can be explained by the fact that in our experiment Delegate compensation is regarded as a cost, and thus it is included in the initial endowment.

Treatment 2. The Proposer can lie about delegation; The Delegate cannot refuse the role

In this treatment, the Proposer is allowed to lie about delegation. The problem is similar to that in the former treatment, but the Proposer can now also choose non-delegation (*N*) and state (*d*) (he lies by informing the Responder that he delegated the decision). Payoffs for this strategy are presented in Table 1 (the last column corresponds to the new strategy). Notice that in this Treatment 2, the Delegate has no option to refuse the scapegoat role (he will be allowed to refuse in T3). His compensation for occupying the scapegoat role is set to 10.

The payoff matrix for this game was introduced in **Table 1 in Section 2.**

Tables 4a and 4b present the main data.

[10] Unless stated otherwise, all p-values reported in the paper are based on the chi-square test. Because observations are not strictly independent, the output of the test should be regarded as no more than a very rough check.

	Delegate (D)				*Do not delegate (N)*			
Proposer	*true statement (d)*				*true statement (n)*		*lie (d)*	
Number	54				100		116	
Delegate	*Option A (30)*		*Option B (80)*					
Number	32		22					
Responder - accepted	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
Number	23	9	22	0	95	5	83	33

Table 4 a: Number of choices in each option

	Delegate (D)				*Do not delegate (N)*			
Proposer	*true statement (d)*				*true statement (n)*		*lie (d)*	
Frequency	20%				37%		43%	
Delegate	*Option A (30)*		*Option B (80)*					
Frequency	59%		41%					
Responder - accepted	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
Frequency	72%	28%	100%	0	95%	5%	72%	28%

Table 4 b: Frequency of choices in each option

We obtain the following results:

Result 5: With an additional strategy, the frequency of those who choose "true delegation" is now 20% (it was 39% in T1). The frequency of genuine non-delegation is 37% (it was 61% in T1). As much as 43% of the Proposers adopt the new "manipulation" strategy: they claim to have delegated the decision, but they actually did not.

Result 6: In conjunction, the high offer (80) and the message (*d* or *n*) perfectly reveal the strategy of the Proposer (*D* or *N*). The acceptance rate of the high offer is quite high (equal or close to 100%).

Result 7: The low offer (30), which is necessarily accompanied by the message (d), does not allow the Responder to infer whether the Delegate or the Proposer made this offer. The acceptance rate of the low offer is now 72% (for both false and true delegation); it was 66% in the former game without the possibility of false delegation, although the difference is not statistically significant (chi-square (1)=0,786, p=0.375).

It is interesting to compare the *ex-post (average) payoffs for the Proposer* depending on his strategy:

- (*D,d*) strategy, the Proposer's payoff is: 0.59*0.72*140 +0.41*1*100=59.4+41=100.47 ECU
- (*N,n*) strategy, the Proposer's payoff is: 120*0.95=114 ECU
- (*N,d*) strategy, the Proposer's payoff is: 160*0.72=115.2 ECU.

In an environment in which Proposers can resort to false delegation, false delegation is the optimal strategy. True delegation is not superior to adopting a "fair and transparent" allocation.

Treatment 3. The Proposer can lie about delegation; The Delegate can refuse the role

Treatment 3 is an extension of T2 with an important change. Payoffs are the identical to those in Table 2, but the Delegate can refuse to play the scapegoat role. If he rejects this role, the Proposer must select the non-delegated offer (*N*) with the revealing message (*n*), providing the Responder with the high offer 80. When refusing the scapegoat role, the Delegate loses his 10 ECU compensation with certainty. A Delegate who is given a genuine delegation cannot refuse this role.

Thus, the outcome tables (Tables 5a and 5b) are similar to Tables 4a and 4b, but the "lie" column is divided into two columns, depending on whether the Delegate accepted or rejected the scapegoat role.

	Delegate (D)				*Do not delegate (N)*					
Proposer	*true statement (d)*				*true statement (n)*		*lie (d)*			
Number	50				44		104			
Delegate	*Option A (30)*		*Option B (80)*				*Accepts*		*Rejects*	
Number	39		11				84		20	
Responder - accepted	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*
Number	34	5	10	1	44	0	70	14	20	0

Table 5a: Number of choices for each option

	Delegate (D)				*Do not delegate (N)*					
Proposer	*true statement (d)*				*true statement (n)*		*lie (d)*			
Frequency	25%				22%		53%			
Delegate	*Option A (30)*		*Option B (80)*				*Accepts*		*Rejects*	
Frequency	78%		22%				81%		19%	
Responder - accepted	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes*	*No*	*Yes**	*No*
Frequency	87%	13%	91%	9%	100%	0	83%	17%	100%	0

Table 5b: Frequency of choices for each option (*If the Delegate rejects, then the offer is {120:80})

The main results are listed below.

Result 8: Despite the loss of income, 19% of the Delegates stand up and refuse the dishonest offer.

Result 9: Yet, in this treatment, the frequency with which Proposers adopted the dishonest strategy increased from 43% to 53% (chi-square(1)=4,193; p=0.04).

Result 10: As a consequence, at 42%, the total frequency of active scapegoats does not change (53%*81%, approximately equal to 43% (in T2)).

Result 11: At 25%, the frequency of “true delegation” is approximately unchanged (20% in T2, 25% in T3). However, in T3, Delegates who have a true mandate will substantially increase the recourse to the Low option 30, from 60% in T1 and T2 to 78% in T3 (chi-square (1)=4,209, p=0.04).

Result 12: Responder acceptance rates of the poor offers (30) are quite high in both the true delegation (87%) and the false delegation (83%) conditions; they are higher than the acceptance rate of the poor offers in T2 at 72% (chi-square (1)=6,44, p=0.01). This may partly be the case because Responders now realize that they could eventually face honest Delegates; they accept more often, as they expect that someone in the decision chain has been honest.

Again, we would like to compare the ex-post payoff of the Proposer depending on the strategy:

- (*D,d*) strategy, the Proposer’s payoff is 0.78*0.87*140 +0.22*0.91*100=95+20=115 ECU
- (*N,n*) strategy, the Proposer’s payoff is 120*1=120 ECU
- (*N,d*) strategy, the Proposer’s payoff is: 0.81*0.83*160+120*0.19*120=107+22.8=129.8 ECU

As above (in T2), false delegation is the optimal strategy and true delegation is dominated by the fair, transparent offer.

An environment with false delegation (lies allowed) appears to be beneficial to Proposers, compared to a truthful delegation (no lie) context (T1). When lies are possible, proposers benefit from lying twice. First, the low offer (30) (favorable to Proposers) is chosen more often (as shown by the sum of the frequencies of lying and of true delegation when Delegates choose A). Furthermore, in a lying environment, the acceptance rate of the low offer is significantly higher than in the no-lie environment.

If there is a lesson for officials called to implement unpopular reforms, is that even if they wish to resort to false delegation, Delegates should be afforded the option to refuse this role. This requires having a pool of potential Delegates; if there is only one possible player that can play the delegation role, the acceptance rate of the poor offer should be closer to the rate in T2 than that in T3. In examples used in the Introduction, there are certainly numerous consultants able to play the “cost-killer” role, but only the EU can serve as the scapegoat for EU governments.

Although we adopted a stranger design and re-matched teams after each round, one criticism of our analysis concerns the limited number of independent observations for each treatment. To obtain additional observations, each subject played each of the three roles three times (thus each participant made a decision during nine rounds). To check for potential biases, we therefore analyzed, for T2 and T3, (i) whether the acceptance rate of the poor offer differed depending on whether the subject played the Responder role in round 1, round 2 or round 3 and (ii) how many Proposers used false delegation, depending on whether they played the Proposer role during round 1, round 2 or round 3. We did not use information from rounds 6 to 9 to focus on the first decision as a Responder (or Proposer). As shown by an independence test, the false delegation rates did not differ from one round to another, neither for T3 nor for T2. Only in T2 was the acceptance rate of the poor offer higher in round 3 relative to rounds 1 and 2; there was no difference for T3.

4. Conclusion

Research in experimental economics has demonstrated that principals in principal-agent problems may resort to delegation to "shift the blame" onto a third party, thereby extracting higher rents from their partners in negotiations. Yet delegates may pursue objectives that diverge from the goals of the principal. If there are persons willing to occupy the scapegoat role – who will pretend to act as the delegate but make no decision – a dishonest principal might simply lie that he delegated the decision, while he retains full control.

This paper contributes to the literature on lies and deception by analyzing whether Proposers would lie about delegation in an ultimatum game with imperfect information. Again, we demonstrate that a non-negligible number of individuals would lie if they had the opportunity to do so. Our design is relatively conservative, as a delegation cost of 10 ECUs is charged even if the Delegate only serves a scapegoat role.

If Delegates are allowed to refuse the scapegoat role, some of them will stand up and refuse to become the accomplices of dishonest Proposers. Yet the impact of this "filter" on total dishonesty is offset by the increase in the frequency of dishonest Proposers. The latter behave as if they anticipate the Delegates' response and adopt a more aggressive lying strategy.

A calibration experiment, i.e., a standard ultimatum game in which Proposers may only chose between two predetermined allocations (120/80) and (170/30) has demonstrated that, at 44%, the frequency of Responders who accept a low offer (15% of the initial endowment) is relatively high in this experiment compared to traditional ultimatum games with a continuous division choice. This is unsurprising; Responders can understand that the Proposer has no intermediate choice and accept the poor offer more readily.

One of the most important results of our analysis is the much higher acceptance rate of the poor offer in treatments in which lies are allowed. This acceptance rate reaches as high as 83-87% when Proposers can lie and Delegates can refuse to play the scapegoat role (but only 19% do so). In this environment, lying about delegation is the best strategy for Proposers, providing them an ex-post payoff as high as 129.8 ECUs, the highest across all other strategies and treatments.

However, it is reassuring that even in an environment in which cheating has no visible costs, certain Proposers refuse to behave dishonestly (22% in T3, 37% in T2). In the real world, cheaters are occasionally caught, and punished. Even a small expected punishment could be sufficient to further dissuade dishonest strategies. It might be interesting for future research to analyze the impact of a small probability of detecting liars on the lying strategies in this game. It would also be interesting to study the impact of the compensation scheme on the lying strategies. For instance, if the cost of hiring a false delegate were reduced, Proposers might adopt this strategy more often. However, Responders should anticipate this change and refuse delegated offers more frequently.

Our results shed some light on the role of external advisors hired by decision makers when they must pass unpopular reforms. Policymakers might not only might try to "shift the blame", as shown by experimental economic studies mentioned in the Introduction, but some of the observed "blame shift" might be spurious; the "expert" merely plays a scapegoat role with no real decision power. While immoral, this situation is not necessarily bad for those who will bear the costs and benefits of the reform. In the ultimatum game, the Proposer wishes to manipulate the Responder and extract additional rent at the expense of the Responder. In this case, the outcome is clear: the Responder will lose something. However, in many of the examples provided in the Introduction, the Proposer wishes to implement a reform that might be helpful in the long run (for the firm or the economy) but encounters strong resistance in the short run. The recourse to scapegoats to pass an unpopular but necessary reform is much less harmful from an ethical perspective.

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Appendix: Example of Instructions - Treatment 2

(Instructions for Treatment 3 are similar but include the option for the Delegate to refuse to hold the "scapegoat" role).

Screen 1.

Thank you for participating in this experiment. Please read these instructions carefully. Should you have any questions, please raise your hand and call the administrator.

Do not use cellular phones or communicate with colleagues; otherwise, you may be excluded from the experiment.

Payoffs are denominated in Experimental Currency Units (ECU). At the end of the experiment, the ECU will be converted in euros at the exchange rate of 50 ECU = 1 euro. The final payoff can reach 10 to 15 euros.

Screen 2.

The experiment has 9 rounds.

In each round, you will be assigned to a group of three anonymous persons, chosen at random. Groups are re-matched after each round.

Each group is made up of a **Proposer**, a **Delegate** and a **Responder**. You will play each role three times.

At the beginning of each round, the Proposer is provided with 200 ECU. He must make an offer to the Responder who can accept or reject it.

He can make the offer directly or through an intermediary in the form of a Delegate. Moreover, he must send a message to the Responder, indicating "offer delegated" or "offer not delegated".

The message "offer delegated" is automatically sent if the Proposer chooses to delegate the offer. Yet, if he chooses not to delegate the offer, he has the choice of sending the message "delegated" or "not delegated". The Responder will not be able to verify whether the message is true or false.

If the Responder accepts the offer, all gains are due. If he rejects the offer, the payoffs of the three players are zero.

Screen 3. Rules of the game

The Table at the bottom of the screen presents all possible allocations of the gains among the three players depending on their choices. During each round, the decision stages are:

1st stage.

The Proposer chooses between "delegate" and "not delegate" for the decision of how to divide the 200 ECU.

- If he delegates, the Respondent receives the allocation determined by the Delegate in stage 2 and the message “offer delegated”.
- If he does not delegate, the Respondent receives the allocation determined by the Proposer himself and a message chosen by the Proposer, which can be “offer delegated” or “offer not delegated”.

The responder observes the offer and the message; he cannot verify whether the Proposer or the Delegate has made the decision.

2nd stage

If the Proposer has decided not to delegate the offer, the Delegate has no decision to make and waits until the next round.

If the Proposer has delegated the offer, the Delegate must choose one of two options for sharing the pie, as indicated in the Table below.

3rd stage

The Responder receives an offer (30 or 80) and the message. He must decide whether he accepts or he rejects the offer.

- If he accepts, the gains are due.
- If he rejects, payoffs of all three subjects for this round are zero.

	The Proposer himself takes the decision. He sends the message “Offer Delegated”	*The Proposer himself takes the decision. He sends the message “Offer Not Delegated”*	*The Proposer delegates the decision. He sends the message “Offer Delegated” The Delegate chooses among Option A and B (**A**)*	*The Proposer delegates the decision. He sends the message “Offer Delegated” The Delegate chooses among Option A and B (**B**)*
Gain Proposer	160	120	140	100
Gain Delegate	10	0	30	20
Gain Responder	30	80	30	80

Next screens are standard decision screens for the three players.

The decision screen of the Proposer recalls the former Table. He is invited to tick one of the three boxes:

- You make the decision by yourself and send the message “offer not-delegated”
- You make the decision by yourself and send the message “offer delegated”
- You delegate the offer to the Delegate and send the message “offer delegated”

If he receives the delegation, the Decision screen of the Delegate indicates only the two last columns of the Table. He must choose between:

- Option A

- Option B

If he does not receive the delegation, he is invited to wait.

The decision screen of the Responder indicates his offer (30 or 80) and the message "offer delegated" or "offer not-delegated". He must choose between:

- Accept
- Reject

The last screens present the outcomes.
At the end of each round, you are informed of whether the Respondent has accepted or rejected the offer and of your gain for this round.

ESSEC Business School
Avenue Bernard Hirsch
BP 50105
95021 Cergy-Pontoise Cedex
France
Tél. +33 (0)1 34 43 30 00
Fax +33 (0)1 34 43 30 01
www.essec.fr

ESSEC Executive Education
CNIT BP 230
92053 Paris-La Défense
France
Tél. +33 (0)1 46 92 49 00
Fax +33 (0)1 46 92 49 90
http://formation.essec.fr

ESSEC Business School
Singapore Campus
100 Victoria Street
National Library Building # 13-02
Singapore 188064
essecasia@essec.fr
Tél. +65 6884 9780
Fax +65 6884 9781
www.essec.edu

Informations

+33 (0)1 34 43 33 58
www.essec.fr
research.center@essec.fr

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