## Appendix A: Instruction (Spanish translation)

Welcome to the Experiment! This is an experiment to study decision making, so we are not interested in your particular choices but rather on the individual's average behavior. Thus, all through the experiment you will be treated anonymously. Neither the experimenters nor the people in this room will ever know your particular choices. Please do not think that we expect a particular behavior from you. However, keep in mind that your behavior will affect the amount of money you can win.

Next, you will find instructions on the computer screen explaining how the experiment unfolds. The instructions are the same for all subjects in the laboratory and will be read aloud by experimenters. Please follow them carefully, as it is important that you understand the experiment before starting.

Talking is forbidden during the experiment. If you have any questions, raise your hand and remain silent. You will be attended to by the experimenters as soon as possible.

**THE EXPERIMENT**

*First phase*

The experiment has two phases. In the first one, you are able to get money by solving a questionnaire.

The quiz that you will face is the same for all subjects in the room and contains 20 multiple-choice questions with 5 possible answers (only one of them is correct). You have 35 minutes to solve the quiz. Each of your correct answers will be rewarded at a reward rate that will be the same for each correct answer but may vary across individuals. No questions will be rewarded higher than others and the reward of each correct answer will be randomly announced once you finish the questionnaire. This reward per correct answer lies between 100 and 200 pesetas and does not depend on your performance.

You will now receive the questionnaire on a piece of paper. To answer the questions, you must use the computer screen. Please do not write on the questionnaire, and make

sure that you have selected your answers correctly on the computer screen before continuing, as the computer will automatically check your answers at the end of this phase. Calculators cannot be used during the experiment. You will be provided an additional piece of paper to make computations if needed.

Remember that during the experiment you are not allowed to communicate with each other: you can only communicate with the experimenters (Figure 1A).

*Second phase*

In this second phase, you will be randomly matched with a subject in this room and your total earnings will be announced. Remember that the reward of each correct answer is randomly determined so it does not depend on your performance in the quiz.

*(Subjects were informed about their earnings. They faced a computer screen quite similar to the one that appears below).*

Now, you will be assigned a type, that is, you will either be player A or player B. This type is randomly determined to choose the one subject that divides the pie. Hence, the subject selected as player A will divide the total earnings. This player has five different options to divide the earnings, as you will see in the computer screen. Player B will also have the possibility to choose an allocation, but the decision of player B will not be paid.

Remember that your choices will be treated anonymously. Neither during the experiment nor after the experiment will you know the identity of the person you are matched with (Figure 2A).

## Appendix B: Data

This appendix presents the data. Recall that there are 72 dictators (37 women and 35 men). The dictators' decisions in the distribution phase are summarized in Table 1B. In Panel A, I report the number of dictators choosing each possible allocation by considering women and men separately. Since no dictator chose to give the entire surplus away, such an allocation is not listed. Likewise, note that justice principles may coincide in some cases, so Table 1B presents both the raw data and the grouped data, which has been used to plot (Figure 1 in the main text).[1]

**Table 1B**. Dictators' allocation choices in the dictator game

A. Unconditional distribution of allocation choices

| | Raw Data | | | Grouped Data | | |
|---|---|---|---|---|---|---|
| | Women | Men | Total | Women | Men | Total |
| Selfish | 10 | 15 | 25 | 10 | 15 | 25 |
| Egalitarian | 10 | 6 | 16 | 15 | 9 | 24 |
| Accountability | 6 | 5 | 11 | 13 | 9 | 22 |
| Libertarian | 2 | 5 | 7 | 8 | 6 | 14 |
| Egal. = Account. | 3 | 3 | 6 | | | |
| Egal. = Libert. | 2 | 0 | 2 | | | |
| Account. = Libert. | 4 | 1 | 5 | | | |
| | 37 | 35 | 72 | | | |

[a] In each cell, I report the number of observations. The grouped data takes into account that some allocation choices might coincide under different scenarios.

B. Distribution of allocations depending on the dictator's relative earnings.

[1] Recall that the dictator will divide the surplus in two identical parts when choosing the egalitarian allocation. The accountability allocation is based on the exerted effort (i.e., the number of correct answers) whereas the libertarian allocation takes into account the reward levels and is based on monetary contributions to the surplus. Note that the accountability and the libertarian allocation coincide ($r_d^q$=$y_d$) if $p_d = p_r$. When $q_d = q_r$, then the accountability allocation and the egalitarian allocation coincide ($r_d^q = 1/2$). When the subjects' monetary contribution to the surplus is the same ($y_d = y_r$), then the libertarian and the egalitarian allocations coincide ($y_d = \bar{y}/2$).

| | $y_d \geq y_r$ | | | $y_d < y_r$ | | |
|---|---|---|---|---|---|---|
| | Women | Men | Total | Women | Men | Total |
| Selfish | 5 | 10 | 15 | 5 | 5 | 10 |
| Egalitarian | 0 | 3 | 3 | 10 | 3 | 13 |
| Accountability | 2 | 1 | 3 | 4 | 4 | 8 |
| Libertarian | 1 | 4 | 5 | 1 | 1 | 2 |
| Egal. = Account. | 1 | 2 | 3 | 2 | 1 | 3 |
| Egal. = Libert. | 2 | 0 | 2 | 0 | 0 | 0 |
| Account. = Libert. | 2 | 1 | 3 | 2 | 0 | 2 |
| | 13 | 21 | 34 | 24 | 14 | 38 |

[a] In each cell, I report the number of observations.

## Appendix C: Econometric Analysis

For the sake completeness, I present further regressions that attempt to see if some of the results presented in the paper are robust to other specifications (additional regressions are available upon request).

The main results of the logit specification are presented in Table 1C. In columns (1), (2) and (3), the dependent variable is the probability of choosing the most convenient allocation. Column (4) presents the results of a model in which the dependent variable is the probability of choosing the selfish allocation –i.e., the idea is testing if women are more socially oriented than men. In all specifications, the standard errors are presented in parenthesis and the marginal effects in the column ME.

**Table 1C**. Additional regressions

| | Model (1) | | Model (2) | | Model (3) | | Model (4) | |
|---|---|---|---|---|---|---|---|---|
| | Estimates | ME | Estimates | ME | Estimates | ME | Estimates | ME |
| Intercept | -0.915* | | -0.865 | | -0.129 | | -0.164 | |
| | (0.55) | | (0.62) | | (0.85) | | (0.53) | |
| Women | 1.164** | 0.25** | 1.134** | 0.25** | 1.680* | 0.36** | -0.734 | -0.16 |
| | (0.53) | | (0.50) | | (0.89) | | (0.58) | |
| DW | -0.118 | -0.02 | -0.100 | -0.02 | -0.087 | -0.02 | -0.778 | -0.16 |
| | (0.62) | | (0.63) | | (0.63) | | (0.64) | |
| DB | 0.850 | -0.18 | -0.825 | -0.18 | -0.796 | -0.17 | -0.526 | -0.11 |
| | (0.64) | | (0.66) | | (0.66) | | (0.63) | |
| $DQ_{dif}$ | | | -0.097 | -0.02 | 0.494 | 0.11 | | |
| | | | (0.56) | | (0.82) | | | |
| Women* $DQ_{dif}$ | | | | | -0.975 | -0.19 | | |
| | | | | | (1.16) | | | |
| $Q_{dif}$ | | | | | | | 0.025 | 0.01 |
| | | | | | | | (0.07) | |

Recall that $Q_{dif} = q_d - q_r$. The dummy variable $DQ_{dif}$ takes the value 1 if $Q_{dif} \geq 0$ (and it is 0 otherwise). Significance at *10%, **5%, ***1% level.

The role of the gender is always positive (and significant) in specifications (1), (2) and (3), what supports Result 4 (i.e., women are more likely to choose the most convenient allocation). The gender is not significant in model (4) in line with Result 2 (i.e., women are neither more nor less socially oriented than men).

## Appendix D: Robustness check

In order to provide further evidence in favor of the main result on the paper (Result 4), I perform some additional regressions using the data in Rodriguez-Lara and Moreno-Garrido (2012). In their experiment, subjects do also contribute to the surplus that will be distributed but any division of the accumulated surplus is acceptable in their experiment, whereas in the current paper dictators are offered 5 different allocation choices and have to choose one of them.[2]

To investigate if the data in Rodriguez-Lara and Moreno-Garrido (2012) provides evidence in favor of women being more self-serving than men, I use a similar approach to the one presented in their paper. I estimate the proportion of the surplus that a dictator gives away (s) as a function of what the recipient has contributed ($x_{r,i}$), where the recipient's contribution can be considered to be the one that corresponds to the accountability principle ($c = \bar{y}\, q_r/(q_d + q_r)$) or the libertarian principle ($x_{r,i} = y_r$).

$$s_i = \alpha_i + \beta_i x_{r,i} + e_i$$

Rodriguez-Lara and Moreno-Garrido provide (robust) estimates for these regressions and test for $H_0: \alpha = 0, \beta = 1$ to see if the data can reconcile with the accountability or the libertarian principle. They also test for $H_0: \alpha = 0.5, \beta = 0$ to see if the egalitarian principle can support the data. They reject these principles and propose the "bias principle" to explain the dictator's behavior ($x_{b,i}$). This principle assumes that dictators follow the natural justice principle that maximizes their earnings; i.e., $x_{b,i} := \min\{x_{a,i}, x_{l,i}, 0.5\}$.

In Table 1D, I report the estimates of $\alpha$ and $\beta$ using Weighted Least Square, which is a procedure that allows the fitting of a model that does contain heteroskedastic residual.[3] The table includes the value of the statistics for testing if the accountability, the libertarian or the biased principle can be used to explain the data. The egalitarian principles is rejected both for men and women (p-values < 0.0035).

[2] In Rodriguez-Lara and Moreno-Garrido (2012), there are 72 dictators as well, but the distribution of men and women is slightly different in their experiment. They have 34 men and 38 women. Their contribution to the total surplus is 54% and 44% respectively (p-value = 0.004, two-tailed).

[3] This is one of the procedures presented in Rodriguez-Lara and Moreno-Garrido (2012), but the results presented in this section are robust if I consider instead the other econometric analyses in their paper.

**Table 1D**. Robustness check: Rodriguez-Lara and Moreno-Garrido (2012)

| | Men | | | Women | | |
|---|---|---|---|---|---|---|
| | Accountability | Libertarian | Biased | Accountability | Libertarian | Biased |
| Intercept | 0.27 | 0.26 | 0.18 | 0.24 | 0.23 | 0.18 |
| | (0.19) | (0.13) | (0.14) | (0.14) | (0.11) | (0.15) |
| $x_r$ | 0.16 | 0.19 | 0.39 | 0.35 | 0.37 | 0.53 |
| | (0.44) | (0.31) | (0.38) | (0.27) | (0.21) | (0.34) |
| $H_0: \alpha = 0, \beta = 1$ | 6.09*** | 6.15*** | 2.46* | 10.12*** | 9.87*** | 1.20 |

Notes: Men: 34 subjects, Women: 38 subjects. Significance at *10%, **5%, ***1% level.

As already noted in Rodriguez-Lara and Moreno-Garrido (2012), dictators do not follow the egalitarian, the accountability or the accountability principle so that the idea of a unique justice principle can be rejected. Interestingly, we reject the null hypothesis that men exhibit biased when dividing the surplus (at the 10% significance level) whereas cannot reject this hypothesis for women. This finding is in line with Result 4 in the paper.