

# Pre-Analysis Plan: A follow-up to default effects in fairness preference elicitation.\*

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## 1 Introduction, Experiment and Data Collection

The purpose of this study is to follow up on a previous experiment (registered in the AEA registry: AEARCTR-0012990). Specifically, we run the same design as in the previous experiment, with the modification that the default payment is assigned based on merit. We anticipate that with the Merit treatment, the distribution of the population's ideal points will be more evenly distributed than in the Luck treatment, where most subject will likely have an ideal point of equality or full inequality. Therefore, the Merit treatment will facilitate the estimation of the weight placed on the default payoffs.

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The full details of the data collection are identical to the previous experiment and are detailed in the PAP for a companion project, “Fair Institutions” (see AEA registry: AEARCTR-0012990).

For this project, we collect data from three different treatments, split between two population—a representative US sample and a representative Swedish sample. The English-language questionnaires used in the three treatments are provided in Section 3.

In treatments 1A (Unequal Default), the interim payoffs are assigned based on merit, where the higher payoff is assigned to the individual who is more productive in the real effort task. In treatment 2A, the interim payoffs are equal (Equal Default). In treatment 3A, there are no interim payoffs (No Default).

Table 1: Treatments: Number of Spectators

	USA	Scandinavia
Unequal Default 6/0	250	250
Equal Default 3/3	250	250
No Default	250	250
<b>Total</b>	<b>750</b>	<b>750</b>

## 2 Empirical strategy

This section outlines the hypotheses and empirical strategy of the project.

### 2.1 Hypotheses

We anticipate that the findings of the original experiment will replicate in the Merit treatment. Therefore, we test the following hypotheses.

**Hypothesis 1** *In the Merit frame, respondents are less likely to accept inequality in the Equal Default treatment relative to the Unequal Default treatment.*

**Hypothesis 2** *In the Merit frame, respondents are less likely to accept inequality in the No Default treatment relative to the Unequal Default treatment.*

**Hypothesis 3** *In the Merit frame, inequality acceptance in Scandinavia is lower than in the US in both the Unequal Default, Equal Default and No default treatments.*

## 2.2 Specifications and Analysis

In the analysis, we use two measures of the inequality acceptance of spectator  $i$ . First, we measure the inequality implemented by spectator  $i$ :

$$u_i = \frac{|Income\ Worker\ A_i - Income\ Worker\ B_i|}{Total\ Income} \in [0, 1], \quad (1)$$

This inequality measure is equivalent to the Gini coefficient in a two-person situation. It is equal to one if the spectator decides on a 6-0 split and zero if the spectator decides to equalize the incomes between the two workers.

Second, as a descriptive measure, we also measure inequality acceptance as an indicator variable,  $u'_i$ , for whether the spectator decides to equalize the income of the two workers, i.e., whether the spectator is not willing to accept any inequality between them.

The main empirical specification we will use to study the treatment effects on inequality acceptance in the Merit frame is:

$$\begin{aligned} u_i = & \alpha + \delta_0 EqualDefault_i + \delta_1 Sweden_i + \delta_2 EqualDefault_i \ Sweden_i \\ & + \delta_3 NoDefault_i + \delta_4 NoDefault_i \ Sweden_i + \gamma \mathbf{X}_i + \epsilon_i, \end{aligned} \quad (2)$$

where  $EqualDefault_i$  is an indicator variable for spectator  $i$  being in the Equal Default treatment,  $NoDefault_i$  is an indicator variable for spectator  $i$  being in the No Default treatment,  $Sweden_i$  is an indicator variable for spectator  $i$  being from Sweden, and  $\mathbf{X}_i$  is a vector of control variables. Since the Unequal Default treatment is the base treatment, the estimated value of  $\delta_0$  and  $\delta_2$  provide us with the causal effects of the equal default on, respectively, the level of accepted inequality and the difference in accepted

inequality between the US and Swedish samples. We will also report the results both with and without control variables (age, gender, education, income; see PAP for “Fair Institutions” for details).

Additionally, we will also run a specification that includes both the data from this round of data collection and from the previous round of data collection, with the appropriate indicator variables for “Merit” (i.e. a baseline of Luck).

We will also report descriptive statistics, along with  $u'_i$ , across all three treatments (Unequal Default, Equal Default and No Default) and country samples.

Lastly, we will use the data to provide an estimate of  $\beta$  from our theoretical framework (i.e. the weight placed on the default relative to the ideal point), and an estimate of the impact of the treatments of the number of subjects who select an interior distribution (see Valasek et al., 2024)—as mentioned in the intro, we anticipate that more subjects will select interior payoff distribution in the Merit treatments relative to the Luck treatments.

### 3 Questionnaire

#### Treatment 1A: Merit: Unequal Default

In contrast to traditional survey questions that are about hypothetical situations, we now ask you to make a choice that has consequences for a real life situation. A few days ago two individuals, let us call them worker A and worker B, were recruited via an international online market place to conduct an assignment.

Worker A and worker B were each offered a participation compensation of 2 USD regardless of what they were paid for completing the assignment. After completing the assignment, they were told that their productivity may determine their earnings from the assignment. They were not informed about who was the most productive worker. The most productive worker would earn 6 USD for the assignment and the other worker would earn nothing for the assignment. However, they were told that a third person would be informed about the assignment and who was the most productive worker, and would be given the opportunity to redistribute the earnings and thus determine how much they were paid for the assignment.

You are the third person and we now want you to choose whether to change the earnings for the assignment between worker A and worker B. Your decision is completely anonymous. The workers will receive the payment that you choose for the assignment within a few days, but will not receive any further information.

Worker A was most productive and earned 6 USD for the assignment, thus worker B earned nothing for the assignment. Please state which of the following alternatives you choose:

I do not change the earnings:

- worker A is paid 6 USD and worker B is paid 0 USD.

I do change the earnings:

- worker A is paid 5 USD and worker B is paid 1 USD.
- worker A is paid 4 USD and worker B is paid 2 USD.

- worker A is paid 3 USD and worker B is paid 3 USD.
- worker A is paid 2 USD and worker B is paid 4 USD.
- worker A is paid 1 USD and worker B is paid 5 USD.
- worker A is paid 0 USD and worker B is paid 6 USD.

## Treatment 2A: Merit Equal Default

In contrast to traditional survey questions that are about hypothetical situations, we now ask you to make a choice that has consequences for a real life situation. A few days ago two individuals, let us call them worker A and worker B, were recruited via an international online market place to conduct an assignment.

Worker A and worker B were each offered a participation compensation of 2 USD regardless of what they were paid for completing the assignment. After completing the assignment, they were told that their productivity may determine their earnings from the assignment. They were not informed about who was the most productive worker. Both the most productive worker and the other worker would earn 3 USD for the assignment. However, they were told that a third person would be informed about the assignment and who was the most productive worker, and would be given the opportunity to redistribute the earnings and thus determine how much they were paid for the assignment.

You are the third person and we now want you to choose whether to change the earnings for the assignment between worker A and worker B. Your decision is completely anonymous. The workers will receive the payment that you choose for the assignment within a few days, but will not receive any further information.

Worker A was most productive and earned 3 USD for the assignment, and worker B also earned 3 USD for the assignment. Please state which of the following alternatives you choose:

I do not change the earnings:

- worker A is paid 3 USD and worker B is paid 3 USD.

I do change the earnings:

- worker A is paid 6 USD and worker B is paid 0 USD.
- worker A is paid 5 USD and worker B is paid 1 USD.
- worker A is paid 4 USD and worker B is paid 2 USD.

- worker A is paid 2 USD and worker B is paid 4 USD.
- worker A is paid 1 USD and worker B is paid 5 USD.
- worker A is paid 0 USD and worker B is paid 6 USD.

## Treatment 3A: Merit No Default

In contrast to traditional survey questions that are about hypothetical situations, we now ask you to make a choice that has consequences for a real life situation. A few days ago two individuals, let us call them worker A and worker B, were recruited via an international online market place to conduct an assignment.

Worker A and worker B were each offered a participation compensation of 2 USD regardless of what they were paid for completing the assignment. After completing the assignment, they were told that their productivity may determine their earnings from the assignment. They were not informed about who was the most productive worker. However, they were told that a third person would be informed about the assignment and who was the most productive worker, and would choose how the total earnings for completing the assignment, \$6, would be divided between the two of them and thus determine how much they were paid for the assignment.

You are the third person and we now want you to choose how to divide the earnings for the assignment between worker A and worker B. Your decision is completely anonymous. The workers will receive the payment that you choose for the assignment within a few days, but will not receive any further information.

Worker A was most productive. Please state which of the following alternatives you choose:

- worker A is paid 6 USD and worker B is paid 0 USD.
- worker A is paid 5 USD and worker B is paid 1 USD.
- worker A is paid 4 USD and worker B is paid 2 USD.
- worker A is paid 3 USD and worker B is paid 3 USD.
- worker A is paid 2 USD and worker B is paid 4 USD.
- worker A is paid 1 USD and worker B is paid 5 USD.
- worker A is paid 0 USD and worker B is paid 6 USD.

## References

Valasek, J., Vorjohann, P., and Wang, W. (2024). Fairness preferences, inequality acceptance and default effects. *Mimeo*.