

# The fairness of inequality due to risk and effort choices

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# Motivation

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- Rise in inequality but **no rise in support for redistribution**  
(Alesina et al., 2001; Kenworthy and McCall, 2008; Ashok et al., 2015; Kuziemko et al., 2015)

# Attitudes towards inequality and fairness

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- Recent empirical literature: role of **perception of fairness** of the inequality (see Roemer and Trannoy, 2016, for an overview)

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**People's fairness perceptions matter for their redistributive choices and attitudes**

# Research question 1

Choice on effort and choice on risk-taking

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**RQ 1: Do people perceive inequalities due to choices on effort as more fair than inequalities due to choices on risk-taking?**

- **Observational** (e.g. Fong, 2001; Alesina and Angeletos, 2005; van Oorschot, 2006; Alesina and Giuliano, 2011)  
→ Effort within control, risk out of control
- **Experimental: Effort** (e.g. Konow, 2000; Cappelen et al., 2007; Cappelen et al., 2010; Becker et al., 2012)  
→ Effort within control, risk out of control
- **Experimental: Risk** (e.g. Trhal and Radermacher, 2009; Cettolin and Tausch, 2015; Cappelen et al., 2013; Mollerstrom et al., 2015)  
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**Contribution this study:** Inequality due to **self-chosen effort** *and* **self-chosen risk**

- **No redistribution (NR):**  
Fairness of allocation based on choice
- **Egalitarianism (EGA):**  
Fairness of allocation based on equality of the outcomes
- **Effort proportionality (EFF):**  
Fairness of allocation based on choice on effort

Expectation that some people's redistribution decisions are most consistent with EFF.

**Entrepreneurial risk-taking**

### Entrepreneurial risk-taking

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**RQ 2: Are hard-working risk-takers perceived as more worthy of compensation or credit than idle risk-takers?**

Third party spectator design: elicit fairness views free from self-interest (Cappelen et al., 2007)

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## Stages of the experiment

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1. Choice stage:  
Workers make choices on risk and effort and complete effort task.
  2. Earnings stage:  
Workers are matched in pairs. Initial earnings according to choices assigned.
  3. Redistribution stage:  
Spectators decide whether and how much to redistribute within the pair.
  4. Payment stage:  
Workers are paid according to the decision of the spectator.
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Worker choice stage

1. **Effort:** 5 vs. 10 vs. 15 tables
2. **Risk:** 100 points per table vs. 70 or 130 points per table with equal probability

Initial point assignment:  $x(i) = \alpha(i) \times e(i)$

Matching in pairs:

→ 46 theoretically possible choice combinations

**Table 1:** The four situations of interest

Situation	Safe-player			Risk-taker		
	$e$	$\alpha$	$x$	$e$	$\alpha$	$x$
LuHi	10	100	1000	15	130	1950
LuLo	10	100	1000	5	130	650
UnHi	10	100	1000	15	70	1050
UnLo	10	100	1000	5	70	350

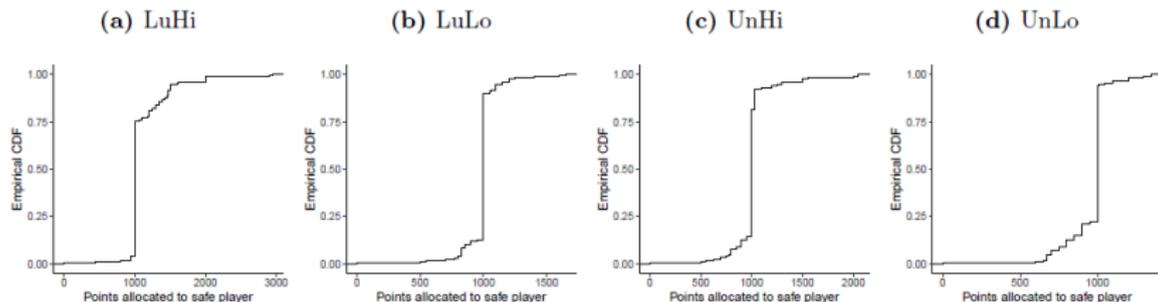
Lu/Un = Lucky/Unlucky, Hi/Lo = High effort/Low effort,  $\alpha$  = wage,  $e$  = number of tables chosen and  $x$  = initial earnings

Spectators make choices for all four situations of interest

# Results I

$N = 563$ , data collected on Amazon Mechanical Turk

**Figure 1:** Redistribution in the four situations of interest

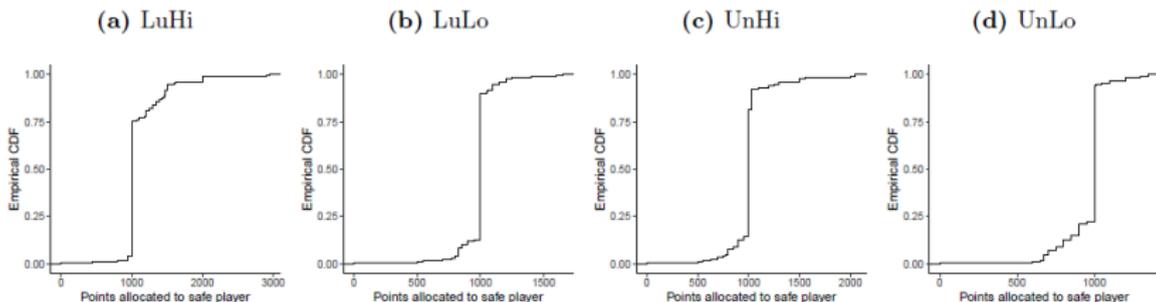


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Lu/Un = Lucky/Unlucky, Hi/Lo = High effort/Low effort

**Result 1:** In 72% of the choice situations spectators do not redistribute at all.

## Results II

Points to safe player:

$$F^{NR} = e_S \times \alpha_S$$

$$F^{EGA} = \frac{e_S \times \alpha_S + e_R \times \alpha_R}{2}$$

$$F^{EFF} = \frac{e_S}{e_S + e_R} \times (e_S \times \alpha_S + e_R \times \alpha_R)$$

$\alpha$  = wage

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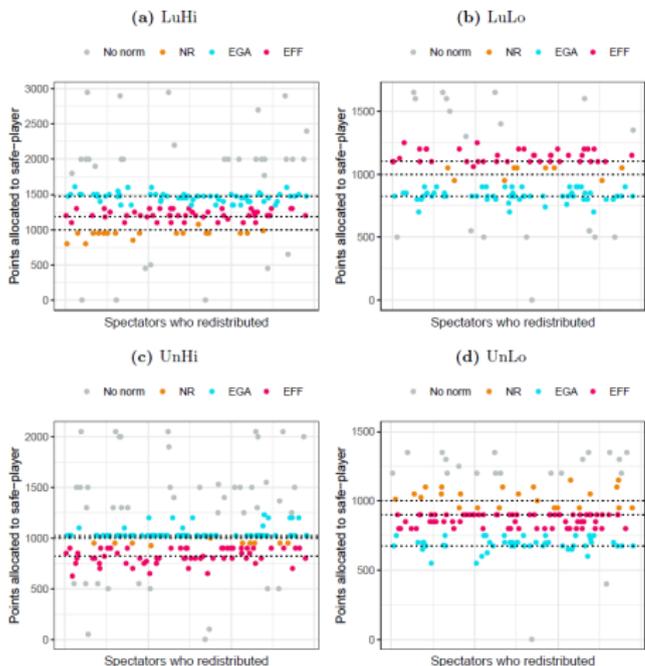
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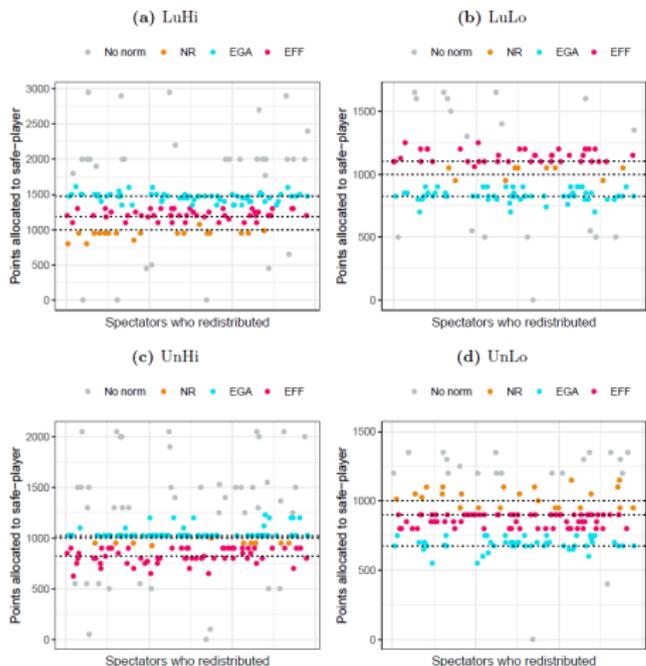
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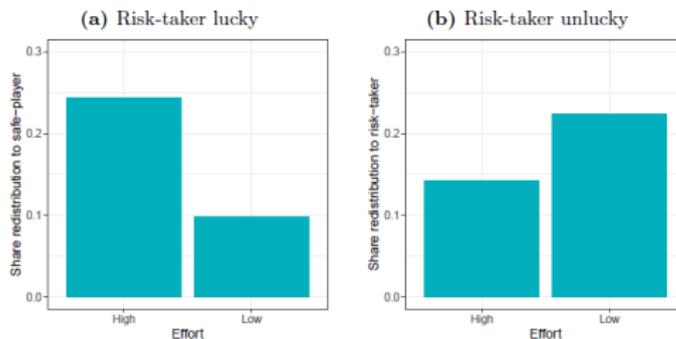
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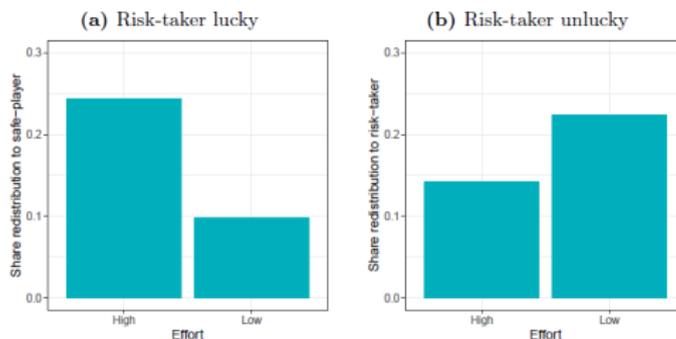


**Result 2:** 75.8% of the choices are best approximated by NR, 13.9% by EGA and 10.9% by EFF.

**Figure 2:** Redistribution between risk-taker and safe-player



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**Result 3:** Risk-takers that exerted high effort are not treated more favourably than risk-takers that exerted low effort.

**Contribution:** Disclosure of the **existence of a purely effort-related fairness intuition** that disregards choices in risk domain

- Focus on factors within vs. out of individual control too narrow to understand fairness intuitions
- Choice domain relevant and should be included to understand moral and political discussions

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- Focus on factors within vs. out of individual control too narrow to understand fairness intuitions
- Choice domain relevant and should be included to understand moral and political discussions
- Blind spots in philosophical theory  
→ promising roads for empirical questions

$$V(i) = -\frac{(x_S(i) - F^k)^2}{t} \quad (1)$$

$x_S(i)$  = points allocated to the safe player

$F^k$  = fair allocation under the respective fairness norm  $k$

$t$  = total amount of points that can be allocated

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