



ALMA MATER STUDIORUM • UNIVERSITÀ DI BOLOGNA  
DIPARTIMENTO DI SCIENZE ECONOMICHE

# How Property Shapes Distributional Preferences

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## Can property rights affect distributional preferences?

Beliefs aspect of culture: preferences for **redistribution** can be

- affected by political regimes  
*Ockenfels & Weimann (1999), Corneo & Grüner (2004), Alesina & Fuchs-Schündeln (2007)*
- macroeconomic shocks, natural disasters, positive wealth shocks  
*Giuliano and Spilimbergo (2014), Gualtieri et al. (2019), Andersen et al. (2020)*

Market integration correlates with fairness and reciprocity.

*Henrich et al. (2010), Jakiela (2014), Boesch & Berger (2019)*

Formal private property rights increase propensity to respect others' property.

*Fabrizi & Dari-Mattiacci (2021)*

# Beni



## The Rural Land Plan (Plan Foncier Rural)

In Africa customary tenure characterized by collective property and **informal possession** largely predominates in rural areas (Deininger and Feder, 2009).

### The “Plan Foncier Rural” (PFR)

In the attempt to *improve access to land*, tenure *security* and the development of a *land market*, the Beninese government with the support of the Millennium Challenge Corporation developed an approach for *systematic identification and registration of customary rights* to parcels of agricultural land.

Socio-land surveys to identify rights holders, and demarcate parcels boundaries.

Allows for public contestation of the proposed registration.

Requires rights holders and neighbors to publicly sign survey records (Delville, 2006).

## Implementation of the PFR as an RCT

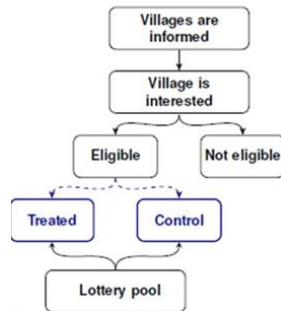
The implementation took place in **2010-2011**.

**576 eligible villages** willing to implement the reform were identified

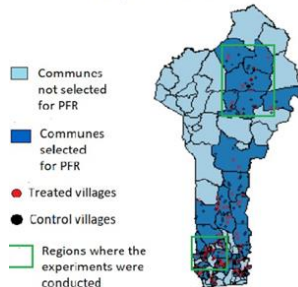
**291 villages** was selected via **public lottery**, and PFR was actually implemented (“treatment”).

Nonselected villages (“control”) did not receive any intervention and, as of today, continue to have customary land rights.

Selection of treated villages



The Republic of Benin



# Experimental design

from Almås et al. (2020)

## Workers (n=576)

- recruited from Amazon Mechanical Turk (AMT) to complete *4 real effort tasks*
- fixed payment of \$1 plus a variable payment for each the effort tasks
  - *2 luck*
  - *2 merit*
- for each task, random pairing with another worker.
- the “winner” is *provisionally allocated CFA 600* ( $\approx$  \$1), the “loser” CFA 0
- this amount could be redistributed within the pair by an anonymous third-party

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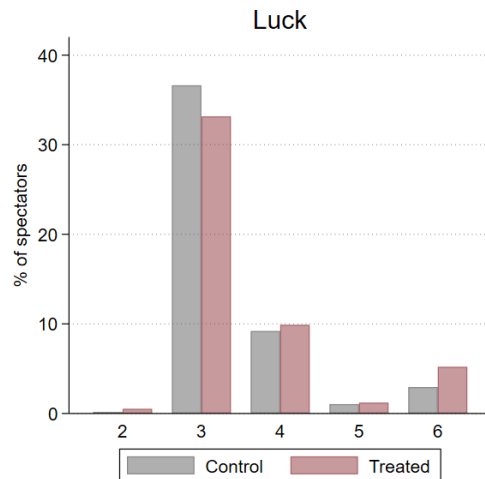
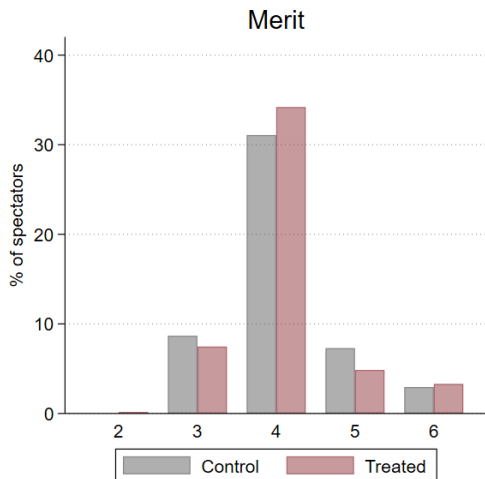
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## Spectators (n=576)

- recruited from 32 Beninese villages (16 treated): 18 per village (gender balanced)
- matched with 2 pairs of workers (1 “luck” and 1 “merit”) – control for order
- either confirm provisional payments, or *redistribute* in multiples of CFA 100

## Overview: distribution in Merit and Luck





## Empirical specification

### Gini index:

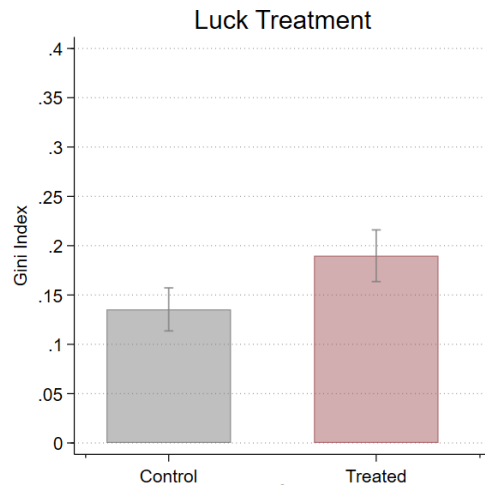
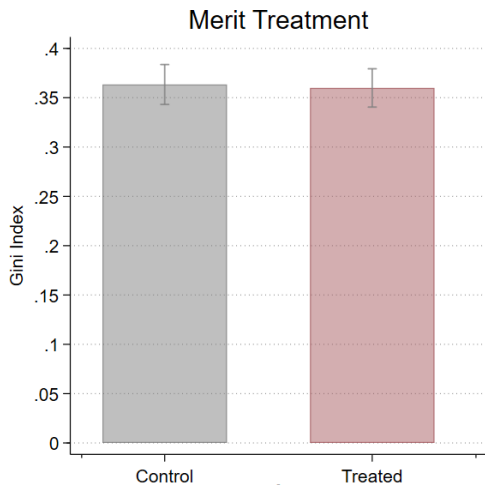
$$e_i = \frac{|\text{income worker } A_i - \text{income worker } B_i|}{\text{total income}} \in [0, 1]$$

- $e_i = 1 \rightarrow$  no redistribution
- $e_i = 0 \rightarrow$  50-50 redistribution

### Main empirical specification:

$$e_{ij} = \alpha + \alpha_M M_j + \delta_T T_i + \delta_M M_j T_i + \mathbf{X}_i + \eta_i + e_{ij} \quad (1)$$

# Treatment (PFR) effect on Luck but not on Merit



## PFR increased acceptance of inequality generated by luck

|                  | Model 1             | Model 2             | Model 3             | Model 4             |
|------------------|---------------------|---------------------|---------------------|---------------------|
| Constant         | 0.099<br>(0.061)    | 0.100<br>(0.061)    | 0.125**<br>(0.058)  | 0.129**<br>(0.059)  |
| Merit            | 0.228***<br>(0.021) | 0.228***<br>(0.021) | 0.228***<br>(0.021) | 0.228***<br>(0.021) |
| Treated          | 0.061**<br>(0.030)  | 0.066**<br>(0.030)  | 0.068**<br>(0.030)  | 0.066**<br>(0.030)  |
| Merit×Treated    | -0.058<br>(0.043)   | -0.053<br>(0.043)   | -0.053<br>(0.043)   | -0.053<br>(0.042)   |
| dPFR Controls    | N                   | Y                   | Y                   | Y                   |
| Village Controls | N                   | N                   | Y                   | Y                   |
| Wealth Controls  | N                   | N                   | N                   | Y                   |
| N.obs.           | 1152                | 1152                | 1152                | 1152                |
| R2 (overall)     | 0.149               | 0.150               | 0.152               | 0.154               |

## Inequality acceptance, market integration, income, and gender

**Market integration** proxied by *distance from paved roads* – strongly correlated with villagers' participation in market activities and access to the formal judiciary (Bonjean and Brunelin, 2013; Casaburi, Glennerster and Suri, 2013; Fabbri, 2021)

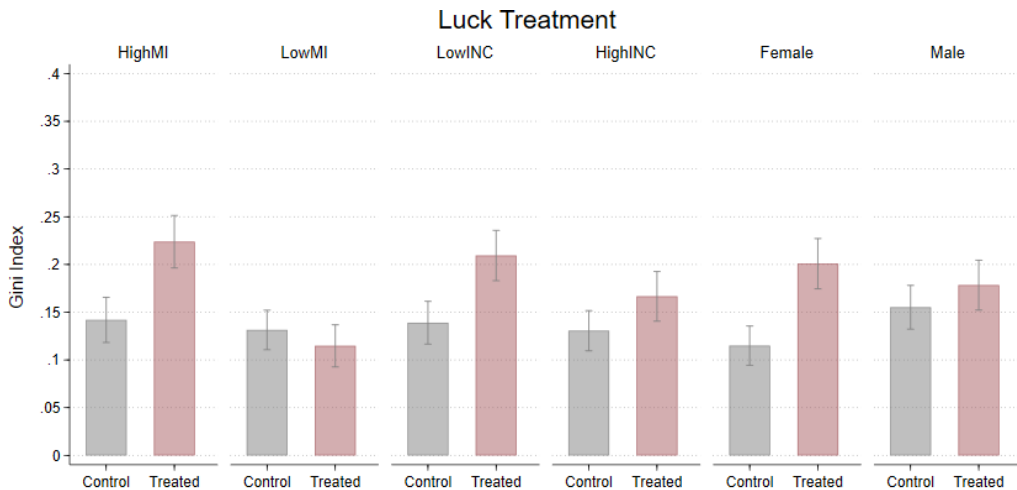
**Income:** household's weekly income above/below median.

**Gender:** women farmers reported the lowest level of perceived tenure security before the land tenure reform, and substantially increased the amount of long-term investments after it (Goldstein et al., 2018).

### Heterogeneity analysis

Treatment effect concentrated on *high market integration*, *low income*, and *women*.

# Heterogeneity analysis



## Discussion and conclusion

Experiencing the PFR reform induced an estimated increase of roughly 60% in acceptance of inequality generated by luck.

Participants who experienced the greatest improvement in their tenure situations also display the strongest changes in inequality acceptance.

But **why** does the assignment of property rights increase participants tolerance for inequality generated by luck?

Changes in distributional choices unlikely to be mediated by the reform's effects on altruism, risk preferences, wealth, or economic vulnerability, which were not significantly affected (Fabbri, 2021; Goldstein et al., 2016; Omondi, 2019).

## Possible interpretation - exposure to markets

Experiencing **formal property rights** → reinforced spectators' perception that **workers deserved their payments**, even if determined by pure luck (Lane, 1991).

Abundant evidence that interactions regulated by **market-like institutions**

- reduce participants' redistributive behavior
- increase feelings of self-attribution.

*Babcock & Loewenstein, 1997; Bowles & Polania-Reyes, 2012; Hoffman et al., 1994*

## Possible interpretation - motivated beliefs

Treated villagers adopt a **dissonance-reduction strategy**

→ **self-justify** their ownership of land (Bowles, 1998).

Link to literature on motivated beliefs (Be´nabou and Tirole, 2016; Gino, Norton and Weber, 2016; Zimmermann, 2020).

In the customary system, tenure rights are subject to **redistributive obligations** (Boltz, Marazyan and Villar, 2019).

An “**external**” **intervention** awards to participants in treated villages the enjoyment of **exclusive property rights**.

To **morally justify** their new condition, people “convince themselves [...] that the *appropriate notions of fairness and justice* are those that also happen to *correspond to their own self-interest*” (Gino, Norton and Weber, 2016, p.207).



## Conclusion

A society's redistributive system does not only results from its' members preferences.

**Economic institutions** play a key role in shaping people's acceptance of inequality.

Institutional reforms which **privatize** access to economic resources may

- **reduce** people's **demand for redistribution**
- crystallize social inequalities unrelated to individuals' achievements.

Promoting individual ownership can improve the efficient use of resources and provide optimal incentives for economic development.

However reforms might need to be complemented by policies designed to prevent resulting aggravations of social inequalities.



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