

Provision of club goods in the lab

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Introduction

- Classification of goods
 - Ex : Swimming pool
- Club theory = normative theory (size, number, fee)
(Sandler and Tschichhart, Public Choice, 1997)
- Experimental investigation of the voluntary provision of club goods

	Rivalry (High)	Rivalry (Low)
Exclusion (Easy)	Private good	Club goods
Exclusion (Difficult)	CPR	Public good

Introduction

- Club goods = excludable public goods.
- Club as a step level public good
 - minimum size to be provided
 - Above the threshold improvement of the club.
- Enforcing exclusion has conflicting effect
 - Reduce free riding
 - Can decrease welfare
- Few work on public good with exclusion
 - Swope (Experimental Economics, 2002) = excludable public good
 - Increase contribution
 - Decreases welfare when MPCR is low
 - Gailmard and Palfrey (J. Pub. Eco, 2005), Cinyabuguma et al. (J. Pub. Eco, 2005) Charness and Young (WP, 2006)

Model

$$\text{Max}(x_i, G) = \alpha(w - g_i) + \beta_i \lambda G \quad \text{if } G = \sum(g_{-i} + g_i) \geq P \\ aw \quad \text{else}$$

$$S/t x + g_i = w$$

$$\text{with } \beta_i = 1 \text{ if } g_i > 0$$

$$\beta_i = 0 \text{ if } g_i = 0$$

$$\alpha > \lambda, n\lambda > \alpha$$

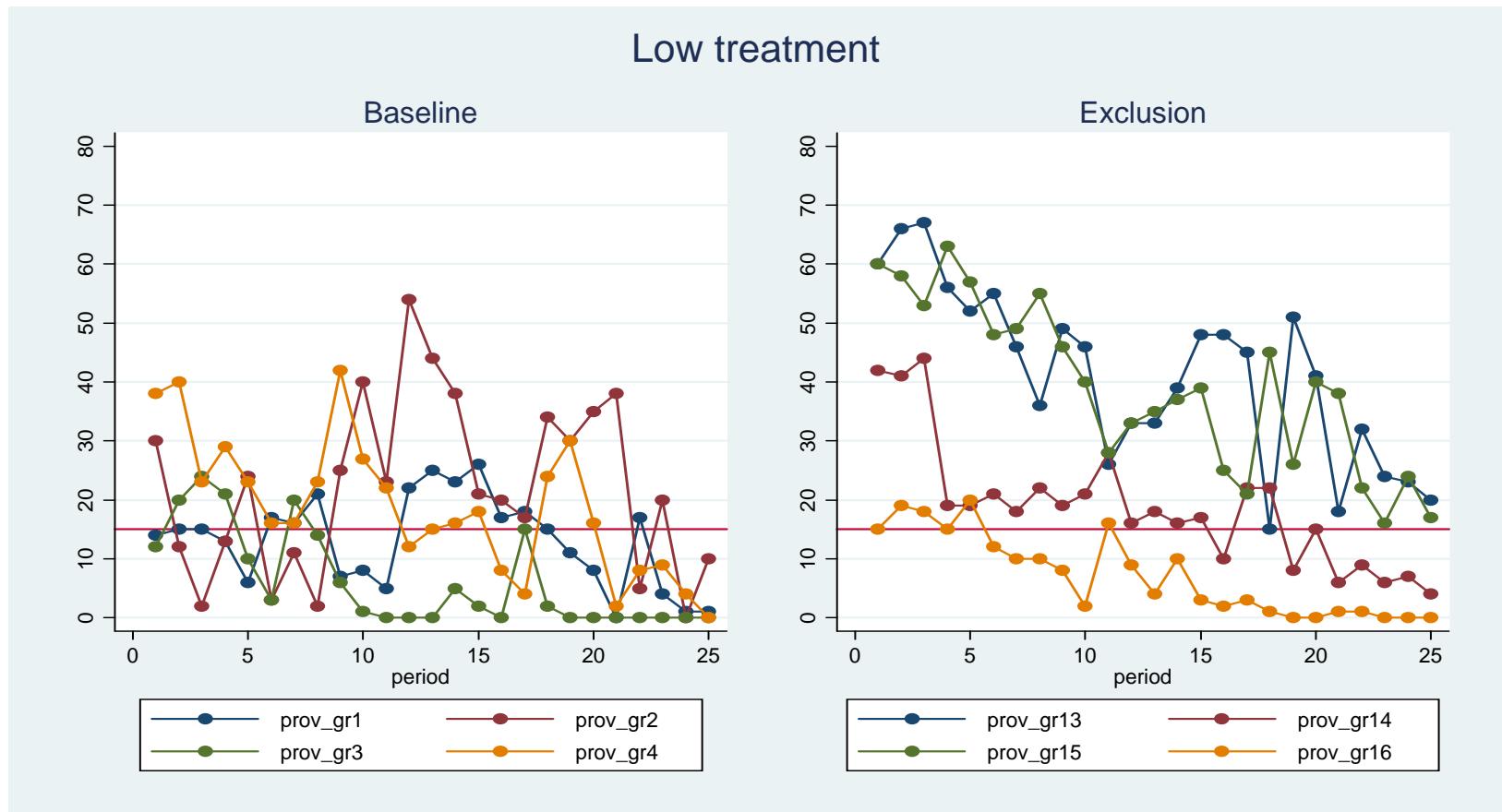
Experimental design

- Baseline :
 - Choice between private account and collective
 - Step level mechanism : the group has to reach a provision point in order to provide the public good. Unless tokens are lost.
- Exclusion :
 - The individual has to contribute in order to benefit from the collective account.
 - No minimum level of contribution required

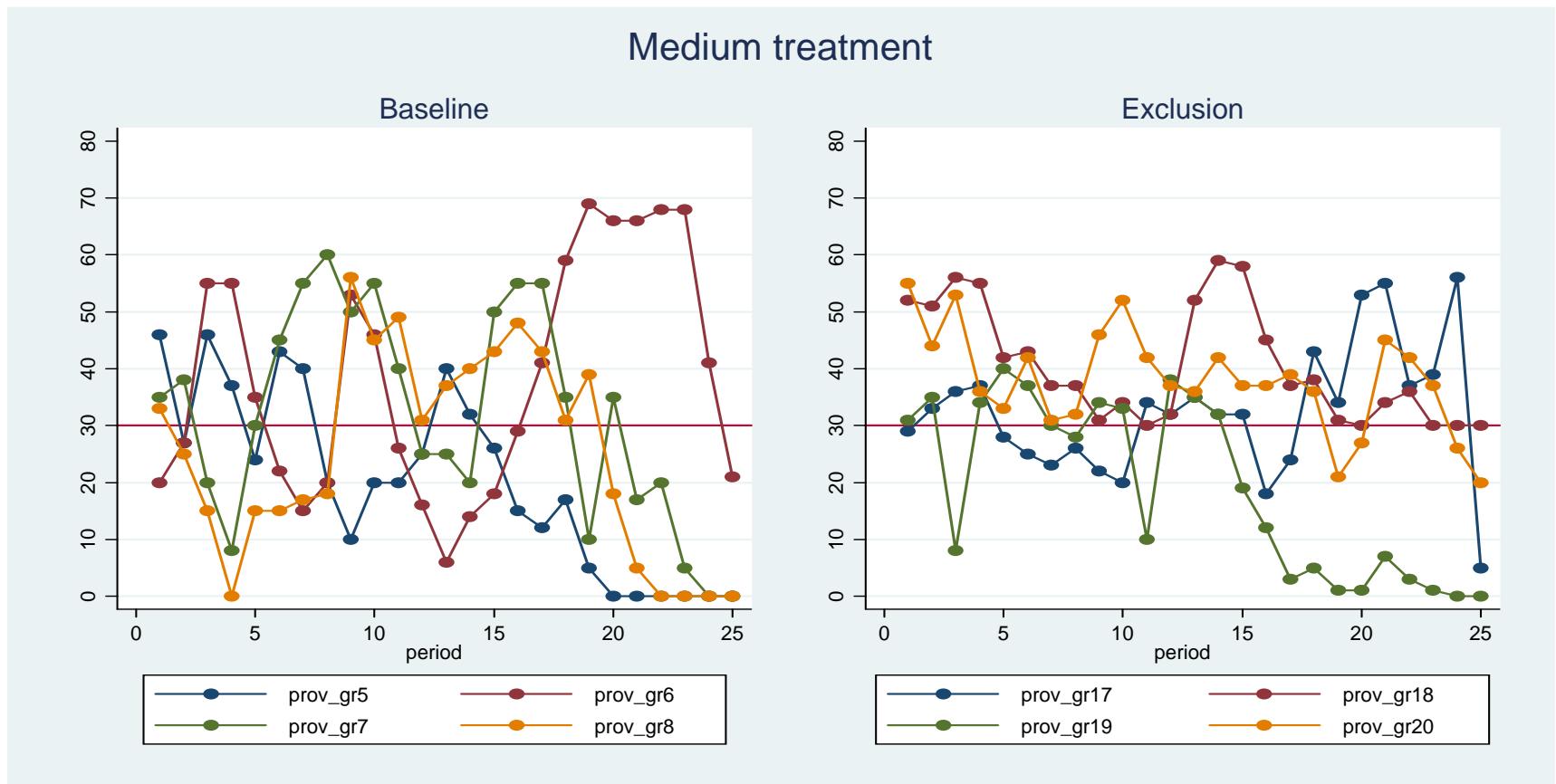
Parameters

- Endowment = 20 tokens
- Three levels of threshold tested :
 - Low = 15
 - Medium = 30
 - High = 60 (money back guarantee)
- 4 Groups of 4 per treatment, 25 periods, 96 students
- 2400 observations

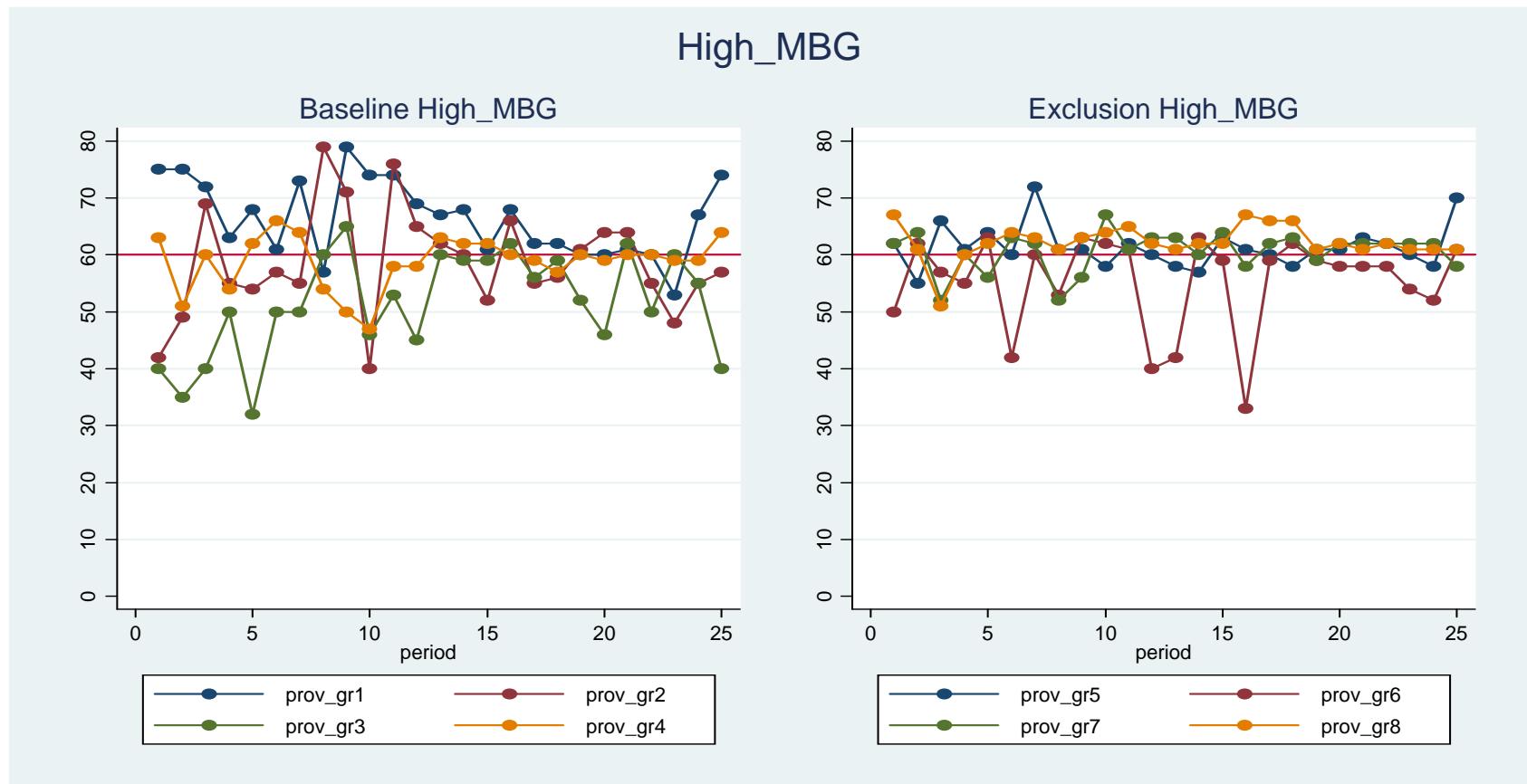
Results (1): Exclusion increases success of provision



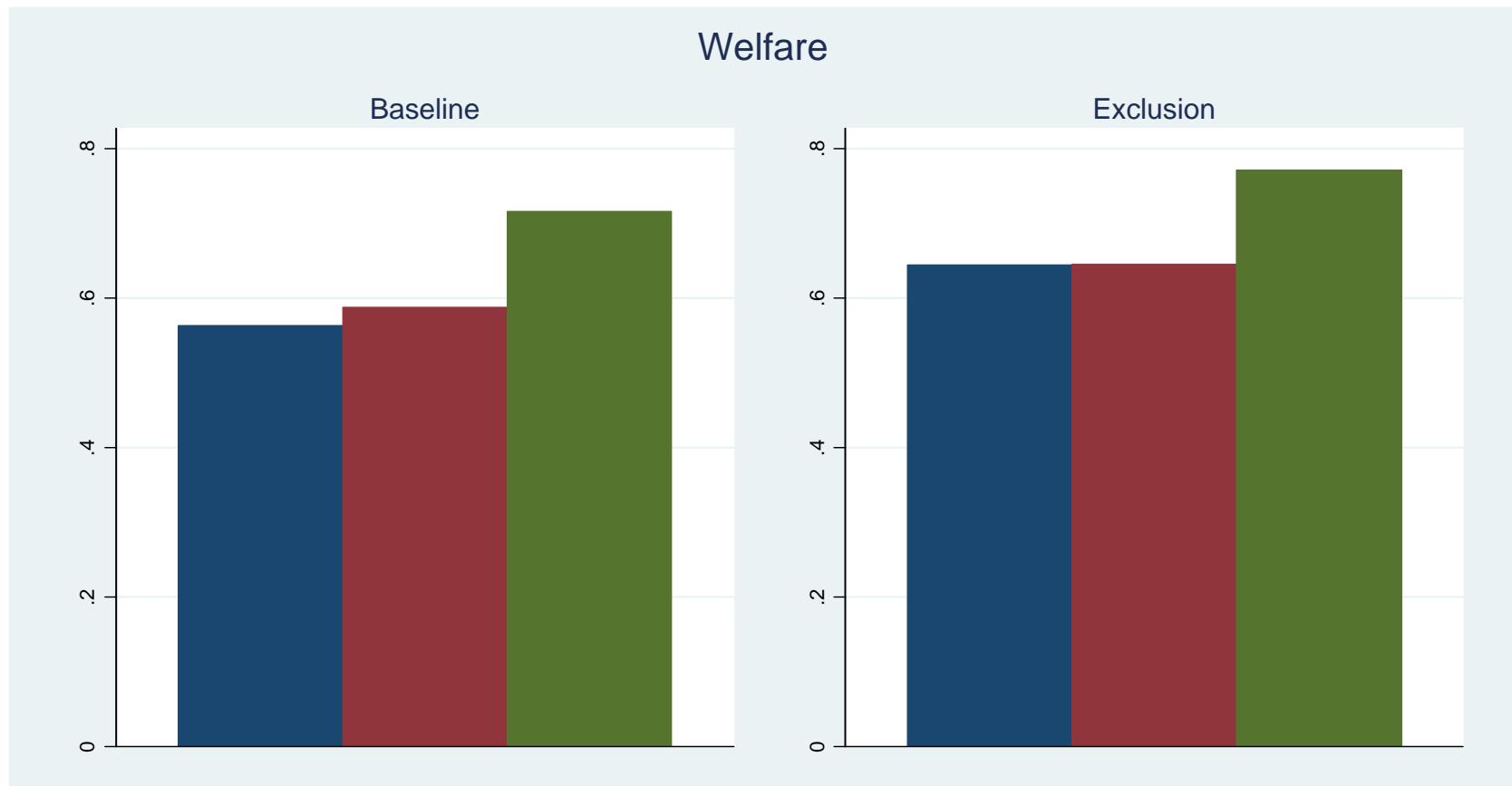
Results (2): Exclusion increases success of provision



Results (3) : Exclusion increases success of provision



Result (4) : Exclusion increases welfare



Discussion : Why ?

