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The provision of club goods in the lab

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Provision of club goods in the lab

M.A. BCHIR and M. WILLINGER

IMEBE 2008

Introduction

- Classification of goods
 - Ex : Swimming pool
- Club theory = normative theory (size, number, fee) (Sandler and Tschichart, 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

$$\text{Max}(x_i, G) = \begin{cases} \alpha(w - g_i) + \beta_i \lambda G & \text{if } G = \sum (g_{-i} + g_i) \geq PP \\ \alpha w & \text{else} \end{cases}$$

$$\text{S.t. } x + g_i = w$$

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

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

$$\alpha > \lambda ; n\lambda > \alpha$$

Experimental design

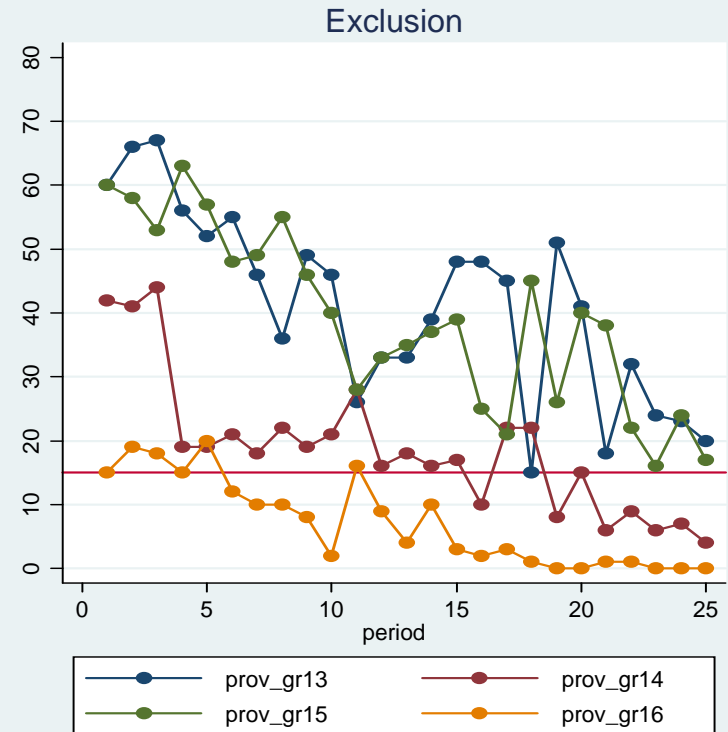
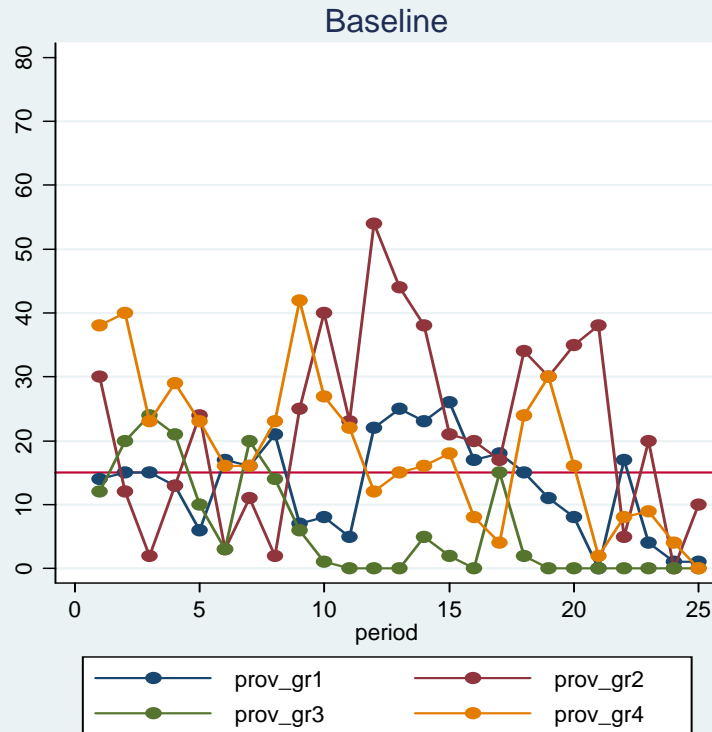
- Baseline :
 - Choice between private account and collective
 - Step level mechanism : the group has to reach a provision point in order to provide the public good. Unless tokens are lost.
- Exclusion :
 - The individual has to contribute in order to benefit from the collective account.
 - No minimum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

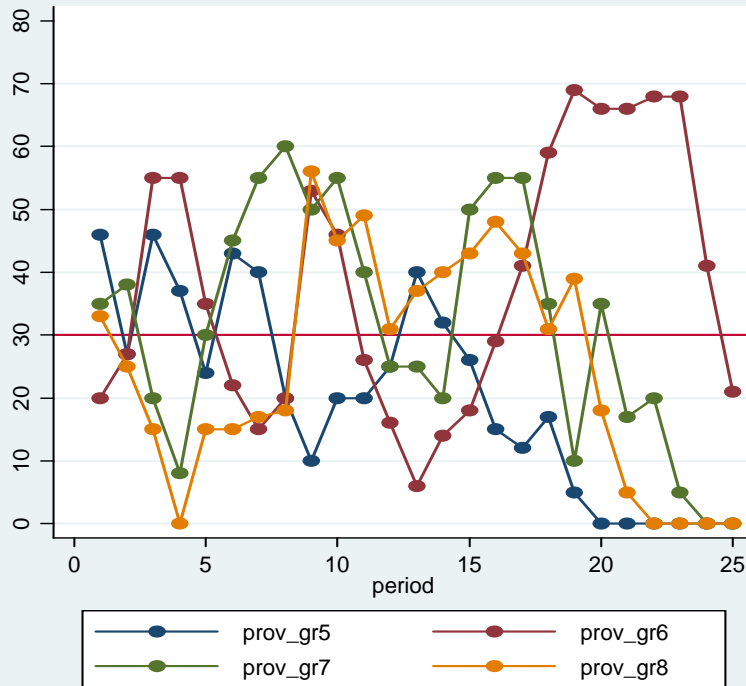
Low treatment



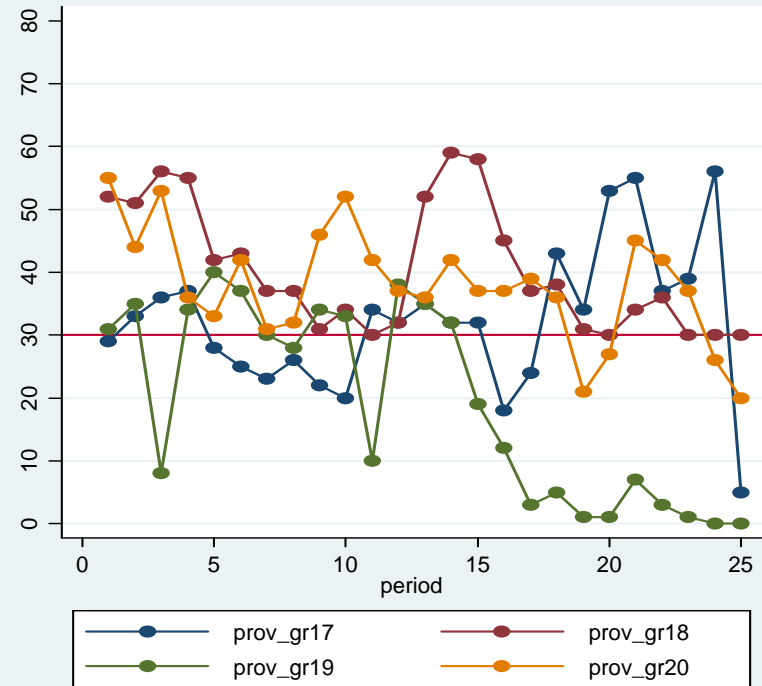
Results (2): Exclusion increases success of provision

Medium treatment

Baseline

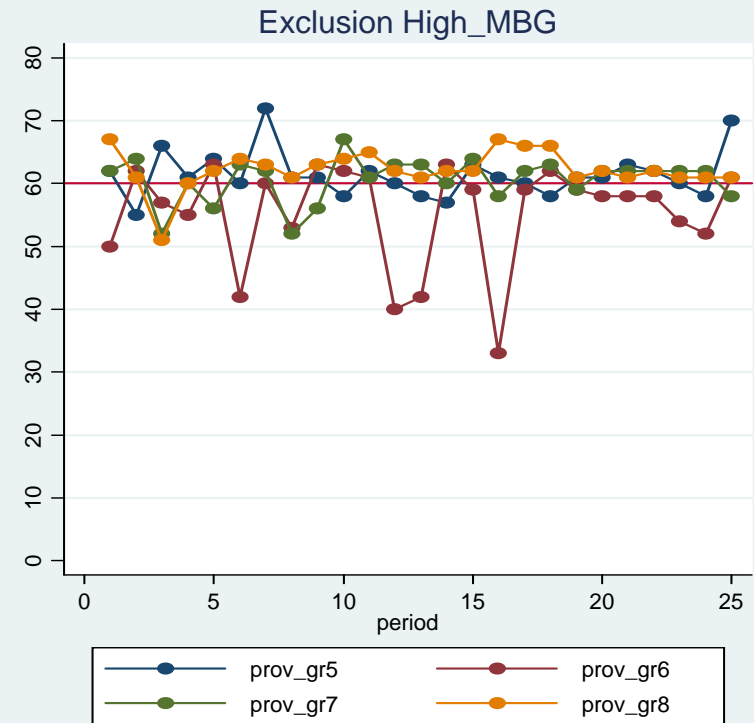
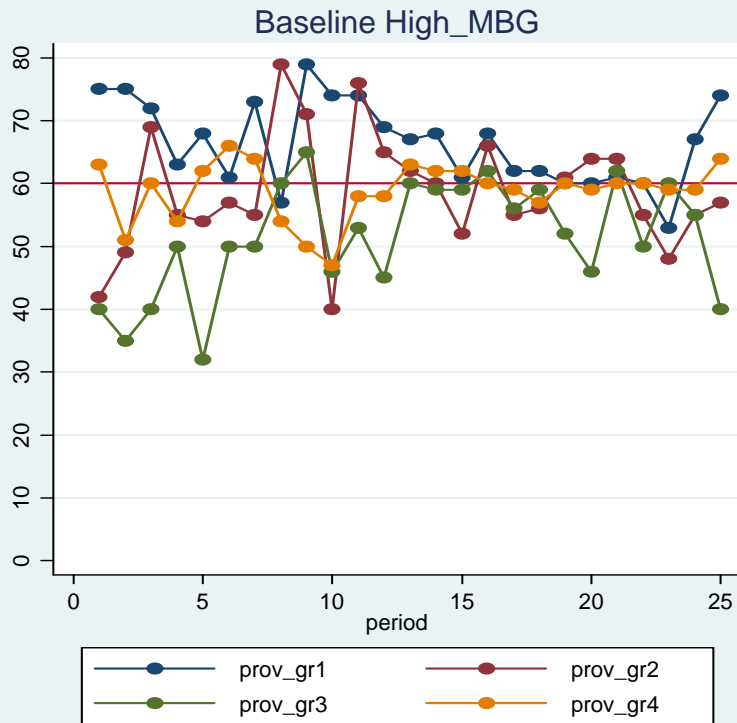


Exclusion

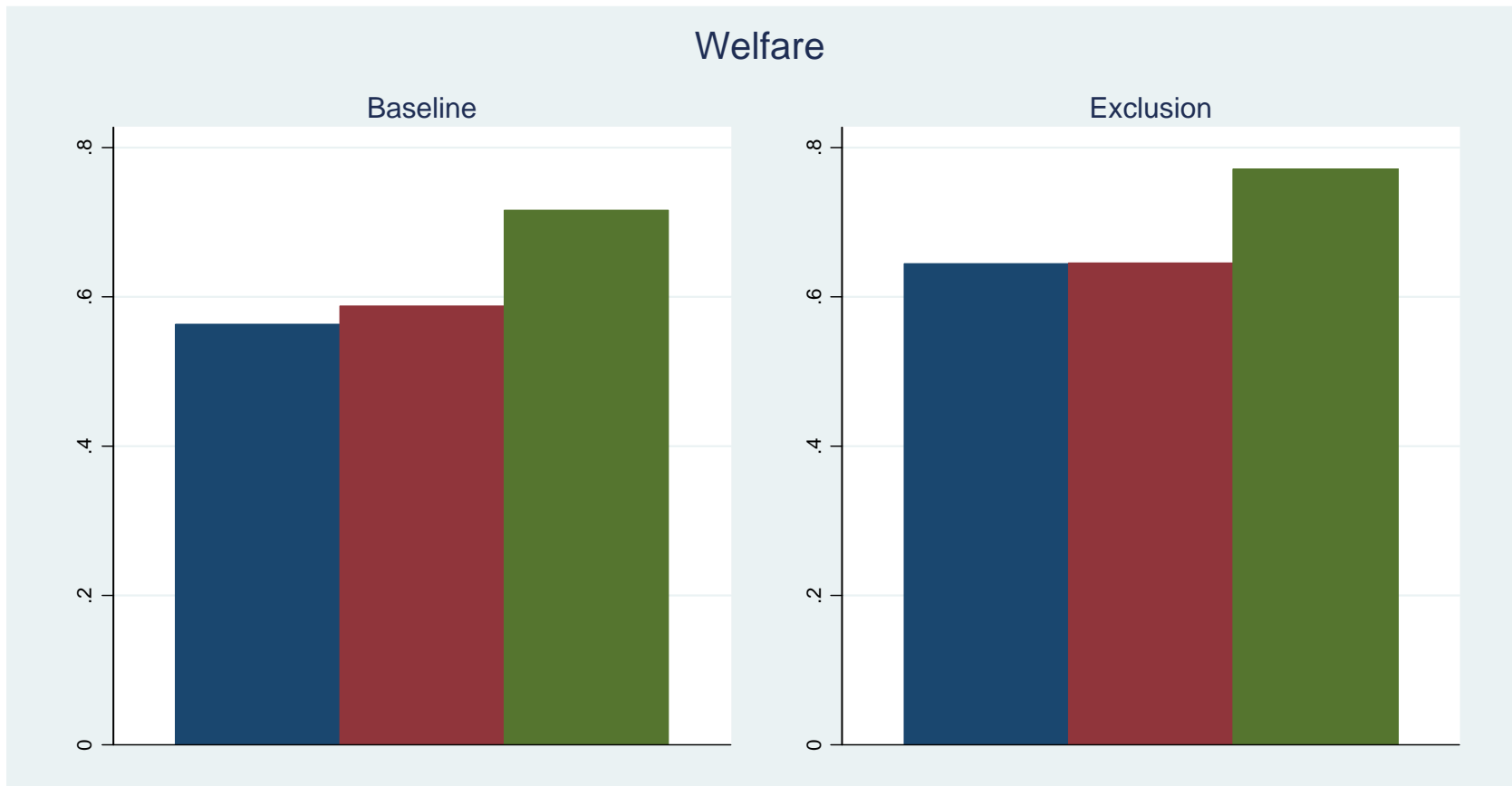


Results (3) : Exclusion increases success of provision

High_MBG



Result (4) : Exclusion increases welfare



Discussion : Why ?

Number of contributors

