

Club Good Provision and Nested Contests

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Abstract

In this paper, we analyze a framework of two clubs where relative aggregate club activity serves as a head start in a following contest. Following Nitzan (1991)¹ a proportion of the head start is distributed on egalitarian grounds and the rest is distributed according to relative effort of club members. The effect on rent dissipation and club good provision is studied in a two-stage game. In the first stage, club members choose the activity level in their club to maximize the sum of utility from club membership and expected utility from contest participation. Members of both clubs and nonmembers enter one of $K \geq 2$ different contests in stage two in which they compete simultaneously to win a rent. Individual spending as well as club activity determine the probability of receiving the rent or a proportion of the rent allocated to each contestant. We find that a player's activity level in the club increases due to the motivation of winning a contested rent in the second stage. If a club membership is relatively important, contest investment is completely substituted by club activity. Under equal distribution of the head start among club members, the club with the smallest number of members or with the highest diversity of club members is the most active.

¹Nitzan, S. (1991): Collective Rent Dissipation, *The Economic Journal*, 101(409), 1522-1534

Clubs are voluntary organizations whose members collectively consume or produce at least one good or service. Buchanan (1965)² describes a club as a group of people that privately provides a certain class of public goods. Thus, clubs have to solve the same kind of collective action problems that exist in the provision of public goods. Shared responsibilities and positive returns to joint activities induce free riding.

Former research (Sandler and Tschirhart (1997)³) suggests that clubs which are relatively small in size and composed of individuals having relatively homogeneous interests will be more successful because of a lower intensity of free riding. Iannaccone (1992)⁴ applies the theory of clubs to religious organizations. He confirms the finding, that relatively small clubs or churches with high entry costs and strict behavioral demands are persistent over time. The purpose of our paper is to examine the motivation of a club membership and the successfactor of bigger clubs such as professional alumni networks (McKinsey, Boston Consulting Group) or alumni networks of university graduates (University of Michigan Alumni Association), student associations or affiliation to parties. Clubs offer or produce local public goods which may also mean that they provide the necessary support and contacts for professional advancement. A club membership can play a major role in certain occupational fields.

The aim of our paper is to analyze how the motivation of professional advancement affects the success of a club. We would like to answer the question in how far the club size or the diversity of actors in a club determine the overall club activity. Specifically, we assume that club members benefit from (in-)formal networking events and contacts to people from other business communities. A framework of two clubs is analyzed where relative aggregate club activity serves as a head start in a following contest. Following Nitzan (1991) we apply a sharing rule which distributes a proportion of the head start on egalitarian grounds and the rest is distributed according to relative effort of club members. The effect of a professional motivation on overall club activity is studied in a two-stage game. In the first stage, club members choose the activity level in their club to maximize the sum of utility from

²Buchanan, J. (1965): An Economic Theory of Clubs, *Economica*, New Series, 32(125), 1-14

³Sandler, T. and Tschirhart, J. (1997): Club Theory: Thirty Years Later, *Public Choice* 93, 335-355

⁴Iannaccone, L. (1992): Sacrifice and Stigma: Reducing Free-Riding in Cults, Communes, and Other Collectives, *Journal of Political Economy*, 100(21), 271-291

club membership and expected utility from contest participation. Members of both clubs and nonmembers enter one of $K \geq 2$ different contests in stage two in which they compete simultaneously to win a rent. In contrast to previous studies, we find that a player's activity level in the club increases due to the motivation of winning a contested rent in the second stage. If a club membership is relatively important, contest investment is completely substituted by club activity. Under equal distribution of the head start among club members, the club with the smallest number of members or with the highest diversity of club members is the most active. This result shows that not only the group size but also the diversity regarding members' professions or businesses is decisive for the success of a group in a nested contest.