## Principal-Agent Problems When Principal Allocates a Budget

## Kimiko Terai<sup>a</sup> Amihai Glazer<sup>b</sup>

<sup>a</sup> Faculty of Economics, Keio University, 2-15-45 Mita, Minato-ku, Tokyo 108-8345, Japan

E-mail: kterai@econ.keio.ac.jp

<sup>b</sup> Department of Economics, University of California, Irvine, Irvine, California
92697, U.S.A.

E-mail: aglazer@uci.edu

http://ies.keio.ac.jp/upload/pdf/jp/DP2015-012.pdf

## Abstract

Agents benefit from having the principal believe that they share his preferences, whereas the principal may prefer that agents reveal their types. Such incentives are explored in a model which considers a principal who sets a budget in each of two periods, that each of the two agents allocates among different services. In the second period, the principal, having observed the agents' behavior in the first period, gives a larger budget to the agent he believes more likely shares the principal's preferences. Each agent may behave strategically, spending his budget on the service he thinks the principal prefers, thereby hiding his type. The principal may induce agents to reveal their types by hiding from them his preferences, or by giving them a large budget in the initial period. Such an approach, however, may lead agents in the initial period to spend too much on services the principal little values.

Keywords: delegation, budget, hidden information