Available online at www.sciencedirect.com
ScienceDirect
European Economic Review 51 (2007) 183–202
EUROPEAN ECONOMIC REVIEW
www.elsevier.com/locate/eer

On representative social capital ☆

Charles Bellemare, Sabine Kröger*

Département d'économique, Université Laval, Canada

Received 8 April 2006; accepted 13 March 2006
Available online 19 May 2006

Abstract

This paper analyzes the behavior of subjects randomly drawn from the Dutch population who reveal their capacity to provide and sustain social capital by their propensity to invest and reward investments in an economic experiment. We find that heterogeneity in behavior is characterized by several asymmetries—men, the young and elderly, and low educated individuals invest relatively less, but reward significantly more investments. The age effects are found to corroborate existing findings, whereas those of gender and education do not. Higher expected levels of investments by others are found to have a positive and significant effect on own investments. Finally, a laboratory experiment with student subjects is found to provide a lower bound of the population level of social capital.

JEL classification: Z13; C90; C10; D39

Keywords: Social capital investments; Social norms; Experiments; Representative samples

1. Introduction

Most social relations are governed by implicit informal agreements rather than explicit contracts. Even in the later case, contracts are often incomplete, which gives rise to incentives to act against the interests of other parties. Institutional economists (e.g., North, 1990; Williamson, 1985) have argued that differences in the costs to enforce contracts

☆ A previous version of this paper circulated under the title "On Representative Trust". Financial support from CentER and CentERdata is gratefully acknowledged.
*Corresponding author. Tel.: +1 418 6562131x12896.
E-mail addresses: cbellemare@ecn.ulaval.ca (C. Bellemare), skroger@ecn.ulaval.ca (S. Kröger).

0014-2921/$ - see front matter © 2006 Elsevier B.V. All rights reserved.
doi:10.1016/j.euroecorev.2006.03.006

translate into cross-country differences in the performance of organizations and economic growth.

It is now well accepted that social capital rests, among other things, on the trust, trustworthiness, and altruism between individuals, and on self-enforcing norms of behavior, all of which allow trades between two agents to be completed informally, with lower transactions costs than required by complex contracts (e.g., Bowles and Gintis, 2002). Empirical evidence suggests that such factors may explain cross country differences in growth and efficiency of organizations (e.g., Zak and Knack, 2001; LaPorta et al., 1997).

In this paper we have a large representative sample of individuals drawn from the Dutch population play a computerized version of an investment game similar to that presented by Berg et al. (1995) (henceforth BDMc). In this game, a sender can pass (invest) part of his initial endowment to a responder. The amount invested is doubled and added to the responder's initial endowment. The responder then chooses how much of this to return to the sender. The structure of this game allows concerns for social efficiency and motives of trust, trustworthiness, positive reciprocity, and altruism to emerge from the investment and return decisions made by the relevant players (e.g., Cox, 2004).[1] The analysis of these decisions potentially improves on the analysis of survey questions intended to capture specific aspects of social capital (e.g., Alesina and La Ferrara, 2002), an approach which has recently been criticized on the basis that answers to such questions do not correlate well with observed behavior (see Glaeser et al., 2000; Gächter et al., 2004). Because we also collected answers to a popular survey question on trust towards others (taken from the World Value Survey (hereafter WVS)), we are able to document the extent to which revealed versus stated choice data can provide different inferences on individual behavior in the context at hand.

One of the main advantages of sampling from the entire Dutch population is that we can relate all the individual decisions in our experiment to a rich set of socio-economic characteristics. The decisions of senders are further related to their subjective social norms of behavior, norms believed to play an important role in many social settings (see Elster, 1989; Ostrom, 2000). To our knowledge, the relationship between subjective norms of behavior and social capital has not been addressed so far. We measure these social norms by directly asking senders to state their expectations about the average behavior of other senders. This approach allows for unrestricted heterogeneity in expectations across individuals, and does not impose a priori assumptions on how these norms are formed.[2] Eliciting subjective expectations raises endogeneity issues, as stated expectations may be jointly determined with decisions made during the experiment. We conduct exogeneity tests to investigate this possibility.

We also compare the behavior observed in our representative population to the behavior of student subjects who participated in the same experiment, this time in the laboratory. This provides a valuable insight on the capacity of the laboratory to provide information on the population level of social capital. This comparison can be more generally related to the literature assessing the external validity of lab experiments by comparing the play of

[1] In concentrating on these aspects of social capital, we do not mean to suggest that individual involvement in communities (e.g., Glaeser et al., 2002) or efforts to build and maintain social ties are unimportant in the larger scheme of social capital. Rather, they are not objects of our enquiry.

[2] One such assumption would be to assume that senders with the same observable characteristics have the same expectations, expectations which are consistent with their observed behavior in the experiment.