Is Individual Behavior Oriented to Self-interest, Other-interest or both?

Empirical Evidence from a Case Study of Social Capital

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Is Individual Behavior Oriented to Self-interest, Other-interest or both?  

By Zhenyu Zhang and Gary D. Lynne

Abstract

While social capital is becoming mainstreamed in social science, much remains to be done to better understand its’ nature. This is especially true for “What motivates the investment in social capital, and what affects the level of social capital?” An earlier paper by Robison, Schmid and Siles (2002) suggests that social capital is motivated by sympathy, and thus in some sense it is sympathy. The empirical testing herein suggests that the formation of social capital may well be motivated in part by an empathetic, sympathetic tendency toward pursuing a shared other-interest. Data used in the test is from a mid-western U.S.A. rural community we refer to herein as “Nirvana” as it was identified in Cordes et al. (2003). The evidence shows Nirvana residents value social capital as a means of reaching self-interested ends as conditioned by shared other-interest. There appears to be a kind of symbiosis at work between the two interests, self-interest and other-interest, which likely explains the development success of this community. The question on what degree of orientation from strict attention to self-interest leads to greater viability in communities like Nirvana remains unresolved, and to answer the question explicitly requires further research on comparison of communities at different levels of economic viability and social capital.

Key word: social capital, self-interest, other-interest, motivation
Introduction

Conventional economic theory has been built on the assumption that people don’t need to care for each other as long as the market organizes the selfishness, and whatever behavior is observed can be explained by a solely self-interest pursuit. However, hundreds of papers have appeared throughout the social science literature, arguing that social capital matters in understanding individual and group differences in a wide range of situations from farm land market trading to economic and community development under a wide range of conditions (e.g. Schmid and Robison 1995, Robison and Hanson 1995, Onyx and Bullen 2000, Woolcock 2001, Cordes et al 2003, Durlauf 2004).

Yet, generally these papers have not explored what motivates the formation of social capital observed in the economy and community. Coleman (1988) identifies social capital as a resource that actors can use to achieve their own interests, and claims that social capital is purely motivated by self-interest. The only reason people want to establish a certain relationship is because each one wants to get something out of it. That is, social capital is only instrumental to the pursuit of self-interest, and is not pursued in its own right. Does social capital exist only as an expression of self-interest that individuals are willing to pay for it because it furthers their individual interest? Or, is there some other motivation at work, causing social capital to exist and to have value, because individuals are empathizing, imagining themselves in the state of others, and as result, tempering their self-pursuit? Such tempering could also lead to pursuing a shared other-interest. Or, does social capital exist because of the orientation in both interests? The hypothesis that interpersonal relationships are driven by pursing only self-interest is tested in the paper. Specifically, the objectives of this study is to 1) show the existence of
social capital in the community; 2) find out what motivates individual willingness to
invest in social capital; and 3) explore the possibility that knowing what motivates social
capital, as driven by a particular orientation in the two interests, may be the key to
understanding why some rural communities achieve a higher state of economic and
community development. Said somewhat differently, it could be that the key to a higher
state of development in a community rests in being somewhat oriented toward the other-
interest albeit also an interest internalized within self, such that understanding and
influencing that orientation could help a community achieve a higher plane.

The article is organized as follows: We first review previous studies on social
capital related to its role and values, most of which implicitly, if not explicitly, suggests
that self-interest is the only driving force for an individual’s willingness to invest in
social capital. Second, we report our empirical test results and discussion, suggesting
there may well be other-interest conditioning self-interest. We then conclude with
implications for connecting a high level of social capital with a high viability and success
in a community’s economic development, due to a kind of symbiosis occurring between
the two interests as jointly pursued.

What motivates social capital?

Historically, there have been two broad intellectual streams in the description and
explanation of social action. One, following on the work of most sociologists, sees the
actor as a socialized individual and actions as governed by social norms, rules and
obligations, perhaps even willing to sacrifice self-interest to achieve a kind of shared
other-interest in the greater good. The other, following on the work of most economists,
sees the actor as having goals independently arrived at, and acting wholly on self-interest.
In the latter conception, caring for others and social capital have no role in and of themselves, which seems contrary to experience. A number of authors from both traditions have recognized these problems and attempted to impart some of the insights and orientations of the one intellectual stream to the other (e.g. Tylor 1982, Etzioni 1988, Robison & Flora 2003).

Few papers have really worked on the motivation of social capital, most of which address only the conceptual or theoretical perspectives without providing empirical evidence. Taylor (1982) argues that social capital is generated through a combination of short-term altruism and long-term self interest, wherein individuals provide a service to others at a personal cost, and expect that such kindness will be returned at some undefined time in the future in case of need. Latham (1997) and Fukuyama (1995) claim that social capital cannot be generated by individuals acting on their own in isolation, implying that the formation of social capital depends on a proclivity for sociability. Generally, previous studies suggest that self-interest itself or a self-interest driven reciprocity triggers an individual’s willingness to invest in social capital.

In contrast, Etzioni (1988) states that individual is motivated not only by a utilitarian self-interest in the pursuit of pleasure, but also by a complex of social and individual goals. Bowles and Ginitis (2002) use game theory to show that individual motivations supporting community governance are not captured by either the conventional self-interested preferences, or by unconditional altruism towards one’s fellow community members, but some integration of both. Robison and Flora (2003) suggest that a substantial amount of human behavior does not appear to be motivated
only by selfish preferences. Briefly, these studies imply that joint interests motivate the formation of social capital.

If individuals are purely self-interested as most economists suggest following the second intellectual stream, all the respondents in the survey would choose to leave the community for additional income. What we actually observe in the case of the Nirvana study is inconsistent with such speculation, and is especially demonstrated by the unwillingness of a substantive number of residents to move from Nirvana at all.

**Case study in a rural community**

In this paper, we propose to empirically shed more light on what motivates individuals to invest in social capital, by focusing on the extent to which orientation toward the empathy/sympathy domain determines the perceived value of social capital in a rural community. The idea is: If we could explain what motivates more investment in social capital in this ideal community, perhaps this would ultimately help to find the key to what drives economic and community development more generally. The case of “Nirvana” is one of these ideal kinds of communities, known to be one wherein individuals experience a relatively high level of social capital and economic vitality, substantively higher than many if not most other rural areas in USA. This is the reason Nirvana was chosen for this case study (see Cordes et al., 2003).

The survey was conducted in 2000, and collected 1012 residents’ perspectives, including detailed measurements on standard economic psychology scales about the extent to which self-interest is a driver in their economic decisions. The fact that 68% of those surveyed (everyone with a Nirvana zip code) responded alone indicates something is different in this community, perhaps a larger sense of connectedness is at work that
would also motivate helping a research team, i.e. normal response rates for such a questionnaire, having 38 often intricate questions covering 17 pages, would be more in the 20-30% range. As described in detail in Cordes et al. (2003), the contingent valuation method was applied to obtain a quantitative measure of the existence of social capital, and the dollar value of social capital.

The key question was framed in terms of a lucrative job opportunity in some other community. The respondent was told that the new job would be about the same in terms of job satisfaction; they currently know no one in the new community; the place is similar on other fronts, except that close friends, business associates, etc., would stay behind when the respondent and her/his immediate family moved to take advantage of this opportunity. The new place is also at some distance; limiting the opportunities for at best only a few visits back to Nirvana per year. The respondents answered two major questions:

1) Would you and your household consider leaving Nirvana for additional income?
   _No, I cannot imagine my household leaving no matter how much money was offered._
   _Yes, for enough income, we would move._

2) If yes, how much additional annual income would it take to get your household to move? Answering “No” gave a strong indicator that the matter of social capital was simply not an economic quantity to some residents, for whom social capital could not be converted into monetary terms. For those answering “Yes”, social capital is fundamentally no different than any other kind of dollar capital (such as physical capital and human capital) in that sense, albeit as we will see in the empirical results, there is a social conditioning of the dollar amount. The dollar estimate gave the monetary value of
social capital for those willing to put a dollar value on it. These questions give dependent variables of the (0, 1) and a continuous variable for those who said “yes” (for those in this group giving a dollar estimate). Because only those who answered yes have given the dollar measure on social capital, which creates a potential sample bias problem, a sample selection model proposed by Heckman (1979) was applied.

Step 1 is the decision equation, where the dependent variable is 1 or 0, corresponding to the answer either “Yes”, choosing to leave, or “No”, not leaving this Community under the promising financial opportunity. The independent variables include the degree of selfishness; how self-interest is conditioned by others (and, thus, implicitly by the shared other-interest); how self-interest is conditioned by the perceived degree of control over one’s own decision; household net annual income after taxes; self-interest in a job; other-interest in a job (with particular reference to coworkers); and an interaction term between the last two terms.

Step 2 is the dollar value equation, where the dependent variable is the additional annual income required by respondents who are willing to move, the dollar value in logarithm, and independent variables defined above, plus the IMR (Inverse Mill’s Ratio, measuring the correlation between two equations).

In looking to the independent variables that might explain the variation in this measure of social capital, the design of this part of the questionnaire and the econometric analysis draws heavily on the metaeconomic approach (Lynne, 1999; 2002; in press; Hayes and Lynne, 2004; Kalinowski et al., 2006). This approach, based in a theory that goes beyond standard microeconomics by positing a dual motive in human nature, suggests that humans jointly seek both self-interest and other-interest. Both interests are
internalized to the self. This suggests the search for measures of selfishness, tendencies for a willingness to be influenced by others (arising from “walking-in-their-shoes”, i.e. empathizing), and perhaps even to sacrifice self in order to achieve the sense of well-being that comes from sharing with others in common pursuits.

Also, the metaeconomic approach elevates the matter of control to a higher plane, making it explicit in the theory, that individuals seek control at the same time they seek self-interest, that one cannot understand one drive without the other. As Angyal (1941/1967), arguably the best holistic psychologist ever, described it, it is human nature to continually try to wrest control away from the inherent control asserted by others, and the environment itself, seeking autonomy, expressed as complementary to the pursuit of self-interest. So, wanting more individual control and self-interest tend to work together. The influence of others, on the other hand, tends to condition and work counter to the pursuit of the self-interest. If influence of others is found a driver, this simply indicates the individual tends to condition the pursuit of self-interest with the joint pursuit of other-interest, the latter reflecting empathy, i.e. the individual conditioning self-interest from having imagined oneself in the state of others, and acted accordingly, after answering the question “how would I wish to be treated if it were me in that situation?”

Results and Discussion

Due to incomplete answers, 649 observations are used for the Step 1 analysis, among which 388 individuals give the dollar value on how much extra money they want for giving up the social capital existing in this community. This money information is used in Step 2 analysis.
The strong assumption required in the Heckman method is to assume that errors in the two equations have a bivariate normal distribution; therefore, the error in the first equation is examined. The quantile, histogram appears to have the shape of a normal distribution, which provides the justification in choosing the Heckman model for this study.

**Table 1 Probit Model Estimation Result**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>IG28RAVE</td>
<td>149.93</td>
<td>21.95</td>
<td>6.84 ***</td>
</tr>
<tr>
<td>BALINF2</td>
<td>-3.51</td>
<td>0.53</td>
<td>-6.60 ***</td>
</tr>
<tr>
<td>BALCTL2</td>
<td>-12.22</td>
<td>3.52</td>
<td>-3.47 ***</td>
</tr>
<tr>
<td>YQ37DOL</td>
<td>0.000023</td>
<td>0.000019</td>
<td>1.18</td>
</tr>
<tr>
<td>JOB</td>
<td>0.040</td>
<td>0.0096</td>
<td>4.15 ***</td>
</tr>
<tr>
<td>COLLAB</td>
<td>0.023</td>
<td>0.010</td>
<td>2.22 **</td>
</tr>
<tr>
<td>JOBCOL</td>
<td>-0.0012</td>
<td>0.00029</td>
<td>-4.31 ***</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>-0.59</td>
<td>0.21</td>
<td>-2.82 ***</td>
</tr>
</tbody>
</table>

*** Significant at 1% level; ** Significant at 5% level.  Sample size is 650.

The variable used to measure the tendency toward pursuing the self(ish) interest (IG28RAVE) is the average of the reversed Question 28 items, i.e. the scales on the Q#28 items are reverse coded before entry into the regression analysis (also leaving out items c and d, the latter justified using factor analysis; see the actual questionnaire at [http://social.capital.unl.edu/nirvanaquest.pdf](http://social.capital.unl.edu/nirvanaquest.pdf)). This is a commonly used psychological scale, referred to as the selfism scale by Phares and Erskine (1984). The influence part of the BALINF2 (IG28RAVE X influence) variable was drawn from Q#19 multiplied by Q#20, an expectancy-valence variable, a proxy for the utility gained from being
influenced by others. The control part of the BALCTL2 (IG28RAVE X control) is Q#27 reversed, which measures the extent to which the respondent believes others are not likely to control the decision. It was reversed because we wished to form and test for a variable that would potentially dampen self-interest; we would expect that if the individual perceived it was more unlikely someone could control their decision to move that they would be less likely to express their self-interest in moving. The JOB variable is the average of parts a-d of Q#22 times Q#23, again an expectancy-valence, or proxy for utility, in this case the self-interest utility gained by the respondent in her/his work. The other-interest utility (COLLAB) gained from relationships at work is a proxy by parts e-i of Q#22 times Q#23.

Probit results from Step 1 in Table 1 show that the variables associated with selfishness (IG28RAVE) and self-interest related to the current job (JOB) have a significantly positive impact on people’s decision to leave Nirvana for another financial opportunity. That is: i) the more self(ish)-interested the individual, the more likely they will choose leaving for another lucrative opportunity; ii) also, the more value individuals put on a job/work, the more likely they will choose leaving for the new job, that is, “the job” no matter where it is located has high value in the self-interest sense; iii) finally, notice that the income (YQ37DOL) effect is statistically insignificant, essentially playing no role in this part of the decision to stay or to leave, which provides support for our contention that something besides monetary considerations are at work in this place. Also, iv) notice that a strong sense of well-being at work as measured in COLLAB, representing a kind of shared other-interest in the workplace, also drives the willingness to consider moving; this is to say, if one values collaborators at work, then logically
being able to have this same feature in a new job (the contingency describes how the job situation and working environment will be essentially the same, except the pay will be higher) could well help drive the decision to give up social capital in Nirvana.

An especially substantive finding that supports the hypothesis that perhaps other-interest is playing a role is suggested by the variables corresponding to the orientation and conditioning of self-interest by other-interest (BALINF2); conditioning of self-interest by others’ control (BALCTL2); and the interaction between self-interest and other-interest from work (JOBCOL). All of these forces temper, and thus have a negative effect on the individual’s decision to leave Nirvana. That is: v) the more consideration there is for others in the sense of empathizing with them (BALINF2), and thus tempering one’s own decision, in effect being willing to be influenced by others, the less likely the individual will choose to leave; vi) the less perceived control there is on the individual’s own decision from others (BALCTL2), especially family members and close friends, the less likely the individual will choose leaving (that is, people who perceive more control and are more self-interested are more likely to move, which is consistent with the pursuit of self-interest, obtaining more control over one’s own situation); and finally, vii) the self-interest arising in the job itself is conditioned by the other-interest from work (JOBCOL) suggesting that the more there is a sense of caring and satisfaction with coworkers from the current job, the less likely one is to leave for a new similar job. The negative sign suggests the symbiotic complementarities (see Lynne, in press, the book chapter), “sum-greater-than-the-sum of the parts” outcomes in the current job, i.e. there is some kind of feedback as between the two interests that is making this job work well for
these individuals, which makes them reluctant to leave it, and thus the negative sign on JOBCOL.

The most interesting thing is the significant role of others in conditioning self-interest (BALINF2) along with the fact that annual income (YQ37DOL) has an insignificant effect, both of which suggest that purely economic, individualistic factors are not the only force in the individual’s decision. To make sense of these economic factors, one must look to the empathy affects on the pursuit of self-interest.

The IMR was created using Probit results in Step 1, and used as one of the independent variables in Step 2. The coefficient of IMR is 0.62 (p-value=0.077), i.e. there is no significant correlation between the two equations at the 5% significant level. This result provides reasonable grounds to run the analysis of two equations, separately.

### Table 2 Semi-log OLS Estimation Result

<table>
<thead>
<tr>
<th>Variables</th>
<th>Estimated Coefficient</th>
<th>Standard Error</th>
<th>T-Ratio</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMR</td>
<td>0.62</td>
<td>0.35</td>
<td>1.77</td>
<td>0.077 *</td>
</tr>
<tr>
<td>BALINF2</td>
<td>1.30</td>
<td>0.61</td>
<td>2.13</td>
<td>0.034 **</td>
</tr>
<tr>
<td>BALCTL2</td>
<td>-3.75</td>
<td>2.86</td>
<td>-1.31</td>
<td>0.19</td>
</tr>
<tr>
<td>YQ37DOL</td>
<td>0.000013</td>
<td>0.0000023</td>
<td>5.74</td>
<td>0.00 ***</td>
</tr>
<tr>
<td>JOB</td>
<td>0.017</td>
<td>0.014</td>
<td>1.22</td>
<td>0.22</td>
</tr>
<tr>
<td>COLLAB</td>
<td>0.018</td>
<td>0.013</td>
<td>1.36</td>
<td>0.17</td>
</tr>
<tr>
<td>JOBCOL</td>
<td>-0.0007</td>
<td>0.00046</td>
<td>-1.54</td>
<td>0.13</td>
</tr>
<tr>
<td>CONSTANT</td>
<td>8.38</td>
<td>0.35</td>
<td>24.22</td>
<td>0.00 ***</td>
</tr>
</tbody>
</table>

*** Significant at 1% level; ** Significant at 5% level; * Significant at 10% level. Sample size is 389.

The semi-log OLS estimation results in Step 2 in Table 2 show that the variable measuring the orientation in the self-interest (i.e. in the sense of measuring how self-
interest is being conditioned by others, through the vehicle of the respondent acting on empathy) due to the influence from significant others (BALINF2) has a positive affect on the dollar value of social capital. This result is consistent with our hypothesis that individual behavior in this community is oriented toward the other-interest rather than solely the self-interest, and drives the investment in social capital. It also provides evidence countering standard economic expectations, which used to think of the individual as a creature solely pursing self-interest by ignoring the interdependence driven by the empathy between individuals. If standard economic theory holds in this case, all the residents in a community would be expected to choose leaving in order to maximize their annual income under the assumption stated in the questions. In fact, the survey shows about 1/3 (38%) of the people choose not leaving under any circumstance, suggesting the substantive importance of social capital in the sense that it is “off-limits” to being monetized for this group. Also, for the 2/3 (62%) who said yes, the average response was nearly $33 thousand, suggesting the monetary value of social capital, to those willing to so monetize it, also is substantial.. as well as the level being conditioned by the utility individuals get from empathizing with others (as represented in the BALINF2 variable). Also, as expected, control is no longer a force; once a person visualizes actually moving, and is now considering how much money it will take, the individual has already disconnected in the economic psychological sense from those others that might be perceived as controlling.

Yet, by explicitly introducing both other-interest and control from the others into the framework, we are not in some sense rejecting microeconomic theory and that approach. Instead, as microeconomics teaches, the respondent’s income is now a
significant variable. For those willing to put a dollar value on it, to put it in the monetary domain of their thought and evaluation process, the value is higher if one has more income as the standard theory predicts. As metaeconomics… an approach that goes beyond microeconomics but does not replace it… predicts, money plays a role, but only after the self-interest has been conditioned by the empathy driven other-interest, at least in communities that are as economic viable as that displayed in Nirvana.

**Conclusions and Implications**

As Robison and Flora (2003) argue,

Much of human behavior does not appear to be motivated by selfish preference for increases in physical goods and services. Examples of such behavior include unwillingness to move from one’s community for a significant pay increase, and attachment to things with little physical value. The social capital paradigm explains some of these nonmaterial-oriented behaviors by integrating behavioral concepts and assumptions from the fields of economics, psychology, and sociology.

This study supports this contention, albeit we need to keep in mind this community was chosen for study in the first place as it represents an ideal community, which has a high level of social capital and economic vitality.

The results reported in this case study of Nirvana also provide a new prospective into traditional microeconomic theory by showing that individual behavior is not only driven by pursuing self-interest, but also by pursuing other-interest. This empathy driven pursuit goes well beyond considering just the most significant others represented in the immediate family and co-workers. It also suggests that as many as 38-percent are unwilling to monetize the social capital in this ideal community. Perhaps it takes at least this much commitment to a place in order to ensure the kind of economic and community vitality resident in Nirvana.
Perhaps most importantly, this study sheds new light on understanding why some rural communities achieve a higher state of economic development and community vitality than others, with the reasons resting in the orientation in the interests within the community in question. The high level of economic success in a community of this nature is likely due to the motivation of its residents to condition their self-interest with the shared other-interest, which they pursue for its’ own reasons, suggesting a new kind of understanding about what drives economic and community development. Yet, this is just one case study. To answer the question about the role played by the degree of orientation will require further testing in a wide-variety of communities representing the full-spectrum of development. We hope you will join us in this research effort.

References


