Cambridge Journal of Economics 2008, **32,** 289–294
doi:10.1093/cje/bem039
Advance Access publication 24 October, 2007

The foundations of trust: macro and micro

Eric M. Uslaner*

This comment on Beugelsdijk's (2006) critique of trust and its measurement argues that it misses the mark, and that there is neither a theoretical nor an empirical foundation for thinking that the macro and micro foundations of trust or its measurement are different from each other. Generalised trust is more than a simple illusion hiding behind institutional structures.

Key words: Trust, Institutions, Economic growth
JEL classifications: B40, O11, Z13

1. Introduction

The foundations of trust are a contentious topic in the social sciences. Some argue that trust among people has institutional roots (Rothstein, 2005), while others are more sceptical that political and social institutions can lead people to have faith in each other (Uslaner, 2002). Beugelsdijk (2006) takes this argument a step further: 'trust as it is measured in these macro studies is not a reflection of trust as it is theory upon at the micro level, but . . . it is in fact a proxy for the well-functioning of institutions'. Trust at the micro level reflects our experience in dealing with other people in transactions. Trust at the macro level–or at least as we have measured it, 'is something other than micro trust . . . Instead of measuring trust . . . we may have been measuring the well-functioning of institutions' (Beugelsdijk, 2006, pp. 372, 382). Trust, then, becomes a cipher—a simple place-holder for an effective state.

In this comment, I take issue with this argument. I have a stake in the argument not only because I have written extensively about trust (Uslaner, 2002), but also because I am cited and quoted–and misinterpreted—in Beugelsdijk's article. I do not focus on new evidence or upon the link between trust and growth in this comment. Rather I shall briefly place the theoretical and measurement issues in context, counter Beugelsdijk's critique of the trust measure, and argue that the statistical analysis he employs to make his point is problematic.

Generalised trust, as the measure has come to be called, has the same micro and macro foundations—and they are largely *not* institutional. They certainly are not mere surrogates for institutional performance. Yes, trusting societies rank better on some institutional

Manuscript received 27 March 2007; final version received 17 August 2007.
Address for correspondence: Department of Government and Politics, University of Maryland–College Park, College Park, MD 20742, USA; email: euslaner@gvpt.umd.edu

* University of Maryland, USA.

measures (especially corruption), but not on all and Beugelsdijk's technique (factor analysis) for linking the two is flawed. We cannot dismiss trust so quickly.

2. The foundations of trust

The core of Beugelsdijk's argument is a critique of how trust has been measured at the aggregate level and whether it is simply a surrogate for effective government. The most widely employed measure of trust in the social sciences is the survey question—used cross-nationally in the World Values Survey and other national and cross-national surveys including the General Social Survey, the American National Election Studies, the Afrobarometer, the Asian Barometer, the Latinobarometer, and many other surveys beginning with work by Rosenberg (1956): 'Generally speaking, do you believe that most people can be trusted or can't you be too careful in dealing with people?'.

I first turn to an examination of what the trust question means and what we know about its effects and causes—at both the micro and macro level. Most economists—and many political scientists—believe that trust is a summary of people's experiences and is very fragile (Glaeser *et al.*, 2000; Hardin, 2002). I argue that there are different conceptions of trust, including, of course, the most common one where trust reflects experience. There is *also* another variant of trust that I term 'moralistic trust', which is a value that we learn early in life and that is largely resistant to bad experiences—or good ones (Uslaner, 2002, ch. 2). I have shown (Uslaner, 2002, ch. 3) that the standard survey question reflects moralistic trust rather than experience-based faith in others. The overwhelming share of people—72% of those who gave a detailed response—in a 'think aloud' experiment in the 2000 American National Election Study pilot survey said that the question reflected deeper orientations about one's world view rather than anything connected to day-to-day experience (Uslaner, 2002, p. 74). Moralistic trust is also not fragile: Across a series of panel surveys over periods of time ranging from 2 years to 17 years, between 75% and 86% of respondents gave consistent responses (Uslaner, 2002, pp. 60–8).

The stability of trust and the interpretations of survey respondents support my claim that generalised trust represents a sense of social solidarity, a belief that other people, especially people unlike yourself, are part of your moral community. The generalised trust question, according to a factor analysis I performed on data from a 1996 Pew survey of metropolitan Philadelphia, is tied to people you do not know—people you meet on the street, people who work where you shop—rather than people you do know, such as your family and people at your club, your house of worship, and at work (Uslaner, 2002, pp. 52–56). It does *not* reflect the generalised reciprocity that is part and parcel of how we interpret trust based upon personal experiences (cf. Putnam, 1993, pp. 171, 180). People who were helped by someone when they were young, whose family helped someone when they were young, or who saw someone they admire provide assistance to another person are no more likely to trust others than people without such experiences (Uslaner, 2002, p. 141).

The foundations of experience-based trust and moralistic trust are different. Experience-based trust is fragile, moralistic trust is not. Experience-based trust is based upon responses to how others have treated you and your interactions with others in your social network and the organisations you join. Moralistic trust, faith in strangers who may not be like you, cannot rest upon your perceptions of people you know, since strangers may not be similar to your own circle. Experience-based trust matters, of course, but it is fundamentally different from moralistic trust and the two are (statistically) independent of each other (Uslaner, 2002, pp. 52–6, 145–8). Moralistic trust does reflect experiences, but those early in life rather than as an adult, and trusting values formed early in life persist through adulthood (Uslaner, 2002, pp. 160–71). The academic literature on trust is almost all based, including Beugelsdijk's essay, on the 'standard question' and this question, I have shown, reflects moralistic trust, not experience-based trust.

This view of trust leads to predictions that generalised trusters will be more likely to connect with people through good deeds—charitable giving and volunteering—rather than simply by joining civic groups. Such good deeds are only connected to trust if they involve helping people who may be different from yourself: Volunteering at your child's school and making charitable donations to your house of worship neither stem from generalised trust nor do they promote it (Uslaner, 2002, ch. 5). Generalised trusters are more tolerant of people who are different from themselves, they are supportive of racial minorities and immigrants and see the benefits of trading with countries that may be different from their own. They will thus support programmes that benefit minorities and the poor and will favour more open markets. Each of these predictions receives support at *both the macro and the micro level*, from surveys in the USA, over time from aggregate data in the USA and cross-national aggregate analysis.

Trust is strongly related to patterns of volunteering and giving to charity for people who may be different from yourself, to support for open markets and to measures of free trade, to support for programs that benefit the poor and to higher levels of government spending on programs such as education and universal healthcare. The key foundations of trust are optimism for the longer-term future, a sense of control over one's own life at the micro level and economic equality, an essential foundation for social solidarity and the belief in a shared fate, at the aggregate level, both over time in the USA and cross-nationally. Not surprisingly, there are strong negative ties between measures of optimism and economic inequality at the aggregate level (see Rothstein and Uslaner, 2005; and Uslaner, 2002, ch. 4, 5, 6, 8).

The upshot of these findings, using both individual-level responses and aggregate scores across countries, is that *the micro and macro foundations of trust are the same*. Micro findings from survey research are mirrored in macro results from aggregate analysis.

What, then, are we to make of Beugelsdijk's argument about the institutional roots of trust at the macro level? First, while Beugelsdijk (2006, pp. 376–7) approvingly cites my statement that 'the belief that the legal system is fair may be the most important guarantee that 'most people can be trusted', he fails to note that I am citing someone else (Rothstein, 2000) and that my very next sentence indicates strong disagreement with this thesis: 'Instead, I argue that trust in people and trust in government have different roots' (Uslaner, 2002, p. 7). Second, there is little support at the micro level for the link between trust in other people and confidence in government.

In the USA, the mean correlation (tau-c) between the American National Election Study question on trust in government and generalised trust in 12 surveys from 1964 to 1998 is just 0.177, while the mean correlation between generalised trust and the General Social Survey question on confidence in the executive branch over 17 surveys from 1973 to 1998 is only 0.094. Across 42 nations, the correlation between trust and confidence in the legislative branch (from the World Values Survey) is –0.154 (negative because higher values of confidence indicate less faith in the legislature). Trust in government reflects beliefs about government performance and the popularity of specific leaders, whilst trust in people does *not* rest upon such transient attitudes. Cross-national aggregate results show only modest correlations between trust and democratic government, which become insignificant in multivariate analyses, as does the fairness of the legal system (Uslaner, 2002, pp. 152–8, 224, 244). Neither at the macro nor the micro level do we find an institutional foundation for generalised trust.

It is far from clear that trust in other people has institutional roots—much less that it is a surrogate for other structural variables. I turn now to the new evidence that Beugelsdijk presents. Is it more convicing?

3. Beugelsdijk's analyses

Beugelsdijk's argument that the macro foundations of the trust measure (if not trust itself) are well-functioning governments rests upon his statistical analysis showing strong macro-level links between trust and government performance. Beugelsdijk (2006, 377–9) presents a factor analysis of a variety of cross-national indicators of political and social indicators, some of which are familiar (ethnic fractionalisation), some ambiguous (rule of law, which has been measured in many different studies), and some unfamiliar (social infrastructure). So I cannot readily replicate the analysis, but that is not an issue since I am more than willing to accept Beugelsdijk's results at face value. It is not the numbers I challege, it is the interpretation—and how it is carried out.

Beugelsdijk considers 18 aggregate measures across 41 nations. The UCLA Statistical Consulting Laboratory (n.d.) argues: 'As a rule of thumb, a bare minimum of 10 observations per variable is necessary to avoid computational difficulties'. Yet Beugelsdijk's analysis has only 2.3 observations per variable and there is an issue of insufficient degrees of freedom. Moreover, at least two pairs of measures—ethnic homogeneity and ethnic fractionalisation, on the one hand, and corruption and the rule of law, on the other—are composed of the same underlying indicators and thus will automatically load on the same factor.

The factor analysis yields five distinct dimensions, all with eigenvalues well over the minimal value of 1.0 for a distinct dimension. Five dimensions for no more than 16 distinct variables do not suggest a single syndrome of government and social performance. Trust loads on a dimension with the Gini index and economic discrimination—consistent with my own results on the foundations of trust. A variety of government-related measures such as corruption, the rule of law, contract enforcement, the black market premium, capitalism and social infrastructure load on the main (government) factor. Beugelsdijk then extracts trust from its own factor and takes the high loading variables on the government dimension and conducts a second factor analysis (actually a principal components analysis) and finds a single dimension where trust loads on this single component. Yet, trust did not originally load on the government factor. Conducting a second analysis—and including and excluding variables without explanation—undermines Beugelsdijk's argument that trust is just one more measure of stable and clean government.

Beugelsdijk also restricts his analysis to Europe since earlier work may have overstated the link between trust and growth by including low-trusting, poorer countries (Beugelsdijk, 2006, pp. 380–2). By excluding relevant cases, however, Beugelsdijk introduces selection bias: restricing the range of cases included will *underestimate* the true effect for a variable (King *et al.*, 1994, p. 129).

Trust is substantially higher in Europe than outside it, gross domestic product per capita (according to 2000 data from Penn World Tables) is more than twice as great in Europe as elsewhere, and the Gini index (Deininger and Squire, 1996) is almost 1.5 times as great outside of Europe as inside. Any analysis of trust and its foundations or consequences that is restricted to Europe will be hampered by sample selection. Truncating a sample can lead to erroneous inferences. There is a much stronger correlation between trust and economic inequality ($r = -0.507$, $N = 37$) outside Europe than inside, where the correlation has the wrong sign ($r = 0.190$, $N = 34$)—mostly reflecting the (artificially) low levels of inequality and the more understandable low levels of trust in the former Communist nations. Confidence in government is more strongly related to generalised trust *outside Europe* ($r = -0.279$, $N = 16$) than inside it ($r = -0.064$, $N = 26$). So if trust is merely a surrogate for effective government in Europe, it is not reflected in how well people say that the key institution of democracy (the legislature) performs.

Eliminating cases requires a theoretical justification about why some connections work better than others. Beugelsdijk's finding that the relationship between trust and growth becomes stronger when we include less trusting, poorer countries may well indicate that there are real differences between high-trusting and low-trusting countries. Beugelsdijk is truncating his sample and perhaps obscuring why trust may be important.

To be sure, Beugelsdijk (2006, p. 373) argues that his data analysis 'may be mere illustrations rather than hard empirical proof' and no more than 'circumstantial evidence'. Yet, the analysis is beset with difficulties and does not support his theoretical arguments. If the foundations of trust are different at the macro and micro levels, we should need a more comprehensive analysis of the determinants and effects of trust. My own analysis of trust at *both levels* provides strong support for the contrary claim: the foundations of generalised trust are the same at both the micro and micro level—a sense of optimism and control at both levels as well as economic equality, which in turn leads to greater optimism, at the macro level (Uslaner, 2002, ch. 2, 4, 7). And these foundations are *not* institutional.

More critically, factor analysis is a rather blunt tool for establishing causality or for untangling relationships among variables. It is an atheoretical tool—indeed, it is generally called 'exploratory factor analysis' (in contrast to 'confirmatory factor analysis', which is similar to two-stage least squares and does presume a causal structure).

While I challenge the view that trust is part of a larger syndrome of good government, I agree with Beugelsdijk that trusting societies are more likely to have less corruption. In Uslaner (in press, ch. 2; see also Uslaner, 2004), I link strong in-group trust and low out-group trust to high levels of corruption: particularised trusters (who only trust their own kind) strongly distrust outsiders. They fear that people of different backgrounds will exploit them—and, in a dog-eat-dog world, you have little choice but to strike first before someone exploits you.

Gambetta (1993) argues that the Mafia took root in Southern Italy because there were strong in-group ties and weak generalised trust there. Varese (2001, p. 2) makes much the same argument about the Russian Mafia: 'If trust is scarce, and the state is not able or willing to protect property rights, it is sensible to expect a high demand for non-state, private protection. The existence of a demand for protection does not, however, necessarily imply that a supply of protectors will emerge'. Low levels of generalised trust lead to greater corruption. When people do not trust people who are different from themselves—and reserve their trust for their own kind (particularised trust)—they will feel less guilty about acting dishonestly toward people who are not part of their moral community. High inequality leads to low trust and thus to more corruption—and grand corruption, where high-level officials get rich as ordinary people stay poor, further erodes trust. Petty corruption, which does not enrich people, has no significant effect on trust.

I have offered a theoretical link between trust and corruption and show in Uslaner (in press, ch. 3) that this link goes both ways, from low trust to high corruption and back again to low trust. Survey data show that the connection only holds for grand corruption, not petty corruption (Uslaner, in press, ch. 5, 6, 7). This argument, unlike Beugelsdijk's, is causal. I do not posit that trust and corruption are indicators of the same underlying phenomenon. And factor analysis cannot show what, if anything, the causal linkages among a set of variables might be.

This theoretical link does suggest that trust is not divorced from institutions, but the connection is not the one posed by Beugelsdijk. Institutions that lead to greater equality *promote* trust, if not causing it directly. A trusting population will be more cooperative, and thus governments in societies with trusting populations will be less corrupt and are likely to function with less conflict and greater responsiveness (Uslaner, 2002, ch. 7). Yet, this is not the same thing as saying that trust *means* better governing institutions.

4. Reprise

Beugelsdijk's critique of trust and its measurement thus misses the mark. There is neither a theoretical nor an empirical foundation for arguing that the macro and micro foundations of trust or its measurement are different from each other. Nor is there support for the argument that the macro foundations of trust reflect government performance. His claims are not sufficient to dismiss the relevance of trust. The debate over whether trust in people has institutional foundations is still vigorous, and ongoing, but there is little doubt that generalised trust is more than a simple illusion hiding behind institutional structures.

Bibliography

Beugelsdijk, S. 2006. A note on the theory and measurement of trust in explaining differences in economic growth, *Cambridge Journal of Economics*, vol. 30, 371–87

Deininger, K. and Squire, L. 1996. A New Data Set: Measuring Economic Income Inequality, *World Bank Economic Review*, vol. 10, 565–92

Gambetta, D. 1993. *The Sicilian Mafia: The Business of Private Protection*, Cambridge, MA, Harvard University Press

Glaeser, E. L., Laibson, D., Scheinkman, J. A. and Soutter, C. L. 2000. Measuring Trust, *Quarterly Journal of Economics*, vol. 65, 811–46

Hardin, R. 2002. *Trust and Trustworthiness*, New York, Russell Sage Foundation

King, G., Keohane, R. O. and Verba, S. 1994. *Designing Social Inquiry: Scientific Inference in Qualitative Research*, Princeton, Princeton University Press

Putnam, R. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*, Princeton, Princeton University Press

Rosenberg, M. 1956. Misanthropy and political ideology, *American Sociological Review*, vol. 21, 690–5

Rothstein, B. 2000. Trust, social dilemmas, and collective memories: on the R and decline of the Swedish model, *Journal of Theoretical Politics*, vol. 12, 477–99

Rothstein, B. 2000. *Social Traps and the Problem of Trust*, Cambridge, Cambridge University Press

Rothstein, B. and Uslaner, E. M. 2005. All for all: equality, corruption, and social trust, *World Politics*, vol. 58, 41–72

UCLA Statistical Consulting Lab. n.d. Annotated SPSS Output: Factor Analysis, http://www.ats.ucla.edu/STAT/spss/output/factor1.htm [date last accessed: March 19, 2007]

Uslaner, E. M. 2002. *The Moral Foundations of Trust*, New York, Cambridge University Press

Uslaner, E. M. 2004. Trust and Corruption, pp. 76–92 in Lambsdorf, J. G., Taube, M. and Schramm, M. (eds), *Corruption and the New Institutional Economics*, London, Routledge

Uslaner, E. M. In press. *The Bulging Pocket and the Rule of Law: Corruption, Inequality, and Trust,* New York, Cambridge University Press, available at http://www.bsos.umd.edu/gvpt/uslaner/corruption.html

Varese, F. 2001. The Russian Mafia: Private Protection in a New Market Economy, Oxford, Oxford University Press