



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Does Diversity Drive Down Trust?

Eric M. Uslaner

NOTA DI LAVORO 69.2006

APRIL 2006

KTHC - Knowledge, Technology, Human Capital

Eric M. Uslaner, *Department of Government and Politics, University of Maryland,
Center for American Law and Political Science, Southwest University of Political Science and Law
Chongqing, China*

This paper can be downloaded without charge at:

The Fondazione Eni Enrico Mattei Note di Lavoro Series Index:
<http://www.feem.it/Feem/Pub/Publications/WPapers/default.htm>

Social Science Research Network Electronic Paper Collection:
<http://ssrn.com/abstract=903051>

The opinions expressed in this paper do not necessarily reflect the position of
Fondazione Eni Enrico Mattei
Corso Magenta, 63, 20123 Milano (I), web site: www.feem.it, e-mail: working.papers@feem.it

Does Diversity Drive Down Trust?

Summary

Some researchers claim that diverse populations lead to less trust. Generalized trust is a core value that leads to positive outcomes in societies--from greater tolerance of minority groups and immigrants and willingness to do good deeds, to less corruption, more social welfare and education spending, more open markets, and better functioning government. Generalized trust fundamentally rests upon a foundation of respect for diversity, but at the same time arguing that societies have a common culture. It is the idea that people have a shared fate. Generalized trust rests upon a foundation of economic equality. Yet some claim that diversity leads to less trust rather than more trust. Trusting people who are different from yourself is atypical of most people, they claim. I dispute this--arguing that generalized trust is largely unrelated to population diversity. It is not diversity that matters--it is how populations are distributed. I show that trust is lower not in diverse societies, but rather in societies with large minority groups that are segregated from the majority groups. Minority residential segregation leads to less trust because it leads to less interaction across different groups in society--and leads minorities to associate only with each other, to form their own political organizations, and to see their fate as less dependent upon majority groups. I then discuss how economic inequality and the rule of law shape the relationship between trust and minority residential segregation.

Keywords: Trust, Diversity, Corruption

JEL Classification: Z13, O57, D73

This paper was presented at the First EURODIV Conference "Understanding diversity: Mapping and measuring", held in Milan on 26-27 January 2006 and supported by the Marie Curie Series of Conferences "Cultural Diversity in Europe: a Series of Conferences", EURODIV, Contract No. MSCF-CT-2004-516670.

Address for correspondence:

Eric Uslander
Department of Government and Politics
University of Maryland
College Park MD 20742
USA
Phone: +1 301 405 4151
Fax: +1 301 314 9690
E-mail: euslaner@gvpt.umd.edu

Uslaner, “Does Diversity Drive Down Trust?” (1)

A bond of trust lets us put greater confidence in other people’s promises that they mean what they say when they promise to cooperate. The “standard” account of trust presumes that trust depends on information and experience. Offe (1999) states: “Trust in persons results from past experience with concrete persons.” If Jane trusts Bill to keep his word and if Bill trusts Jane to keep her word, they can reach an agreement to cooperate and thus make both of them better off.

If Jane and Bill did not know each other, they would have no basis for trusting each other. Moreover, a single encounter will not suffice to develop trust. Even when they get to know each other better, their mutual trust will be limited to what they know about each other. Jane and Bill may feel comfortable loaning each other a modest amount of money. But Bill won’t trust Jane to paint his house and Jane will not trust Bill to repair her roof—since neither has any knowledge of the others’ talents in this area (Hardin, 1992, 154; Coleman, 1990, 109; Mizralski, 1996, 121ff.).

The decision to trust another person is essentially *strategic*. Strategic (or knowledge-based) trust presupposes risk (Mizralski, 1996, 18; Seligman, 1997, 63). Jane is at risk if she does not know whether Bill will pay her back. Trust helps us solve collective action problems by reducing transaction costs—the price of gaining the requisite information that Bill and Jane need to place confidence in each other (Putnam, 1993, 172; Offe, 1996, 27). It is a recipe for telling us *when* we can tell whether other people are trustworthy.

Beyond the strategic view of trust is another perspective. Moralistic trust is a moral commandment to treat people *as if* they were trustworthy. The central idea behind moralistic trust is the belief that most people share your fundamental moral values (cf. Fukuyama, 1995, 153). Moralistic trust is based upon “some sort of belief in the goodwill of the other” (Seligman,

Uslaner, “Does Diversity Drive Down Trust?” (2)

1997, 43; cf. Mansbridge, 1999; Yamigishi and Yamigishi, 1994, 131).

Strategic trust cannot answer why people get involved in their communities. The linkage with moralistic trust is much more straightforward. Strategic trust can only lead to cooperation among people you have gotten to know, so it can only resolve problems of trust among small numbers of people. We need moralistic trust to get to civic engagement. Yet moralistic trust seems to be the exception rather than the rule. We are more predisposed to trust people like ourselves than people who may be different from ourselves. Social identity theory stresses that each of us has one or more identities by which we define ourselves—and an overarching identification with “most people” seems counterintuitive. Contact theory suggests that we can overcome the “straightjacket” of in-group trust by getting to know people of different backgrounds—and thus learning to trust them. Yet, contact with people of different backgrounds may itself be an illusory goal. Diversity, some (Alesina and LaFerrara, 2000, 2002) argue, may draw people away from the very sort of contact that might build generalized trust.

Does diversity drive down trust? Why is generalized trust the exception rather than the rule and is there hope that contact with people of different backgrounds might lead to more generalized trust? In the analyses to follow, I show that diversity *per se* does not drive down trust. The models that predict a simple linkage between diversity and trust are too naive and have little empirical support. Instead, the relationship between diversity and trust is highly dependent upon context. In some cases, diversity mixed with frequent contact among equals can enhance trust (Forbes, 1997, 19). But diversity can also drive people apart—when people feel threatened by minority groups. Most critically, diversity can drive down trust when there is little opportunity for contact between groups—as where the minority group is geographically segregated

Uslaner, “Does Diversity Drive Down Trust?” (3)

from the majority. Geographic segregation breeds high in-group trust and low generalized trust, and boosts the power of politicians who use ethnic appeals. Segregated groups also have fewer resources than majority groups. Segregation and ethnic appeals are prime conditions for corruption, which in turn leads to less trust. So we have the makings of a vicious cycle of ethnic segregation, inequality, low trust, corruption, and continuing low trust in the majority. Isolation of a group within a diverse society, not diversity *per se*, seems to be the biggest threat to trust.

The Varieties of Trust

Moralistic trust is a value that rests on an optimistic view of the world and one’s ability to control it. Moralistic trust is not a relationship between specific persons for a particular context. If the grammar of strategic trust is “A trusts B to do X” (Hardin, 1992, 154), the etymology of moralistic trust is simply “A trusts.”¹

Strategic trust reflects our expectations about how people *will* behave. Moralistic trust is a statement about how people *should* behave. *People ought to trust each other.* The Golden Rule (which is the foundation of moralistic trust) does *not* demand that you do unto others as they do unto you. Instead, you do unto others *as you would have them* do unto you. The Eighth Commandment is *not* “Thou shalt not steal unless somebody takes something from you.” Nor does it state, “Thou shalt not steal from Bill.” Moral dictates are absolutes (usually with some exceptions in extreme circumstances).

Strategic trust is not predicated upon a negative view of the world, but rather upon uncertainty. Levi (1997, 3) argues: “The opposite of trust is not distrust; it is the lack of trust” (cf. Hardin, 1992, 154). But moralistic trust must have positive feelings at one pole and negative ones at the other. It would be strange to have a moral code with good juxtaposed

Uslaner, “Does Diversity Drive Down Trust?” (4)

against undecided.

Beyond the distinction between moralistic and generalized trust is the continuum from particularized to generalized trust. Generalized trust is the perception that *most* people are part of your moral community. Its foundation lies in moralistic trust, but it is not the same thing.² The difference between generalized and particularized trust is similar to the distinction Putnam (1993, 93) drew between “bonding” and “bridging” social capital.

Trust matters for the type of civic activities that tap this sentiment of reaching out to people who are different from ourselves—and to helping them. Where faith in others matters most is in volunteering and giving to charity. And not just for any type of volunteering or giving to charity. If I volunteer at my son’s school or give to my house of worship (or other religious cause), I am strengthening *in-group* ties. Religious volunteering and giving to charity is the hallmark of particularized trust. Giving time or money to *secular* causes, where we are more likely to help people who are different from ourselves, is the hallmark of generalized trusters (Uslaner, 2002, ch. 7. Wuthnow, 1999).

Generalized trust matters because it helps connect us to people who are different from ourselves. Generalized trusters are tolerant of immigrants and minorities and support equal rights for women and gays. But they are not fuzzy multiculturalists. They believe in a common core of values and hold that ethnic politicians should *not* represent only their own kind. Trusting societies have more effective governments, higher growth rates, less corruption and crime, and are more likely to redistribute resources from the rich to the poor (LaPorta *et al.*, 1999; Uslaner, 2002, chs.5 and 7).

The Atypicality of Generalized Trust

Uslaner, “Does Diversity Drive Down Trust?” (5)

We are predisposed to trust our own kind more than out-groups (Brewer, 1979). Messick and Brewer (1983, 27-28, italics in original) review experiments on cooperation and find that "members of an in-group tend to perceive other in-group members in generally favorable terms, particularly as being *trustworthy, honest, and cooperative*." The Maghribi of Northern Africa relied on their extended Jewish clan—and other Jews in the Mediterranean area—to establish a profitable trading network in the twelfth century (Greif, 1993). Models from evolutionary game theory suggest that favoring people like ourselves is our best strategy (Hamilton, 1964, 21; Masters, 1989, 169; Trivers, 1971, 48).

Social identity theorists such as Brewer see generalized trust as the exception rather than the norm. And cross-national data suggest that they are correct. In each of its four waves, the World Values Survey has asked the generalized trust question: “Generally speaking, do you believe that most people can be trusted, or can’t you be too careful in dealing with people?” In each wave, only a minority—and seemingly a shrinking one—trusts fellow citizens. Across 24 countries and regions in 1981, 38.5 percent believed that “most people can be trusted.” with only the four Nordic nations (Denmark, Finland, Norway, and Sweden) having a majority of trusting respondents. As the number of countries rose to 44 in 1990, the trusting share shrunk to 34.6 percent, with the United States, Canada, and China showing a majority of trusting citizens.³ The addition of more countries in 1995 led to a decline in the overall trust level to 25.1 percent, with only Norway, Sweden, and China having a majority of trusting citizens. In 2001, the World Values Survey had responses to the trust question in 82 countries with 26.9 percent trusters and majorities in just eight countries.⁴ Whatever the issues of measurement in specific countries might be, it is clear that high levels of generalized trust are atypical of most societies. Aside

Uslaner, “Does Diversity Drive Down Trust?” (6)

from the Nordic countries—and the United States in the 1960s (Uslaner, 2002, chs. 2, 6) and some selected Western democracies--Canada and the Netherlands--most people throughout the world seem more disposed to trust their in-groups than people in general.

Trust and Contact

What, then, determines trust? Much of the literature on social capital is based upon the assumption that people learn to trust each other by interacting with them. Trust, this argument goes, reflects our experience with other people and when we have positive encounters with some people, we generalize them to the larger society (Hardin, 1992). Putnam (1993, 90, 180) argues: “...a dense network of secondary associations both embodies and contributes to effective social collaboration” and “[e]ffective collaborative institutions require interpersonal skills and trust, but those skills and that trust are also inculcated and reinforced by organized collaboration.” Later Putnam (2000, 137) elaborates on this claim: “...people who trust others are all-around good citizens, and those more engaged in community life are both more trusting and more trustworthy....the critically disengaged believe themselves to be surrounded by miscreants and feel less constrained to be honest themselves. The causal arrows among civic involvement, reciprocity, honesty, and social trust are as tangled as well-tossed spaghetti.”

Rosenblum (1998, 48) argues:

...there is the tendency to adopt a simplistic “transmission belt” model of civil society, which says that the beneficial formative effects of association spill over from one sphere to another....The “transmission belt” model is simplistic as a general dynamic. It is one thing to say that within face-to-face rotating credit associations “social networks allow trust to become transitive and spread: trust

Uslaner, “Does Diversity Drive Down Trust?” (7)

you, because I trust her and she assures me that she trusts you,” and quite another thing to show that habits of trust cultivated in one social sphere are exhibited in incongruent groups in separate spheres.

Cohen (1997, 16) adds:

Putnam fails to say just what generalizes the social trust produced within voluntary associations. How does inter-group trust become trust of strangers outside the group? Why does the willingness to act together for mutual benefit in a small group like a choral society translate into willingness to act for the common good or to become politically engaged at all?...*is the interpersonal trust generated in face-to-face interactions even the same thing as “generalized trust”?* I don’t think so.

In Japan, there is evidence of such a “transmission belt” of trust—from your immediate family to the school to the workplace—and then, it stops. Particularized trust doesn’t spread to strangers in Japan; indeed, “when Japanese people are taken out of...settings” where trust has developed because of personal ties, “they tend often to behave in highly aggressive and exploitative ways”(Eisenstadt, 2000, 61). Stolle (2000, 233) argues that civic groups amount to “private social capital,” providing benefits only to members that “are not universal and cannot be generalized to other settings.”

The “transmission belt” theory of trust does not receive much support from empirical studies. Uslaner (2002, chs. 4, 5, 7) examines civic engagement and trust in the United States and finds almost no links between the two. The only types of civic engagement that both depend upon trust and create more trust in turn are volunteering and giving to charity—but both only

Uslaner, “Does Diversity Drive Down Trust?” (8)

when such good works connect us to people outside our own in-groups. Most forms of civic engagement, Uslaner argues, do *not* lead us to interact, directly or indirectly (as with charity) with people who are different from ourselves. Rather, we join groups *in order to have more contact with people like ourselves*—if not demographically (racial, gender, income) then in terms of interests (bowling, singing in choral societies, birdwatching, political values, among others). In short, when we join civic groups—and especially when we have social interactions such as going on picnics or having dinner parties—we *are not likely to encounter people who are different from ourselves*. The entire point of such activities is to bond with people whom we can easily trust. Stolle’s (1998) survey of group members (and some non-members) in the United States, Germany, and Sweden asks people how long they have belonged to each type of group. And she finds that neither the simple fact of group membership nor the length of involvement makes people more trusting of strangers, but the length of group membership *does make people more trusting of fellow group members*.

Not all contact comes from membership in civic associations—or even informal social contacts. As argued above, a homogenous community may simply reinforce in-group loyalty at the expense of out-group trust. In a homogenous community, there is less opportunity for people to interact with people of different backgrounds. But there is hardly unanimity about the supposed effects of diversity on trust. Some (especially, Marschall and Stolle, 2004) argue that diversity promotes trust by putting people into contact with others not like themselves. Others suggest that diversity leads to lower trust. Alesina and Putnam argue that racial diversity and fractionalization leads to lower levels of trust -- because minorities are less trusting. The more diverse a society is, the more minorities it obviously has. Knack and Keefer (1997) argue that

Uslaner, “Does Diversity Drive Down Trust?” (9)

societies with a more heterogenous population have lower levels of trust.

The negative relationship between diversity and trust stems from the "racial threat" argument made in the 1940s by V.O. Key, Jr. (1949). Key argued when the share of minorities is high in the American South, increased levels of racial discord rather than greater tolerance, will follow. Key's argument has been confirmed by more recent work on voting for racist candidate David Duke in Louisiana in the 1990s; see Giles and Buckner, 1993). The racial threat argument has shaped, directly or indirectly, the claims of social identity theorists who claim that out-group trust is the exception, while in-group trust is the norm (Forbes, 1997, 35). Alesina and LaFerrara (2000, 850), two economists who rely upon this claim from social identity theory, argue:

...individuals prefer to interact with others who are similar to themselves in terms of income, race, or ethnicity...diffuse preferences for homogeneity may decrease total participation in a mixed group if fragmentation increases. However, individuals may prefer to sort into homogenous groups.

Consistent with Key, they find that people living in ethnically and racially diverse communities are *less likely* to participate in voluntary associations in the United States—especially those organizations in which face-to-face contact is most likely such as churches and youth groups. Diversity, they argue, breeds aversion to interaction with people of different backgrounds and people who are most averse to contact with out-groups participate the least: “...individuals who choose to participate less in racially mixed communities are those who most vocally oppose racial mixing” (Alesina and LaFerrara, 2000, 891). People living in ethnically heterogenous communities are also less likely to trust other people (Alesina and LaFerrara, 2002) in the United

Uslaner, “Does Diversity Drive Down Trust?” (10)

States, though not in Australia—where it is linguistic diversity that drives down trust (Leigh, 2006). These findings are part of a more general syndrome of negative effects for diversity that Alesina and his colleagues have reported in cross-national analyses (Alesina et al., 2003; Alesina and LaFerrara, 2004).

Trust and Diversity: The Evidence

How strong is the evidence on trust and diversity—and does diversity drive down trust? The standard way of measuring diversity is a fractionalization (or Herfindahl) index, which is a measure of the probability that two randomly selected individuals will share the same demographic trait. The earliest and most widely used measure is the Easterly-Levine (1997) measure of ethnic and linguistic fractionalization based upon data from the 1960s. Alesina et al. (2003) and Fearon (2003) have updated and refined the original Easterly-Levine measures and offered different formulations of how to conceptualize and measure diversity. All of the measures of ethnic and linguistic diversity are largely variations on the same theme and they are all highly correlated with each other. The religion indicators are only modestly correlated with ethnic and linguistic fractionalization. Nevertheless, it is useful to compare how each might relate to generalized trust—to see whether any specific form of diversity leads to more or less trust than the others.

Garcia-Montalvo and Reynal-Querol argue that measures of fractionalization do not give us a good idea of the real amount of conflict in a society. They argue (2005, 6): "...the relationship between ethnic diversity and civil wars is not monotonic: there is less violence in highly homogeneous and highly heterogeneous societies, and more conflicts in societies where a large ethnic minority faces an ethnic majority. If this is so then an index of polarization should

Uslaner, “Does Diversity Drive Down Trust?” (11)

capture better the likelihood of conflicts, or the intensity of potential conflict, than an index of fractionalization." Garcia-Montalvo and Reynal-Querol (2005) show that countries with high levels of polarization are more likely to endure long civil wars. Not surprisingly, civil wars are associated with lower trust (Uslaner, 2002, ch. 8)—so it seems that ethnic polarization should be associated with lower levels of generalized trust—and likely even more so than would simple diversity.

My measure of generalized trust comes from the the 1990 and 1995 waves (most recent figure used). To increase the sample size, I imputed scores for generalized trust.⁵

Does diversity lead to less trust? I rely upon simple scattergrams and report multivariate analyses. The relationships between trust and each of the measures of diversity are relatively weak that there is no need to dwell on more sophisticated analyses. Perhaps diversity may lead to other undesirable outcomes, such as corruption, but I have also failed to find a positive relationship between ethnic diversity and corruption in a simultaneous-equation model; indeed, this more elaborate test shows *a negative relationship between ethnic diversity and corruption*—precisely the opposite of what these theorists suggest (Uslaner, 2005).

I present the scattergrams for the fractionalization and diversity measures in Figures 1-8 below. Most of them show a slightly negative tilt (more diversity leads to less trust), but none of the measures has much predictive success. The r^2 values range from a maximum of .102 for the new Alesina measure of ethnic fractionalization to .006 for Fearon’s measure of cultural diversity. *The simple story is that no measure of diversity—not the ethnic, linguistic, or religious fractionalization indices of Alesina et al., the original Easterly-Levine ethno-linguistic fractionalization, or the newer indices of Fearon (ethnic fractionalization based upon new data,*

Uslaner, “Does Diversity Drive Down Trust?” (12)

ethnic fractionalization using the Soviet Atlas data from Easterly and Levine, the cultural diversity index, or the share of the largest ethnic group)—has a strong connection to generalized trust. To be sure, in simple bivariate regressions, two of the measures do have significant negative regression coefficients at $p < .05$ or better: the Alesina et al. measure of fractionalization, and the original Easterly-Levine indicator; Fearon’s measure of the size of the largest group has what seems to be a significant coefficient but it is in the wrong direction! The remaining indicators are not even significant in bivariate regressions.

Figures 1-8 about here

Alesina et al. (2003, 175) admit that their fractionalization measures are no longer significant predictors of corruption, infant mortality, illiteracy, or government transfer payments once latitude and gross domestic product are included in the model. If the models fail to show significant effects of diversity on these outcomes, we might expect the same to hold for trust. I reestimated the cross-national models of trust in Uslaner (2002, ch. 8),⁶ and *each measure of diversity falls to insignificance as well.*

There is simply no evidence across countries that diversity *per se* leads to less trust. Religious fractionalization is only weakly related to ethnic and linguistic diversity. Religious fundamentalists are significantly less trusting than adherents of mainstream religions (Uslaner, 2002, ch. 4) and religious conflict is at the heart of many inter-state and intra-state wars. So we might expect that religious diversity would be more strongly (negatively) related to generalized trust—but again, we see only a weak relationship. The scattergrams for each of these measures do not suggest any non-linearities—instead, diversity seems to be uncorrelated with trust.

Uslaner, “Does Diversity Drive Down Trust?” (13)

What about polarization? The logic between high levels of polarization and low levels of trust seem more compelling, especially since Garcia-Montalvo and Reynal-Querol (2005) show a strong relationship between polarization and civil wars (which are strongly related to low trust, see n. 6). In Figure 9 we see that ethnic fractionalization (as measured by Alesina et al.) and polarization are *not* the same. The relationship is not monotonic and many countries that rank high on fractionalization do not score so highly on polarization. The simple correlation between ethnic fractionalization and ethnic polarization is only .630. Not surprisingly, loess plots of ethnic and religious polarization and trust (Figures 10 and 11) show somewhat stronger relationships than we find for the various diversity measures. Still, the r^2 values are not terribly high—at .119 for ethnic polarization and .110 for religious polarization. Countries with high levels of ethnic polarization are about as likely to have trusting citizens as those with the lowest levels. While the polarization coefficients in bivariate regressions are significant (with higher t ratios than for any of the diversity measures), they fall to insignificance in the multivariate models once more. Polarization is only marginally more powerful in predicting trust than is fractionalization (see Table 1), despite expectations that it would have far more powerful effects.

[Figures 9-12, Table 1 about here](#)

To make my case stronger, I examine the impact of ethnic heterogeneity on trust in another context: across the American states. Richard F. Winters has derived a measure of ethnic heterogeneity across the states in the 1990s using a Herfindahl index. Rodney Hero has estimated the share of each state’s minority population for the 1990s.⁷ I estimated state-level shares of trusting people from a variety of national surveys conducted from the 1970s through the

Uslaner, “Does Diversity Drive Down Trust?” (14)

1990s;⁸ the 1990 data provide trust estimates for 44 states. In Figure 12, I show that ethnic heterogeneity does not predict trust any better in the American states ($r^2 = .007$) than it does cross-nationally—indeed, the coefficient (though insignificant) is slightly positive. Minority populations are much less trusting than majorities—especially in the United States where minorities have faced considerable discrimination (Uslaner, 2002, 35-36), so it makes sense to expect that states with large shares of minority residents would, on average, be less trusting—and this is confirmed in Figure 13, yet even here the relationship is modest ($r^2 = .173$). Ethnic homogeneity and the share of the minority population are, of course, related ($r^2 = .510$, see Figure 14), though hardly identical. Yet even the share of the minority population falls to insignificance in predicting trust when economic inequality—the strongest determinant of trust over time in the United States, across the American states, and cross-nationally (Uslaner, 2002, chs. 6, 8; Uslaner and Brown, 2005) enters the equation.

[Figures 12-14 about here](#)

The tests for the effects of diversity on trust do not simply reflect the peculiarities of one sample (even though it is large and comprehensive). There seems to be no compelling reason to believe that *population diversity per se* leads to lower levels of trust. Population diversity *per se* does not imply anything about the frequency of contact between members of different ethnic groups. Of course, ethnic homogeneity must be associated with low inter-group contact since there will be little opportunity to meet members of minority groups when their numbers are so few. But high population diversity hardly guarantees intergroup contact. The notion of racial threat that Key portrayed is one of high diversity (cf. Forbes, 1997, 19, 58), but little contact

Uslaner, “Does Diversity Drive Down Trust?” (15)

between the majority and the minority. Racial threat implies that diversity ought to be negatively related to trust, but social capital theory would lead us to expect quite the opposite: More contact leads to more trust. The available evidence so far does not give us any measure of contact, so perhaps we can get a better understanding on how diversity shapes trust by examining contact directly.

Does Contact Matter?

The best available measures of contact come from Robert Putnam’s Social Capital Benchmark Survey in the United States in 2000.⁹ This survey has data on both trust and friendship patterns across races. Are people who have friends of a different race more likely to trust others? The Social Capital Benchmark Survey asked a variety of trust questions: generalized trust, trust of one’s own ethnic group, and trust in various ethnic groups *relative to one’s own group*. It also asked about friendship patterns—having friends who are black, Hispanic, Asian, or white, as well as the total number of friendship patterns across groups. Each friendship pattern is based upon out-group friendships only (so having a white friend only includes non-white respondents). I present the zero-order correlations in Table 2. The correlations are once again very modest—the highest correlation for generalized trust is for non-whites having a white friend ($r = .122$), and even this relationship is very small. There is no evidence that people who trust their own group highly are less likely to have friends from a different background.

Having a friend of a different group has no effect on how much one trusts African-Americans or whites, and only modest effects on trusting Latinos or Asians. Having a Latino friend makes you slightly more likely to trust Hispanics relative to one’s own group ($r = .120$)

Uslaner, “Does Diversity Drive Down Trust?” (16)

and having an Asian friend makes people slightly more likely to trust Asians ($r = .133$). Yet even these relations are modest and there is no evidence that having a friend of an opposite race makes a person more trusting in general.

Table 2 about here

These results may seem initially puzzling, but they are readily explicable. They are quite consistent with Forbes’s (1997, 111) summary of similar studies—modest correlations, mostly positive but some of the wrong sign and no clear pattern. Simple contact is not enough to lead to more trust. The “transmission belt” theory of trust is too simplistic. It ignores both context and the nature of contacts. Marschall and Stolle (2004) argue that contact will only increase trust if it occurs in a diverse community. Pettigrew (1998, 66) argues that a simple “transmission belt” model ignores the more complex argument on contact originated by Gordon W. Allport: Contact alone, he held, is not sufficient; contact must be accompanied by “equal group status within the situation, common goals; intergroup cooperation; and the support of authorities, law, or custom.” These are rather demanding conditions for contact. Simply knowing someone of a different background, even having them as a casual friend, is not sufficient to shape more fundamental beliefs such as trust (or tolerance).

The Social Capital Benchmark Survey does not take into account the demographic make-up of a community, nor does it establish anything about the nature of friendship patterns—whether they are based upon equal status or common goals or are widely accepted by others. Even the question of friendship may not be clear: Forbes (1997, 19) argues that contact must involve “intimate” knowledge of the other person, whereas the Social Capital Benchmark Survey does

Uslaner, “Does Diversity Drive Down Trust?” (17)

not permit us to determine how deep (or shallow) each friendship is.

The contact hypothesis, Forbes (1997, 58-59) is more likely to be applicable to children rather than to adults, since “[c]hildren have minds that are almost blank slates, lacking historical lore or knowledge. Their thinking, unlike that of adults, is not tangled up with complicated ethnic mythologies.... children do not meet as superiors or inferiors, in relations of authority and subordination...”. My own results are consistent with Forbes’s speculation: I found that having a friend of an opposite race was far more likely to shape the trust of young people than adults (Uslaner, 2002, 171). Trust, I argue, is a value shaped early in life; it does not change readily and is not affected by most types of experience, either positive or negative (Uslaner, 2002, ch. 5). So if contact does matter, it should be important when trust is still be formed—in young people. By the time a person reaches adulthood, his/her orientation towards trust is less likely to change. So even a deep friendship with a person of a different group may lead a mistruster to argue that her friend is simply “different from the others.”

Beyond the Transmission Belt

Forbes and Pettigrew extend their critique of the transmission belt variants of contact theory even farther. You can’t argue directly from contact to trust, even if Allport’s other rather stringent contingents are met. Contact is not random. Trusting or tolerant people are more likely to choose friends of a different group and mistrusters will shy away from such contact (Forbes, 1997, 111-112; Pettigrew, 1998, 77). So the relationship between contact and trust is far from simple—or direct. There is clearly a selection bias in choosing friends—so the causal direction of contact leading to trust may be unclear.

Is the search for the effects of diversity on trust pointless? No, but we need a clear vision

Uslaner, “Does Diversity Drive Down Trust?” (18)

of how we think diversity may shape trust. Forbes (1997, 167) argues:

If the groups in question differ in language or culture, increasing contact between the groups will mean increasing competition between incompatible ways of life. Friendship with outsiders will generally mean defection from the beliefs and practices of the in-group...

Yet, the group members must have some non-negligible probability of interacting. Forbes (1997, 144) holds that “[t]he more frequent and the more intimate the contacts among individuals belonging to different tribes or nations, the more these groups come to resemble each other culturally or linguistically... Different languages, religions, customs, laws, and moralities—in short, different cultures—impede economic integration, with all its benefits.” He adds (Forbes, 1997, 150): “Isolation and subordination, not gore and destruction, seem to be the main themes in linguistic conflict.”

Forbes’s argument suggests why the simple measures of diversity show such weak relationships with generalized trust. These indices are too insensitive to the distribution of groups within a country. Contact will yield positive results only if the size of each group is large enough to provide both regular and sustained contact. If minorities are well integrated into a society and live among the majority, such contact is possible (though hardly guaranteed). If minorities are isolated within their own ethnic enclaves, then the contact that might lead to greater trust (among children or adults) will be impossible. When a minority group is segregated within a society, the opportunities for contact with members of the majority are limited—and hence building of generalized trust becomes more difficult. Concentrated minorities are more likely to develop a strong identity that supercedes a national sense of identification—and to

Uslaner, “Does Diversity Drive Down Trust?” (19)

build local institutions and political bodies that enhance this sense of separateness. Geographical isolation may breed in-group identity at the expense of the larger society. Geographic separation may also lead to greater political organization by minority groups, which can establish their own power bases as their share of the citizenry grows.

The level of residential segregation in a state is the one aspect of diversity that does drive down generalized trust:. Using data from the Minorities at Risk (MAR) project of the Center for International Development and Conflict Management at University of Maryland, I estimated the geographical isolation of major minority groups within a wide range of countries.¹⁰ The MAR project created a trichotomous index for each major minority group in a country and I aggregated the scores across countries. This is an approximation, to be sure, but it is the best available measure of geographical separation. Countries where minorities are most geographically isolated have the lowest levels of generalized trust, a relationship that is considerably strengthened when I eliminate countries with a legacy of Communism (see Figures 15-16).¹¹ The r^2 values for the two figures are .182 and .342, respectively. *The negative relationship between residential segregation and generalized trust remains significant in a multivariate analysis.*

The reason why the ethnic segregation measure may shape trust more than the other indicators of fractionalization or diversity might lie in the fact that there is at least a moderate relationship between ethnic segregation and inequality—and inequality is the strongest determinant of generalized trust. High inequality, according to Allport and his followers, makes contact ineffective in producing trust.

Countries with more diverse populations are marked by greater economic inequality. Yet, there is little support for the argument that residential segregation is more likely to be associated

Uslaner, “Does Diversity Drive Down Trust?” (20)

with greater economic inequality than are other measures of diversity. Of the various measures of population diversity, the group concentration measure has one of the *lower* correlations with economic inequality.¹² The simple correlation is .388, compared to .465 for Alesina’s ethnic fractionalization, .456 for Fearon’s ethnic fractionalization measure, .507 for Fearon’s measure of the population share of the largest group, and .434 for the Easterly-Levine index of fractionalization. Most measures of population diversity are related to economic inequality. Countries with a large share of minorities have less equal distributions of wealth, regardless of whether the minorities are isolated or live alongside majority groups.

There is one key area in which the group concentration measure of ethnic fractionalization is distinctive: Nations with high levels of group concentration are more likely to have a weak rule of law and greater corruption. Corruption thrives when in-group trust is strong and out-group trust is weak (Gambetta, 1993, Uslaner, 2005). Ethnic group leaders may play on fears of outsiders to justify their own corruption—and this will lead to clientelistic politics and will in turn lower generalized trust. In contrast, where residential segregation is minimal, minority groups will be better integrated into the larger society and less subject to the will—or whims—of clientelistic leaders. High degrees of integration will promote generalized trust, which in turn will lead to less corruption (Uslaner, 2005).

For the Transparency International 2004 Corruption Perceptions Index, representative correlations are: group concentration: -.485 (N = 74); Alesina ethnic fractionalization: -.386 (N = 91); and Fearon ethnic fractionalization: -.372 (N = 88). For legal and property rights,¹³ representative correlations are: group concentration: -.568 (N = 65); Alesina ethnic fractionalization: -.420 (N = 81); and Fearon ethnic fractionalization: -.376 (N = 78).

Uslaner, “Does Diversity Drive Down Trust?” (21)

Residential segregation more than simple diversity increases corruption and leads to a lower regard for property rights.

Ethnic diversity by itself does not reduce trust. But when groups are segregated within a country, there are fewer opportunities for members of different ethnicities, religions or language groups to interact with each other. Minority groups that live apart from the majority will develop high in-group trust and, especially since they will be of lower economic status, will be likely to express their grievances in the form of nationalistic sentiments that are anathema to generalized trust. And, critically, these groups will develop strong leaders who emphasize nationalism—while at the same time exploiting their own constituents through clientelistic politics. Such corruption both feeds on high in-group trust and low out-group trust—and reinforces low generalized trust.

Diversity, then, may drive down trust if it is based upon unequal relationships and ethnic segregation. Yet, meeting as equals in a more integrated environment, can also produce greater trust. We seem to have fewer instances of this positive aspect of diversity, largely because heterogeneity is generally associated with inequality of both wealth and power.

Generalized trust is the exception rather than the rule, as social identity theorists have argued. Creating trust is not easy, especially when there is little opportunity for contact among the most numerous groups in a society. Isolation breeds in-group trust—and it is often accompanied by high levels of economic inequality. Low in-group trust perpetuates itself through ethnic political appeals and corrupt leaders. When out-group trust is low, people feel little remorse in cheating out-group members. The two groups do not have a shared fate and, indeed, members of the minority are likely to see the majority as exploiting them. No wonder generalized trust is uncommon and no wonder that few societies move from mistrusting to trusting. The conditions

Uslaner, “Does Diversity Drive Down Trust?” (22)

under which diversity breeds more trust, rather than less trust, seem to be difficult to achieve in most societies. We don't often have diverse friendships that are based upon equality and deep understanding and empathy across ethnic lines—and residential segregation makes such friendships almost impossible. Diversity does not inevitably drive down trust, but it may be more likely to lead to less rather than more faith in strangers.

Uslaner, “Does Diversity Drive Down Trust?” (23)

Table 1

Fractionalization and Polarization: Do Either Shape Trust?

	Fractionalization	Polarization
Ethnic	.113	.119
Religious	.064	.110

Entries are r^2 values for the Alesina measures of fractionalization and the Garcia-

Montalvo/Reynal-Querol (N = 66) and the imputed measure of generalized trust.

Uslaner, "Does Diversity Drive Down Trust?" (24)

TABLE 2

Dependent Variable/Independent Variable	tau-b / tau-c
Generalized trust	
Have black friend	.015
Have Hispanic friend	.037
Have Asian friend	.072
Have white friend	.122
Number friends different background	.046
Trust own ethnic group	
Have black friend	-.022
Have Hispanic friend	-.017
Have Asian friend	.045
Have white friend	.044
Number friends different background	.008
Trust blacks relative to own group	
Have black friend	.094
Have Hispanic friend	.042
Have Asian friend	.054
Trust whites relative to own group	

Uslaner, “Does Diversity Drive Down Trust?” (25)

Have Hispanic friend	.085
Have Asian friend	.066
Have white friend	.073
Number friends different background	.087

Trust Asians relative to own group

Have black friend	.111
Have Hispanic friend	.077
Have Asian friend	.133
Have white friend	.102
Number friends different background	.138

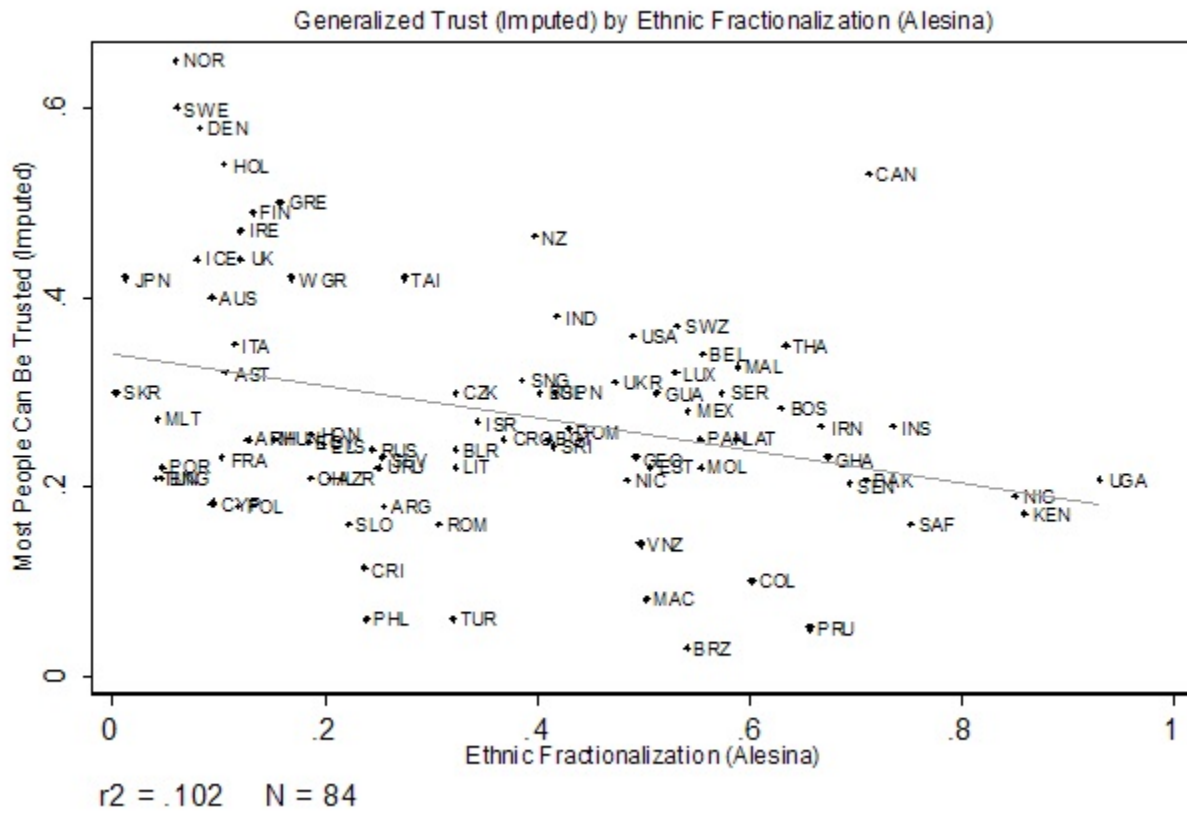
Trust Hispanics relative to own group

Have black friend	.112
Have Hispanic friend	.120
Have Asian friend	.105
Have white friend	.044
Number friends different background	.113

Each of the measures of friendship refer to friends outside one’s own ethnic/racial group.

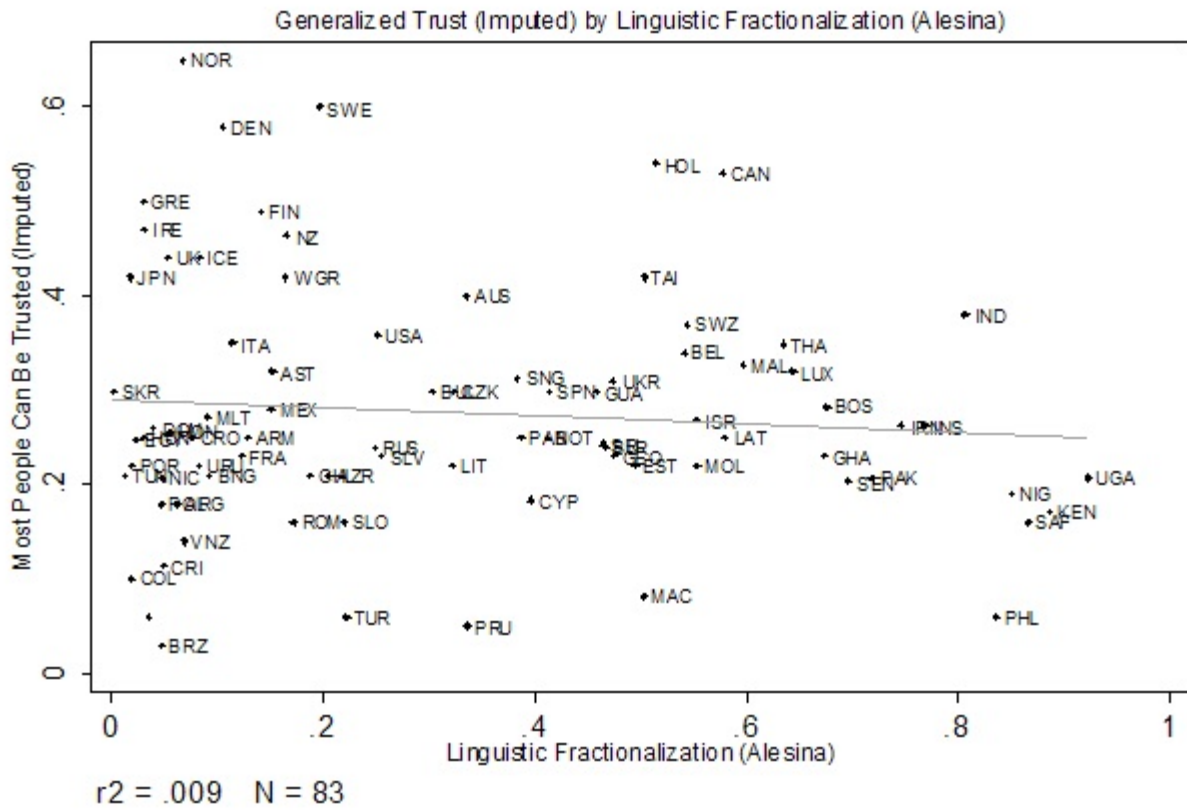
Uslaner, "Does Diversity Drive Down Trust?" (26)

Figure 1



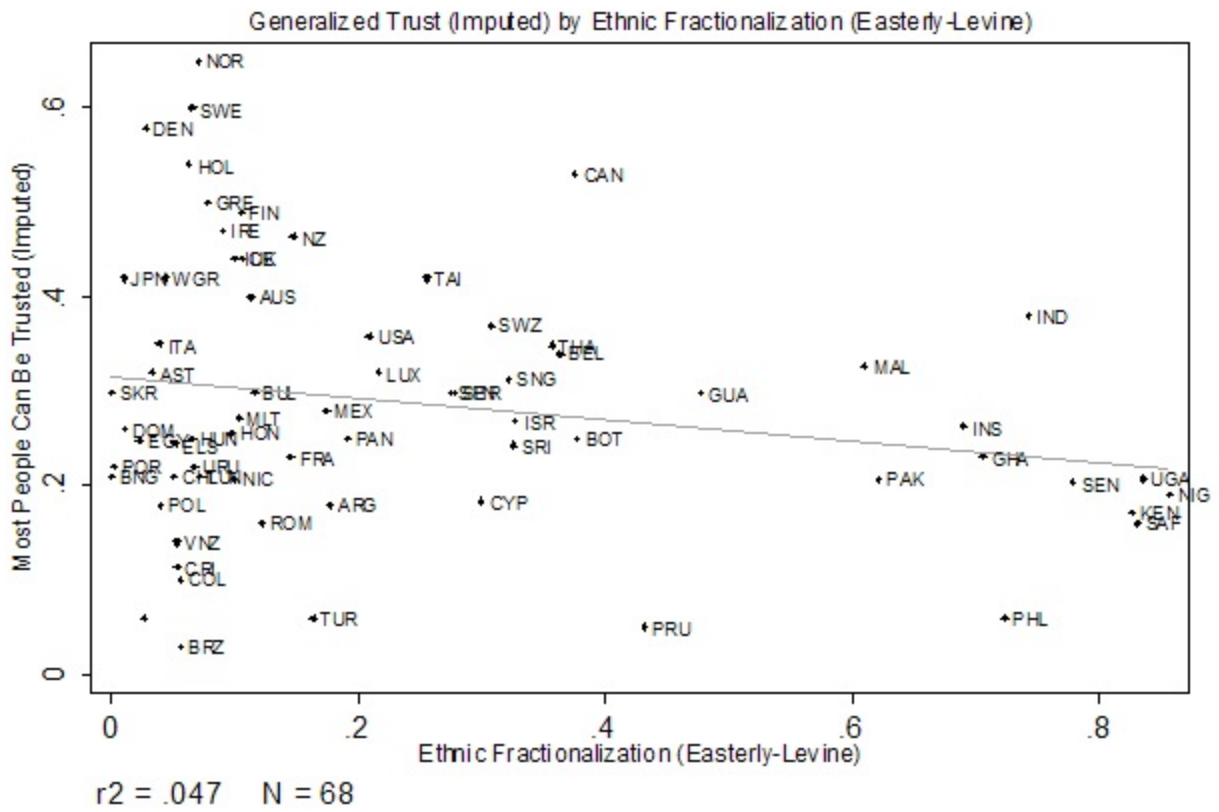
Uslaner, "Does Diversity Drive Down Trust?" (27)

Figure 2



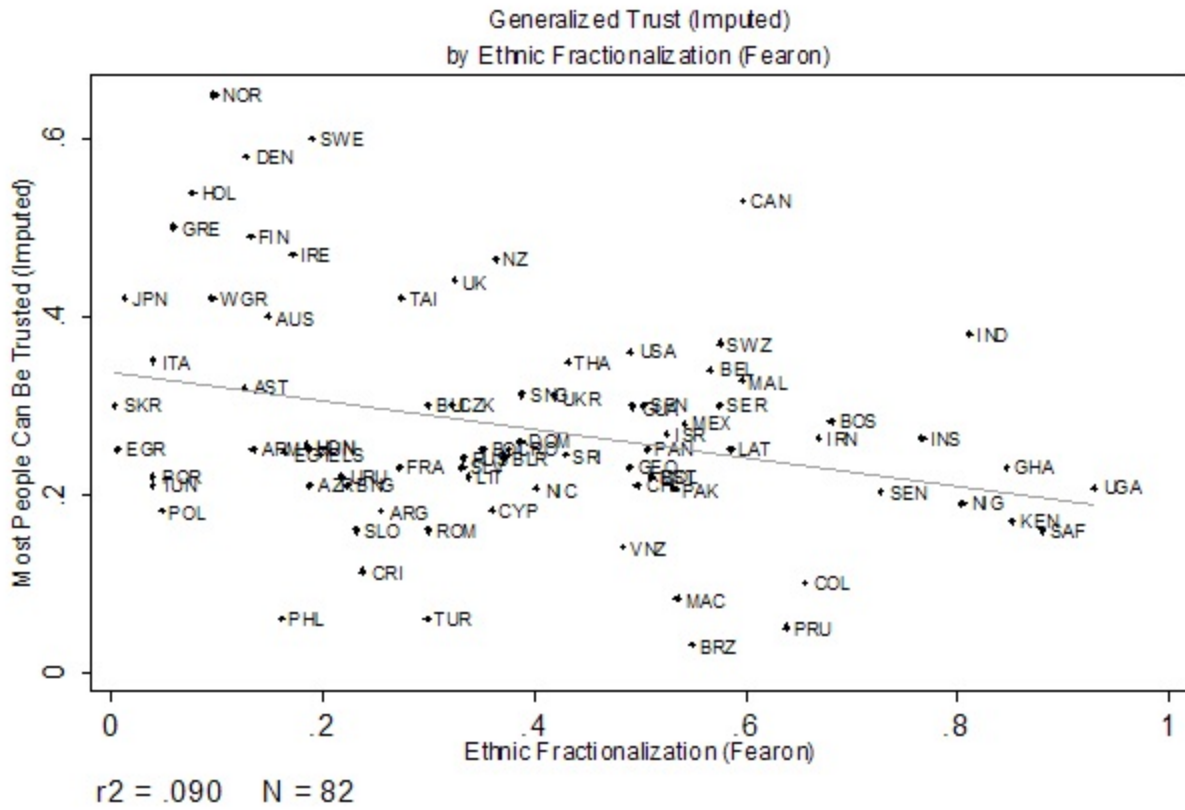
Uslaner, "Does Diversity Drive Down Trust?" (29)

Figure 4



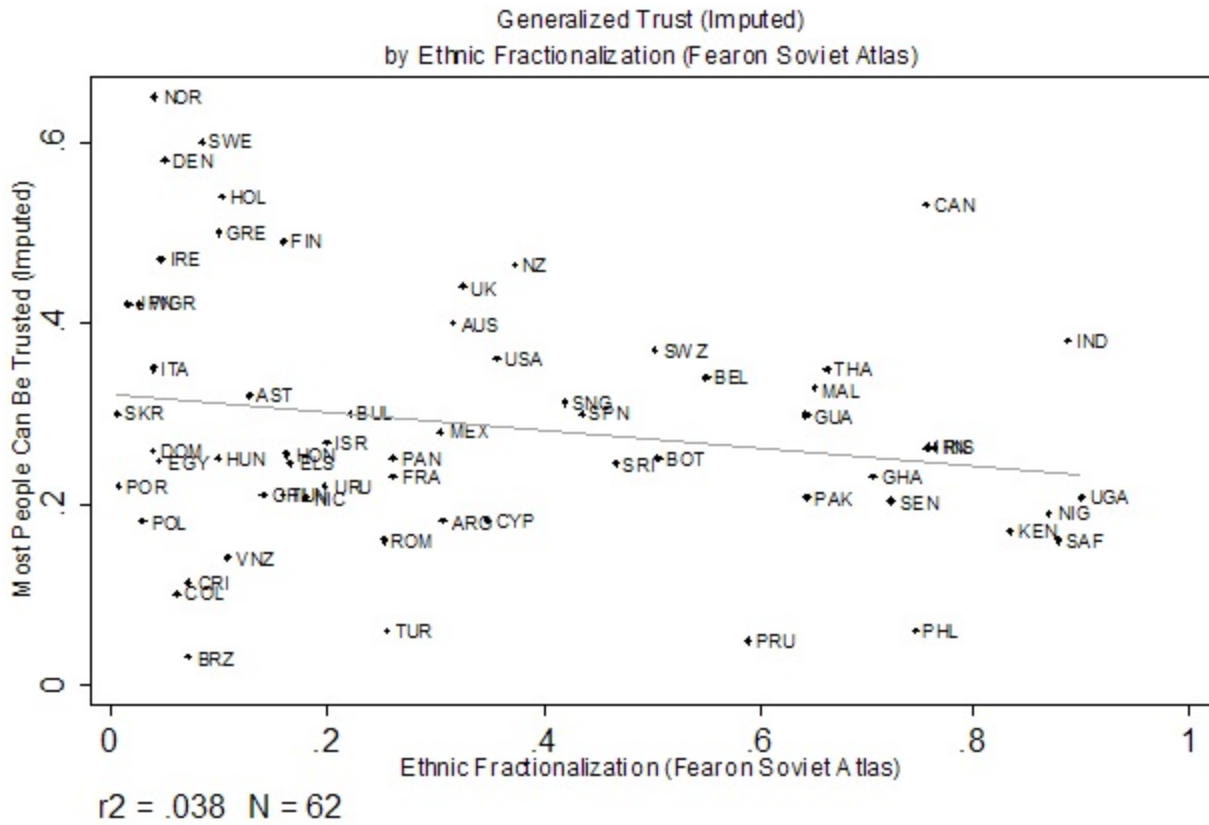
Uslaner, "Does Diversity Drive Down Trust?" (30)

Figure 5



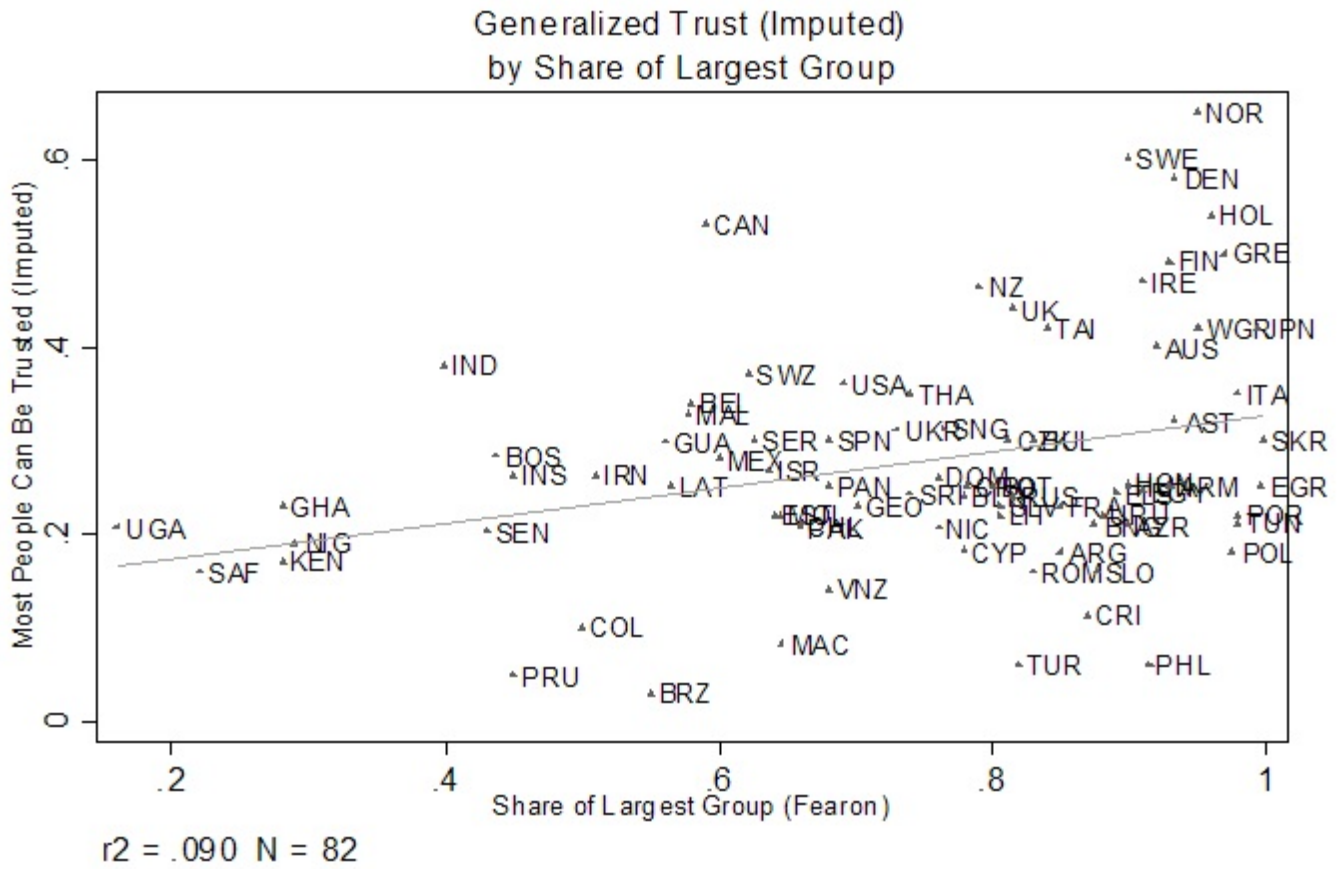
Uslaner, "Does Diversity Drive Down Trust?" (31)

Figure 6



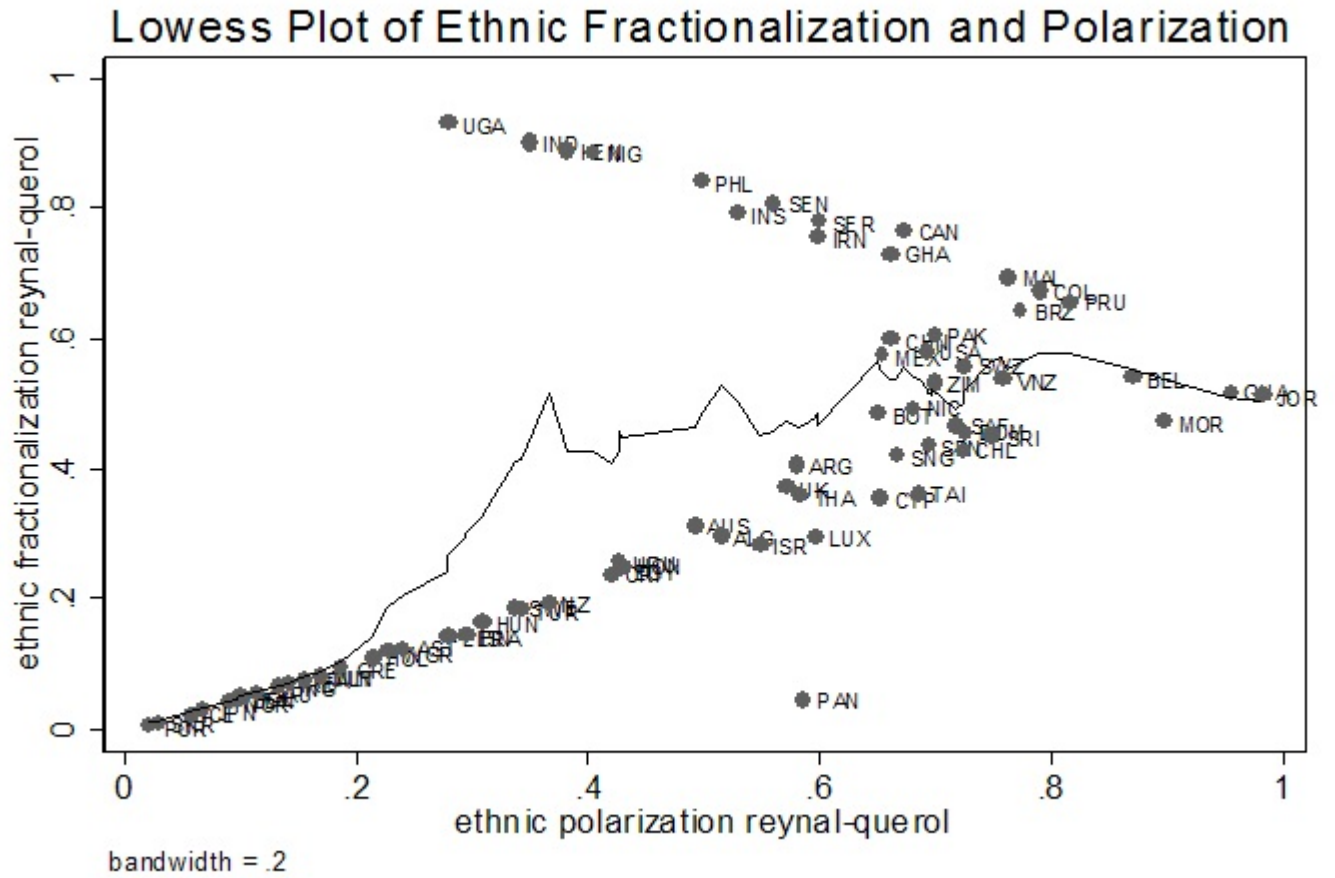
Uslaner, "Does Diversity Drive Down Trust?" (33)

Figure 8



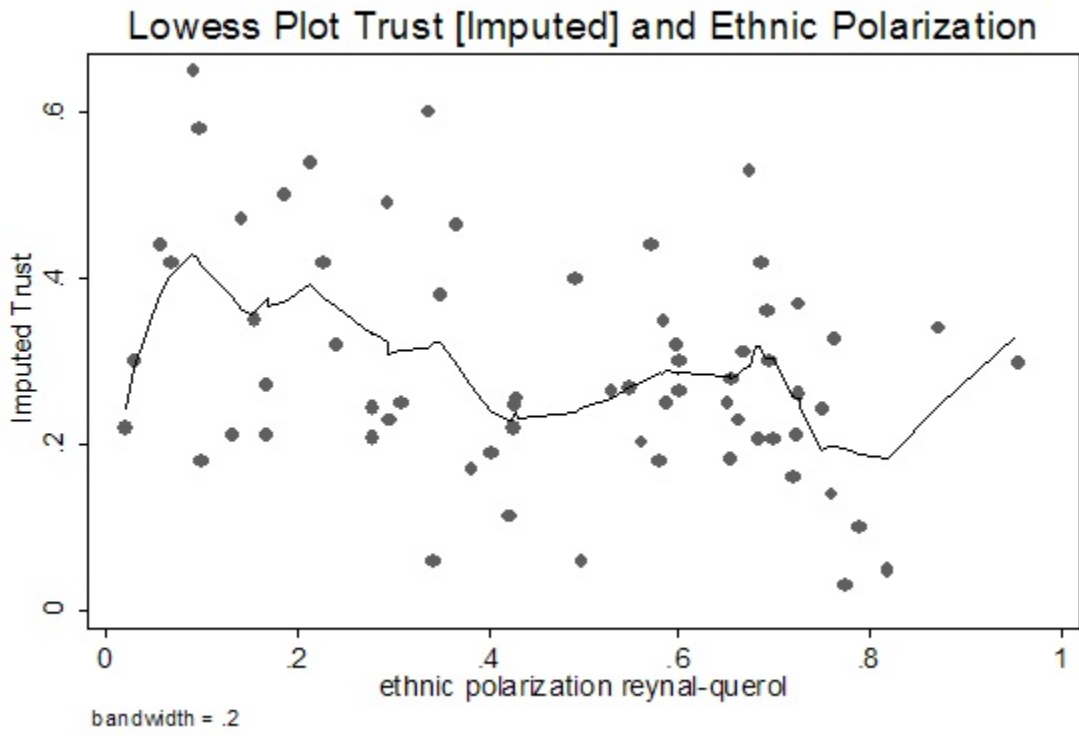
Uslaner, "Does Diversity Drive Down Trust?" (34)

Figure 9



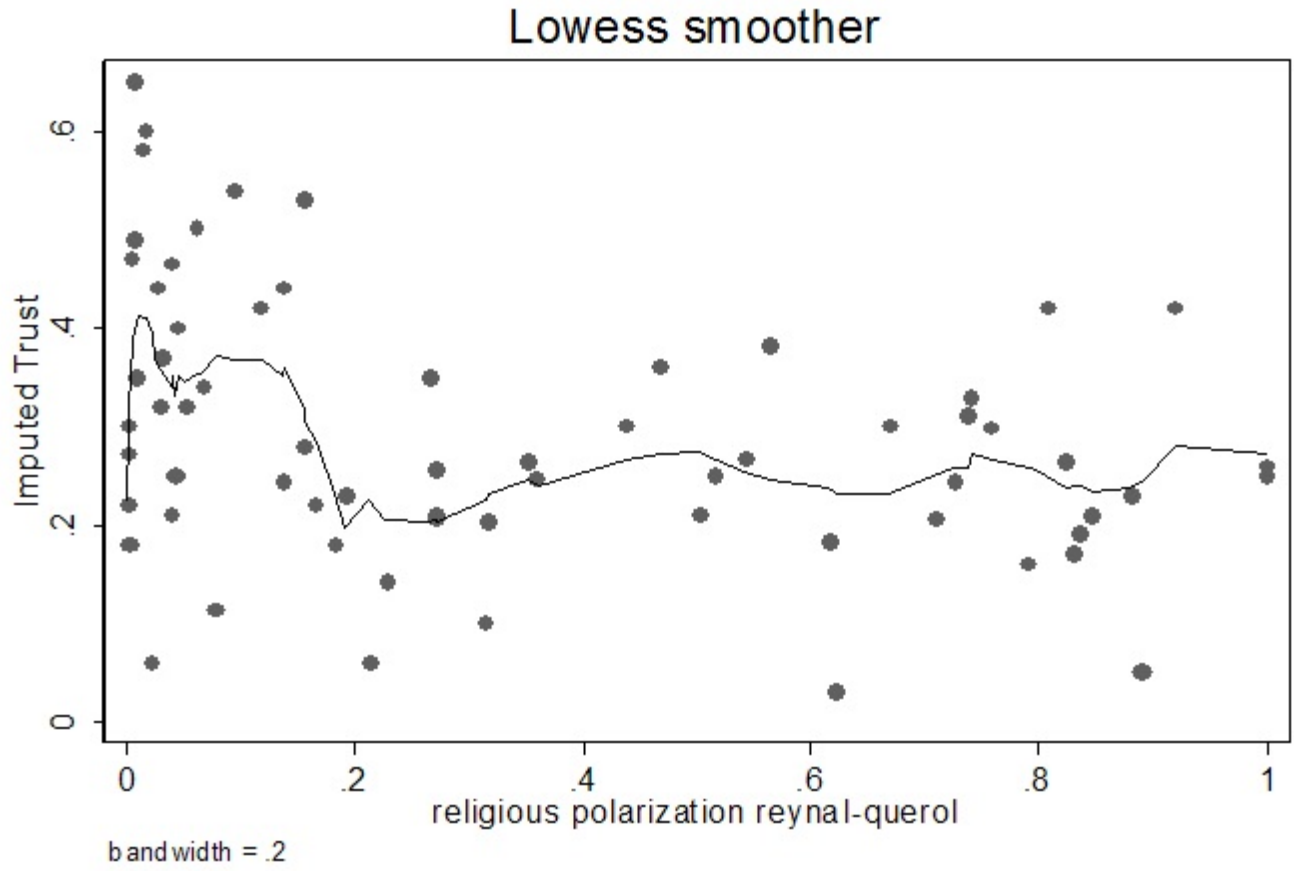
Uslaner, "Does Diversity Drive Down Trust?" (35)

Figure 10



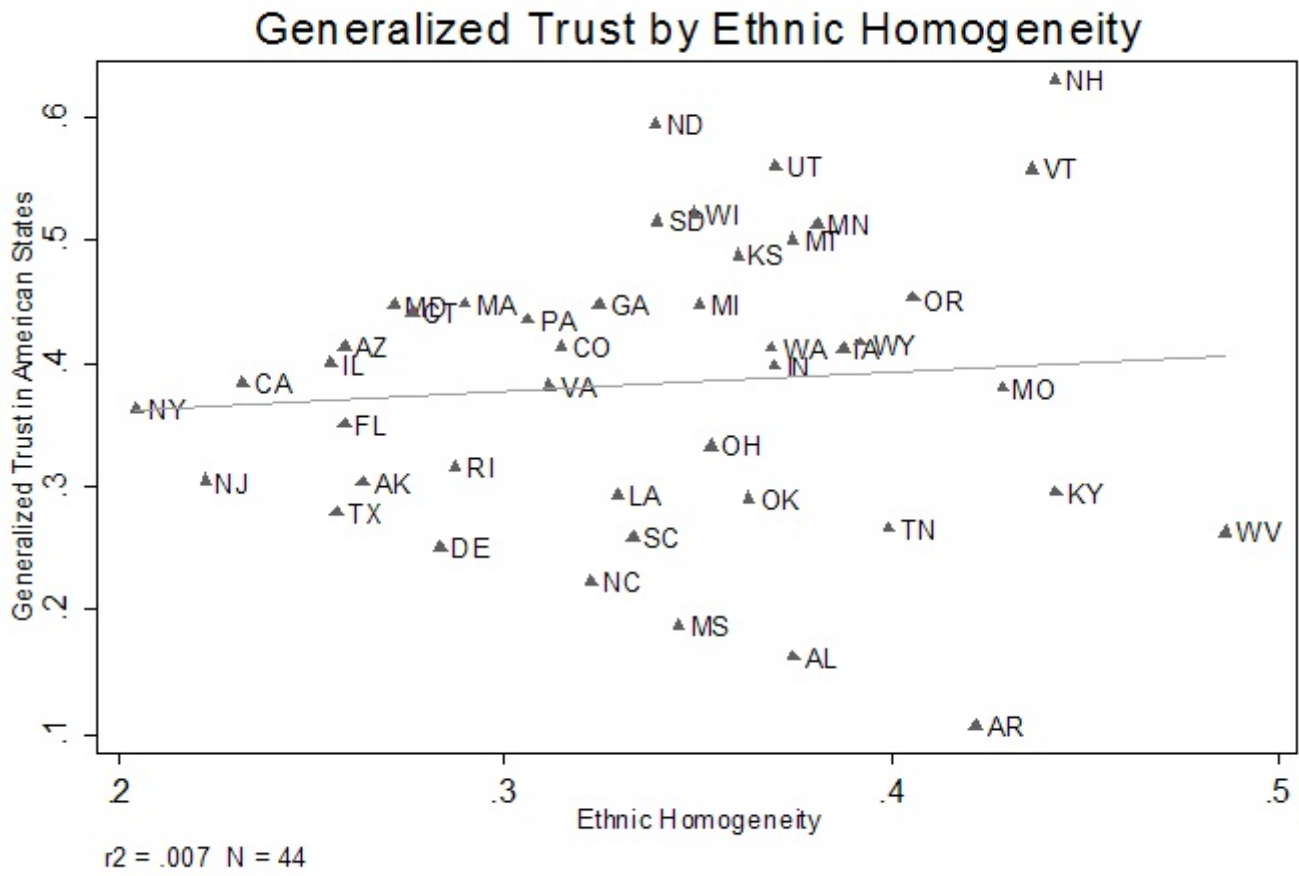
Uslaner, "Does Diversity Drive Down Trust?" (36)

Figure 11



Uslaner, "Does Diversity Drive Down Trust?" (37)

Figure 12



Uslaner, "Does Diversity Drive Down Trust?" (38)

Figure 13

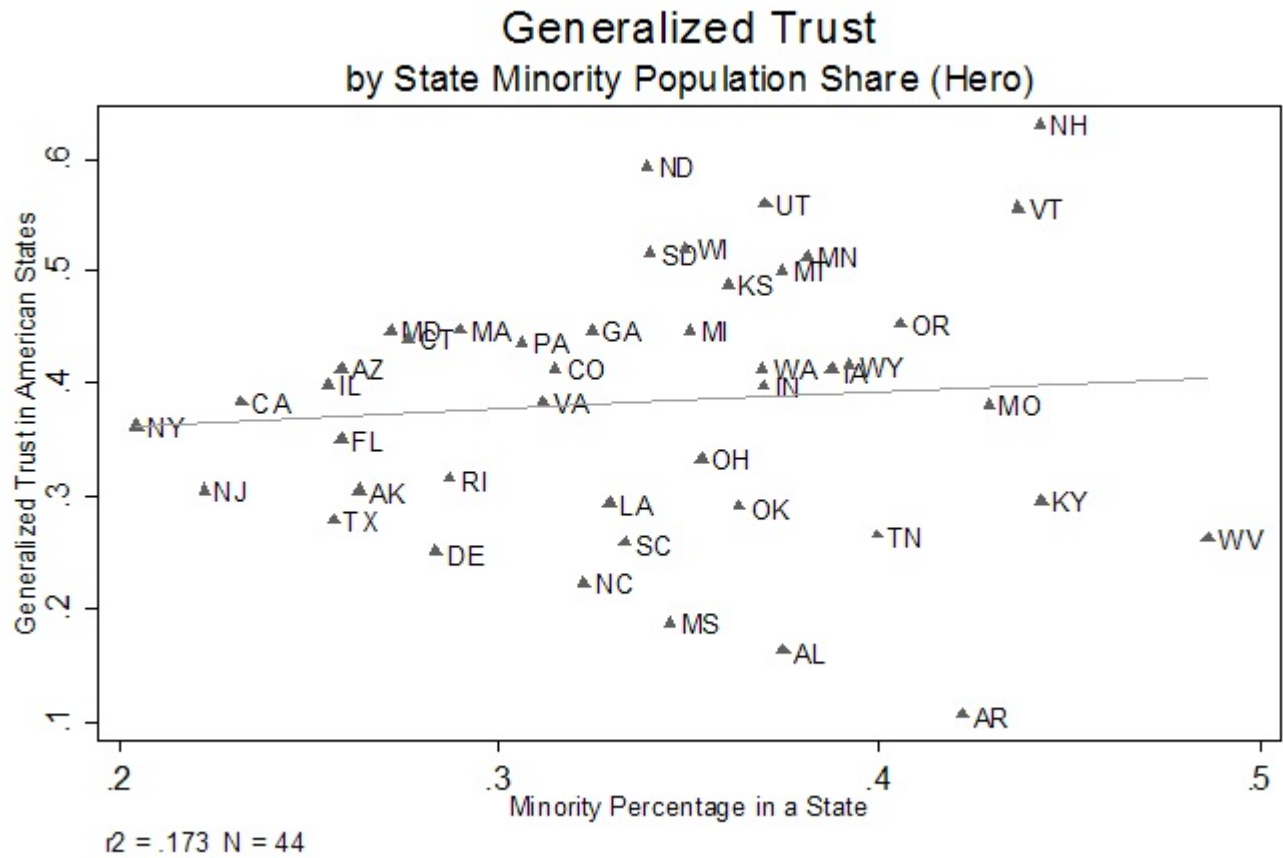
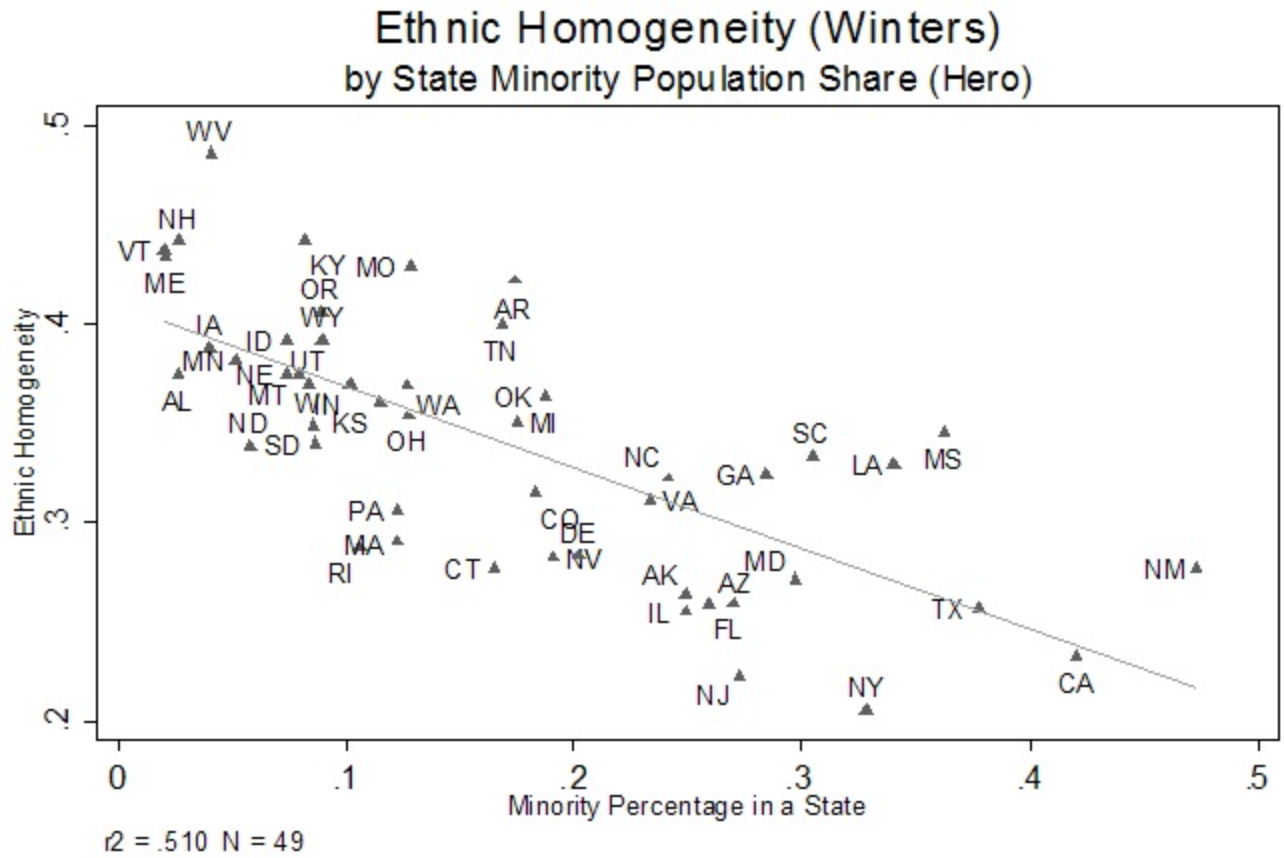
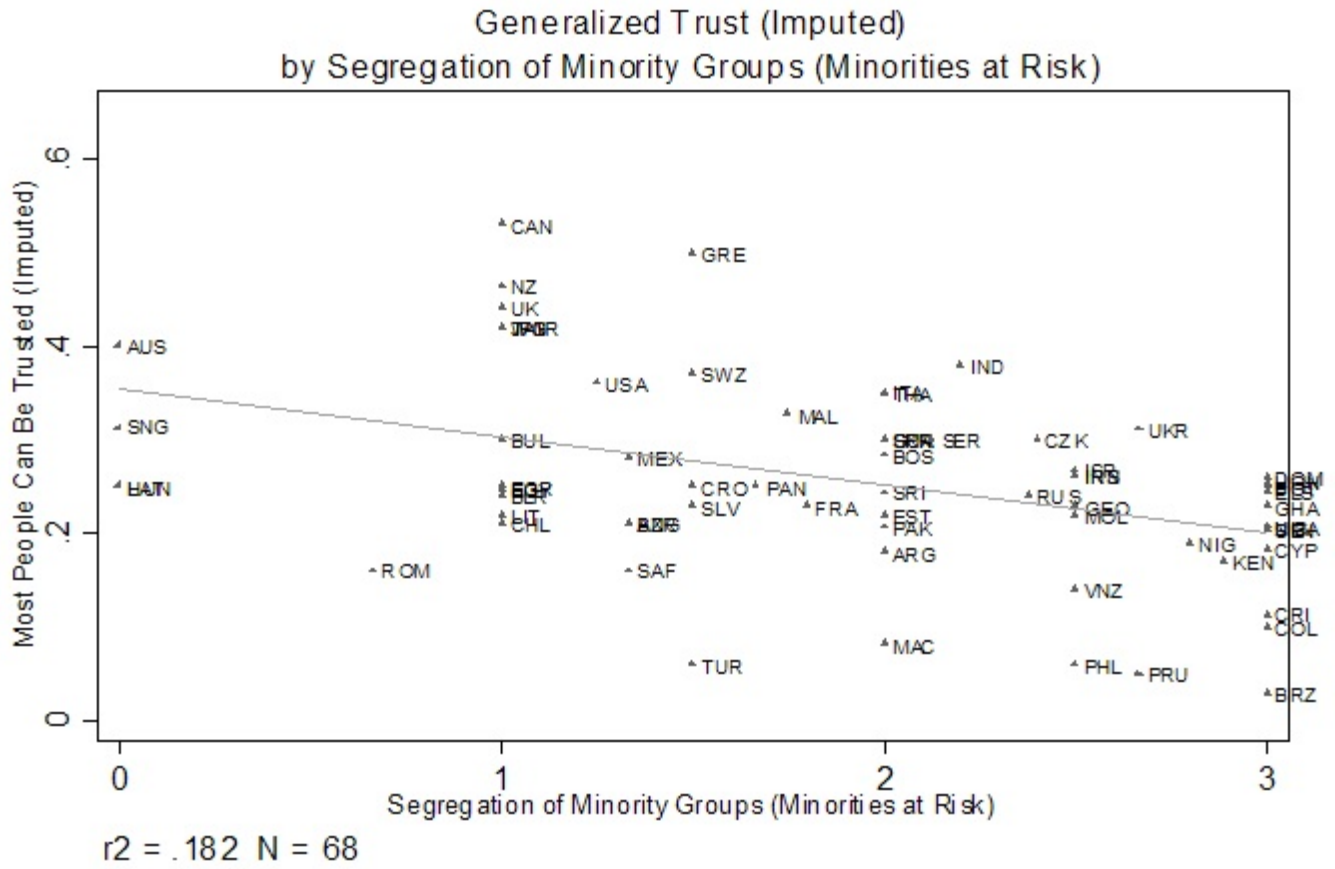


Figure 14



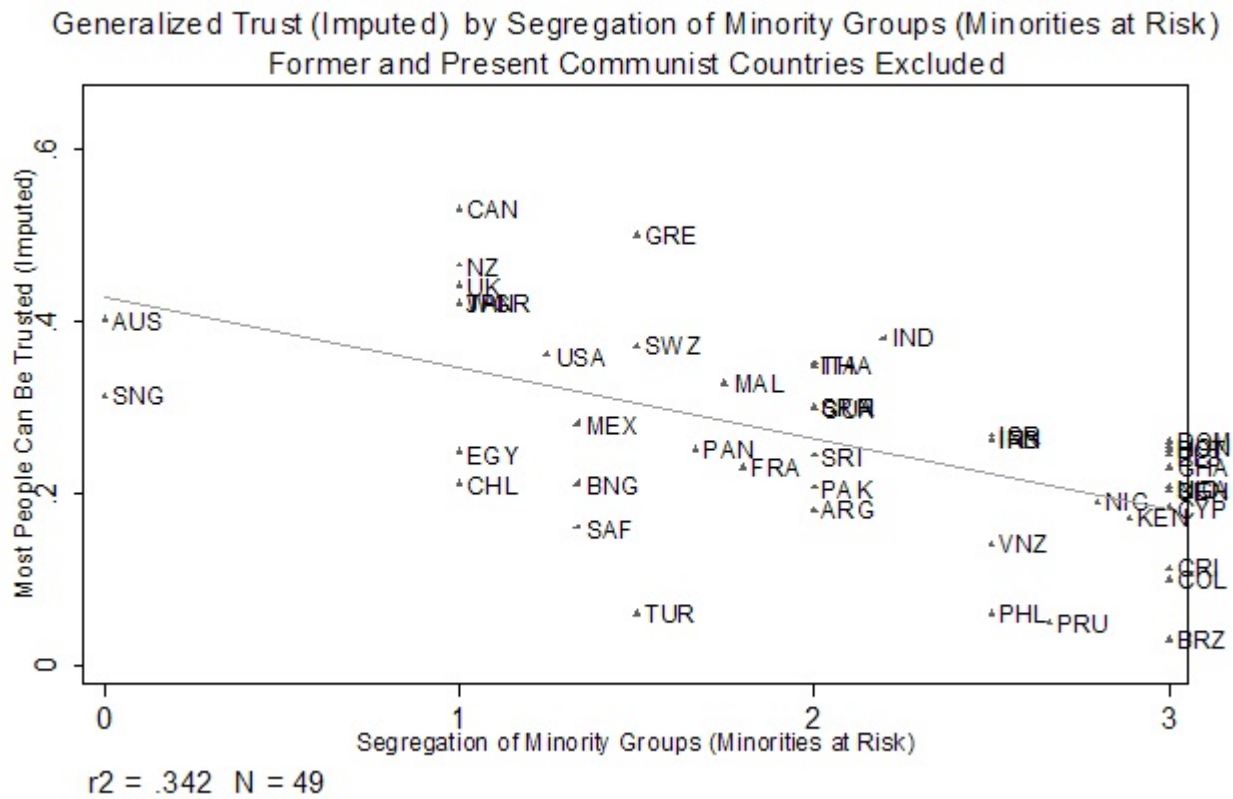
Uslaner, "Does Diversity Drive Down Trust?" (40)

Figure 15



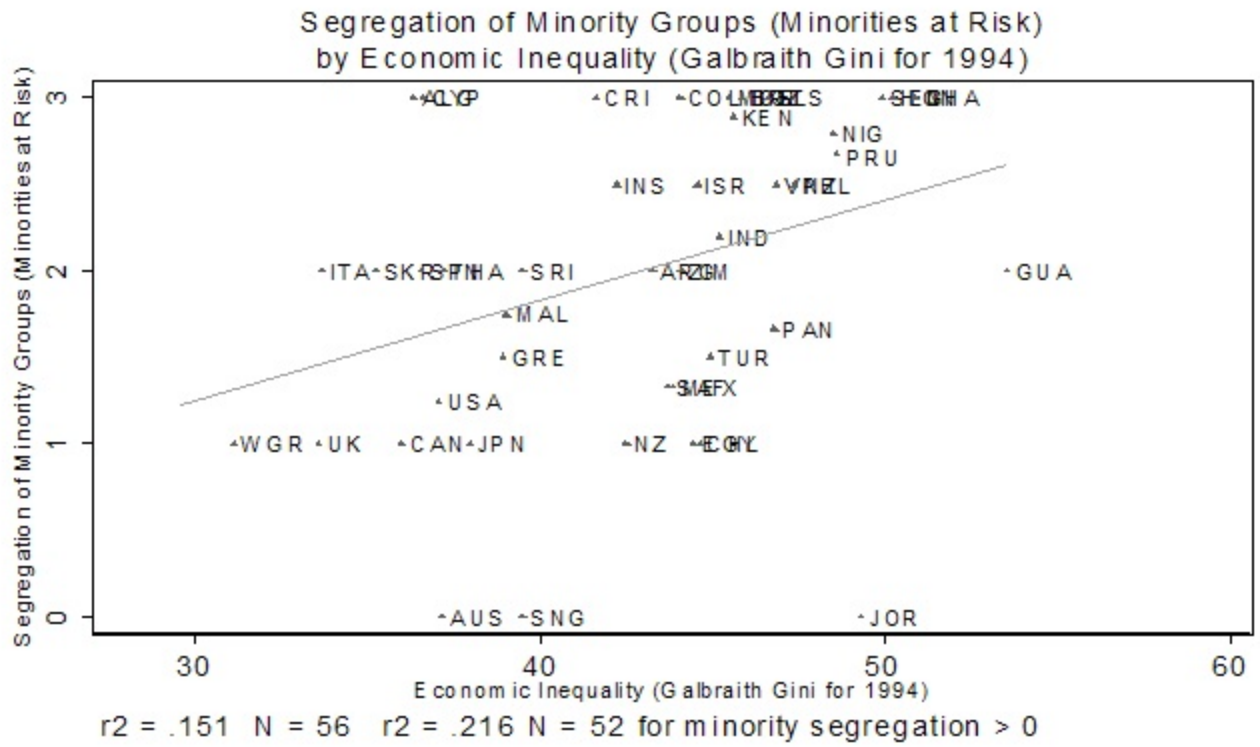
Uslaner, "Does Diversity Drive Down Trust?" (41)

Figure 16



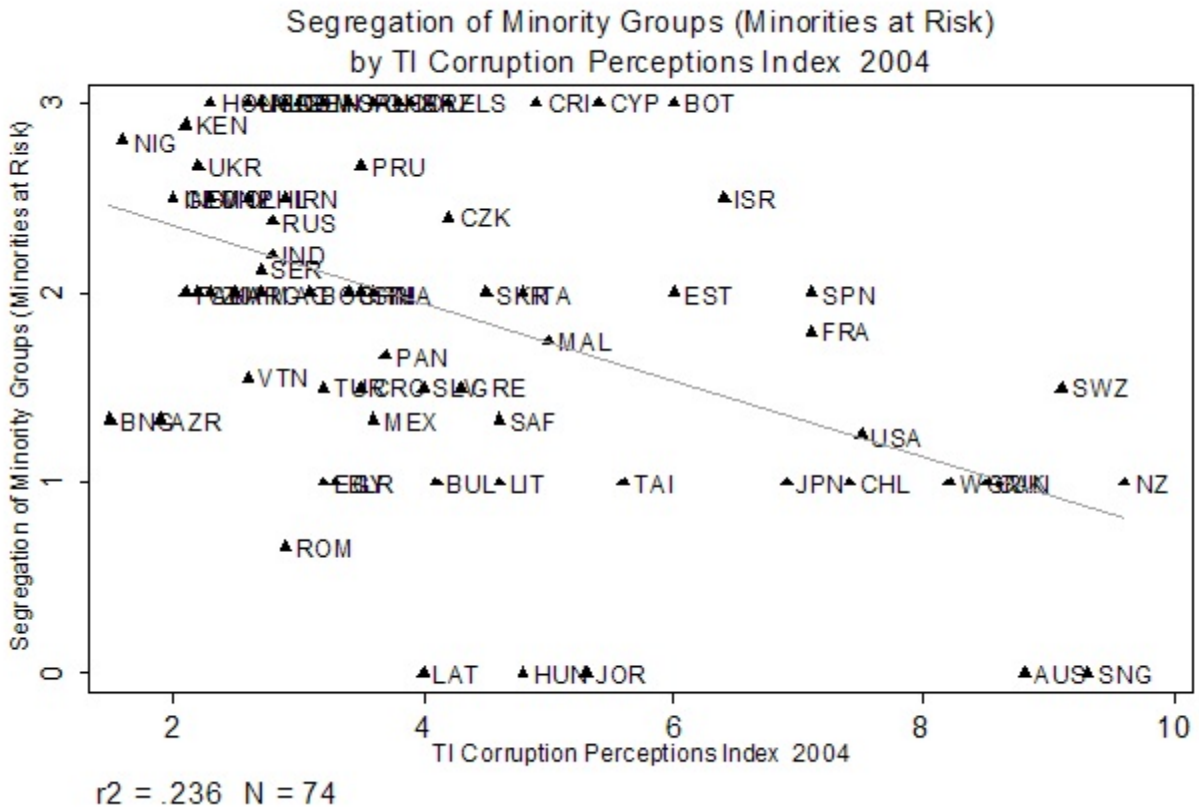
Uslaner, "Does Diversity Drive Down Trust?" (42)

Figure 17



Uslaner, "Does Diversity Drive Down Trust?" (43)

Figure 18



Uslaner, “Does Diversity Drive Down Trust?” (44)

REFERENCES

- Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat, and Romain Wacziarg. 2003. “Fractionalization,” Journal of Economic Growth, 8:155-194.
- Alesina, Alberto and Eliana LaFerrara. 2000. “Participation in Heterogenous Communities,” Quarterly Journal of Economics, 115:847-904.
- _____. 2002. “Who Trusts Others?” Journal of Public Economics, 85:207-234.
- _____. 2004. “Ethnic Diversity and Economic Performance.” NBER Working Paper 10313, available at <http://www.nber.org/papers/w10313> .
- Brewer, Marilyn B. 1979. “In-Group Bias in the Minimal Intergroup Situation: A Cognitive-Motivational Analysis,” Psychological Bulletin, 86:307-324.
- Cohen, Jean L. 1997. “American Civil Society Talk.” College Park, MD: National Commission on Civic Renewal, Working Paper # 6.
- Coleman, James S. 1990. Foundations of Social Theory. Cambridge, MA: Belknap.
- Eisenstadt, S.N. 2000. “Trust and Institutional Power in Japan: The Construction of Generalised and Particularistic Trust,” Japanese Journal of Political Science, 1:53-72.
- Fearon, James D. 2003. “Ethnic and Cultural Diversity by Country,” Journal of Economic Growth, 8:195-222. Article and data available at <http://www.stanford.edu/~jfearon/> .
- Forbes, H.D. 1997. Ethnic Conflict: Commerce, Culture, and the Contact Hypothesis. New Haven: Yale University Press.
- Fukuyama, Francis. 1995. Trust: The Social Virtues and the Creation of Prosperity. New York: Free Press.

Uslaner, “Does Diversity Drive Down Trust?” (45)

- Gambetta, Diego 1993. The Sicilian Mafia: The Business of Private Protection. Cambridge: Harvard University Press.
- Garcia-Montalvo, Jose and Marta Reynal-Querol. 2005. “Ethnic Polarization and the Duration of Civil Wars,” available at http://www.econ.upf.es/~reynal/war_duration_polarV4.pdf.
- Giles, Micheal W. and Melanie A. Buckner. 1993. “David Duke and Black Threat: An Old Hypothesis Revisited,” Journal of Politics, 55:702-713.
- Greif, Avner. 1993. “Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders’ Coalition,” American Economic Review, 83:525-548.
- Hardin, Russell. 1992. "The Street-Level Epistemology of Trust," Analyse & Kritik, 14:152-176.
- Key, V.O., Jr. 1949. Southern Politics in State and Nation. New York: Random House.
- Knack, Stephen and Philip Keefer. 1997. “Does Social Capital Have An Economic Payoff? A Cross-Country Investigation,” Quarterly Journal of Economics, 112:1251-1288.
- LaPorta, Rafael, Florencio Lopez-Silanes, Andrei Schleifer, and Robert W. Vishney. 1999. “The Quality of Government,” Journal of Law, Economics, and Organization, 15:222-279.
- Leigh, Andrew. 2006. “Trust, Inequality, and Ethnic Homogeneity.” Unpublished manuscript, Centre for Economic Policy Research, Australian National University, Discussion Paper Number 511, January.
- Levi, Margaret. 1997. “A State of Trust.” Unpublished manuscript, University of Washington.
- Mansbridge, Jane. 1999. “Altruistic Trust.” In Mark Warren, ed., Democracy and Trust. New York: Cambridge University Press.
- Marschall, Melissa and Dietlind Stolle. 2004.. “Race and the City: Neighborhood Context and

Uslaner, “Does Diversity Drive Down Trust?” (46)

the Development of Generalized Trust,” Political Behavior, 26:126-154.

Masters, Roger D. 1989. The Nature of Politics. New Haven: Yale University Press.

Messick, David M. and Marilynn B. Brewer. 1983. “Solving Social Dilemmas: A Review.” In Ladd Wheeler and Phillip Shaver, eds., Review of Personality and Social Psychology. Beverly Hills: Sage Publications.

Misztal, Barbara A. 1996. Trust in Modern Societies. Cambridge, UK: Polity Press.

Offe, Claus. 1999. “Trust and Knowledge, Rules and Decisions: Exploring a Difficult Conceptual Terrain.” In Mark Warren, ed., Democracy and Trust. Cambridge: Cambridge University Press.

Pettigrew, Thomas F. 1998. “Intergroup Conflict Theory,” Annual Review of Psychology, 49:65-85.

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

Rosenblum, Nancy L. 1998. Membership and Morals. Princeton: Princeton University Press.

Stolle, Dietlind. 1998. “Bowling Together, Bowling Alone: The Development of Generalized Trust in Voluntary Associations,” Political Psychology, 19:497-526.

_____. 2000. “Clubs and Congregations: The Benefits of Joining an Association.” In Karen S. Cook, ed., Trust in Society. New York: Russell Sage Foundation.

Stolle, Dietlind, Stuart Soroka, and Richard Johnston. 2005. “How Diversity Affects Attitudinal Social Capital: A U.S.-Canada Comparison.” Presented at the Workshop for Preliminary Presentations of Findings from the Citizenship, Involvement, Democracy (CID) Survey Project, December 12-13, 2005, Georgetown University.

Uslaner, “Does Diversity Drive Down Trust?” (47)

Tajfel, Henri. 1982. “Social Psychology of Intergroup Relations,” Annual Review of Psychology, 33:1-39.

Trivers, Robert L. 1971. “The Evolution of Reciprocal Altruism,” Quarterly Review of Biology, 46:35-57.

Uslaner, Eric M. 2002. The Moral Foundations of Trust. New York: Cambridge University Press.

_____. 2005. “The Bulging Pocket and the Rule of Law: Corruption, Inequality, and Trust.” Presented at the Conference, “The Quality of Government: What It Is, How to Get It, Why It Matters,” November 17-19, 2005. The Quality of Government Institute, Department of Political Science, Göteborg University, Göteborg, Sweden, available at <http://www.qog.pol.gu.se/conferences/november2005/papers/Uslaner.pdf>.

Uslaner, Eric M. and M. Mitchell Brown. 2005. “Inequality, Trust, and Civic Engagement,” American Politics Research, 33: 868-894.

Wuthnow, Robert. 1999. “Mobilizing Civic Engagement: The Changing Impact of Religious Involvement.” In Morris Fiorina and Theda Skocpol, eds., Civic Engagement in American Democracy. Washington: Brookings Institution.

Yamigishi, Toshio and Midori Yamigishi. 1994. “Trust and Commitment in the United States and Japan,” Motivation and Emotion, 18:129-166.

Uslaner, "Does Diversity Drive Down Trust?" (48)

NOTES

1. A more formal statement would be:

$\forall B$ and $\forall X$: A trusts B to do X.

As I note below, it is foolish to trust all of the people all of the time. Moralistic trust doesn't demand that. But it does presume that we trust most people under most circumstances (where most is widely defined).

2. I am indebted to Jane Mansbridge for emphasizing this distinction.
3. See Uslaner (2002, 220, n. 1) for a discussion of why the Chinese results in this and other waves should be discounted.
4. In addition to the Nordic countries, the fourth wave had majority trusters in the Netherlands, China, Iran, and Indonesia. The latter three countries seem questionable to me and others and the entire fourth wave of the World Values Survey has many unusual results.
5. The variables used to impute trust are: gross national product per capital; the value of imports of goods and services; legislative effectiveness; head of state type; tenure of executive (all from the State Failure Data Set); distance from the equator (from Jong-sung You of Harvard University); and openness of the economy (from Sachs and Warner, 1997; data available at <http://www.cid.harvard.edu/ciddata/ciddata.html>). The $R^2 = .657$, standard error of the estimate = .087, $N = 63$.
6. The other predictors are the Gini index of inequality from Deininger and Squires (1996), whether a country had a civil war, and the Protestant share of a country's population.

Uslaner, “Does Diversity Drive Down Trust?” (49)

Here I add whether a country is either Communist or transition. All of these coefficients are significant predictors of trust in all models.

7. I am grateful to Winters and Hero for sharing their data.
8. I used the following surveys for generating the trust estimates: the General Social Survey (GSS; 1972, 1973, 1975, 1976, 1978, 1980, 1983, 1984, 1986, 1987, 1988, 1989, 1990, 1991, 1993, 1994, 1996, and 1998), American National Election Study (1972, 1974, 1976, 1992, 1996, and 1998), The *Washington Post* Trust in Government survey (1995), the Pew Civic Engagement survey (1997), the *New York Times* Millennium survey (1999), and the 1971 Quality of Life survey of the Survey Research Center. We are grateful to Robert Putnam and John Robinson for making the state codes for the GSS available to us. The handful of aberrant cases stemmed from easily identifiable outliers, such as a state in which almost all or almost none of the respondents believed that “the government is run by a few big interests.” These cases, few in number, were clearly identifiable when looking at the distributions of the data and were the result of small and unrepresentative samples. M. Mitchell Brown and Fengshi Wu helped put the data set together under a grant from the Russell Sage Foundation. For more details, see Uslaner and Brown (2005).
9. The data set is available from the Roper Center at the University of Connecticut at <http://roperweb.ropercenter.uconn.edu/SocCapReg/sccreg.html> . I use only the national survey data here.
10. The data are available for download at <http://www.cidcm.umd.edu/inscr/mar/data.htm>, accessed May 10, 2004.

Uslaner, “Does Diversity Drive Down Trust?” (50)

11. The logic behind eliminating countries with a legacy of Communism is that these countries have much lower levels of trust that cannot be accounted for by factors used in other models. See Uslaner (2002, ch. 8) for a more detailed discussion.
12. The measure of economic inequality used is from James Galbraith’s data base for 1994 (which has the greatest number of cases). The Galbraith data are available at <http://utip.gov.utexas.edu/data.html>,
13. From <http://www.freetheworld.com> .

NOTE DI LAVORO DELLA FONDAZIONE ENI ENRICO MATTEI

Fondazione Eni Enrico Mattei Working Paper Series

Our Note di Lavoro are available on the Internet at the following addresses:

<http://www.feem.it/Feem/Pub/Publications/WPapers/default.html>

<http://www.ssrn.com/link/feem.html>

<http://www.repec.org>

<http://agecon.lib.umn.edu>

NOTE DI LAVORO PUBLISHED IN 2006

SIEV	1.2006	<i>Anna ALBERINI</i> : <u>Determinants and Effects on Property Values of Participation in Voluntary Cleanup Programs: The Case of Colorado</u>
CCMP	2.2006	<i>Valentina BOSETTI, Carlo CARRARO and Marzio GALEOTTI</i> : <u>Stabilisation Targets, Technical Change and the Macroeconomic Costs of Climate Change Control</u>
CCMP	3.2006	<i>Roberto ROSON</i> : <u>Introducing Imperfect Competition in CGE Models: Technical Aspects and Implications</u>
KTHC	4.2006	<i>Sergio VERGALLI</i> : <u>The Role of Community in Migration Dynamics</u>
SIEV	5.2006	<i>Fabio GRAZI, Jeroen C.J.M. van den BERGH and Piet RIETVELD</i> : <u>Modeling Spatial Sustainability: Spatial Welfare Economics versus Ecological Footprint</u>
CCMP	6.2006	<i>Olivier DESCHENES and Michael GREENSTONE</i> : <u>The Economic Impacts of Climate Change: Evidence from Agricultural Profits and Random Fluctuations in Weather</u>
PRCG	7.2006	<i>Michele MORETTO and Paola VALBONESE</i> : <u>Firm Regulation and Profit-Sharing: A Real Option Approach</u>
SIEV	8.2006	<i>Anna ALBERINI and Aline CHIABAI</i> : <u>Discount Rates in Risk v. Money and Money v. Money Tradeoffs</u>
CTN	9.2006	<i>Jon X. EGUIA</i> : <u>United We Vote</u>
CTN	10.2006	<i>Shao CHIN SUNG and Dinko DIMITRO</i> : <u>A Taxonomy of Myopic Stability Concepts for Hedonic Games</u>
NRM	11.2006	<i>Fabio CERINA</i> (lxxviii): <u>Tourism Specialization and Sustainability: A Long-Run Policy Analysis</u>
NRM	12.2006	<i>Valentina BOSETTI, Mariaester CASSINELLI and Alessandro LANZA</i> (lxxviii): <u>Benchmarking in Tourism Destination, Keeping in Mind the Sustainable Paradigm</u>
CCMP	13.2006	<i>Jens HORBACH</i> : <u>Determinants of Environmental Innovation – New Evidence from German Panel Data Sources</u>
KTHC	14.2006	<i>Fabio SABATINI</i> : <u>Social Capital, Public Spending and the Quality of Economic Development: The Case of Italy</u>
KTHC	15.2006	<i>Fabio SABATINI</i> : <u>The Empirics of Social Capital and Economic Development: A Critical Perspective</u>
CSRM	16.2006	<i>Giuseppe DI VITA</i> : <u>Corruption, Exogenous Changes in Incentives and Deterrence</u>
CCMP	17.2006	<i>Rob B. DELLINK and Marjan W. HOFKES</i> : <u>The Timing of National Greenhouse Gas Emission Reductions in the Presence of Other Environmental Policies</u>
IEM	18.2006	<i>Philippe QUIRION</i> : <u>Distributional Impacts of Energy-Efficiency Certificates Vs. Taxes and Standards</u>
CTN	19.2006	<i>Somdeb LAHIRI</i> : <u>A Weak Bargaining Set for Contract Choice Problems</u>
CCMP	20.2006	<i>Massimiliano MAZZANTI and Roberto ZOBOLI</i> : <u>Examining the Factors Influencing Environmental Innovations</u>
SIEV	21.2006	<i>Y. Hossein FARZIN and Ken-ICHI AKAO</i> : <u>Non-pecuniary Work Incentive and Labor Supply</u>
CCMP	22.2006	<i>Marzio GALEOTTI, Matteo MANERA and Alessandro LANZA</i> : <u>On the Robustness of Robustness Checks of the Environmental Kuznets Curve</u>
NRM	23.2006	<i>Y. Hossein FARZIN and Ken-ICHI AKAO</i> : <u>When is it Optimal to Exhaust a Resource in a Finite Time?</u>
NRM	24.2006	<i>Y. Hossein FARZIN and Ken-ICHI AKAO</i> : <u>Non-pecuniary Value of Employment and Natural Resource Extinction</u>
SIEV	25.2006	<i>Lucia VERGANO and Paulo A.L.D. NUNES</i> : <u>Analysis and Evaluation of Ecosystem Resilience: An Economic Perspective</u>
SIEV	26.2006	<i>Danny CAMPBELL, W. George HUTCHINSON and Riccardo SCARPA</i> : <u>Using Discrete Choice Experiments to Derive Individual-Specific WTP Estimates for Landscape Improvements under Agri-Environmental Schemes: Evidence from the Rural Environment Protection Scheme in Ireland</u>
KTHC	27.2006	<i>Vincent M. OTTO, Timo KUOSMANEN and Ekko C. van IERLAND</i> : <u>Estimating Feedback Effect in Technical Change: A Frontier Approach</u>
CCMP	28.2006	<i>Giovanni BELLA</i> : <u>Uniqueness and Indeterminacy of Equilibria in a Model with Polluting Emissions</u>
IEM	29.2006	<i>Alessandro COLOGNI and Matteo MANERA</i> : <u>The Asymmetric Effects of Oil Shocks on Output Growth: A Markov-Switching Analysis for the G-7 Countries</u>
KTHC	30.2006	<i>Fabio SABATINI</i> : <u>Social Capital and Labour Productivity in Italy</u>
ETA	31.2006	<i>Andrea GALLICE</i> (lxxix): <u>Predicting one Shot Play in 2x2 Games Using Beliefs Based on Minimax Regret</u>
IEM	32.2006	<i>Andrea BIGANO and Paul SHEEHAN</i> : <u>Assessing the Risk of Oil Spills in the Mediterranean: the Case of the Route from the Black Sea to Italy</u>
NRM	33.2006	<i>Rinaldo BRAU and Davide CAO</i> (lxxviii): <u>Uncovering the Macrostructure of Tourists' Preferences. A Choice Experiment Analysis of Tourism Demand to Sardinia</u>
CTN	34.2006	<i>Parkash CHANDER and Henry TULKENS</i> : <u>Cooperation, Stability and Self-Enforcement in International Environmental Agreements: A Conceptual Discussion</u>
IEM	35.2006	<i>Valeria COSTANTINI and Salvatore MONNI</i> : <u>Environment, Human Development and Economic Growth</u>
ETA	36.2006	<i>Ariel RUBINSTEIN</i> (lxxix): <u>Instinctive and Cognitive Reasoning: A Study of Response Times</u>

ETA	37.2006	<i>Maria SALGADO</i> (lxxx): <u>Choosing to Have Less Choice</u>
ETA	38.2006	<i>Justina A.V. FISCHER and Benno TORGLER</i> : <u>Does Envy Destroy Social Fundamentals? The Impact of Relative Income Position on Social Capital</u>
ETA	39.2006	<i>Benno TORGLER, Sascha L. SCHMIDT and Bruno S. FREY</i> : <u>Relative Income Position and Performance: An Empirical Panel Analysis</u>
CCMP	40.2006	<i>Alberto GAGO, Xavier LABANDEIRA, Fidel PICOS And Miguel RODRÍGUEZ</i> : <u>Taxing Tourism In Spain: Results and Recommendations</u>
IEM	41.2006	<i>Karl van BIERVLIET, Dirk Le ROY and Paulo A.L.D. NUNES</i> : <u>An Accidental Oil Spill Along the Belgian Coast: Results from a CV Study</u>
CCMP	42.2006	<i>Rolf GOLOMBEK and Michael HOEL</i> : <u>Endogenous Technology and Tradable Emission Quotas</u>
KTHC	43.2006	<i>Giulio CAINELLI and Donato IACOBUCCI</i> : <u>The Role of Agglomeration and Technology in Shaping Firm Strategy and Organization</u>
CCMP	44.2006	<i>Alvaro CALZADILLA, Francesco PAULI and Roberto ROSON</i> : <u>Climate Change and Extreme Events: An Assessment of Economic Implications</u>
SIEV	45.2006	<i>M.E. KRAGT, P.C. ROEBELING and A. RUIJS</i> : <u>Effects of Great Barrier Reef Degradation on Recreational Demand: A Contingent Behaviour Approach</u>
NRM	46.2006	<i>C. GIUPPONI, R. CAMERA, A. FASSIO, A. LASUT, J. MYSLIAK and A. SGOBBI</i> : <u>Network Analysis, Creative System Modelling and DecisionSupport: The NetSyMoD Approach</u>
KTHC	47.2006	<i>Walter F. LALICH</i> (lxxx): <u>Measurement and Spatial Effects of the Immigrant Created Cultural Diversity in Sydney</u>
KTHC	48.2006	<i>Elena PASPALANOVA</i> (lxxx): <u>Cultural Diversity Determining the Memory of a Controversial Social Event</u>
KTHC	49.2006	<i>Ugo GASPARINO, Barbara DEL CORPO and Dino PINELLI</i> (lxxx): <u>Perceived Diversity of Complex Environmental Systems: Multidimensional Measurement and Synthetic Indicators</u>
KTHC	50.2006	<i>Aleksandra HAUKE</i> (lxxx): <u>Impact of Cultural Differences on Knowledge Transfer in British, Hungarian and Polish Enterprises</u>
KTHC	51.2006	<i>Katherine MARQUAND FORSYTH and Vanja M. K. STENIUS</i> (lxxx): <u>The Challenges of Data Comparison and Varied European Concepts of Diversity</u>
KTHC	52.2006	<i>Gianmarco I.P. OTTAVIANO and Giovanni PERI</i> (lxxx): <u>Rethinking the Gains from Immigration: Theory and Evidence from the U.S.</u>
KTHC	53.2006	<i>Monica BARNI</i> (lxxx): <u>From Statistical to Geolinguistic Data: Mapping and Measuring Linguistic Diversity</u>
KTHC	54.2006	<i>Lucia TAJOLI and Lucia DE BENEDETTIS</i> (lxxx): <u>Economic Integration and Similarity in Trade Structures</u>
KTHC	55.2006	<i>Suzanna CHAN</i> (lxxx): <u>“God’s Little Acre” and “Belfast Chinatown”: Diversity and Ethnic Place Identity in Belfast</u>
KTHC	56.2006	<i>Diana PETKOVA</i> (lxxx): <u>Cultural Diversity in People’s Attitudes and Perceptions</u>
KTHC	57.2006	<i>John J. BETANCUR</i> (lxxx): <u>From Outsiders to On-Paper Equals to Cultural Curiosities? The Trajectory of Diversity in the USA</u>
KTHC	58.2006	<i>Kiflemariam HAMDE</i> (lxxx): <u>Cultural Diversity A Glimpse Over the Current Debate in Sweden</u>
KTHC	59.2006	<i>Emilio GREGORI</i> (lxxx): <u>Indicators of Migrants’ Socio-Professional Integration</u>
KTHC	60.2006	<i>Christa-Maria LERM HAYES</i> (lxxx): <u>Unity in Diversity Through Art? Joseph Beuys’ Models of Cultural Dialogue</u>
KTHC	61.2006	<i>Sara VERTOMMEN and Albert MARTENS</i> (lxxx): <u>Ethnic Minorities Rewarded: Ethnostratification on the Wage Market in Belgium</u>
KTHC	62.2006	<i>Nicola GENOVESE and Maria Grazia LA SPADA</i> (lxxx): <u>Diversity and Pluralism: An Economist's View</u>
KTHC	63.2006	<i>Carla BAGNA</i> (lxxx): <u>Italian Schools and New Linguistic Minorities: Nationality Vs. Plurilingualism. Which Ways and Methodologies for Mapping these Contexts?</u>
KTHC	64.2006	<i>Vedran OMANOVIĆ</i> (lxxx): <u>Understanding “Diversity in Organizations” Paradigmatically and Methodologically</u>
KTHC	65.2006	<i>Mila PASPALANOVA</i> (lxxx): <u>Identifying and Assessing the Development of Populations of Undocumented Migrants: The Case of Undocumented Poles and Bulgarians in Brussels</u>
KTHC	66.2006	<i>Roberto ALZETTA</i> (lxxx): <u>Diversities in Diversity: Exploring Moroccan Migrants’ Livelihood in Genoa</u>
KTHC	67.2006	<i>Monika SEDENKOVA and Jiri HORAK</i> (lxxx): <u>Multivariate and Multicriteria Evaluation of Labour Market Situation</u>
KTHC	68.2006	<i>Dirk JACOBS and Andrea REA</i> (lxxx): <u>Construction and Import of Ethnic Categorisations: “Allochthones” in The Netherlands and Belgium</u>
KTHC	69.2006	<i>Eric M. USLANER</i> (lxxx): <u>Does Diversity Drive Down Trust?</u>

(lxxviii) This paper was presented at the Second International Conference on "Tourism and Sustainable Economic Development - Macro and Micro Economic Issues" jointly organised by CRENoS (Università di Cagliari and Sassari, Italy) and Fondazione Eni Enrico Mattei, Italy, and supported by the World Bank, Chia, Italy, 16-17 September 2005.

(lxxix) This paper was presented at the International Workshop on "Economic Theory and Experimental Economics" jointly organised by SET (Center for advanced Studies in Economic Theory, University of Milano-Bicocca) and Fondazione Eni Enrico Mattei, Italy, Milan, 20-23 November 2005. The Workshop was co-sponsored by CISEPS (Center for Interdisciplinary Studies in Economics and Social Sciences, University of Milan-Bicocca).

(lxxx) This paper was presented at the First EURODIV Conference "Understanding diversity: Mapping and measuring", held in Milan on 26-27 January 2006 and supported by the Marie Curie Series of Conferences "Cultural Diversity in Europe: a Series of Conferences.

2006 SERIES

CCMP	<i>Climate Change Modelling and Policy</i> (Editor: Marzio Galeotti)
SIEV	<i>Sustainability Indicators and Environmental Valuation</i> (Editor: Anna Alberini)
NRM	<i>Natural Resources Management</i> (Editor: Carlo Giupponi)
KTHC	<i>Knowledge, Technology, Human Capital</i> (Editor: Gianmarco Ottaviano)
IEM	<i>International Energy Markets</i> (Editor: Anil Markandya)
CSRM	<i>Corporate Social Responsibility and Sustainable Management</i> (Editor: Sabina Ratti)
PRCG	<i>Privatisation Regulation Corporate Governance</i> (Editor: Bernardo Bortolotti)
ETA	<i>Economic Theory and Applications</i> (Editor: Carlo Carraro)
CTN	<i>Coalition Theory Network</i>