GÖTEBORG UNIVERSITY

THE QOG INSTITUTE
QUALITY OF GOVERNMENT

The Quality of Government and Social Capital:
A Theory of Political Institutions and Generalized Trust

Bo Rothstein
Dietlind Stolle

QoG WORKING PAPER SERIES 2007:2

THE QUALITY OF GOVERNMENT INSTITUTE
Department of Political Science
Göteborg University
Box 711
SE 405 30 GÖTEBORG

March 2007

ISSN 1653-8919

 A revised version of this paper has been accepted for publication in *Comparative Politics*. Authors' names are in alphabetical order and they share equal responsibility for the manuscript.

The Quality of Government and Social Capital:
A Theory of Political Institutions and Generalized Trust
Bo Rothstein and Dietlind Stolle
QoG Working Paper Series 2007:2
March 2005
ISSN 1653-8919

Abstract

The purpose of this article is to present a new theory on the generation of social capital. In the discussion about the sources of social capital it has been stressed that generalized trust is built up by the citizens themselves through a culture that permeates the networks and organizations of civil society. Since this approach lacks a micro-theory and has produced only mixed empirical evidence, we like to highlight instead how social capital is embedded in and linked to formal political and legal institutions. Not all political institutions matter equally, however, in fact we argue that trust thrives most in societies with effective, impartial and fair street-level bureaucracies. The article presents the causal mechanism between these institutional characteristics and generalized trust, and illustrates its validity in a cross-national context.

Bo Rothstein
The Quality of Government Institute
Department of Political Science,
Göteborg University
Box 711
SE 405 30 Göteborg, Sweden
bo.rothstein@pol.gu.se

Dietlind Stolle
Department of Political Science
McGill University
855 Sherbrooke St. West
Montréal, QC H3A 2T7, Canada
Dietlind.Stolle@mcgill.ca

Introduction: The Theory of Social Capital

The purpose of this article is to present a new theory explaining how social capital is generated. The reason for investigating this is the wealth of empirical research showing that social capital is associated with a number of political, social, and economic outcomes that for most people are normatively desirable. Among these are well-performing democratic institutions (Putnam 1993, Newton 1999b, Woolcook 2001), personal happiness (Helliwell 2002), optimism (Uslaner 2002), economic growth (Knack & Keefer 1997, Zak & Knack 2001), and democratic stability (Inglehart 1999). The problem is that in this abundance of positive associations between social capital and various desired social and political outcomes, the *sources* of social capital often remain under-theorized and empirically unexplored. Simply put, if social capital is such an important societal resource, we need to know more about how it is generated and maintained.

From a theoretical point of view, social capital has gained interest because it has been pointed out as an important resource in the solution of social dilemmas. These problems are also known in non-cooperative game theory as "multiple equilibria."[1] Whereas game theory has established certain structural aspects of a cooperative game, which foster the emergence of cooperation, e.g. the tit-for-tat strategy, or a form of reciprocity combined with the perception that a relationship is long-term in character (Axelrod 1984, Scharpf 1997:86, Kydd 2000), recent research has also pointed out the importance of generalized trust (Ostrom 1998, Ziegler 1998, Eckel & Wilson 2003). In social dilemma type of situations, agents acting from a utility-based script can reach radically different levels of social/economic efficiency depending on the existence of social trust. Even if everyone realizes that cooperation would be beneficial for all, it will only come about if the agents trust that (almost all) others are going to cooperate (Rothstein 2005). The reasons are well known: Not only can cooperation be a costly strategy for the individual, it is also an unlikely strategy if one is not convinced that (almost) all other agents are also going to cooperate because the public

[1] They are also known as the n-person prisoners' dilemma, or the problem of collective goods, or the "tragedy of the commons."

good that is going to be produced will not come into existence if not enough "others" can be trusted to cooperate (Ostrom 1999).

Trust has also been found to be an important resource in social-psychology. Experimental evidence shows fairly conclusively that generalized trust matters for cooperation, especially in one-shot situations and in multiple n-person games trusters do give their unknown partners a chance (Rotter, 1980; Wrightsman, 1966; Yamagishi, 2001).[2] Clearly, generalized trust is an advantage to people and societies that possess it, as trusters are more likely to initiate cooperative relations, which is beneficial for themselves as well as for their social environment.

Social capital has been defined as trust and beyond that as access to and membership in various types of networks, as well as norms of reciprocity (Coleman 1990; Putnam 1993). We consider the attitudinal aspects of the concept, such as generalized interpersonal trust, to be the most important part of social capital. The reason is that individuals can be members of networks that consist of untrustworthy agents and/or networks that are held together by distrusting agents that are outside the network. There is thus no logical reason why membership in networks per se should be a social value. Attitudes of generalized trust extend beyond the boundaries of face-to-face interaction and incorporate people who are not personally known (Uslaner 2002). These attitudes of trust are generalized when they go beyond specific personal settings in which the partner to be cooperated with is already known. They even go beyond the boundaries of kinship and friendship, and the boundaries of acquaintance. In this sense, the scope of generalized trust should be distinguished from the scope of trust toward people one personally knows. When citizens believe that most people can be trusted, indicates an evaluation of the moral standard of the society in which they live (Delhey and Newton 2005). Living in a society (or working in an organization) with high moral standards (i.e. where "people in general" are thought to be trustworthy) is an asset, because many forms of transaction costs are reduced or even minimized (Svendsen and Svendsen 2004).

[2] In repeated games or in games with specific partners, generalized trust is not a discriminating factor in determining outcomes, although even in this case, trusters are more likely to give people a second chance (ibid).

Interpersonal generalized trust is usually seen as something that is built up through a culture that permeates the networks and organizations of civil society. Because of this historical-cultuarlist focus, the debate over the sources of social capital has often lost sight of political and institutional factors. In particular, the institutional conditions under which social capital can grow have remained largely unexplored. For example, Putnam and Goss have stated that "(t)he myriad ways in which the state encourages and discourages social-capital formation have been under-researched […] Such questions represent some of the many unexplored frontiers in social-capital research." (Putnam & Goss 2001, 17)

The question why it is that citizens in some countries, regions, cities or villages are able to trust each other and thereby solve many of their collective action problems while others are not, turns out to be one of the most interesting puzzles in the social sciences (Ostrom 1998, Krishna 2002). In this article we will address this particular issue in more detail, and sketch out a theory of the formation of generalized trust that is embedded in the structure and characteristics of political institutions. In fact we argue that many of the effects that social capital has been shown to have on institutions might be as much caused by the effects of institutional differences on social capital. Thus, our ambition is to build a theory, in which the causal logic that is the most common in studies of social capital, is reversed.

This article proceeds in six main sections. In the first two we review current approaches explaining the sources of generalized trust, distinguishing the society-centered and the institution-centered approaches. In the third section we build on the results of the existing approaches and go beyond them. In the fourth section we develop our theory about the way the causal mechanism(s) between political institutions and social capital operate. In the fifth section, we illustrate how the theory works with cross-national and other national survey data. Finally, we bring our new insights together with suggestions for future research in our last section.

1. The Generation of Social Capital— The Society-Centered Model

The social capital literature is divided on the question of the causes and origins of social capital. On the one side are scholars who argue that variations in the amount and type of social capital can be explained primarily by *society-centered approaches* (Fukuyama 1999; Putnam 2000). In this Tocquevillian approach, the capacity of a society to produce social capital among its citizens is determined by its long-term experience of social organization, anchored in historical and cultural experiences that can be traced back over very long periods. .

The society-centered approach see regular social interaction, preferably through membership in voluntary associations, as the most important mechanism for the generation of social capital; more informal types of social interactions have been included in later work as well. Following the Tocquevillian tradition, formal and informal associations are seen as creators of social capital because of their socializing effects on democratic and cooperative values and norms; associations function as "learning schools for democracy." However, this approach has revealed three problems. The first is that in empirical analyses, voluntary associations do not fulfill the role they were believed to play in social capital creation. The second problem is the theoretical difficulty in distinguishing various types of social interactions from each other. The third issue concerns the problems involved in the search for causes or roots of social capital. We briefly summarize these issues in turn.

A number of studies carried out in different democratic countries over the last few years have called into question the effect of participation in many voluntary associations directed at benevolent purposes on social trust and the willingness to cooperate outside of group-life. It is true that people who are "joiners" also generally trust and cooperate with others more, but this seems to be an effect of *self-selection*. People who—for some other reason—score high on the social ability to trust and cooperate with others join voluntary associations disproportionately. However, activity in such organizations does not add much in these desired traits, at least not for adults. Members become purely more trusting of their fellow members and they cooperate more for group purposes only (Stolle 2001, Uslaner 2002). Thus

the evidence that associational membership of adults *creates* social capital that can be used in the wider society simply does not hold (Delhey and Newton 2003; Claiborn and Martin 2000; Herreros 2004, Kuenzi 2004, Uslaner 2002, Wollebæck and Selle 2002, Kim 2005).[3] Other types of social interactions might do the job, yet a second problem occurs.

The second issue is that even if we accepted the importance of volunteering as a premise for the learning of cooperation and trust, not all voluntary associations serve a normatively desirable purpose. The problem is that we do not yet have a micro-theory of social capital that defines those aspects of volunteering that are important for the creation of civic attitudes. Many associations are in fact established to create distrust. Alan Brinkley refers to parochial communities that do not reach out but instead manifest and nurture an inward-looking and segregating culture (1996). Sheri Berman (1997) has argued that the Nazis in Weimar Germany used existing voluntary associations as vehicles for their "Machtübername" in 1933. Far from such extreme examples, some voluntary associations may use their power, for example as producer organizations, to extract resources from society in a way that comes close to blackmail, giving undue or disproportional advantages to its members to the detriment of the rest of society. Organized interests have not always been known to act in a way that increases generalized trust in society. The literature on neo-corporatism and on "rent-seeking" emphasizes this aspect of the effects of interest organizations (Lewin 1992; Olson 1982).

The problem of good and bad associations is readily admitted in social capital research, and promising new analyses distinguish groups according to the degree of contact members have with individuals unlike themselves. This distinction has been labeled as bridging (contact with many people who are dissimilar) versus bonding (contact with people like oneself) social interaction. Bridging interactions are believed to create more desirable outcomes (Putnam 2000). In a similar vein, Warren distinguishes between groups oriented toward status, group identity, and material goods, as well as those focused on inclusive social, public, or identity goods (2001). However, both theoretical accounts are still up for empirical

[3] The evidence on the relationship between regional associational density and civic attitudes is also mixed at best (van der Meer 2003).

testing (Marschall and Stolle 2004). Generally, the struggle to distinguish between 'the good, the bad and the ugly' in the world of voluntary associatons underlines the lack of theoretical parameters that define a micro-theory of social capital. Our conclusion from this research is that the use of membership in adult voluntary associations as a *measurement* of social capital should be handled with caution, and that its use as a *producer* of social capital is in all likelihood misplaced.

The third problem has to do with the lack of understanding of the actual transmission of social capital across generations. Upon closer inspection, it turns out that the theory as it stands is of a somewhat deterministic nature (Tarrow 1996). The research reveals that the level of social capital in a society is determined by very long historical trajectories. For example, according to Putnam, the differences in the stock of social capital between the North and the South in Italy are traced as far back as to the 12th century (Putnam 1993). Also, Fukuyama believes that trust is deeply rooted in culture. According to him, it is the result of shared ethical habits that emerge in communities over a very long time (1995). Whether this view holds or not, the understanding that the amount of social capital in a society is historically determined by various societal structures with roots far back in historical time has prevented the search for modern-day solutions that help to stimulate the development of social capital.[4] Yet in this view, governments, and particularly oppressive regimes, can at most damage and destroy the social capital that exists (Fukuyama 1995), as the examples of the Norman Kingdom in Southern Italy and of several authoritarian and totalitarian regimes in Southern and Eastern Europe or Latin America indicate (cf. Sztompka 1996, 1998). In this type of analysis, governments are seen as incapable of facilitating the generation of social capital**.**

2. The Institution-Centered Approach

As a response to the society-centered and historically-determined approaches, the *institution-centered* accounts of social capital theory claim that for social capital to flourish, it needs to

[4] This aspect in itself does not falsify the theory, of course.

be embedded in and linked to the political context as well as formal political and legal institutions (Berman 1997; Encarnación, 2006; Hall 1999; Levi 1998; Tarrow 1996; Rose-Ackerman and Kornai 2004; Kumlin and Rothstein 2005). According to this group of scholars, social capital does not exist independently of politics or government in the realm of civil society. Instead, government policies and political institutions create, channel, and influence the amount and type of social capital. The capacity of citizens to develop co-operative ties and establish social trust is in this account heavily influenced by government institutions and policies. This point of view would imply that institutional engineering could indeed be used to foster social capital.

In comparison to the society-centered perspective, the institutional model fits more squarely with the "new institutionalism" in political science (Thelen 1999). This approach has mainly focused on the importance of using institutions as independent variables in various theoretical models. So far, the "new institutionalism" and the social capital research agenda have been mostly disconnected. For example, in his overview of "the new institutionalism," Guy Peters identifies no less than six different institutional approaches in political science and concludes that these six approaches and social capital research are mutually exclusive. Summarizing this research, he claims that "the concepts of 'social capital' and 'civil society' are really ways of saying that without the right set of social values structural manipulation and constitution writing will produce little positive results" (p. 88). We take this to be the general consensus among scholars in the social capital approach, namely that historically established cultural traits take precedence over institutions in explaining variation in social capital. However, Peters also refers to the work on democratization by Alfred Stepan and Juan Linz, who emphasize the importance of institution building for changing citizens' values in a way that helps stabilize fledgling democracies. Peters' statement about this line of reasoning is as follows:

> This approach argues, although perhaps not so boldly, that if effective institutions can be constructed and managed then in time (and perhaps not very much time), the appropriate values will also be created (Peters 1999, p. 88).

This argument by Linz and Stepan has been confirmed earlier in studies of German post-war development as well. Despite concerns expressed in the original civic culture study (Almond and Verba 1963), Baker et al (1981) and Conradt (1984) have shown that the political institutions of the Bundesrepublik have created a democratic political culture in Germany.

We can distinguish two main types of institutional arguments in relation to the concept of social capital: an attitudinal approach and an institutional-structural approach. In the former, scholars examine the relationship between institutional/political trust and generalized trust. For example, Hall indicates that political trust and generalized trust are correlated in Britain (Hall, 1999). Kaase discusses the consistently positive but weak correlation between the two types of trust in cross-national survey samples (Kaase, 1999: 14).

However, interpretations of this correlation vary. Some recognize the correlation between the two types of trust, but see generalized trust mostly as a predictor of political trust. For example, Lipset and Schneider claim that in the United States, what they call the "personal characteristic of trust in others" might explain developments in public confidence. "A general feeling of confidence in institutions seems to derive from a personal outlook of optimism, satisfaction and trust" (1983: 120ff.). Newton and Norris elaborate this causal flow when they find a strong positive correlation at the aggregate level in the analysis of the World Value Surveys in seventeen trilateral democracies. They interpret their findings as evidence that social capital "can help build effective social and political institutions, which can help governments perform effectively, and this in turn encourages confidence in civic institutions" (2000). This, of course, is the logic of Putnam's argument, in which he shows that regional governmental performance depends on levels of regional social capital (1993). The problem with all of these analyses is that the flow of causality is not clear. Brehm and Rahn, for example, have tried to disentangle the causality between these two types of trust with a statistical analysis of the General Social Surveys (GSS) data and a model that allows for reciprocal causation. They found that confidence in institutions has a larger effect on interpersonal trust than the other way around, even though they see both types of trust as influencing each other (Brehm and Rahn, 1997: 1014ff.).

We see three main problems with the attitudinal arguments regarding the relationship between institutions and social capital. First, the fact that attitudes cause other attitudes is not very illuminating. The main problem of the attitudinal approach is that attitudes that relate to institutions are not connected to the actual institutional characteristics. Second, there are a variety of forms of institutional trust that we can identify in the study of advanced industrialized democracies, but it is often a problem that most of them are collapsed under one label. It is no wonder, then, that scholars find weak or no correlations between generalized trust and other forms of institutional trust or confidence, since they focus on confidence in political institutions in general without specifying how the relationship between the specific institutional characteristics and generalized trust work. The third problem is that the causal mechanism for both causal claims remains unclear. Given Putnam's (1993) logic from trust to institutional performance to confidence in politicians, we do not know *how* trusting people create better service performance and better local politicians who are more responsive. Do more trusting citizens contact governmental officials more frequently to pressure them into good performance? Or is it that local politicians just reflect the culture of trust or distrust that prevails in their local societies? How exactly can the trust or distrust of citizens and their ability to reciprocate influence governmental performance and, as a result, stimulate their confidence in politicians? We argue that the reverse logic is just as plausible. Theorizing the causal mechanism on *how* the link between institutional characteristics and attitudinal social capital works might be a good first step in the right direction. In sum, what is missing in the literature that advocates social capital as the prerequisite for good institutional performance and democracy is a theoretical specification of how the mechanism(s) that accounts for the causal logic operate(s).

The second institutional approach overcomes some of these problems. This approach generally centers on the role of the state as a source of social capital generation. Tarrow, for example, maintains that the "state plays a fundamental role in shaping civic capacity" (Tarrow, 1996:395). It has been argued that governments can realize their capacity to generate trust only if citizens consider the state itself to be trustworthy (Levi, 1998: 86). States, for example, enable the establishment of contracts in that they provide information and monitor legislation, and enforce rights and rules that sanction lawbreakers, protect

minorities and actively support the integration and participation of citizens (Levi, 1998: 85ff.). This discussion is very insightful, as it specifies institutional characteristics such as the efficiency and trustworthiness of state institutions as influential for social capital creation. Certain types of institutions, such as those that deal with lawbreakers, are also emphasized. Yet what is still missing here is a specification of how the causal mechanism between institutional arrangements and trustworthy behavior works.

To sum up, our review of the existing approaches to the sources of social capital has revealed three points. Firstly, the society-centered approaches are theoretically under-specified and lack successful empirical testing. Secondly, so far the institutional arguments have not specified which type of institutions are important and how they work in the creation (or destruction) of generalized trust. Our intention is to outline a model that indicates a) which political institutions are the most important for generating social capital and b) how to understand the causal mechanism between these institutions' characteristics and social trust. The third point is that we need to know which political institutions may be important for generating social capital. The reason is simple. The number of political institutions in any political system, democratic or not, is huge; moreover, the ways in which these can be combined into different institutional systems is infinite. This implies that we need to specify if it is the electoral, or the judicial, or the military, or the administrative or any other political institutions that may be particularly important for generating social capital.

3) The Role of Political Institutions—But Which Ones?

As stated above, the problem is that many forms of institutional trust and confidence are collapsed under one label as "trust in government." Our point is that the literature has not distinguished between confidence in the institutions on the representational side of the political system (parties, parliaments, cabinets, etc.) and confidence in the institutions on the implementation side of the political system. The theoretical reason for why the confidence that people place in these two types of political institutions differ is the following. On the representational side, one of the main roles for political institutions is to be *partisan*. A

political party that holds government power, or the majority in a Parliament, is supposed to try to implement its ideology in a partisan way. Thus, people that support the ideology of the ruling party (or parties) are likely to have confidence in them, while citizens that oppose their ideology are likely to report a lack of confidence. However, it is less likely that this type of political trust or distrust that is connected to political leanings should influence one's generalized trust in other people. There is to our knowledge no plausible causal mechanism linking these two phenomena. This is why we usually find a strong correlation between political leanings and political trust but a weak correlation between confidence in these types of political institutions and social trust (for the original argument see Citrin 1974 and also Newton 1999a; Newton and Norris 2000). We believe that the weak findings of causal relationships between generalized trust and "trust in government" are mostly due to this failure to distinguish between what is the cause of trust in various kinds of political institutions.

We propose that the major source of variations in generalized trust is to be found at the other side of the state machinery, namely the legal and administrative branches of the state such as the police, the courts, and other government organizations responsible for implementing public policies. We argue that these branches of government need to be distinguished from the influence of representational institutions such as the legislative and the executive for three main reasons. The main reason is that while the base for trusting (or distrusting) the institutions dominated by politicians is *partisanship*, the reason for trusting civil servants, judges, the police, or social service institutions are their even-handedness and/or *impartiality* (Rothstein & Teorell 2005).Our argument is that these implementing political institutions reveal messages about the principles and norms of the prevailing political culture that mold and shape people's beliefs and values.

This argument about the role of procedural fairness enjoys strong empirical support in research conducted by psychologist Tom Tyler on why people accept the principle of compliance with the law. When citizens had reasons to believe that the procedures applied by officials in the implementation of laws were fair; they were most acceptant of the legal decisions. Procedural fairness was a more important factor than the risk of being caught and

punished or the general moral norm that people should obey democratically passed laws, and even trumped an individual's belief that the outcome of the case has been in his or her favor or not (Tyler 1992, 1998).

Compared to other political institutions, the police and the other legal institutions of the state have a special task, namely to detect and punish people who, in game theory parlance, use *opportunistic* strategy (we would prefer the term *treacherous*). In other words, the judicial system and the police are in the business of taking care of "other people" who are untrustworthy.. We therefore want to emphasize here the role of the judicial institutions and the police in particular (what we call "order institutions"). In sum, we argue that the impartiality and fairness of street-level political institutions are important dimensions of institutional trust and confidence that can be conceptually separated from conventional political trust in politicians, parties, and "the government". In the following section we elaborate exactly *how* these institutions influence generalized trust.

4. Institutions, corruption and social capital – the causal mechanism

How then would corrupt and partisan practices in the administrative machinery of the state influence people's propensity to trust others in their society? The link between corruption and social capital is by no means obvious since there are (at least) two possible answers to this issue. The first would be the assumption that in societies where people cannot trust the police or the judicial system, they would compensate for this lack of trust by increasing their social networking and their trust in each other. Conversely, an inefficient, corrupt, biased and unfair administrative system does not allow any kind of trust to rise, and particularly prevents the development of trust between people. We examine both arguments in turn.

As for the first line of reasoning, the logic is that, facing a non-functioning state apparatus, society gets together to overcome the problems of the state. In other words, people would compensate for their lack of trust in political institutions by increasing their connectedness to other people whom they can trust. In this way, society is "forced" to cooperate in order to circumvent or fill the gaps in the inefficient, biased or disorganized state. In this vein,

Michael Woolcook writes that "rampant corruption, frustrating bureaucratic delays, suppressed civil liberties, failure to safeguard property rights and uphold the rule of law, forces communities back on themselves, demanding that they supply privately and informally what should be delivered publicly and formally" (Woolcook 2001, p. 16). Similar views have been expressed about the state of civil society in the analysis of authoritarian and totalitarian states. It has been shown that people under communism have created cooperative networks in order to alleviate the lack of opportunities and material support provided by their government (Sztompka 1996; Völker and Flap 2001).

One of the leading scholars of corruption makes a related argument about the positive correlation between corruption and social capital. Della Porta's claim is that in order to make corrupt exchanges, one has to trust the others who are involved in corruption. While this is "bad" social capital, the idea is that corruption creates strong norms of reciprocity and trust between those who are involved in corruption.

> In all illegal systems of exchange, a high degree of trust and reciprocity is necessary among participants, so the internalization of some rules of the game is therefore necessary. A good reputation for respecting the terms of the illegal exchange, which participants often call 'honesty', is valued by the actors involved. (Della Porta 2000, p. 223).

It has been acknowledged in these debates that these types of ad-hoc cooperation and niches of social interactions are not of a generalized character. Surely trust can thrive in such particularized communities, but this type of trust cannot reach out to include various groups of the population. The small dense niche networks in East Germany characterized by high levels of in-group trust were so special because they actually were created as a protection against weak ties and other types of networks (Völker and Flap 2001). The high degree of norm conformity that Della Porta depicts among those who involve in corruption may be plausible. But again, this is a specific type of trust in that the "secret" of corruption cannot be revealed to the outsider—it thus does not reflect generalized trust, which is the aspect of social capital that is at stake in the theory of social capital. In fact with the existence of such

small-knit closed networks, information will not flow and generalized trust will not spread at all (Granovetter 1973; Uslaner 2002).

Moreover, people involved in corruption need not really trust one another, because they are in a situation of "mutual deterrence". By this we mean that both parties stand to lose if the corrupt exchange is revealed, as giving and taking bribes are *both* criminal offences in most political systems. Deterrence is not exactly the same as the trust that the other does not defect. Based on very interesting empirical evidence, Varese argues that the internal operations of criminal organizations such as the Mafia are not at all based on trust, but rather on fear, suspicion and deep mistrust (Varese 2004).

When it comes to attitudes of a generalized nature, such as generalized trust, our argument is that things work the other way around. A deteriorating, biased, corrupt administrative system generally goes hand in hand with low levels of social capital, particularly when measured as generalized trust. The *institutional theory of trust* that we propose builds on Levi's insight that an individual's perceptions of fair, just, and effective political institutions and the fact that most fellow citizens have similar beliefs all influence the individual's generalized trust. Government institutions generate social trust only if citizens consider the political institutions to be trustworthy. In this respect it is important, according to Levi, that states enable the establishment of contracts by providing information and monitor laws, enforcing rights and rules that sanction lawbreakers, and protecting minorities (Levi 1998, p. 85ff).

The argument runs as follows. Institutions of law and order have one particularly important task: to detect and punish people who are "traitors", that is, those who break contracts, offer or take bribes, engage in clientelistic operations, cheat, steal, murder and do other such non-cooperative things and therefore should not be trusted. Thus, if citizens think that these institutions do what they are supposed to do in a *fair* and *effective* manner then they also have reason to believe that the chance of people getting away with such treacherous behavior is small. If so, citizens believe that people have good reason to refrain from acting in a treacherous manner and because of this, they will believe that "most people can be trusted" in their society. However, we wish to emphasize that it is not just the efficiency with which

treacherous behavior is punished that matters for generalized trust, but the combination of *efficiency and fairness of order institutions*.[5] Fairness of public institutions such as the police, courts or even social service offices are particularly relevant to attitudes about other people because they resemble the street-level bureaucracy and connect institutions and people with each other. Police officers, social service bureaucrats, judges etc. are both representatives of the people as well as exhibitors of institutional values. In sum, if citizens can trust the institutional effectiveness and fairness of the judicial system and the police, then one's generalized trust in others can be facilitated.

There is also a positive twist to our argument. There is ample evidence that citizens' evaluation of the performance of the different types of government institutions with which they interact influences their confidence in them (Kumlin 2004). Moreover, it can be demonstrated that contact with more universal types of welfare institutions—as opposed to selective and means-tested (and therefore biased) institutions—is positively related to generalized trust (Rothstein and Stolle 2003). We would like to expand the argument here to include the impartial and unbiased character of various types of institutions with which citizens are in contact, including the courts and police, and their positive facilitative influence on generalized trust. Below we specify the deductive logic as composed of the following four causal mechanisms.

[Figure 1 about here]

As indicated in Figure 1, we argue that the absence or presence of corruption, the level of arbitrariness and bias of public officials in the police and court systems have two important consequences that become influential for citizens in several ways: they influence the trust in the institutional effectiveness and trust in institutional fairness. Surely, corruption does not go hand in hand with trust in governmental institutions. It is obvious that the reason for offering bribes is that one does *not* trust public officials to do what they otherwise are supposed to do.

[5] Efficiency of institutions alone can lead to feelings of relative safety or protection from arbitrary crime committed by fellow citizens, as the low crime rates in former Communist countries of Eastern Europe indicate; however, they cannot create generalized trust because of their lack of fairness and impartiality.

We develop four different parts of this causal mechanism between institutional characteristics and generalized trust. Institutional efficiency and fairness:

1. influence the individual agent's perception of his/her safety and security. The absence or presence of fear of others will obviously influence the belief that "most other people" ought/ or ought not to be trusted.
2. determine the individual agent's *inference* from those who are given the responsibility of guarding the public interest to the ret of society. For example, if those in position of responsibility cannot be trusted, then "most other people" can surely not be trusted.
3. shape the *observance* of the behavior of fellow citizens, as institutional fairness sets the tone. The message of corrupt systems is, for example, that in order to get what one needs in life, one must be engaged in various forms of corruption. Hence, the individual agent will witness the use of corruption amongst fellow citizens, and will feel obliged to engage in corrupt practices in order to get what she deems necessary in life. However, there cannot be any generalized trust in those individuals who just take advantage of others and the system.
4. cause *experiences* with these institutions when in direct contact with them. Corrupt and unfair institutions, for example, might lead to experiences of discrimination and injustice, which negatively influences generalized trust.

Our model helps to identify some of the important dimensions of state institutions that are closely related to a significant aspect of social capital, namely generalized trust, and we thus present an institutional theory of generalized trust.[6] To reiterate, we consider these institutions to be important influences on citizens' views of other people because they 1) are permanent institutions that offer direct contact with street-level bureaucrats in every-day settings, 2) exhibit important norms of society such as impartiality and fairness, and 3) deal with a valuable public good, personal safety.

[6] Our argument is certainly not that all forms of "generalized trust" are caused by experiences with and trust in the impartiality and fairness of certain government institutions. There are other important sources that create such social capital, for example the early childhood experiences of trust relationships in one's immediate family (Uslaner 2002). However, we would like to suggest that early childhood influences on trust might be the result of parents' experiences with street-level order institutions as presented above.

5. Empirical Illustrations

We will illustrate our theory by using a variety of data sources. First, we explore whether our general argument about varieties of institutional confidence and trust holds, and whether certain types of institutions such as the legal system, the police and social welfare institutions play a more important role for generalized trust than the political/representational institutions. In the second part, we use the longitudinal character of the World Value Survey and estimate how the changes in attitudes about institutions relate to the changes in generalized trust in various societies. In the third part, we go a step further and move beyond this attitudinal approach to include measurements of the institutions themselves. This empirical illustration of our theory requires the merging of aggregate statistical institutional measurements with aggregate public opinion data. Fourth, an essential contribution of our work is that we do not just show how the causal mechanism specified captures the way institutions might influence aggregate attitudes, but we add tests at the micro-level as well. Are individuals who have experienced corruption, unfair institutions, discrimination, or lack of protection, less trusting as well?

5.1. Data

For the various steps we utilize a longitudinal cross-national sample provided by the World Values Survey, as well as data from several national country surveys such as Sweden and Canada. Our cross-national survey data is merged with aggregate statistical data at the country level. Our data sources include:

- The various waves of the World Values Surveys (1980/1990/1995-97)[7].
- The pooled data from the Swedish survey conducted by the SOM (Society – Opinion – Media) institute at Göteborg University, Sweden.[8]

[7]. For a full description of the data set, see www.worldvaluessurvey.org.

[8] The institute is managed jointly by the Departments of Political Science, Public Administration and Journalism/Mass Communication at Göteborg University. For this project, questions about trust have been added to the five surveys 1996 to 2000 with funding from the Swedish Council for Research in the Humanities and Social Sciences. For information about sampling, response rates, etc. please visit www.som.gu.se or contact som@jmg.gu.se.

- The national sample of the Equality, Security and Community (ESC) survey of Canada, which was completed at the Institute for Social Research (ISR) York University in 1999/2000.[9]

5.2 Varieties of Institutional Trust—A General Exploration

Our previous discussion demonstrated that there are at least two dimensions along which citizens might judge political institutions: they expect representatives of political, legal, and social institutions to function as their agents; at the same time, citizens focus on neutrality, fairness, and impartiality. Moreover, we argued that citizens expect more agency and more political bias from political institutions with elected offices, whereas they expect impartiality and an unbiased approach from order institutions. Our claim is, of course, that the lack of impartiality of order institutions damages generalized trust; alternatively, institution's perceived impartiality should support generalized trust. Before we turn to such causal links, we examine the distinctions that citizens draw between various institutions. Can we actually find the difference between trust in political institutions that are perhaps seen as partisan, and trust in order institutions for which citizens should demand more fairness and impartiality?

[Table 1 about here]

In order to see whether trust in various political institutions actually does fall onto different dimensions, we subject the individual level third wave of the World Values Survey to a factor analysis.[10] As the results in Table 1 indicate, citizens from 56 countries make distinctions between types of confidence in institutions in a list of nine different types. The factor analysis (principal component, with varimax rotation) reveals that three different dimensions of institutions emerge.[11] Indeed most political institutions with elected offices fall under the first dimension, such as confidence for parliaments, governments, political parties, and—to our surprise—the civil service. In many countries, it may be that the high-

[9] The survey component of the ESC project (see http://www.arts.ubc.ca/cresp/outc.htm) is designed to provide information on social networks, well-being, socio-economic status, civic participation, and attitudes toward government policies.

[10] The third wave WVS contains the most complete battery of questions about confidence in a variety of institutions.

[11] The results are confirmed in the WVS aggregate data set.

level civil service is seen as partisan and as an extension of elected governmental offices, and indeed in various countries high-level civil servants are often politicized (Halligan 2003). The second dimension reflects the group of order institutions that are expected to function with less political bias and in an impartial manner, even though the actual experiences in authoritarian systems, for example, are sometimes very different. Under this dimension fall trust in the army, legal institutions and the police. A third dimension taps confidence in institutions that are mostly control institutions that check the power of institutions with elected offices, and include the media (see Table 1). In other words, citizens do make distinctions between government institutions in the way our theory predicts, particularly as political institutions are distinguished from those that help to keep law and order.

[Table 2 about here]

A cross-check with survey results from Sweden should verify our analysis. The Swedish SOM data include a variety of questions on trust in political institutions,[12] ranging from institutions of the welfare state such as schools and the health system to political institutions such as parliament and the government. Using the yearly SOM surveys from 1996 to 2003 we reach a similar result: citizens in Sweden make parallel distinctions between different types of trust in institutions in a list of ten. The factor analysis (principal component, with varimax rotation) reveals that three different dimensions of institutions emerge. Again, most political institutions with elected offices fall onto the first dimension, which includes confidence in parliaments, governments, and local governments. The second dimension again reflects the group of institutions that are of a more permanent character and less political in nature; they include the public health system, the public school system, the police, legal institutions, and defense. Here, typical order institutions and those of the welfare state come together on one dimension as predicted by our theoretical framework. The third dimension taps trust in control institutions that check power of institutions with elected offices, and includes the media. This result nicely confirms the WVS data. The question now is whether these different types of institutional confidence also reveal differences in their relationship to generalized trust. We will go beyond the attitudinal approach and analyze whether the

[12] The survey questions here were phrased with regard to trust in institutions (as opposed to confidence).

institutional characteristics of fairness and impartiality versus corruption explain levels of generalized trust in the section that follows this analysis.

5.3 Perceptions of Institutions and Generalized Trust—the Attitudinal Approach

Even more interesting in the light of our argument is the relationship between the dimensions of institutional confidence and generalized trust. In the large cross-national sample of the WVS, the correlation between confidence in political/ biased institutions, as well as between confidence in power-checking institutions and generalized trust is negative and low (see Figure 2a for evidence of the former). As predicted by our theory, there is no relationship between political institutions with elected office and generalized trust at the aggregate level. Trust in solely political institutions with elected office is mostly determined by party preference and political ideology (Citrin 1974). At the individual level, this kind of trust should fluctuate much more over time, depending on who is in power. However, in line with our expectations, we find a rather strong relationship between aggregate levels of confidence in order institutions and generalized trust. The results support the claim that societies in which the impartiality of the order institutions cannot be guaranteed, as expressed by lower citizens' confidence in these types of institutions, also show lower levels of generalized trust (and vice versa), see Figure 2b.

[Figure 2a and 2b about here]

Surely the development of our causal mechanism ensures a causal logic that underlies our empirical analysis, yet if institutions are in any way responsible for social capital in the form of generalized trust, then we ought to see a connection longitudinally as well. In other words, if institutions become more biased or less impartial over time, we would expect a negative effect on generalized trust. Similarly, if institutions become fair and impartial in a given country we would expect a positive effect. At the same time, we might expect asymmetric effects, as a loss in impartiality might be more devastating to generalized trust than a gain is to its development. This expectation is also influenced by the theoretical literature on

generalized trust, which predicts that a loss in trust is very hard to repair (Offe 1999). According to our theoretical discussion and these insights, we would expect strong negative consequences for generalized trust when trust in order institutions has declined in countries over time.

[Figure 3 about here]

For Figure 3, we compiled data from countries that participated in the first and last waves of the World Value survey. Since the first wave was taken in 1981 and the last one more recently in the year 2000, we believe that this 19 year period represents a good time frame for examining the relationship between longitudinal changes in institutional trust and generalized trust. More precisely, we will analyze whether changes in trust in the police are related to generalized trust.[13] Unfortunately, only 20 countries have data in both waves; very few countries experienced a slip in police trust, most visibly Britain, Northern Ireland, South Korea, and Japan. Two of these countries, Britain and South Korea, also experienced a rather strong decline in generalized trust. Overall, the changes in police trust and changes in generalized trust over this period of about 20 years are somewhat related. Generally, countries with a loss of 10 percentage points in confidence in the police in this period had on average a 6 percentage point loss in generalized trust. A positive or stable trend did not lead to significant positive changes in generalized trust. This result suggests that negative institutional trends relate to generalized trust, whereas it is not certain whether positive trends have an equally positive relationship. The overall correlation of changes in police trust and changes in generalized trust is .27 for the sample of 20 countries.

Since we have established that citizens distinguish between various types of institutional trust, and that at the aggregate level generalized trust is more closely related to trust in order institutions as compared to institutions with elected offices, our next task is to analyze which institutional experiences relate to generalized trust. Our theory about the causal mechanism entails that important aspects of confidence in order institutions are institutional efficiency in terms or protection and safety as well as institutional impartiality and fairness. Particularly, we emphasized four causal linkages from institutional experiences to generalized trust,

[13] Trust in legal institutions was not chosen because this item was not asked in wave 4.

namely citizens' feelings of safety and protection, citizens' inference from elites' and fellow citizens' behavior, as well as their experiences with discrimination. If these are correct, we should see that citizens are less able to trust when they experience widespread corruption, inefficient institutions, unreliable police and arbitrariness and bias of courts. We will analyze some of these propositions at the macro and micro-levels below.

5.4 Institutional Characteristics and Generalized Trust—Macro Results

The question, then, is whether not only perceptions of order institutions but also actual "objective" variances in their characteristics are related to the spread of generalized trust across countries. For this part of our analysis, we utilize the aggregate data of the World Value survey, for which we collapse the second and third wave into a cross-sectional data set. For the multivariate analysis, we identify two important institutional dimensions, which according to our theory should matter most for social capital: institutional effectiveness and institutional impartiality. We have chosen the "Government Effectiveness" point estimate indicator for 1996 used by the World Bank's research unit (Kaufmann, Kraay, Mastruzzi 2003) as our measure of institutional effectiveness. It measures the competence of civil servants, the independence of the civil service from political pressures, and the credibility of the government's commitment to policies. The main focus of this index is on "inputs" required for the government to be able to produce and implement good policies and deliver public goods. The impartiality measure is complementary and delves into the level of bias in important institutions. It is a summated rating index of three measures from the IRIS[14] data that tap the impartiality of courts and the bureaucracy as well as the corruption in politics generally (Knack and Keefer 1998).[15] In addition to our measures of institutional efficiency and impartiality we also include the common measure of longevity of democracy (Inglehart 1999) as a measure of overall institutional impartiality over time. The guarantee of politically democratic institutions over time should imply more impartial rule of law and fairer police practices compared to authoritarian regimes, although there is of course a strong variance between democracies as to the level of impartiality of their institutions. Furthermore, we

[14] IRIS stands for International Country Risk Guide (ICRG) Data which provides annual values for indicators of the quality of governance, 1982-1997, constructed by Stephen Knack and the IRIS Center, University of Maryland, from monthly ICRG data provided by The PRS Group.

[15] These are not ideal measures of institutional impartiality, yet indicators of police corruption or court corruption are not readily available

include a measure of equality of outcomes, the GINI index. More egalitarian societies without major societal socio-economic gaps are believed to achieve higher levels of generalized trust than societies in which inequality is rampant (Rothstein and Uslaner 2005).

In our multivariate model, we also include control variables that are related to generalized trust at the country level. Basic patterns of religion (Inglehart 1999), ethnic and religious fractionalization Alesina and La Ferrara 2000), the experience of communism (Howard 2003), as well as classic network indicators of social capital such as aggregated memberships in voluntary associations (Putnam 1993) should all matter for generalized trust. For example, Protestant countries, countries with a high GDP per capita and high educational secondary enrollment rates, as well as those with fewer ethnic and religious divisions should be better able to develop interpersonal citizen trust than other countries. Of course, also GDP per capita (Inglehart 1999) and educational enrollment (Brehm and Rahn 1997) play a role, yet we do not include those factors in the baseline model as they are highly correlated with our institutional variables and other controls. We should see that institutional impartiality and effectiveness matter for generalized trust holding other factors that explain variances in trust constant.[16]

[Table 3 about here]

In Table 3 we present at first bivariate results of our main indicators and generalized trust. The table reveals that most variables perform according to the expectations. Non-protestant countries, and those with high levels of ethnic fractionalization (not so much religious fractionalization), former communist countries, and those with low GDP per capita and low school enrolments all have lower levels of generalized trust. Institutions matter as well: institutional efficiency, impartiality, equality of outcomes measured by low GINI scores, as well as democratic longevity are all positively linked with aggregate trust.

[Table 4 about here]

[16] See descriptive statistics in the appendix.

In our multivariate model, we use the Protestant culture and ethnic and religious diversity, communist background as well as membership in voluntary associations as the most important cultural control variables, yet we do not utilize the other factors in the baseline model, as all institutional variables are related to the longevity of democracy, GDP per capita, educational enrolment, and these variables are also related to each other. Because of multicollinearity therefore, the institutional variables are examined individually in addition to the baseline model.[17] GDP per capita and secondary school enrolment did not withstand the multivariate test and lost statistical significance in a multivariate model. As Table 4 indicates, all institutional variables are significantly related to generalized trust, even when controlling for important societal characteristics and historical experiences. Countries with high levels of generalized trust also have the most effective and impartial institutions, and the longest experiences with democracy, as well as most egalitarian socio-economic outcomes, controlled for important societal attributes.

Moreover, our theory implies that when institutional effectiveness and impartiality come together, we should see particularly strong effects on trust. We therefore collapsed the measurement of institutional efficiency and impartiality into one index and used an interaction model as well. Countries with institutions, which are efficient as well as impartial at the same time, have significantly more trust than other countries. The interaction effect accounts for 3.2% of the variance in generalized trust.[18] In a second interaction model we compared countries with highly efficient institutions to all others and multiplied this score with the impartiality measure. Both models indicate that the effect of high institutional impartiality conditional upon high effectiveness is particularly strong. In order to fully examine the relationship between institutional characteristics and experiences as well as generalized trust, we need to analyze this connection in a multivariate micro model as well.

[17] See Delhey and Newton (2005) and Freitag (2006) for a similar approach.
[18] This was calculated by comparing the R-squared of a regression model with institutional efficiency and impartiality measures and a model with these variables and the interaction term, on this procedure see Jaccard (2003).

5.5. Linkages at the Micro Level

Do individual experiences with institutions also translate into specific patterns of generalized trust, as our theory would predict? To get closer to the way our causal mechanism operates at the micro level, we analyze whether trust in order institutions influences generalized trust in a multivariate setting. If trust in order institutions remains an important factor in relation to generalized trust, even when controlling for other variables, we would be yet another step closer to assembling the evidence for how the theory works at the micro level. We present results for tests in three different data sets: the Swedish SOM surveys, the ESC Canadian national survey as well as in the second and third waves of the World Value surveys.[19]

[Table 5 about here]

Table 5 shows three similar models in three different data sets in which we analyze the micro-relationship between institutional experiences and generalized trust. As in our macro models, here too we include various other micro level predictors that have been shown to be important for generalized trust, such as socio-economic resources, attitudes such as life satisfaction, and, of course, trust in order institutions. Of course, variables that have been put forth by other theoretical approaches are also included, such as associational membership and trust in political institutions (or trust in government). Many socio-economic resources emerge as important factors for trust; education is predominant but individual associational membership and attitudes such as life satisfaction are also significant. Model 1 includes trust in order institutions which—when controlling for all these other variables—emerges as a very strong factor: a one unit increase in trust in order institutions (a 4 point scale) corresponds to a .4 increase in generalized trust on an 11-point scale.[20] The fact that trust in order institutions holds in a model in which trust in political institutions and associational membership is controlled strengthens the idea that order institutions are not unimportant for generalized trust.

[19] Descriptive statistics are in the appendix.
[20] This effect is difficult to compare to associational involvement because of their different scales, e.g. being an associational member as compared to not being a member pushes .84 on the 11-point generalized trust scale.

In the Canadian data, we do not have the same indicators of trust in order institutions, however a ranking of some political institutions exists. According to our theory, we should find that the ranking of courts and the police as political institutions from which citizens expect impartiality and effectiveness should be highly correlated with values of generalized trust. We do indeed find the relationship between selected institutional ratings and generalized trust. Those citizens who rate courts highly are also those who trust other citizens, controlling for a variety of factors including a ranking of the government. More specifically, each additional point on the 0-100 court rating scale increases the odds of generalized trust by about 10%, controlling for other variables in the model. The courts take here a more important role than the police and the government, although also those are positively related to trust. [21] Second, we also find that Quebeckers are generally less trusting than other Canadians (Soroka et al forthcoming). It is common for minority social and ethnic groups to experience collective discrimination from a variety of political institutions, which translates into perceived unfairness or bias, and as we argue, the lack of perceived impartiality may translate into lasting feelings of distrust towards the wider society. African-Americans in the United States, immigrants in various democratic systems as well as ethnic minorities do not perceive that the system works for them (Alesina and La Ferrara 2000; Orlando 2000, Putnam 2003). Soroka et al found that immigrants in Canada do not have a favorable view of the police (forthcoming). Overall, holding other variables constant, generalized trust is positively related to education, age, employment, associational membership, whereas people in larger metropolitan areas are less trusting in Canada, holding other variables constant. Most importantly, institutional evaluations of the courts shape how citizens view other people.

Finally, this individual-level relationship is confirmed in the World Value survey as well. We are using here a summated rating scale of trust in order institutions including trust in the police, trust in legal institutions as well as trust in the army.[22] Stata's svylogit is utilized here in order to control for the nested structure of the cross-national data set. Controlling for

[21] The one point increase on the 0-100 scale for police rating increases the odds of trust by 6%, and for the rating if government scale by 5%.

[22] Since all three items were included in the second and third wave of the WVS, we utilize both of them here as a cross-sectional data set. The Cronbach's alpha using these three items is alpha=.66.

socio-economic resources, associational membership, life satisfaction, size of the community, we again find that trust in order institutions significantly relates to generalized trust. With regard to the comparison to trust in political institutions though, the results are perhaps least convincing in the World Values survey: moving from no trust to trust on the scale for order institutions yields an increase of the odds of generalized trust by about 48%, controlling for other variables in the model; whereas the same unit increase on the political trust scale increases the odds of generalized trust by 99%. Nevertheless, the importance of trust in order institutions for generalized trust holds up vis-à-vis other control variables.

6. Conclusion

Our argument is that the structure and characteristics of contemporary government institutions is an important and overlooked factor that matters for the generation of generalized trust. The theory we have presented gives an explanation for how the causal flow from impartial institutions to generalized trust might operate. The procedural fairness of these institutions influences citizens' institutional trust and, more specifically, (1) how they experience feelings of safety and protection; (2) how citizens make inferences from the system and public officials to other citizens, (3) how citizens observe the behavior of fellow citizens, and (4) how they experience discrimination against themselves or those close to them.

In our empirical section we have found support that these causal mechanisms are at work. What is special about our empirical analysis is that it works both at the micro and the macro levels. Citizens seem to make distinctions between various types of institutions, and trust in order institutions and in other institutions that implement policy is according to our findings more important for generalized trust than other types of institutional confidence, in most of our models. A key point of our discussion is the direction of causality. How do we know that institutions actually shape social capital and not the other way around? Clearly, many more tests and analyses have to be preformed in order to ensure that this direction of causality holds. For example, an ideal test ground would be quasi-experimental case studies of

institutional reform with pre/ and post- measurements of social capital. However, the first step in this discussion must surely be the development of a causal mechanism based on a strong theoretical account. Our empirical analyses can only be first illustrations of these theoretical insights. Taken alone, each of our results are not enough to make our point. Yet the causal mechanism we have developed and the multiplicity of results we presented throughout this article reveal a great deal about how civic attitudes such as trust are related to and most likely embedded in impartial, fair, and efficient institutions.

Finally, we believe that important policy implications may follow from our results. If the society-centered model is correct, governments can claim that the main problems that plague their societies are caused by too little volunteering. To make democracy work and the economy grow, citizens have to “get involved”. However, if our theory is correct, governments cannot put the blame on their citizens for the lack of social capital. Instead, the policy message becomes a very different one, namely that the lack of social capital is caused by dysfunctional government institutions.

Figure 1

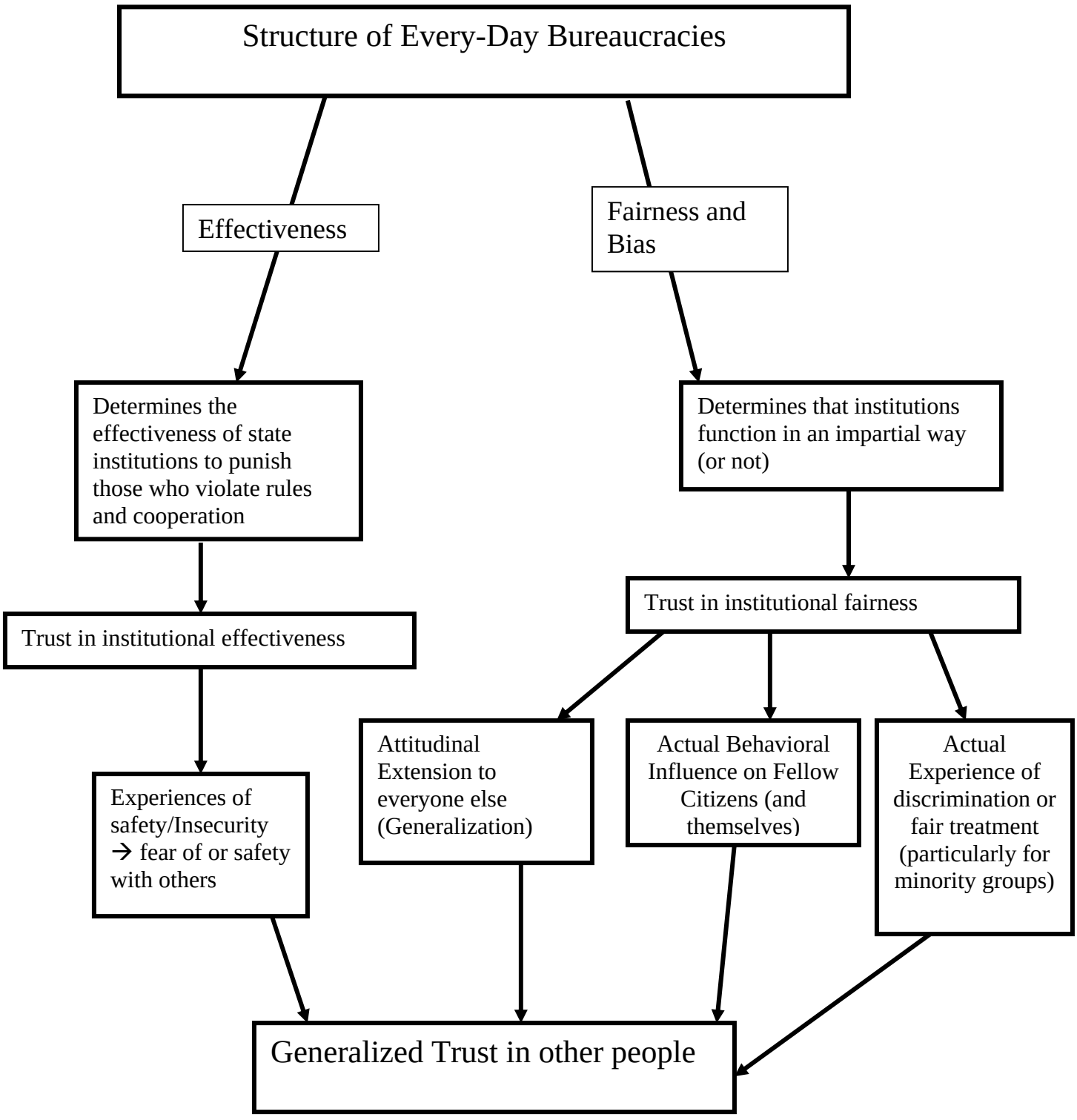
Structure of Every-Day Bureaucracies
Effectiveness
Fairness and Bias
Determines the effectiveness of state institutions to punish those who violate rules and cooperation
Determines that institutions function in an impartial way (or not)
Trust in institutional effectiveness
Trust in institutional fairness
Experiences of safety/Insecurity → fear of or safety with others
Attitudinal Extension to everyone else (Generalization)
Actual Behavioral Influence on Fellow Citizens (and themselves)
Actual Experience of discrimination or fair treatment (particularly for minority groups)
Generalized Trust in other people

Table 1
Confidence in Various Institutions
(WVS Wave 3, Number of countries=56,
Number of included respondents: 64,997)

	Factor 1: Political/ Biased Institutions	Factor 2: Neutral and Order Institutions	Factor 3: Power Checking Institutions
Confidence in Parliament	**.829**	.184	.079
Confidence in Political Parties	**.782**	.036	.150
Confidence in Government	**.740**	.267	.088
Confidence in the Civil Service	**.576**	.282	.172
Confidence in the Army	.060	**.796**	.060
Confidence in the Police	.258	**.694**	.056
Confidence in Legal Institutions	.282	**.639**	.241
Confidence in the Press	.153	.118	**.887**
Confidence in TV	.149	.131	**.878**
Explained Variance (Rotation Sums of quared loadings)	26%	19%	19%

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Table 2
Trust in Institutions in Sweden (SOM data 1996-2003)
Number of included respondents: 19,039

	Factor 1: Political/ Biased Institutions	Factor 2: Neutral and Order Institutions	Factor 3: Power Checking Institutions
Trust in Government	**.875**	.158	.047
Trust in Parliament	**.872**	.206	.100
Trust in the Local Government	**.666**	.253	.187
Trust in the Health System	.083	**.744**	.043
Trust in the Police	.209	**.727**	.042
Trust in the Defense System	.151	**.635**	.093
Trust in Schools	.154	**.531**	.249
Trust in the Legal System	.371	**.515**	.153
Trust in Newspapers	.127	.101	**.831**
Trust in TV	.105	.165	**.830**
Explained Variance (Rotation Sums of squared loadings)	22%	22%	15%

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

Figure 2a

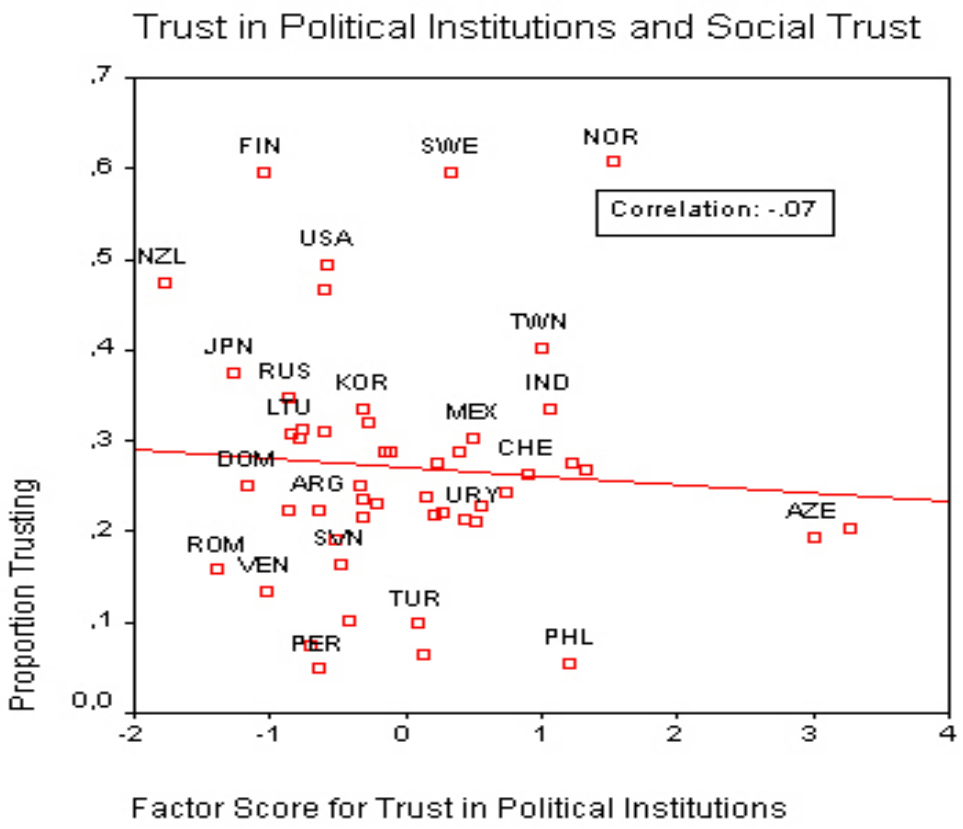

Figure 2b

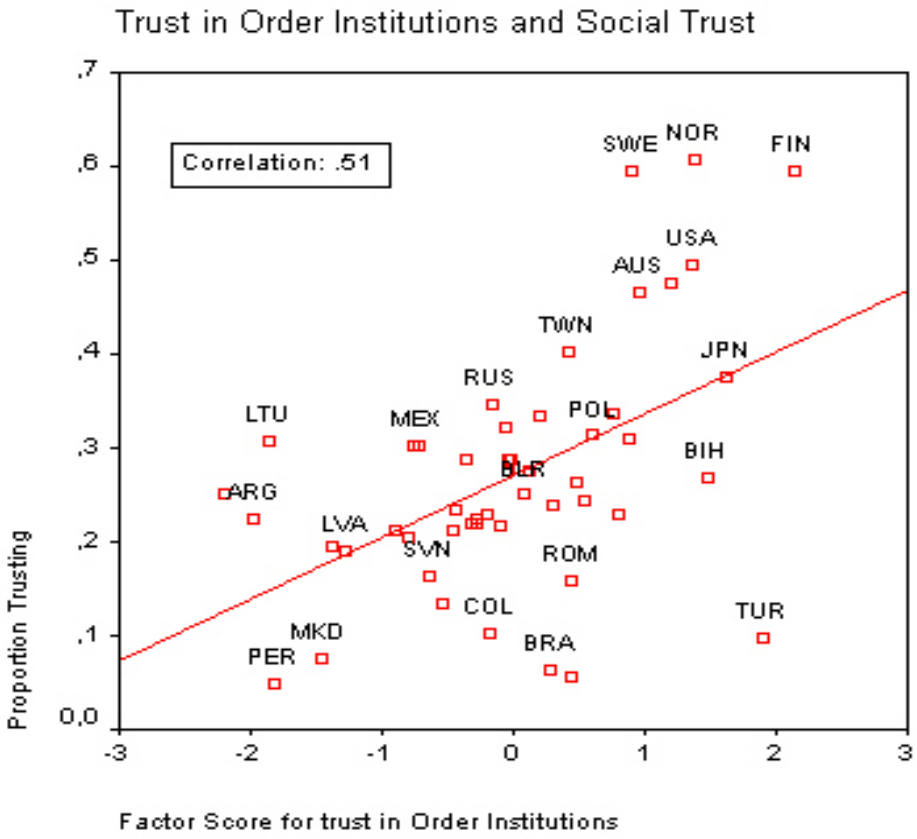

Figure 3

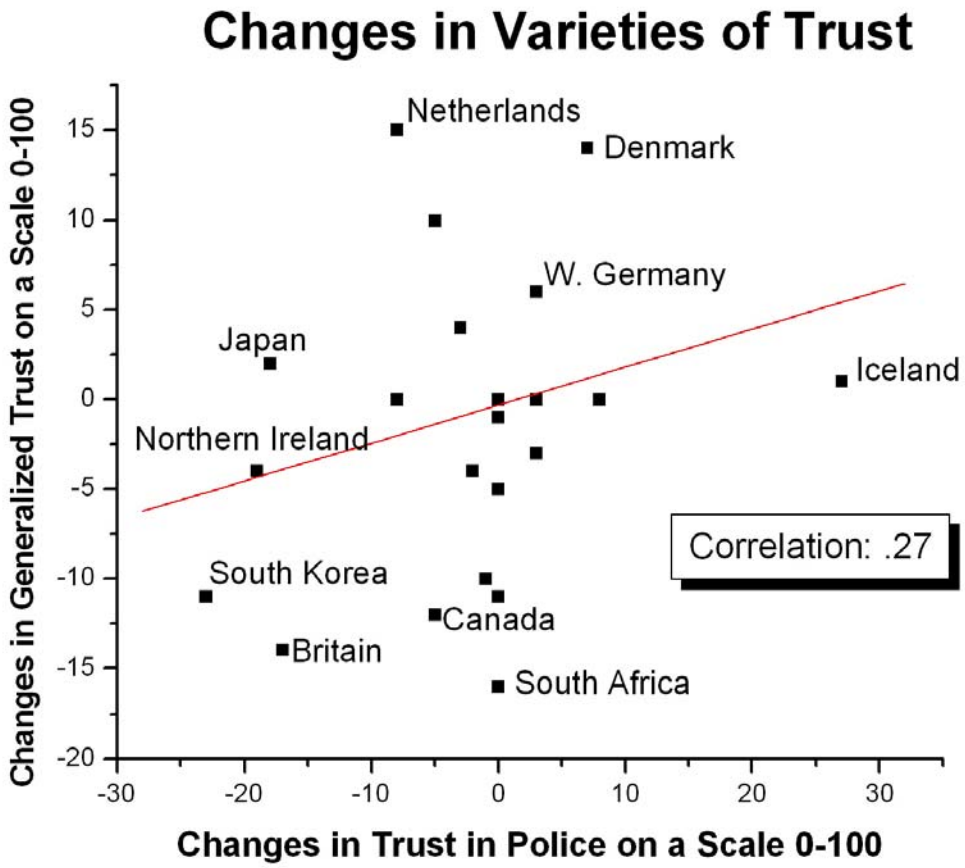
Changes in Varieties of Trust
Changes in Generalized Trust on a Scale 0-100
Changes in Trust in Police on a Scale 0-100
Netherlands
Denmark
W. Germany
Japan
Iceland
Northern Ireland
South Korea
Canada
Britain
South Africa
Correlation: .27
15
10
5
0
-5
-10
-15
-20
-30
-20
-10
0
10
20
30

Table 3: **Relationships with Generalized Trust Aggregate Level**[23]
Correlation Table

Variables	Correlation	N
Socio-political Control Variables		
Protestant Countries versus others religions (Dummy var.)	0.5473*	71
Ethnic Fractionalization	-0.3670*	71
Religious Fractionalization	0.0333	71
Former Communist Country	-0.3257*	71
Associational Membership Scale	0.1090	71
Socio-economic Variables		
Gross Domestic Product	0.5964*	68
Secondary School Enrollment	0.4730*	68
Institutional Variables		
Length of Democracy	0.6591*	71
Gini Coefficient	-0.3646*	69
Institutional Efficiency	0.6455*	68
Institutional Impartiality	0.6457*	53

* 0.05 of significance

[23] Includes the second and third wave of the world value survey.

Table 4: Institutional Characteristics and Generalized Trust

Independents Variables	Baseline Model	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
Protestant Dummy	.1568** (.0476)	.0782 (.0419)	.1642** (.0451)	.1777** (.0424)	.1278** (.0446)	.1497** (.0442)	.1105* (.0433)	.0946* (.0440)	.0877* (.0437)
Ethnic Fractionalization	-.1695* (.0844)	-.1234 (.0768)	-.1157 (.1002)	-.1157 (.1032)	-.1012 (.1027)	-.0808 (.0822)	-.0991 (.1001)	-.0878 (.0903)	-.0773 (.0868)
Religious Fractionalization	.1078 (.0851)	.0945 (.0784)	.0747 (.0909)	.0850 (.0893)	.0842 (.0861)	.0634 (.0801)	.0141 (.0914)	.0094 (.0867)	.0199 (.0835)
Communist	-.0775* (.0357)	.0269 (.0375)	-.0140 (.0354)	-.0496 (.0368)	-.0974* (.0424)	.0049 (.0393)	-.0481 (.0468)	.0287 (.0733)	.0406 (.0732)
Associational Membership	-.2045 (.3434)	-.2653 (.3299)	-.1873 (.3568)	-.1078 (.3317)	-.0386 (.3212)	-.1284 (.3403)	-.1624 (.3499)	-.2012 (.3365)	-.2246 (.3128)
Length of Democracy		.0036** (.0008)							
Gross Domestic Product			.0052 (.0031)						
Sec. School Enrollment				.0014 (.0007)					
Gini Index					-.0044* (.0021)				
Institutional Effectiveness						.0671** (.0192)		.0757 (.0493)	.0791 (.0501)
Institutional Index							.0683** (.0222)	-.0088 (.0485)	-.0502 (.0620)
Interaction Institutional Index*Institutional Effectiveness								.0519* (.0221)	
Interaction highly efficient institutions with impartiality (non-efficient institutions coded zero)									.1455** (.0520)
Constant	.3338** (.0401)	.2193** (.0351)	.2520** (.0524)	.1950** (.0674)	.4822** (.0854)	.2639** 9.0418)	.3584** (.0416)	.2607** (.0724)	.2381** (.0747)
N R^2 VIF	71 0.3962 1.32	71 .5430 1.71	71 .4890 1.67	68 0.4982 1.39	69 0.4502 1.44	68 0.5239 1.71	53 0.5070 1.48	52 0.5786 3.10	52 0.6009 3.63

** 0.01 of Significance & * 0.05 of Significance

Table 5: Explaining Generalized Trust—Individual level models

	Model 1[24]	Model 2[25]	Model 3[26]
	SOM, Sweden (1996-2000)	ESC, Canada (2002)	WVS, 74 countries (1990/95)
Constant	5.16**** (.12)	-2.58**** (.27)	-1.63**** (.06)
Education	.10**** (.01)	.12**** 1.13 (.02)	.01**** 1.00 (.00)
Age	.10**** (.01)	.01*** 1.01 (.00)	.00**** 1.00 (.00)
Married	.10** (.04)	.17** 1.13 (.09)	-.00 .99 (.03)
Unemployed	-.28*** (.09)	-.27* .76 (.15)	-.23**** .79 (.02)
Quebec (francophone)		-1.16**** .314 (.12)	
Size of Location[27]	-.00 (.00)	-.22*** 1.24 (.06)	-.03 .97 (.02)
Life Satisfaction	.53**** (.03)		.43**** 1.54 (.01)
Associational Involvement	.84**** (.11)	.30*** 1.36 (.09)	.95**** 2.58 (.06)
Institutional Trust in Order	.40****		.39****

[24] Model 1 uses OLS regression, as the dependent variable is an 11 point scale. Results show OLS regression coefficients with standard errors in parentheses.

[25] Model 2 uses Logit, as the dependent variable is dichotomous. Results show logit coefficients, with odds ratios and standard errors in parentheses below.

[26] Model 3 uses Stata's Svylogit, as individuals are clustered in countries. Results show svylogit coefficients, with odds ratios and standard errors in parentheses below.

[27] Size of location is measured slightly differently in the three data sets. In the Swedish survey, villages, small towns, large towns and cities are distinguished on a four-point scale. In the Canadian survey small towns and rural areas were distinguished from census agglomeration and census metropolitan areas. In the WVS, size of location is an 8-point scale (standardized between 0-1), distinguishing the following population sizes: <2000, 2-5000, 5-10k, 10-20k, 20-50k, 50-100k, 100-500k, 500k+.

Institutions	(.03)		1.48 (.04)
Rating of Courts		.01**** 1.01 (.00)	
Rating of Police		.00** 1.00 (.00)	
Political trust in Political Institutions or Rating of Government	.22**** (.02)	.00** 1.00 (.00)	.69**** 1.99 (.03)
Adjusted R square -2 Log likelihood Nagelkerke R square	.11	 3117.494 .142	
N	11,903	2,456	84,006
Number of aggregate units			74

*=p<.1; **=p<.05; ***=p<.01; ****=p<.001

Appendix: Descriptive Statistics Aggregate Data set (WVS, waves 2 & 3 and aggregate stats)

Independents Variables	**Measurement (source and/or question wording)**	**Coding**	**Sample Mean**	**Standard Deviation**	**Minimum Value**	**Maximum Value**	**Number of Countries**
Protestant Dummy	Alesina Dataset (2002)	Dummy	0.1830	0.3895	0	1	71
Ethnic Fractionalization	Alesina Dataset (2002)	Heterogeneity score 0-1	0.3128	0.2101	0.0119	0.8505	71
Religious Fractionalization	Alesina Dataset (2002)	Heterogeneity score 0-1	0.4613	0.1951	0.1350	0.8241	71
Communist	Author's coding	Dummy	0.4085	0.4950	0	1	71
Associational Membership WVS	Participation in Church, Sports, Arts, Parties, Environmental, Charity, Other	Additive Scale (Ave. # of membership per country)	0.2823	0.1838	0	1	71
Length of Democracy	Length of time country has been democratic, as of year of WVS wave. Beck et al. 2001.	Number of years	22.7324	24.9908	0	65	71
Gross Domestic Product	GDP per capita World Bank Data	Log	10.8099	7.8221	0.7350	29.2250	68
Sec. School Enrollment	Secondary School enrollment World Bank Data[28]	Scale	83.5702	25.3236	19.1620	142.4888	68
Gini Index	Human Development Report 2004	Index (low values=low inequality)	35.3797	9.7530	24.4	59.1	69
Institutional Effectiveness	Government Point Estimate - 1996 Kaufmann et al 2003	Index (low values =low effective.)	0.4706	0.9038	-1.05	1.98	68
Institutional Index	IRIS data set (Knack and Keefer 1998)	Index (low values=low impartiality)	0	0.9346	-1.8922	1.1878	53
Institut. Index*Inst. Effect.		Interactive	0.7385	0.8255	-0.7477	2.3518	52
Interaction dummy Inst. Effectiveness with impartiality [29]		Interactive	0.3556	0.5355	-0.7870	1.1878	52

[28] Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Secondary education completes the provision of

Descriptive Statistics Individual Level WVS

	Measurement	Coding	Sample Mean	Standard Deviation	Minimum Value	Maximum Value	Number of Countries
Education	Number of years of education	Scale	17.3528	6.2286	0	30	87
Age		Absolute	41.3707	16.1610	18	95	102
Married	Marital Status	Dummy	0.7245	0.4468	0	1	104
Employed	Employment Status	Dummy	0.5728	0.4947	0	1	101
Size of Location	Size of town	Standardized Scale	0.5446	0.3557	0	1	89
Life Satisfaction	Life Satisfaction	Standardized Scale	0.2373	0.5524	-1	1	103
Number of Associational Involvement (active membership)	Church, Sports, Arts, Parties, Environmental, Charity, Other	Standardized scale	0.4271	0.8575	0	1	105
Institutional Trust in Order Institutions	Standardized Score of Army, Police and Legal System	Standardized Index	0.5080	0.2332	0	1	102
Political trust in Political Institutions or Rating of Government	Standardized Score of Government, Parties and Parliament	Standardized Index	0.4145	0.2595	0	1	102

basic education that began at the primary level, and aims at laying the foundations for lifelong learning and human development, by offering more subject- or skill-oriented instruction using more specialized teachersSource: World Bank World Development Indicators, "http://www.worldbank.org"

[29] Non-efficient institutions are coded zero.

Descriptive Statistics Individual Level ESC data

Variables	Sample Mean	Standard Deviation	Minimum value	Maximum value	N
Generalized trust	.52	.5	0	1	2923[30]
Education	5.6	2.1	0	10	5071
Age	45.3	16.3	19	96	5016
Married	,5526	,49727	0	1	5152
Unemployed	,0991	,29885	0	1	5125
Francophone (Québecois)	.15	.36	0	1	5152
Size of location	1,58	,845	1	3	5152
Accumulative voluntary associational membership	.67	.47	0	1	5152
Trust in courts	54.5	23.2	0	100	4662
Trust in police	68.6	20.1	0	100	4949
Trust in federal government	53.3	21.7	0	100	4875
Total N listwise deletion					2456

Descriptive Statistics SOM Study

Variables	Sample Mean	Standard Deviation	Minimum value	Maximum value	N
Generalized trust	6,5104	2,37404	0	10	13532
Education	3,80	2,262	1	7	13779
Age	52,3057	17,74102	15,00	85,00	14126
Married	,6905	,46231	0	1	13780
Unemployed	,0526	,22321	0	1	13312
Size of location	2,53	,955	1	4	13749
Life Satisfaction	2.19	,613	0	3	13720
Accumulative voluntary associational membership	1,80	,613	1	4	13720
Trust in Order Institutions	2,3428	,82213	0	4	13403
Trust in political institutions	1,87	,988	0	4	13507
Total N listwise deletion					11903

[30] Fewer respondents were given the generalized trust question.

References

Alesina, Alberto, Arnaud Devleeschauwer, William Easterly, Sergio Kurlat and Romain Wacziarg. 2002. Fractionalization. Working Paper 9411. National Bureau of Economic Research. http://www.nber.org/papers/w9411

Alesina, Alberto and Eliana La Ferrara. 2000. "The Determinants of Trust," NBER working paper series. Nr. 7621.

Almond, G. A. and Verba, S. (1963). *The Civic Culture*. Princeton: Princeton University Press.

Anderson, Scott. 1999. "The Curse of Blood and Vengance." in *New York Times (Magazine)*. New York.

Baker, Kendall, Russell Dalton and Kai Hildebrand. 1981. "Legitimizing the System," In *Germany Transformed: Political Culture and New Politics*. Harvard University Press. Pages 21-37. .

Beck, Thorsten, George Clarke, Alberto Groff, Philip Keefer, and Patrick Walsh, 2001. "New tools in comparative political economy: The Database of Political Institutions." 15: 1, 165-176 (September), *World Bank Economic Review*.

Berman, Sheri. 1997. Civil Society and the Collapse of the Weimar Republic. *World Politics* 49 (3):401429.

Brehm, J. and Rahn, W. (1997). Individual Level Evidence for the Causes and Consequences of Social Capital. *American Journal of Political Science* 41, 999-1023.

Brinkley, Alan. 1996. "Liberty, Community, and the National Idea," *The American Prospect* vol. 7 no. 29.

Citrin, Jack 1974. "The Political Relevance of Trust in Government,: in *American Political Science Review* vol 68, pages 973-988.

Claiborn, M.P., and P. S. Martin. 2000. Trusting and joining? An empirical test of the reciprocal nature of social capital. *Political Behavior* 22 (4):267-291.

Coleman, James S. 1990. *Foundations of Social Theory*. Cambridge, Massaschusetts: The Belknap Press of Harvard University Press.

Conradt, David. 1984. "Changing German Political Culture," in Gabriel Almond and Sidney Verba, *The Civic Culture Revisited*. Newbury Park: Sage Publications, pp. 212-272.

Delhey, Jan, and Kenneth Newton. 2003. "Who trusts? The origins of social trust in seven societies." *European Societies* 5:93-137.

Delhey, Jan, Kenneth Newton. 2005: Predicting Cross-National Levels of Social Trust: Global Pattern or Nordic Exceptionalism? *European Sociological Review*, Vol. 21, No. 4, 311-327.

della Porta, Donatella. 2000. Social Capital, Beliefs in Government, and Political Corruption. In *Disaffected Democracies*, edited by S. J. Pharr and R. D. Putnam. Princeton: Princeton University Press.

Eckel, Catherine C., and Rick K. Wilson. 2003. The Human Face of Game Theory: Trust and Reciprocity in Sequential Games. In *Trust and Reciprocity*, edited by E. Ostrom and J. Walker. New York: Russell Sage Foundation.

Encarnación, Omar G. 2006. Civil Society Reconsidered. *Comparative Politics* 38 (3):357-376.

Freitag, M. 2006. 'Bowling the State Back In: Political Institutions and the Creation of Social Capital.' *European Journal of Political Research*, (in print).
Fukuyama, Francis. 1995. *Trust : the social virtues and the creation of prosperity*. New York: Free Press.
Fukuyama, Francis. 1999. Social Capital and Civil Society. Paper read at Conference on Second Generation Reform, Nov. 8-9, 1999, at Washington.
Granovetter, Mark. 1973. "The Strength of Weak Ties." *American Journal of Sociology* 78: 1360-80.
Hage, Jerald, and Barbara Foley Meeker. 1988. *Social Causality*. Boston: Unwin & Hyman.
Hall, Peter. 1999. Social Capital in Britain. *British Journal of Political Science* 29 (3):417-464.
Hall, Peter. 2003. "Aligning Ontology and Methodology in Comparative Politics." Pp. 373-407 in *Comparative Historical Analysis in the Social Sciences*, edited by James Mahoney and Dietrich Rueschemeyer. New York: Cambridge University Press.
Halligan, John. 2003. Leadership and the Senior Service from a Comparative Perspective. In. Handbook of Public Administration, edited by B. G. Peters and J Pierre (pp. 98-108). London: Sage Publications.
Hedström, Peter, and Richard Swedberg. 1998. Social Mechanisms: An Introductory Essay. In *Social Mechanisms: An Analytical Approach to Social Theory*, edited by P. Hedström and R. Swedberg. New York: Cambridge University Press.
Helliwell, John F. 2002. "How's Life? Combining Individual and National Variables to Explain Subjective Well-Being." Cambridge, Mass.: NBER (National Bureau for Economic Research).
Herreros, Francisco. 2004. *The Problem of Forming Social Capital: Why Trust?* New York: Palgrave/Macmillan.
Howard, Marc. 2003. *The Weakness of Civil Society in Post-Communist Europe*. Cambridge: Cambridge University Press.
Inglehart, Ronald. 1999. Trust, well-being and democracy. In Democracy & Trust, edited by M. E. Warren. New York: Cambridge University Press.
Jaccard, J. (2003). *Interaction Effects in Multiple Regressions*. Thousand Oaks: Sage Publications.
Kaase, Max. 1999. "Interpersonal Trust, Political Trust and Non-institutionalised Political Participation in Western Europe, " In *West European Politics* 22 (3).
Kaufmann, Daniel, Kraay, Aart and Mastruzzi, Massimo, "Governance Matters III: Governance Indicators for 1996-2002" (June 30, 2003). World Bank Policy Research Working Paper No. 3106.
Kim, Ji-Young. 2005. ""Bowling Together" isn't a Cure-All. The Relationship between Social Capital and Political Trust in South Korea." *International Political Science Review* 26:193-213.
Knack, Steve, and Philip Keefer. 1997. Does Social Capital Have an Economic Payoff? A Cross-Country Investigation. *The Quarterly Journal of Economics* 112 (4):1251-1288.
Knack, Steve and Philip Keefer. 1998. IRIS-3: International Country Risk Guide (ICRG). Data. 3rd Edition. College Park, Maryland: IRIS, East Syracuse, New York: The PRS Group, Inc.

Krishna, Anirudh. 2002. *Active social capital tracing the roots of development and democracy*. New York: Columbia University Press.
Kuenzi, Michelle. 2004. "Social Capital, Political Trust, and Ethnicity in West Africa." Paper presented at the Annaul Meeting of the American Political Science Association, Chicago Sept. 1-4, 2004.
Kumlin, Staffan. 2004. *The Personal and the Political: How Personal Welfare State Experiences Affect Political Trust and Ideology*. New York: Palgrave/Macmillan.
Kumlin, Staffan, and Bo Rothstein. 2005. "Making and Breaking Social Capital. The Impact of Welfare State Institutions." *Comparative Political Studies* (forthcoming).
Kydd, Andrew. 2000. Overcoming Mistrust. *Rationality and Society* 12 (4):397-424.
Levi, Margaret. 1998. A State of Trust. In *Trust & Governance*, edited by V. Braithwaite and M. Levi. New York: Russell Sage Foundation.
Lewin, Leif. 1992. The Rise and Decline of Corporatism. *European Journal of Political Research* 26:59-79.
Lipset, S. M. and Schneider, W. (1983). *The Confidence Gap*. New York: The Free Press.
Marschall, Melisssa and Dietlind Stolle (2004). "Race and the City: Neighborhood Context and the Development of Generalized Trust," in *Political Behavior* 26(2), 126-153.
Méndez, E.Juan., Guillermo O'Donnell, and Paulo Sérgio Pinheiro [eds.]. 1999. *The (Un)Rule of Law and the Underpriviledged in Latin America*. Notre Dame University Press. 1999. 357.
Newton, Kenneth. 1999a. Social and Political Trust in Established Democracies. In *Critical citizens : global support for democratic government*, edited by P. Norris. New York: Oxford University Press.
Newton, Kenneth. 1999b. Social Capital and democracy in Modern Europe. In *Social Capital and European Democracy*, edited by J. W. van Deth, M. Maraffi, K. Newton and P. F. Whiteley. London: Routledge.
Newton, Ken, and Pippa Norris. 2000. Confidence in Public Institutions. In *Disaffected Democracies. What's Troubling the Trilateral Countries*, edited by S. J. Pharr and R. D. Putnam. Princeton: Princeton University Press.
Offe, Claus. 1999. "How can we trust our fellow citizens?" In *Democracy & Trust*, edited by M. E. Warren. Cambridge: Cambridge University Press.
Olson, Mancur. 1982. *The Rise and Decline of Nations: Economic Growth, Stagflation, and Social Rigidities*. New Haven: Yale University Press.
Ostrom, Elinor. 1998. A Behavioral Approach to the Rational Choice Theory of Collective Action. *American Political Science Review* 92 (1):1-23.
Peters, Guy B. 1999. *Institutional Theory in Political Science: The 'New Institutionalism'*. London: Pinter.
Putnam, Robert D. 1993. *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.
Putnam, Robert D., ed. 2002. *Democracy in Flux: Social Capital in Contemporary societies*. New York: Oxford University Press.

Putnam, Robert and Kristin Goss. 2002. ”Introduction,” *Democracy in Flux: Social Capital in Contemporary societies*. New York: Oxford University Press: pages 3-20.
Rose-Ackerman, Susan, and János Kornai (Eds.). 2004. *Building a Trustworthy State in Post-Socialist Transition*. New York: Palgrave/Macmillan.
Rothstein, Bo, and Jan Teorell. 2005. "What is Quality of Government: A Theory of Impartial Political Institutions." Washington D. C.: Annual Meeting of the American Political Science Association.
Rothstein, B., and Uslaner, E. M. (2005). ‘All for All: Equality and Social Trust.’ LSE Health and Social Care Discussion Paper Series. London: London School of Economics and Political Science.
Sayer, Andrew. 1992. *Method in Social Science*. London: Routledge.
Scharpf, Fritz W. 1997. *Games Real Actors Play: Actor-Centered Institutionalism in Policy Research*. Boulder, CO: Westview Press.
Soroka, Stuart, John Helliwell and Richard Johnston. Forthcoming. “Modeling Trust,” with, in Fiona Kay and Richard Johnston, eds., *Diversity, Social Capital and the Welfare State*, Vancouver, BC: University of British Columbia Press.
Svendsen, Gunnar Lind Haase, and Gert Tinggaard Svendsen. 2004. *The creation and destruction of social capital : entrepreneurship, co-operative movements, and institutions*. Cheltenham, UK ; Northhampton, MA: Edward Elgar.
Stolle, Dietlind. 2001. Clubs and Congregations: The Benefit of Joining Organizations. In *Trust in Society*, edited by K. S. Cook. New York: Russell Sage Foundation, pp. 202-244.
Sztompka, Piotr. 1996. Trust and emerging democracy. *International Sociology* 11 (1):37-62.
Sztompka, Piotr. 1998. Trust, Distrust and Two Paradoxes of Democracy. *European Journal of Social Theory* 1 (1):19-32.
Tarrow, Sidney. 1996. Making Social Science Work Across Space and Time: A Critical Reflection on Robert Putnam’s *Making Democracy Work. American Political Science Review* 90 (3).
Thelen, Kathleen. 1999. "Historical Institutionalism in Comparative Perspective." *Annual Review of Political Science* 2:369-404.
Tyler, Tom R. 1992. *Why People Obey the Law*. New Haven: Yale University Press.
Tyler, Tom R. 1998. ‘Trust and Democratic Governance.’ Pp. 269-314 in *Trust & Governance*, edited by Valerie Braithwaite and Margaret Levi. New York: Russell Sage Foundation.
Uslaner, Eric. 2002. *The Moral Foundation of Trust*. New York: Cambridge University Press.
Varese, Federico. 2004. "Mafia Transplantation", in János Kornai, Susan Bo Rothstein and Rose-Ackerman (eds). Creating Social Trust in Post-Socialist Transition (pp148-168). New York: Palgrave/Macmillan
Völker, Beate and Henry Flap. 2001. “Weak Ties as a Liability—the Case of East Germany,” in *Rationality and Society* vol. 13 , no 4 , pp. 397 – 428.
Warren, Mark. 2001. *Democracy and Association*. Princeton: Princeton University Press.

Wollebæck, Dag, and Per Selle. 2002. "Does Participation in Voluntary Associations Contribute to Social Capital? The Impact of Intensity, Scope, and Type." *Nonprofit and Voluntary Sector Quarterly* 31:32-61.
Woolcock, Michael. 1998. Social Capital and Economic Development. *Theory and Society* 27 (2):151-208.
Woolcook, Michael. 2001. The Place of Social Capital in Understanding Social and Economic Outcomes. *ISUMA - Canadian Journal of Policy Research* 2 (1):11-16
Yamagishi, Toshio, and Midori Yamagishi. 1994. "Trust and Commitment in the United States and Japan." *Motivation and Emotion* 18:129-166.
Zak, Paul J., and Stephen Knack. 2001. Trust and Growth. *Economic Journal* 111 (470):295-321.
Ziegler, Rolf. 1998. Trust and the Reliability of Expectations. *Rationality and Society* 10 (4):427-450.