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# TRACING THE HISTORIC ROOTS OF GENERALIZED TRUST

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*This paper discusses the problem of empirically measuring past trust. Today, the share of the population who generally trusts others ranges from 60-70 percent in Scandinavian countries to as low as 3-4 percent in countries like Colombia and the Philippines. The reasons why certain countries have developed higher trust than others require an understanding of when trust emerged; for instance, whether the high rates of trust in Scandinavia preceded or followed the welfare state. The key problem in disentangling the historic roots of trust is that systematic measurements do not go back far enough. Trust was first systematically measured in 1942 in the United States and 1948 in Germany. The lack of older data has led scholars to develop other methods to indirectly trace historic roots of contemporary trust. They suggest that its roots are deeper than previously thought.*

## Introduction

Countries with high rates of trust and trustworthiness tend to outperform those where few trust other people. Bonds of trust defined as expectations of honest behavior allow us to put confidence in one another, which enables advanced economic exchange and social organization by lowering transaction costs (Eric Uslaner 2002).

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## Tracing the Historic Roots of Generalized Trust

Trust is a multifaceted concept with no single definition (Raymond Fisman and Tarun Khanna 1999). One view is that societies require a degree of “generalized morality” to discourage opportunistic behavior (Mark Granovetter 1985; Fisman and Khanna 1999). A commonly cited definition of trust is provided by Diego Gambetta, who notes that “when we say we trust someone or that someone is trustworthy, we implicitly mean that the probability that he will perform an action that is beneficial or at least not detrimental to us is high enough for us to consider engaging in some form of cooperation with him” (1988, 274).

No society is of course entirely without trust, and most people tend to put trust in their kin, clan, neighbors, close friends, or other cohorts. Trust in particular individuals, whom one knows and often resembles, is called particularized trust. Another type of trust that has intrigued scholars is generalized trust in other people—that is, a tendency to view the typical stranger as inherently trustworthy. In the most common measure of trust, the share of respondents who chose the alternative “Most people can be trusted,” rather than “You can never be too careful when dealing with others,” varied widely. It ranges from 3–4 percent in Columbia and the Philippines to 60–70 percent in Norway, Sweden, and Denmark.

A high rate of generalized trust is desirable, since it is associated with a range of favorable outcomes. The differential economic performance observed across nations is difficult to explain satisfactorily without taking into account trust and other cultural variables (Elinor Ostrom and Toh-Kyeong Ahn 2009). Ostrom points out that trust, reputation, and reciprocity are mutually reinforcing to overcome collective action problems. Individuals with internalized norms of reciprocity reward trustworthy actions and punish opportunism. In environments with norms of reciprocity, the payoff is higher for investing in trust and creating a trustworthy reputation (Ostrom 2003).

Geoffrey Hosking (2006) argues that trust is a theme that should be studied more by historians, as the type and level of historic trust is vital for the understanding of historical events. His paper reviews historical studies on trust and shows that taking social cohesion and trust into account can greatly enhance the understanding of events in European history. He further argues that historians can contribute to the trust literature since they study the flow of events and tend to have an

understanding of context, whereas other fields often study trust in isolation at one point in time. Hosking concludes his call for more studies on trust in the field of history:

In brief, then, I believe that examining the way trust has worked in different societies can provide a way in towards investigating problems which are otherwise difficult to conceptualise adequately. That is a good reason for suggesting that historians should ask more systematic questions about the operations of trust. (2006, 115)

Hosking (2014) further discusses trust in past societies and the importance of trust for understanding historical events, including the development of capitalism.

The trust literature is large and dispersed, and therefore summarized in several review articles. While there are many literature reviews on various important topics in trust research, ours is the first to summarize the literature on the historic roots of trust. We particularly focus on the empirical measurement problem of historic trust rates.

Trust has received a great deal of attention in social sciences, with thousands of empirical studies in political science, economics, sociology, business, and psychology. Until recently, less was however known about its developmental history and the extent to which the past exerts an influence on contemporaneous trust levels. In recent years, trust has also been afforded increasing interest by historians and economic historians (e.g. Saumitra Jha 2013). The recognition of the importance of the topic makes it likely that this fruitful line of research in this and similar recent papers will expand further.

This paper is organized as follows. The first section will outline theories on general determinants of trust and explain the necessity of historical perspectives as a complement to these general theories. The next section will discuss the history of measuring trust—thereby discussing the history of trust empiricism and briefly outline nation-level results and trends. The third section will review literature on trust levels among immigrants and their use as proxies for historical trust levels. The following section will review empirical historical studies of trust in various parts of the world. The penultimate section will review theoretical

## Tracing the Historic Roots of Generalized Trust

literature on the unique Scandinavian high trust and its historic roots. Finally, section 6 discusses and concludes the paper.

### **General Theories on the Origins of Trust**

At the theoretical level, there appear to be two ways to look at culture and trust. The *macro-theory of culture* studies why a particular cultural trait has developed in a given society. Another approach that can be called the *micro-theory of culture* is to view culture as an individual phenomenon, and try to answer why people hold particular cultural views—thus, conceiving culture as a form of human capital (Gary Becker 1962; 1996; Becker and Kevin Murphy 2000; James Heckman 2000). Human capital is the result of individual choice and investment, whereas culture is mostly the result of the beliefs of others, not the least in past generations. Culture is difficult to design and instead evolves through more spontaneous and unpredictable processes. Due to the complex and decentralized process through which culture develops, culture is not rationally designed—although it is the result of human actions (Friedrich Hayek 1979; Péter Gedeon 2015). Cultural capital is only sometimes the result of conscious investments and often reflects habituation to moral norms (Francis Fukuyama 1995).

Trust and trustworthiness can be seen as hardwired norms that accumulate over time. While the expectations and values of other members of society are central, cultural capital to some degree also involves conscious choice. Alberto Bisin and Thierry Verdier (2001) analyze the intergenerational transmission of cultural traits as decisions of rational agents, assuming that parents socialize their children and have an inclination to pass on their own preferences. One finding is that family and society can be substitutes in the transition mechanism. When the cultural traits parents wish to transmit belong to only a minority of the population, parents will socialize their children more intensely compared to a situation where the cultural traits are possessed by the majority population. The importance of trust in economics is not surprising, given its role in facilitating exchange. Since transaction costs are prevalent and limit the size and scope of organizations and markets, any method that reduces them is of fundamental importance (Ronald Coase 1960). Throughout history, different societies have developed various tools towards unlocking

exchanges, either through various forms of trust or through formal institutions, such as state regulations.

Connections among individuals as well as associations, such as fraternities and book clubs, contribute to trust. The London Stock Exchange originally developed in the eighteenth century from a private club, meeting in a coffee house (Edward Stringham 2015). Although the terms are sometimes used interchangeably, the concept of trust can be viewed as distinct from social capital. Robert Putnam defines social capital as “social networks and the norms of reciprocity and trustworthiness that arise from them” (2000, 17).

The seminal work of Elinor Ostrom showed how communities solved collective action problems by evolving institutional arrangements (Ostrom 1990). According to Ostrom, trust and reciprocity were key factors for the success of self-organized government systems (Ostrom 2010). Trust is critical for bringing about collective actions since each individual’s cooperative behavior in contributing to public goods carries the risk that others might free ride. Through repeated interaction, reciprocity and reputation for trustworthiness can enable communities to overcome the collective action problem (Ostrom, Roy Gardner and James Walker 1994; Adam Henry and Thomas Dietz 2011).

An important theoretical insight is that trust acts simultaneously as a substitute and as a complement to formal institutions (George Akerlof 1997; Claudia Williamson and Rachel Mathers 2011). In some situations, high rates of trust generated through social capital—based on cultural norms developed in the past, through civic society, or in other ways—is complementary to formal institutions (Williamson and Mathers 2011). In other situations, they can be substitutes since strong formal institutions and trust are different tools to reduce transaction costs. Philippe Aghion, Yann Algan, Pierre Cahuc and Andrei Shleifer (2010) find that regulation and trust act as substitutes, and that government regulations are negatively correlated with trust at the cross-country level. One explanation may be that the lack of trust increases the public’s demand for state regulation. When private property rights and contracts are not formally enforced, society can compensate by using trust as a substitute (Peter Leeson 2007a; 2008). When the formal state collapsed in Somalia, order was nevertheless maintained by relying on the clan, trust, and reciprocity within kinship

## Tracing the Historic Roots of Generalized Trust

groups. In this particular case, where the formal state was oppressive and corrupt, Somalia paradoxically performed better in many social and economic outcomes following the breakdown of the state (Leeson 2007b; Benjamin Powell, Ryan Ford, and Alex Nowrasteh 2008). In the best case, when economies enjoy both well-functioning formal institutions and high levels of trust, economic development receives an additional boost.

While there exist different cultural tools that societies have developed to reduce transaction costs, not all are equally efficient. As will be discussed in later sections, many historical and contemporary societies rely on kin- or in-group-based particularized trust, but lack in universal trust toward people who do not belong to the same group. Particularized trust can be effective in many situations, and is certainly better than no trust, but is less scalable when it comes to organizing modern economies with exchange within and across countries. In societies with limited morality, codes of conduct and norms of honesty are confined to small circles—such as the family, the clan, or the tribe. Against outsiders, opportunistic behavior is regarded as morally acceptable (Guido Tabellini 2010). In a classical ethnographic case study, Edward Banfield (1958) observed life in a rural village in Southern Italy. He concluded that behavior was characterized by “a moral familism,” where moral principle was regarded as irrelevant when dealing with non-family members. The villagers were observed to be self-interested and focus on the short-run advantage of the nuclear family, and moreover assumed that others behaved likewise. The interest of the group or community was not furthered unless it was believed to be to one’s immediate private advantage. By contrast, societies with generalized morality instead apply principles of good and evil as well as abstract rules of good conduct broadly. The process of economic development historically appears to have been facilitated in cultures that made the transition from merely having particularized trust to developing both particularized and generalized trust. Research has not yet conclusively determined why this transition happened in some societies and not in others, nor precisely when it happened. The recent wave of research suggests that trust is indeed rooted in historical experience, although the result is not conclusive due to the problems of accurately measuring trust in the past.

## The History of Measuring Trust

Survey questions on trust are amongst the earliest questions asked in scientific public polling (Hadley Cantril and Mildred Strunk 1951). The first instrument for measuring trust was such self-reported questions, which were later supplemented with behavioral measurement in laboratory experiments (Paul Bauer and Markus Freitag 2018).

A 1942 survey by the Office of Public Opinion Research (OPOR 1942) in the United States appears to have introduced the first question on trust (Bauer 2015). The question was: “Do you think most people can be *trusted*?” Respondents were offered the choice to answer “yes,” “no,” “no opinion,” or a “qualified answer.” In 1942, 66 percent answered yes while 25 percent answered no. This formulation of the trust question was later also used by others, such as The University of Chicago National Opinion Research Center (Tom Smith and Guy Rich 1980).

This first measure of trust was later replaced with a somewhat more sophisticated measure, which provided respondents with a balanced choice. It turns out that the share of people who chose the trusting answer is significantly lower if given a second choice, which articulates why one might not trust others. Instead of only asking “Do you think most people can be *trusted*?,” and asking respondents to choose yes or no, the question is balanced by reminding about the possibility of distrust by providing two alternatives: “Some people say that most people can be trusted. Others say you can’t be too careful in your dealings with people.” The balanced version of the most-people question is now the standard question used to estimate trust and appears to have been coined by Morris Rosenberg (1956). This subtle change reduces the share answering yes by about 20 percentage points in the United States (Putnam 1995). In-depth analysis indicates that this could be because the question is interpreted differently. The simple question and the balanced version are not directly comparable, but both show a decline of trust over time in the United States (Putnam 1995). The National Opinion Research Center has in various years with irregular intervals used the simple version of the trust question, which as noted tends to register a higher level. American rates of trust in these surveys were stable or somewhat increasing from the 1940s, peaking at 77 percent in 1964, after which they declined to 57 percent in 1983 (Smith 1996).

## Tracing the Historic Roots of Generalized Trust

The National Election Study started to measure trust using the balanced version in 1964 in election years, and generally shows a decline from 53 percent in the first survey to around 35–40 percent in more recent surveys. The American social survey with the most consistent and regular estimates of trust is General Social Survey (GSS), which first measured trust using the balanced version in 1972. In that year, 48 percent of Americans answered yes on whether strangers could be generally trusted. By 2016, the share of trusting people as measured by GSS had declined to 31 percent.

In addition to the United States, West Germany is a country with early research on trust that produced long time series. Trust increased from the low rate of 9 percent in the fearful and paranoid postwar climate of 1948, rising gradually to 13 percent in 1953, 28 percent in 1964, and 37 percent in 1990 (Thomas Cusack 1997; Kenneth Newton 2001). In communist East Germany, the share that expressed trust in others was around 26 percent in 1990.

The question if most people can be trusted is not the only survey-based measure on interpersonal trust. Julian Rotter (1967) viewed trust as an innate personality factor rather than a belief, and developed a more detailed measure with several additional questions, which continues to be used in psychological research. Rotter's instrument for measuring interpersonal trust contains no less than 40 questions. For cross-country purposes, however, the balanced question developed by Rosenberg (1956) has become dominant. One practical reason is that longer surveys, such as Rotter (1967), are more costly and complicated to carry out, whereas the brief trust question provides a great deal of information (Bauer and Freitag 2018). Including one question is easy in phone surveys or when added to longer social surveys. The survey question on trust is one of the most robust and parsimonious cross-cultural measures. This is both due to consistency and stability across different surveys, as well as the fact that the answer is strongly linked to outcome variables.

Another early measure of trust was reported by Sidney Verba and Gabriel Almond (1963) as part of the Civic Culture Study, which measured trust in a sample of one thousand individuals in five countries in 1959. The share who responded yes on the trust question was 7 percent in Italy, 19 percent in Germany, 49 percent in the United Kingdom, and 55

percent in the United States, respectively. In Mexico, 30 percent responded yes on the trust question, though in this case the figure may have an upward bias since only cities were sampled.

Aside from interpersonal trust, a wide body of literature in political science has measured the so-called trust-in-government. The question was first developed by Donald Stokes (1962) and included in the American National Election Studies starting in 1964. Trust in various political institutions continues to be regularly measured by the European Social Survey and similar questionnaires (Margaret Levi and Laura Stoker 2000).

The first wave of the World Values Survey was conducted from 1981 to 1984 in ten countries: Argentina, Australia, Finland, Hungary, Japan, Mexico, South Africa, South Korea, Sweden, and the United States. The share of respondents who answered that others could be trusted was highest in Finland at 56 percent, followed by Sweden at 53 percent. The share was lowest in Mexico with 17 percent. In the 2014 European Social Survey, the four Nordic countries were the most trusting. Unlike the United States, trust rates in the Nordic countries are stable or perhaps weakly increasing rather than decreasing (Ulf Andreasson 2017). The Eurobarometer of 1970, 1976, and 1986 instead measured perceived trustworthiness of people from certain other European countries. Denmark was the Nordic country included and ranked as most trustworthy by other Europeans.

Beginning with the Swiss Household Survey and later the European Social Survey, the dichotomous standard measure was replaced with an 11-point scale. This measure, in theory, offers greater precision for estimating trust than yes or no questions, but has been criticized since the scale in practice leads people to choose the middle options, regardless of whether they are trusters or mistrusters (Uslaner 2018).

An interesting experiment asked respondents to think aloud when answering the standard trust question. The results suggest that the standard question indeed performs well for its purpose, and that respondents bring up general evaluations of society, rather than particular acts (Uslaner 2002). Many questions on trust include the phrase “most people.” Paul Bauer and Markus Freitag (2018) probed who students asked the trust question had in mind when considering the category “most people.” The results suggest that many brought up broad categories—such as humans,

## Tracing the Historic Roots of Generalized Trust

people, and strangers. Some think of people they know—such as friends, acquaintances, and fellow students—whereas others mentioned those they meet in public arenas—such as on the street or on public transportation.

Global surveys that sometimes measure trust include the European Values Study, the Eurobarometer, the Afrobarometer, the Arabbarometer, the Latinobarometer, the Asianbarometer, and the Eurasiabarometer. These surveys have small sample sizes and sometimes differ in methodology, which makes the result vary by year. Nevertheless, the overall results are surprisingly consistent. Trust rates are higher in Western Europe and East Asia, but lower in Africa, Latin America, and the Middle East. China has relatively high trust levels with a 40 percent trust rate in Mainland China, 41 percent in Taiwan and 29 percent in Hong Kong. However, there are indications that these results may be inflated by a culturally-induced response bias (Christoph Steinhardt 2012).

In sum, as Bo Rothstein and Uslaner (2005) document, a fairly stable pattern indicates that Nordic countries top the international rankings, whereas the least trusting countries are found in the Middle East, Africa and parts of Latin America. Table 1 below shows trust rates across global regions averaged out by decade, based on the average of the World Values Survey and the European Values Study. In addition to country averages, we report mean values for regional groups based on our classification. Note that the trust rate compared to 1959 has greatly increased in Germany and Italy, declined sharply in the United States, and declined somewhat in the United Kingdom. Trust surveys have small samples and come from several different surveys that differ in method. This creates a large degree of sampling variation in the surveys, which makes it difficult to disentangle real trends from noise. Overall, the trust rate between the 1980s and 2000s is fairly stable in most countries.

Two countries that can be studied over longer periods of time are the United States and West Germany. Figure 1 below reports the four averages of various surveys from 1942 to 2016. The earliest American data rely on the simple question alternative from the National Opinion Research Center and the Office of Public Opinion Research, merely asking whether “Most people can be trusted.” The later American series as well as both German series use the standard trust question, where the question also explains the alternative view, “You can never be too careful when dealing with others.”

**Table 1**  
Trust rates across global regions by decade

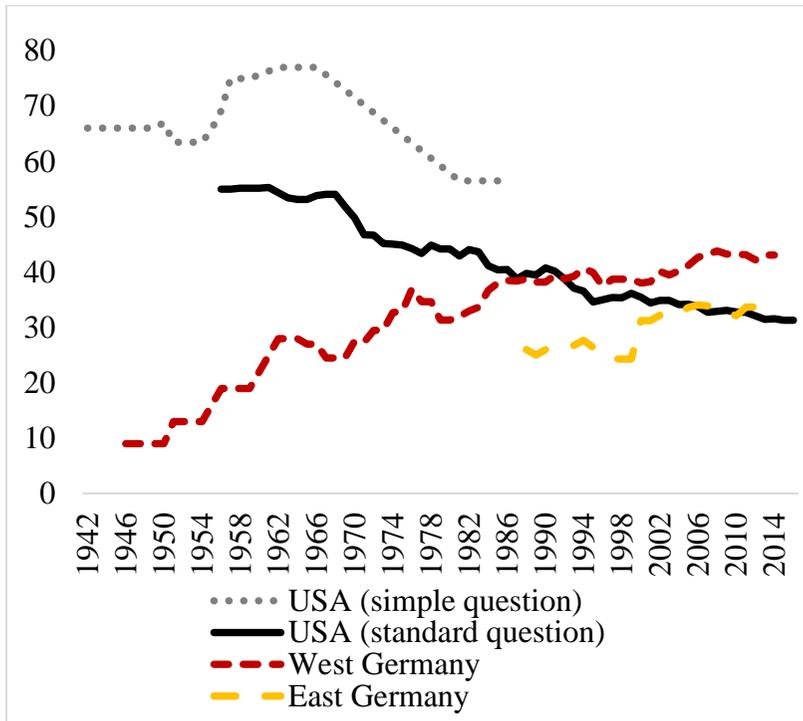
Countries	1980s	1990s	2000s+
Sweden	60	63	67
Finland	60	53	62
Iceland	42	41	51
Norway	63	65	75
Denmark	55	67	76
Nordic countries	56	58	66
Estonia	28	23	36
Lithuania	31	24	30
Latvia	19	21	26
The Baltics	26	22	31
Austria	32	33	37
Germany	33	35	40
Switzerland	n.o.	42	55
Belgium	31	29	35
Netherlands	49	60	58
Western Europe	36	40	45
Ireland	44	36	39
Northern Ireland	44	40	31
UK	43	30	35
British Isles	44	35	35
Czech Republic	26	28	30
Slovakia	22	22	13
Hungary	29	23	25
Poland	29	24	23
Slovenia	17	19	21
Central Europe	25	23	22
France	24	21	23
Italy	31	33	30
Portugal	22	12	17
Spain	36	33	25
Southern Europe	28	25	24
Bulgaria	30	28	20
Romania	16	14	15
Russia	n.o.	28	29
Belarus	n.o.	31	40
Eastern Europe	23	25	26
United States	46	36	37
Canada	51	n.o.	43
Australia	48	40	49
North America/Australia	48	38	43

## Tracing the Historic Roots of Generalized Trust

Countries	1980s	1990s	2000s+
Argentina	27	20	19
Brazil	n.o.	7	8
Chile	n.o.	22	13
Mexico	18	31	14
Latin America	22	20	13
Japan	41	42	39
South Korea	38	32	27
China	n.o.	56	58
East Asia	26	44	41
Nigeria	n.o.	20	15
South Africa	29	23	23
Africa	29	22	19

*Source:* see text.

*Note:* n.o. denotes no observation.



*Source:* see text

### Figure 1

Survey comparison of trust rates in the United States and Germany

The later American source using the standard alternative is the average of the National Election Study, the General Social Survey, the Civic Culture Study, and the World Values Survey, for available years. The German studies are the Civic Culture Study and the World Values Survey, as well as the European Value Survey combined with earlier German data from Thomas Cusack (1997). Since the data reflect a mix of several different surveys over a long period of time, both the German and American figures should be viewed only as a rough approximation to illustrate the long-term trend, with an increase in Germany and a decrease in the United States in the postwar era.

In addition to surveys, a more recent literature has emerged to test trust using laboratory and field experiments. The pioneering paper that used laboratory experiments of trust was by Morton Deutsch (1960), who relied on the classical prisoner's dilemma to observe rates of trust. Later research now more commonly uses the trust game or versions thereof (Joyce Berg, John Dickhaut, and Kevin McCabe 1995). In this game, one agent is allocated a fixed amount and given the choice to send all, none, or a portion of it to the second player. The sum sent is multiplied by a factor, and the second player is in turn given a choice to send some back or act opportunistically. Other studies have developed more advanced games and laboratory experiments to study the interactions of trust, exchange, and cooperation (e.g. Ernst Fehr, Urs Fischbacher, Jürgen Schupp, Bernhard von Rosenblatt, and Gert Georg Wagner 2003; Eric Kimbrough, Vernon Smith, and Bart Wilson 2008). Maria Bigoni, Stefania Bortolotti, Marco Casari, Diego Gambetta, and Francesca Pancotto (2016) carry out a refined experiment comparing trust in Northern and Southern Italy, suggesting that the cooperation gap is in part due to different social norms.

Stephen Knack and Philip Keefer (1997) utilize another type of non-laboratory experiment, using an experiment by the periodical Reader's Digest, where wallets were dropped in a number of cities across the world in order to measure how many were returned by finders. The percentage of wallets returned is strongly correlated with the share that replies yes on the question if they generally trust strangers.

Edward Glaeser, David Laibson, José Scheinkman and Christine Soutter (2000) compare behavior in laboratory experiments using real money with attitudinal survey questions. They find that the survey

## Tracing the Historic Roots of Generalized Trust

response does not predict trust in other players but does predict trustworthiness—in that individuals who self-report that they generally trust others are more likely to behave in an honorable way in the game. Both for experimental behavior and survey responses, some have argued that variation in trust at the individual level may have a hereditary component (e.g. Patrick Sturgis, Sanna Read, Peter Hatemi, Gu Zhu, Tim Trull, Margaret Wright, and Nicholas Martin 2010; Uslander 2018).

Paola Sapienza, Anna Toldra-Simats, and Luigi Zingales (2013) study the relation of the trust experimental game and the survey questions in greater detail. Their approach lets individuals play both roles in the game and further explicitly asks them about their expectation of the trustworthiness of their counterpart. After separating variation in behavior driven by preferences, they find that the standard survey question indeed does predict trust, defined as belief in others.

### **Trust Levels of Immigrants as Proxies of Historical Trust**

To elucidate the processes that create and maintain trust, several studies have focused on the trust level of immigrants (Algan and Cahuc 2010; Luigi Guiso, Sapienza, and Zingales 2006; John Helliwell, Shun Wang, and Junwen Xu 2014; Putnam 2000; Tom Rice and Jan Feldman 1997; Uslander 2008). The idea behind this method is to study the effect of cultural origin on economic behavior by comparing immigrant groups from different ancestry in the same country (Paola Giuliano 2007). This approach allows for many factors other than culture to be held constant, which would not be the case if one compared countries rather than cultural groups within a single country.

Guiso et al. (2006) show that ancestral origin affects trust levels of US immigrants, which correlate highly with trust levels in their home countries. Uslander (2008) has separated the effects of living among others of high-trust backgrounds from inherited trust. While some evidence is found for both, the effect of inherited trust is found to be greater.

Christian Bjørnskov and Gert Tinggard Svendsen (2013) use the current trust levels of third-generation immigrants in the United States to proxy the historical trust level in their ancestors' country of origin. The paper finds that ancestral trust among American third-generation immigrant groups is associated with current trust and welfare state size.

This can be interpreted as an indication that a high stock of trust predates the modern welfare state, and that high rates of trust in the past facilitated the emergence and sustainability of a larger welfare state.

Another comparison between individual trust levels for Americans, and the current national average in their country of ancestry, shows a correlation just as strong for those whose parents migrated as for those whose grandparents migrated. This suggests a long-term persistence of inherited trust (Rice and Feldman 1997).

A study on individual trust levels of Canadian immigrants from several countries found a significant source-country footprint, but found the effect to be smaller for those whose families had lived longer in Canada (Stuart Soroka, Helliwell, and Richard Johnston 2007). American immigrants to Israel have been found to be more trusting than Russian immigrants to Israel (Zvi Gitelman 1982).

Peter Thisted Dinesen (2012; 2013) studied immigrants in Europe, finding support for both the experiential and inherited perspectives, but a larger effect from experience for immigrants from Western countries. Moreover, second-generation immigrants in Western Europe are more adapted to local trust levels than first-generation immigrants (Dinesen and Marc Hooghe 2010).

A study using data from 132 countries in the Gallup World Poll 2005–2012 found that trust among immigrants mainly reflects the conditions in the current country of residence, but a significant influence from the country of origin is also observed by Helliwell et al. (2014). The strength of the “migrant footprint” was here inversely proportional to trust levels in the countries of origin, and migrants from low-trust environments are more likely to import low trust than migrants from high-trust environments are to import high trust.

Algan and Cahuc (2010) compare the trust rate of Americans with immigrant ancestors today with the country of origin and approximate time of arrival of their ancestors. They assess the path of cultural transmission by categorizing the respondents into second-, third-, or fourth-generation migrants, depending on how many US-born parents and grandparents the respondents had. Comparing inherited trust with GDP per capita in the source country, their main findings are that inherited trust can

## Tracing the Historic Roots of Generalized Trust

explain a significant share of the variation in economic development between countries.

### **Empirical Studies on Historical Determinants of Current Trust**

Avner Greif (1994) conducts a comparative historical analysis of the relationship between culture and institutional structure. The study contrasts collectivist cultures with individualist Western cultures. The former have a segregated social structure, where individuals mainly interact with other members of a specific familial, ethnic, or religious group. Collectivist cultures encourage being involved in the lives of other group members and enforce contracts through informal institutions. Individualistic cultures, by contrast, value self-reliance, engage in transactions between people from different groups, and enforce contracts mainly through specialized organizations like courts. Greif (1994) uses a historical case where he compares how the problem of organizing long-distance trade was solved in different cultures. He juxtaposes the individualistic Genoese merchants with the collectivistic Maghribi from Northern Africa. The latter were Jewish traders living in the Muslim world. Both groups undertook long-distance trade in the Mediterranean during the Middle Ages. The two groups developed different solutions to the common problem of honoring contracts and exchanging information. The Maghribi were a segregated community with tight social and familial ties. Their collectivist enforcement mechanisms involved the risk of being informally embargoed and penalized by collective punishment from the group for improper behavior. The individualistic Genoese instead relied on an extensive legal system for registration and enforcement of contracts, using courts and codified law. The collectivist Maghribi system was characterized by horizontal and comparatively egalitarian ties, whereas the individualist Genoese system was hierarchical. Interestingly, both systems functioned efficiently in solving the contract enforcement problem. The collectivistic system required less costly formal organization, such as law courts, but was more restrictive than the individualistic system in terms of scaling up in the long run.

Modern studies have further investigated the transformation from clan- and kin-based societies toward universalist social structures. It should be noted that Europe also used to have kin-based norms, but that

these over time were dissolved and replaced by more individualistic and formalistic social structures. This process had in part already taken place in Northern Italy by the period examined in Greif (1994). In an ambitious study, Jonathan Schulz (2018) compiles detailed historical data in Europe to investigate the role of the mediaeval Catholic Church's marriage policies on dissolving kinship networks. In the Middle Ages, social organization in Europe was commonly based on closely-knit kinship networks. The Catholic Church enforced prohibitions on cousin marriage, including second up to sixth cousins. These policies helped dissolve kinship networks and thereby fostered more inclusive and universal institutions. Schulz (2018) shows that longer exposure to the church predicts higher rates of trust in others today.

### *Trust in Historical Europe*

Putnam, Robert Leonardi, and Raffaella Nanetti (1993) argued that the medieval free city-state experience in Northern Italy was important for the accumulation of social capital, which in turn influenced institutional efficiency. This notion was further studied by Guiso et al. (2016), who emphasized the power vacuum in the Northern Italian peninsula following the fall of the Carolingian Empire, which led to the emergence of a plethora of free city-states. Some city-states formed pacts among prominent families to provide mutual help and solve common problems in the absence of a central state. The pact was enforced by threats of economic and religious ostracism, and the city bishop was commonly the guarantor.

The city-state provided law and order, administered taxation, and maintained infrastructure as well as provided protection. Political power emanated from the people rather than from religious or dynastic authority, even though elite families had a powerful influence. This form of government allowed for an unusually high degree of rule of law and personal freedom for its time (Guiso et al. 2016). The broad participation led to civicism and a sense of responsibility for the common good. By contrast to the free city-states, feudalism in Southern Italy inhibited the accumulation of social capital.

Guiso et al. (2016) attempt to use instrumental variables to deal with the effect of confounding factors. Two instruments were used for

## Tracing the Historic Roots of Generalized Trust

predicting whether a town became a free city-state: first, whether cities were the seat of a bishop by the year 1000; second, whether cities had Etruscan origin. The latter is based on a military defense argument. Cities located in areas with better defensive properties were more likely to emerge as sovereign city-states, and Etruscans as early founders of cities in their regions picked more defensible locations. These instruments are used in a model that compares social capital—measured as non-profit organizations, turnout at major referenda, and organ donation organization. Based on this analysis, the paper argues that the experience of being a city-state increased the rates of social capital. Alberto Alesina and Giuliano (2015) argue that this empirical identification relies on instruments that cannot rule out other mechanisms or explanatory factors, since city-state status was not exogenously determined and instead was related to, among other things, geographical factors that could affect development in other ways. The analysis of the persistence of institutions in Italian city-states in Guiso et al. (2016) is highly interesting and compelling, but does not constitute a clear experiment.

Algan and Cahuc (2014) provide an extensive survey of the literature on trust, institutions, and economic development. In addition to the strong correlation between trust and economic performance, modern papers that use elaborate strategies to capture causal effects also suggest that trust contributes to economic activity.

Tabellini (2010) uses regional literacy rates at the end of the nineteenth century, as well as an institutional variable estimating constraints on the executives in the years 1600 to 1850, as instruments to estimate the effects of current culture on economic development. Trust is found to be associated with economic development.

Johannes Bugge (2016) uses the German Socio-Economic Panel to compare levels of trust within various parts of Germany. Areas that for a longer period of time were exposed to the Code Napoleon legal system were found to have higher rates of trust today. The Napoleonic civil code was introduced in the nineteenth century and is believed to have modernized the system of law as well as regulations relating to serfdom guilds.

Irena Grosfeld, Alexander Rodnyansky, and Ekaterina Zhuravskaya (2013) estimate the long-term effect of Jewish settlement in the Russian

Empire on trust and anti-market attitudes. Historical Russia discriminated against Jews and only allowed Jewish settlement in certain parts of the country, referred to as the “Pale of Settlement.” The study uses discontinuities at the border to measure current attitudes. Since the Jewish population today is small in the former Russian Empire, the authors compare the local population in areas that used to have large-scale Jewish settlement with those that never had large-scale Jewish settlement. The Jewish population that used to live in the Pale of Settlement tended to be urban and specialized in trade and service occupations as middlemen between the overwhelmingly agricultural local population and various markets—in activities such as providing credit, managing real estate, and delivering professional services. The paper finds that the non-Jewish population in areas with historical Jewish settlement today has higher rates of trust as well as anti-market attitudes. The authors argue that this reflects the development of ethnic animosity, an anti-market culture, and bonding trust among the non-Jewish population that lived side by side with Jews. Grosfeld et al. write that “ethnic antagonism between the two groups led to the development of within-group solidarity and trust” (2013, 191). As pointed out by Putnam (1995), bonding or exclusive social capital ties groups together more strongly, in contrast to bridging social capital that enables ties with strangers outside the group.

Nico Voigtländer and Hans-Joachim Voth (2012) discuss the persistence of cultural traits by studying anti-Semitism in Germany over six centuries. Medieval pogroms blaming Jews for the plague are used as an indicator of medieval anti-Semitism and are shown to predict violence against Jews in the 1920s, votes for the Nazi Party, attacks on synagogues and other measures of anti-Jewish sentiment. Interestingly, persistence of anti-Semitism was lower in cities with high levels of trade or immigration.

Shanker Satyanath, Voigtländer, and Voth (2017) highlight the darker side of social capital by showing that denser social networks were associated with faster entry into the Nazi party in interwar Germany. The civic society accelerated the spread of Nazism, which destroyed the fledgling German democracy. In this case, both bridging and bonding social capital proved detrimental for society, a fact that makes clear that high rates of social capital is not unequivocally positive.

## Tracing the Historic Roots of Generalized Trust

Becker, Katrin Boeckh, Christa Hainz, and Ludger Woessmann (2016) study the historical impact of Habsburg imperial rule on trust in institutions today. The Habsburgs established local administrations in acquired territories and equipped them with civil servants trained in Vienna. The authors characterize the Habsburg administration as comparatively efficient and fair and argue that the well-structured bureaucracy made Habsburg rule more acceptable to the populace. The areas where the Habsburgs exerted long-standing political influence were ethnoculturally diverse and are today parts of many different countries. The authors further attempt to identify the effect of historic Habsburg rule on trust by comparing municipalities within the historical borders of the empire to those outside. Individuals in former Habsburg areas have higher trust in the judicial system and are less likely to pay bribes to these local public services. The study compares communities close to each other within the same country in order to reduce the risk that effects are driven by inter-country heterogeneity or geography. The results indicate that the legacy of the Habsburg Empire may have left a historic footprint on contemporaneous levels of citizen trust in state institutions.

Jared Rubin and Elira Karaja (2018) study the historical persistence of trust in three Romanian villages from 1775 to 1919. These Romanian villages were arbitrarily divided by the Habsburg, Ottoman, and Russian borders. The authors carry out experimental games used to measure trust. The idea is that villages on the Habsburgian side for a long period experienced a better institutional climate than those on the Ottoman/Russian sides. The trust games indicate people whose grandfather grow up in a village on the Habsburgian side of the border showed greater trust than those whose grandfather grew up in the non-Habsburgian side. While such laboratory results based on small samples are inherently uncertain, the authors note that the results are consistent with the stickiness of trust.

### *Trust in Africa and Asia*

Where it is difficult to acquire correct information on the trustworthiness of others, rules of thumb are usually developed. Nathan Nunn and Leonard Wantchekon (2011) draw upon this notion to stipulate the hypothesis that norms of mistrust developed in African communities

affected by the transatlantic slave trade. This terrifyingly insecure period had the unique feature that individuals could partly protect themselves by sacrificing other community members to the slave trade in exchange for weapons, causing neighbors to turn on each other and perhaps leading to norms of mistrust. The authors combine individual-level survey data with historical data on slave shipments by ethnic group and show that current trust levels within Africa can be traced back to the slave trade. Groups whose historic ancestors were exposed to more slave raids are on average less trusting today, with the results mediated through internal factors such as cultural norms and values. The study uses distance to coasts as an instrument for the historic risk of slave raids. Areas in sub-Saharan Africa more distant from the coast were historically less exposed to slave raids and today have higher trust rates, whereas no such relationship between distance to coast and trust is found in Asia and Europe.

An important paper in the historical trust literature is Sara Lowes, Nunn, James Robinson and Jonathan Weigel (2017). This study compares norms of rule-following and the propensity to cheat between individuals from or just outside the borders of the African Kuba Kingdom. This was a pre-colonial state formed in the seventeenth century in central Africa, which was unusually centralized and had strong legal institutions. The Kuba Kingdom is now part of the Democratic Republic of the Congo. The Kuba Kingdom had a judicial system with courts, a police force, military, taxation, a constitution, as well as public goods provision. The study compares the behavior of individuals from tribes that lived within the historical boundaries of the Kuba Kingdom with those that dwelled outside the boundaries of the kingdom. The result of the economic experiment is that the Kuba Kingdom had a robust negative effect on norms regarding rule-following. Kuba Kingdom descendants were on average more likely to steal and less likely to follow rules in the economic games. This finding suggests that state institutions had a crowding-out effect on norms relating to trust. In theory, state institutions and culture can be either complements, which reinforce each other, or substitutes, where the existence of state institutions reduces the tendency to invest in norm enforcement and parental norm transmission to children. The study further finds that Kuba Kingdom parents were on average less likely to feel that it is important to teach their children values related to rule-following. The results are

## Tracing the Historic Roots of Generalized Trust

consistent with models where investment in the values of children decline when desirable behavior is instead enforced by formal institutions (Tabellini 2008). What makes these results of Lowes et al. (2017) valuable is that the study utilizes historical natural experiments to credibly identify causal effects of state institutions on norms, in this particular context. The results are, however, not deterministic and it is conceivable that, in other settings, state institutions can instead be complementary with norms.

Jha (2013) studies the roots of interethnic conflict between Hindus and Muslims in India. Variation in religious conflict, such as riots, is traced to medieval ethnic specialization in overseas trade. Medieval ports are ethnically mixed but far less prone to Hindu–Muslim riots. The explanation proposed by the author is that Muslims specialized in overseas trade with the Islamic world, an activity in which they had an advantage. South Asian trading towns where Muslims offered this benefit developed institutional mechanisms to further interethnic exchange, which continues to this day. In addition to violence, the study uses the conspiracies that cause minorities to refuse the polio vaccine as a proxy for trust. Muslims in medieval ports are as likely as non-Muslims to vaccinate their children, whereas Muslims in other urban areas are less likely to do so, lacking faith in the vaccine.

Greif and Tabellini (2017) describe how the clan in China and the corporation in Europe, respectively, enforce cooperation. While the two perform similar functions, they operate quite distinctively. Cooperation inside clans relies on social ties and the reciprocal moral obligation, whereas the corporation exploits generalized morality supplemented by formal rule enforcement. The latter's universal moral obligations are impersonal and weaker but apply to all members of society and can be expanded and scaled up far more easily between unrelated individuals than kinship-based cooperation. Greif and Tabellini (2017) point to path-dependency in the evolution of these two types of enforcement systems. Loyalty groups, such as clans, perpetuate due to positive feedback and work well to pursue collective actions in some situations. Clan-based systems, however, tend to emphasize higher particularized trust to closed social groups rather than universal generalized trust toward strangers. The authors point out that the strength of kinship ties in China is reflected in surveys of trust. The Canadian 2005 Ethnic Survey shows that European

and Chinese immigrants have similar levels of trust toward family members and colleagues at work (Greif and Tabellini 2017, 31). Chinese immigrants, however, are significantly less trusting toward people in general. The authors cite Gordon Redding that in China, “you trust your family absolutely, your friends and acquaintances to the degree that mutual dependence has been established ... With everybody else you make no assumptions about their good will” (1993, 66).

### *Trust and the Welfare State*

At the theoretical level, the relationship between trust and the size and progression of the welfare state is complex and potentially interacts with other economic factors like inequality (Algan, Cahuc, and Marc Sangnier 2016; Svenja Gärtner and Svante Prado 2016). The fact that trust is sticky has enabled researchers to make some conjectures about which countries had high rates of trust in the past. However, we also know that trust can increase or decrease, either gradually or through dramatic events, such as wars and revolutions. It is, therefore, far from certain that trust has developed linearly.

Since data on historical trust is lacking, a number of attempts have been made to use instrumental variables to disentangle the causal link between historical trust and the current welfare state. For this to work, the historical instrumental variable must affect the current welfare state through trust. Niclas Berggren and Henrik Jordahl (2006) document a positive link between the Economic Freedom Index and trust when using the legal origin of countries as an instrument of economic freedom. The relationship is especially strong for legal structure and security of property rights. Andreas Bergh and Christian Bjørnskov (2011) look at three instruments—namely, the existence of monarchies, average temperature in the coldest month of the year, and linguistic attributes believed to be related to trust. The problem with this approach is that we cannot be sure that the correlation between these variables and welfare state policies reflects historical trust rather than other plausible mechanisms.

Table 2 below summarizes the studies in this section, which empirically link current levels of trust to various historical channels and mechanisms. The papers included in this table are those that have trust as an outcome variable, and which attempt to link it causally to historical

## Tracing the Historic Roots of Generalized Trust

**Table 2**  
Studies of the historical determinants of contemporary trust

Study	Outcome	Channel	Source of data	Empirical method
Algan and Cahuc (2010)	Generalized trust	Rates of trust in ancestral country in the World Values Survey, 1995 or 2000	Americans with immigrant ancestry in the General Social Survey, 1972-2004	Timing of arrival of ancestor
Lowes et al. (2017)	Experimental measure of rule-following and cheating	Establishment of 17th century Kuba Kingdom	Sample of 499 individuals in the Democratic Republic of Congo, 2013-2014	Comparison of individuals across historical borders
Grosfeld et al. (2013)	Generalized trust	Living within the Pale of Settlement area, determining Jewish settlement in the 18th and 19th century Russian Empire	Life in Transition Survey in Russia, Latvia, and Ukraine, 2006	Regression discontinuity using distance to border
Buggle (2016)	Generalized trust	Years when area was governed by the Code Napoleon	The German Socio-Economic Panel, 2003	Regression discontinuity using borders between German regions

Wellander and Sanandaji

Study	Outcome	Channel	Source of data	Empirical method
Tabellini (2010)	Generalized trust	Estimate on Constraints on the Executive	The World Values Survey in different regions of eight European countries, 1990-1991 and 1995-1997	Correlation and instrumental variables
Jha (2013)	The decision to vaccinate against polio as a proxy for interethnic trust	Living in cities that used to be medieval Indian ports	The urban sample of the Indian Human Development Survey in 27 Indian states, 2005	OLS
Nunn and Wantchekon (2011)	Generalized trust	The effects of ethnic groups exposed to slave raids	The Afrobarometer in 17 African countries, 2005	Instrumental variables using distance to coast
Rubin and Karaja (2018)	Behavioral experimental trust game	Being ruled by Habsburg, Ottoman, and Russian institutions, 1775–1919	Sample of 297 individuals in Romania, 2016	Comparison of averages
Schulz (2018)	Generalized trust	Prevalence of cousin marriage, in turn determined by exposure to the Catholic Church	68 European regions in the European Social Survey, 2002-2016	OLS

## Tracing the Historic Roots of Generalized Trust

factors. Moreover, the table utilizes the format presented in Becker, Steven Pfaff, and Rubin (2016).

### **Theories on the Historic Roots of High Scandinavian Trust**

While the Scandinavian countries are comparatively small, they often garner disproportionate attention in the field of trust due to being outliers. It is not uncommon for correlates of trust in cross-country analyses to lose their significance when the Nordic countries are left out, leading some to talk about “Nordic exceptionalism” (Jan Delhey and Kenneth Newton 2005).

Gunnar Svendsen and Gert Svendsen (2010) relied on an historical approach when trying to explain the development of cultural and formal institutions related to trust in Scandinavia. Following Francis Fukuyama’s (1995) argument that informal or cultural institutions can develop into formal or political institutions, they trace the roots of Scandinavia’s high trust all the way back to the Viking age. Indeed, the old Viking saying “a word is a word” probably dates back to around 800, and was written down as formal law in 1281 (Svendsen and Svendsen 2010). A Norwegian text from 1241, entitled “The Vikings Guide to Business Success,” underscores the importance of reliability and honesty as a means of building good reputation in one’s own self-interest, rather than altruism.

Svendsen and Svendsen (2010) further argue that norms of shared decision-making gradually became institutionalized, eventually granting representation and political influence to all ranks of society. Nordic states later centralized power and acquired efficient state bureaucracies, where problems of corruption were gradually overcome, allowing for further accumulation of social trust (Rothstein and Rasmus Broms 2013; Rothstein and Jan Teorell 2015; Teorell and Rothstein 2015). Based on this theory, the universal welfare state constituted a culmination of ancient norms of cooperative behavior, reciprocity, and trust in the establishment.

Liberal reforms securing civil rights acted as positive feedback on an “ancient trust-culture,” creating fertile ground for civil associations in the nineteenth century. According to Svendsen and Svendsen (2010), social trust was fostered further by the civil associations that fostered regular face-to-face contact between various groups. Svendsen, Svendsen, and

Peter Graeff (2012) further develop the argument that formal and informal institutions mutually strengthen one another through positive feedback.

Andreasson (2017) refers to high levels of trust as “The Nordic Gold” and discusses its historic roots in the Nordic countries. The paper points out the methodological problem of measuring early trust and argues that the levels we can measure today bear little relation to historical trust. The conclusion of the historical discussion by Andreasson (2017) is that high trust in Nordic countries is related to popular movements in the nineteenth century, which gradually helped trust develop by setting local and democratically-governed grassroots associations.

Rasmus Andersen and Dinesen (2018) extensively review trust in the Nordic countries. Regarding the historic development, they conclude that the Nordic countries started with a high reservoir of social capital, which over time grew even deeper since it was put to good use in activities that further deepened trust and social capital. They, too, emphasize the role of voluntary associations such as labor unions, the peasant movement, the temperance movement against alcoholism, and athletic organizations for developing trust. Unlike trust, the authors point out that involvement in associations can be tracked empirically. The second half of the nineteenth century is referred to as the “age of associations” in Nordic countries, with association activity growing over time. Alejandro Portes and Erik Vickstrom (2011) mention the role of Scandinavian migration as an important determinant of trust. One of the strongest predictors of social capital in American states is the share of the population with Scandinavian origin. This is argued to be linked to associational life in the parts of the United States settled by Scandinavians, which tended to form tightly knit, self-sufficient communities with strong egalitarian traditions (Eugene Boe 1977; Portes and Vickstrom 2011).

Svendsen and Svendsen (2000) try to explain how agricultural history is intertwined with the history of social trust by focusing on the Danish cooperative dairy movement, which emerged in the late nineteenth century and eventually spread to virtually all of rural Denmark. The emergence of a wide cooperative movement is argued to reflect high levels of trust, reciprocity, and cooperation at the time. Furthermore, they suggest that the cooperative movement not only reflected high levels of pre-existing trust,

## Tracing the Historic Roots of Generalized Trust

but also created more trust as the networks grew and engaged more people in mutual economic cooperation under democratic governance.

Rothstein and Teorell (2015) argue that Swedish public administration by the early nineteenth century was characterized by patrimony and partiality. Recruitment to higher offices was typically based on noble birth, seniority or personal connections, rather than merit. Furthermore, positions within higher office were systematically bought and sold through the so-called accord system, which in practice became a pension system for public officials. Public officials were primarily paid through a surplus of agricultural products, supplied housing, and mostly unregulated fees, which—combined with a weak legal code against malfeasance—constituted a fertile ground for bribery and embezzlement. By the early nineteenth century, there was awareness among the political elite of the problems of corruption and the harm this caused to society. This realization led to action against corruption and toward building stronger state institutions, which may have promoted trust.

Historian Lars Trägårdh (2013) emphasizes the importance of Swedish Lutheranism as a cementer of individualism, equality before God and state-centrism, thereby being an important incubator of the modern social contract. In this view, the modern welfare state can be viewed as the secular extension of the Lutheran legacy. Nordic modernization is a process toward reconciling two strong poles: the urge for individual liberation and autonomy versus the necessity of being part of a community and social security. Modern Scandinavian welfare states are the latest stage of this process, and its ideological framework is what Trägårdh has termed “statist individualism.”

A key feature of statist individualism is that it did not undermine civil society but rather bridged the state with civil society. Swedish civil society does not have an antagonistic relationship to the state, but instead has formal and informal links interweaving the two, such as the system of public inquiries and government commissions. Civil institutions in this setting can work together to bridge trust between citizens as well as between citizens and the state (Trägårdh, Susanne Wallman Lundåsen, Dag Wollebæk, and Lars Svedberg 2013).

## **Discussion and Conclusions**

Since trust is an important factor for human societies, it is also important for history. Taking rates and types of trust in the past into account can help explain historical events as well as the variation we today observe in economic and cultural outcomes across societies. In recent years, the empirical research on trust and economic history has expanded and contributed several significant insights. While we cannot measure past trust, scholars can measure trust today and tie it to past events using sophisticated empirical strategies in order to unravel causal links.

An important theoretical insight is that trust and formal institutions can be both substitutes and complements. Another finding is that several types of institutional arrangements have in different contexts been used to reduce transactions costs associated with exchange and cooperation. While kin-based particularized trust can be effective in many situations, the transition to universal generalized trust provided favorable advantages in large-scale anonymous exchange. While research has moved forward in tying variables in the past with present-day trust, the problem of accurately measuring past trust in itself remains unsolved due to the lack of conclusive data.

This review has outlined several studies that use present-day trust levels combined with other historical data in innovative ways. While interesting, this method cannot be used for conclusive results on past trust rates. A reconstruction of historical trust levels is, therefore, necessary in order to further expand an already intriguing literature. For instance, compelling speculations about trust in the Scandinavian societies suggest deep roots, but no “smoking gun” as of yet backs up the theory that Scandinavia was a high-trust society in the past.

Survey data and experiments enable a present-day world map of trust levels. However, these data only stretch back to the 1940s. We end this review by suggesting areas of future research. Economic historians have the proper toolbox to address questions of trust in past societies. While not measured in surveys, a great deal of indirect data exists in historical sources. Historians are familiar with reconstructing data from first-hand sources, and increasingly to quantify narrative methods. Until recently, however, this method has not been applied to trust. Historical trust studies can be further enhanced through analyses of historical first-hand sources,

## Tracing the Historic Roots of Generalized Trust

which may be used to resolve more conclusively unanswered questions on the historical roots of trust.

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## Tracing the Historic Roots of Generalized Trust

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