The Determinants of Trust

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March 22, 2005

INTRODUCTION

During the last 15 years, the social capital literature has grown rapidly. In particular after Robert Putnam's (1993) study of regional governments in Italy, the interest among economists and politologists exploded as Putnam showed that the concept could be used in quantitative explanations of a series of social and economic phenomena. The early literature was unavoidably indiscriminate as to distinguishing between the various elements of social capital, but more recent literature has stressed the need to distinguish between the constituent elements of Putnam's social capital concept, in particular emphasizing the role of social trust. This is in turn defined as the confidence people have that strangers, i.e. fellow citizens on whom they have no specific information, will not take advantage of them (Uslaner, 2002; Bjørnskov, 2006). Using the answers to the World Values Survey question "In general, do you think that most people can be trusted?", the by now quite substantial literature has found that social trust is associated with a set of different macroeconomic outcomes: economic growth, the rule of law and overall quality of governance, corruption, education, the extent of violent crime and subjective well-being are all influenced by the propensity of people within any nation to trust each other.[1]

The questions are therefore where trust comes from and whether or not it can be affected by public policy. The answers to these questions seem to divide researchers into two camps: the optimists and the pessimists. The former group may be best represented by Knack and Zak (2002) who estimate the effects of education and the rule of law alongside a set of factors that cannot be influenced in the short to medium run. The pessimist group, on the other hand, does not find much of a role for policy as they argue that the empirical associations between social trust and e.g. education or rule of law reflect the reverse causal direction, i.e. that trust has caused part of the cross-country differences in these factors. The aim of this paper is to assess the impact of a number of the central factors proposed in the literature and sort out which of those factors are associated with social trust. Although it to some extent rests on earlier work in Uslaner (2002) and Bjørnskov (2005), the paper differs from earlier studies in using a much larger sample of countries and including extra factors. It moreover distinguishes between factors affecting individuals' trust radii and social distance, respectively, and explores indirect effects.

[1] See Knack and Keefer (1997), Whiteley (2000), Zak and Knack (2001), Beugelsdijk et al. (2004), Bengtsson et al. (2005) on growth, la Porta et al. (1997), Knack (2002), Bjørnskov (2006) on the rule of law and overall governance, Uslaner (2002, 2004a), Bjørnskov and Paldam (2004) on corruption, Coleman (1988), la Porta et al. (1997), Putnam (2000) on education, Putnam (2000), Lederman et al. (2002), Uslaner (2002) on crime, and Bjørnskov (2003), Helliwell (2003) on subjective well-being.

The rest of paper is structured as follows. First, the next section discusses the theoretical impacts of a number of factors suggested in previous literature; a second section reviews this literature after which a data description follows. The data are used in the following section that provides empirical estimates of the determinants of social trust. The fourth section explores the determinants of two types of fractionalization before summarizing and drawing policy implications.

THEORY

Tracing the trust differences across Italian regions back to the early renaissance, Putnam's (1993) original study suggests that such features have very deep historical roots. Jackman and Miller (1998), on the other hand, provide a much more optimistic view on the potential for influencing trust in the shorter run through public policy. As such, the discipline is divided into two strands. Where the first strand tends to see trust as a cultural or moral feature, the second interprets trust as reputation, which arises from conscious and purely self-interested motives endogenously determined with institutions and policies shaping the incentives to trust. Guinnane (2005), relying on the latter line of thinking, even comes to the conclusion that trust is "a concept too many" in the social sciences because the effects of trust are already perfectly captured by standard theories of reputation that need no moral or sociological foundations. He concludes that "the importance of information and enforcement, which is the core of the useful notion of trust, has been recognized in economics for decades. Giving it another name […] will not accomplish anything". However, at the crux of his thinking, as is the case for most of the literature arguing that trust can easily be created, is the assumption that social trust is simply a reputation effect arising from repeated face-to-face interactions. Following this assumption to its logical conclusion would imply that there is nothing social about social trust other than in a rather local sense. Yet, such trust-creating mechanisms are refuted by individual-level analyses in Claibourn and Martin (2000) and Uslaner (2002), and in cross-country analysis in Bjørnskov (2006). Instead, Uslaner (2002) suggests that social trust – what he refers to as 'moral trust' - is the trust that we place in people on whom we have no specific information and whose reputation we consequently know nothing about. What arises in face-to-face interactions is instead termed particularized or strategic trust, as it is based on specific information on those whom one interact with. In this line of thinking, social trust is therefore the 'reputation' of most people, i.e. an ex ante belief of how likely any randomly selected individual is to behave in an honest and trustworthy manner.

In order to conceptualize the way in which different factors affect the creation and destruction of social trust as opposed to simple personal reputation, I rely on Fukuyama's (1995) concept of "trust radius". His theoretical starting point is that people tend to trust those who are reasonably similar to themselves. In Uslaner's (2002) terminology, individuals situated within the trust radius of any person are those who belong to his or her "moral community". But, as Uslaner (2002, 181) stresses, "the rich and the poor have little reason to believe that they share common values, and thus might well be wary of each others' motives". When people evaluate the actions of other individuals who are similar to themselves, they can relatively easily understand the background, situation and motives of the actions while the chances for misinterpretation and suspicion towards the motives are much more pronounced when people have to evaluate the actions of those who do not share their status, position in society, ethnicity or general weltanschauung. In the latter case, people will therefore often rationally tend

to place less trust in the benevolence of other people, which could lead to a lower general level of social trust in fractionalized societies.

As such, individuals at each ends of the income distribution will likely feel that they have very little in common and thus feel no or very little responsibility towards people whom they perceive to be substantially different from them. In other words, even if individuals' trust radii are wide – their moral communities are relatively diverse – a high degree of social fractionalization arising from e.g. income dispersion, and ethnic, lingual, religious or political diversity may make people within the same community or nation appear less similar. This dilemma is illustrated in Figure 1.

Figure 1. Fractionalization and trust radii
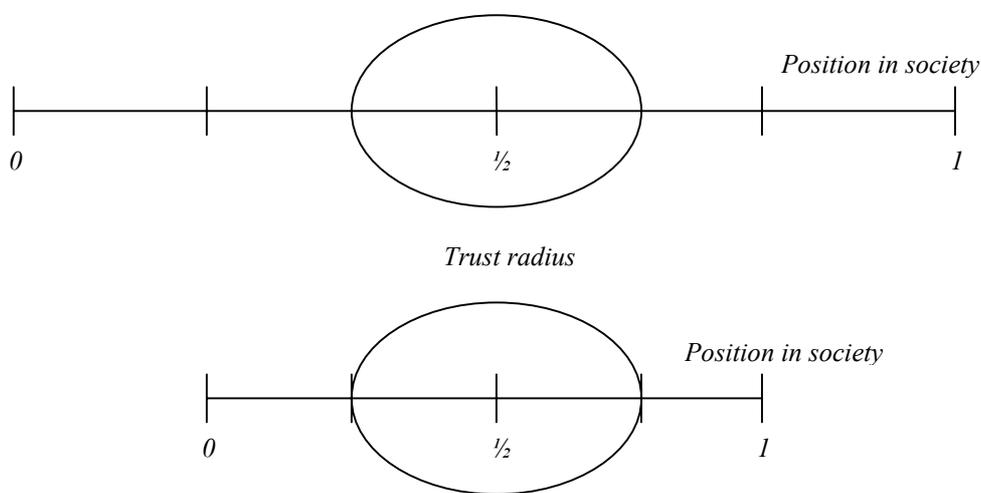
The two lines depict two societies, one with a high degree of social fractionalization as illustrated by the long line – there are large differences between e.g. the rich and the poor – and one with a short line and hence little fractionalization. The average individual in both societies have the same trust radius, represented by the ellipses. Yet in the highly fractionalized society the trust radius of an average person only extends to a quarter of the population while in the less fractionalized society the trust radius extends to half of the population. By splitting the factors influencing trust into two groups – those that are likely to influence the degree of social fractionalization and the external and internal factors that influence individuals' trust radii – it is therefore possible to relatively easily conceptualize what can be done and how trust creation can be influenced at the macro level.

LITERATURE REVIEW

Although this distinction is not made in the literature, the following reviews existing studies with it mind. Hence, it consists of three subsections outlining previous findings of the effects of fractionalization, factors affecting trust radii, and policy variables.

Fractionalization

Turning to the empirical literature on the determinants of social trust, there is virtually complete consensus that the most important determinants of trust are measures of fractionalization that also capture effects of social distance (Knack and Keefer, 1997; Zak and Knack, 2001; Knack and Zak, 2002; Uslaner, 2002; Bjørnskov, 2005).[2] Fractionalization is typically measured along two dimensions: income inequality, and ethnic or ethnolinguistic diversity. In the following, I shall introduce a third dimension, political diversity, which along the lines of the argument above might have similar effects as the other measures of fractionalization.[3]

Income inequality is easily observable in most societies and as such a strong indicator of social fractionalization, which could lead to lower trust. However, the effects of income inequality could also be due to perceived injustices arising from perceptions of why some people are rich and others are not. To 'have' might – in particular when interpreted within traditional leftwing understandings of society - be interpreted as an outcome of having exploited those who 'have not', which will tend to reinforce stereotypes of other groups in society and thereby perpetuate mistrust between those groups (Boix and Posner, 1998). As such, the effects of inequality might be due to both the factual fractionalization as well as individuals' perceptions of fractionalization. To the extent that the latter is the stronger explanation, the distinction also entails rather different policy implications than given by the existing trust literature since a way to increase social trust would be to inform about the 'true' mechanisms behind the existing fractionalization instead of simply 'fighting the numbers'.

While the existing literature has focused on objective measures, perceptions may be equally crucial to understanding the potential effects of other types of fractionalization as it for example must be realized that ethnic diversity is a *latent* variable and that political diversity is a type of fractionalization that can only be very noisily observed or inferred from behaviour and clothing. Under some circumstances, or maybe due to freak coincidences, can ethnic diversity lead to conflict or distrust while other circumstances may not trigger any conflict. One of these circumstances could be the perception of ethnicity while other circumstances could pertain to the integration of ethnic minorities into society. Moreover, any effect from political diversity must logically stem from either a perception (or misperception) of how one's political adversaries view the world and act within it or a fundamental aversion of accepting that view.

A final note of caution applies to the data on income inequality. Henderson et al. (2005) argue that although income inequality might seem very low in communist societies, the degree of consumption inequality is quite considerable. The point is that people do not pay cash for access to special stores, cars or datjas, but are given these things as rewards for proving loyal and useful to the communist party. These deficiencies of communist statistics may have made the inevitable increase in inequality following the demise of the communist systems in the Soviet bloc seem larger than they were in reality and thus to a severe underestimation of real inequality in these countries.

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[2] Likewise, studies in experimental economics have shown the effects of social distance on behaviour in various trust games (Hoffman et al., 1996; Glaeser et al., 2000; Buchan and Croson, 2004).

[3] It should be noted that there are similar indices of religious and linguistic diversity that are correlated with ethnic diversity. However, as is the case in the rest of the literature, I find that ethnic diversity has the strongest effects throughout. I therefore refrain from discussing the other types.

Factors affecting individuals' trust radii

Following the conceptual distinction in the above, a number of factors have been argued to affect individuals' trust radii. Some of the factors proposed in earlier studies can be easily changed while others are very persistent over time. Given the stability of trust over the two decades covered by the WVS, it could a priori be assumed that most determinants have deep historical roots, a suggestion first put forward by Putnam, (1993) and substantiated by recent studies. Uslaner (2004c) for example shows that Americans' propensity to trust depends strongly on the *current* trust level in the home country of their *ancestors*, indicating a substantial time-invariant cultural element that must necessarily be transmitted within the family. Interestingly, the only exceptions are people of Eastern European descent that are substantially more trusting than people living in these countries today. Most studies indeed find that postcommunist countries are less trusting, despite their more equal income distributions, due to the detrimental effects of communist surveillance and control. Winston Churchill, who was always up for a memorable quote, for example once called communism "a horrible form of mental and moral disease" (quoted in Addison, 2005, 93). Paldam and Svendsen's (2000) dictatorship theory also stresses the detrimental moral effects of communism, as most of these countries took meticulous care to ensure that virtually everyone might be spying for a secret service. The East German Stasi (das Ministerium für Staatssicherheit), for example, employed 91,000 full time employees and an estimated 300,000 private informants at the time of the communist collapse, implying that about 4% of the adult population actively worked for the organization. For most people in the communist bloc, there were therefore quite strong incentives not to trust people whom they did not know personally, which substantially narrowed their trust radius.

Religion comprises another set of factors that most studies find are important to social trust (la Porta et al., 1997; Zak and Knack, 2001; Uslaner, 2002; Berggren and Jordahl, in press). Most find that countries with a large share of Protestants are more trusting although different explanations have been proposed. Some studies stress that Protestantism is a non-hierarchical religion, as opposed to Catholicism and Islam. In Protestantism, as in most Eastern religions such as Buddhism and Hinduism, the responsibility of ones actions is individualized such that actions that are morally 'wrong' will somehow be penalized in the afterlife. On the other hand, in Catholicism it is possible to be absolved of ones sins by the church. The practice of absolution thus releases the subjects of the Pope of individual responsibility for their worst deeds, which could lead people to be more wary of trusting their fellow citizens. Another joint problem for hierarchical religions may be a potential built-in tendency for individuals to place part of the responsibility for their actions on a supreme power. Many Muslims for example use the phrase "Inch'Allah" in their daily life, suggesting that a variety of things only occur 'if God will', which means that only contingent on a number of factors do people feel morally obliged to keep their promises. This God-given uncertainty naturally could lead to a lower trust in fellow citizens. Another possible effect of hierarchies, not only religious, is that people come to live according to strict rules. They may therefore fail to develop trust because following rules does not induce any social learning about what people would do in the absence of any enforced formal rules.[4] However, an alternative possibility is that part of the effect of Islam arises due to the Arab-Muslim tradition for totalitarian systems, which may have suppressed trust in

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[4] As far as I know, this argument is new to the social capital literature. I am grateful to Niclas Berggren for suggesting it to me.

much the same way as communism did.[5] Regardless of the explanations most studies find that countries with large Protestant and Eastern-religious populations are more trusting while those with large Catholic and Muslim populations are less trusting, both types of explanations relying on effects influencing individuals' trust radius.

Finally, I have in previous work found that monarchies have significantly more trusting populations (Bjørnskov, 2005), although it should be stressed that it cannot be ascertained a priori whether this is an effect of monarchs setting an example of good behaviour by, as the British and Danish monarchs for example traditionally do at the close of the year, reprimanding the population for slips of morality, or if the effects of monarchy instead capture historical factors that simultaneously affect trust and has perpetuated this particular political institution. As such, it is uncertain how to categorize the effects of monarchy as the latter explanation would imply an effect on individuals' trust radius while the former would most likely be an effect of monarchs reducing the perceived social fractionalization by being a symbol of unity common to all society.

Policy variables

Turning to the set of policy variables that might potentially affect social trust, institutional quality in one form or another is often mentioned. As such, Zak and Knack (2001) and Berggren and Jordahl (in press) both argue that the rule of law affects trust creation as it, in the terminology of this paper, increases individuals' trust radii by reducing the prospective costs of having one's trust misused. The latter argues broader that individuals need to be "free to trust" as they also find indications that other elements of economic freedom are associated with social trust, i.e. that the institutions of market economy entail civilizing mechanisms and incentives that stimulate trust (e.g. Hirschman, 1982). Both economic freedom and democracy might also reduce the degree of perceived fractionalization in society as all would be allowed to participate in the political process regardless of their status in society (Berggren, 1999).

A number of studies have also argued that political trust is beneficial for the creation of social trust as politicians provide role models for ordinary citizens who will tend to increase their trust radii whenever politicians appear to be trustworthy (Yamagish and Yamagishi, 1994; Brehm and Rahn, 1997; Rothstein, 2003). Likewise, education has been argued to lead to higher social trust, based on the arguments that more educated individuals will be in a better position to evaluate risks and potential, thereby reducing the uncertainty of dealing with strangers (Knack and Keefer, 1997; Knack and Zak, 2002). The risk reduction would in virtually all models of behaviour lead to a higher propensity to trust people on whom one has only limited information. Along similar lines, education might either socialize individuals or 'indoctrinate' them with a moral belief that one should always trust other people. Following these lines of thought, education would hence increase individuals' trust radii. Some of the same considerations would apply to freedom of press, as free and dependable information could be argued to be necessary for individuals to form accurate beliefs about their fellow citizens.

Finally, Torpe (2003) and Kumlin and Rothstein (2005) argue that the 'welfare state' produces trust, in particular when those states do not test whether citizens

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[5] See for example Bernard Lewis (2002), a book entitled "What Went Wrong" that describes the decline of the Arab world relative to Europe. It is worth noting that Indonesia, which is the world's largest Muslim country, has a rather high social trust score and – being Asian - no Arab background. Voigt (2005) focuses instead on problems associated with Arab or Muslim norms.

receiving benefits are actually entitled to them. One of their main points is that the welfare state makes people's lives more certain by e.g. protecting them from severe income losses due to unemployment and by redistributing substantial sums from the rich to the poor, thereby quasi-artificially making the income distribution more even. These effects would likely both reduce social fractionalization and perhaps increase individuals' trust radius, as people might perceive the income distribution to be fairer. However, it is an open question if the majority of the population in such states would perceive the intensive redistribution as 'fair' since most citizens would pay high taxes to finance the welfare state. Welfare state institutions thus risk creating more social fractionalization, in particular if those institutions would prevent certain groups in society from being integrated in e.g. the labour market. A priori, the total effect of welfare systems is not certain. This and other questions are sought answered using the data outlined in the following.

DATA

I measure social trust in what has become the standard way, by taking the percentage of a population that answers yes to the WVS question "In general, do you think that most people can be trusted?" (Inglehart et al., 2004). Although the use of survey data in economics and measures of social capital in particular have been criticized for the shortcoming that it is not always clear what the data measure (e.g. Durlauf, 2002), this variable has proved to be a reliable and valid measure of trust and trustworthiness, for example by being strongly correlated with return rates in a wallet-drop experiment (Knack, 2001; Uslaner, 2002). The optimist strand of the literature would indicate that social trust reacts to a number of outward stimuli, which would make the time of observation crucial. However, the trust scores in the WVS are very stable over time (Uslaner, 2002; Volken, 2002; Bjørnskov, 2005). I therefore use the average of all available observations, supplemented by data from the 1995 Latinobarometro and the 2003-2004 Danish Social Capital project. This probably smoothes out some of the inevitable noise, and gives a total of 88 observations listed in the appendix. Table 1 gives descriptive statistics on all variables. It should be noted that while the paper thus uses a substantially larger sample than previous literature, the averages of trust and other variables are quite close to those in earlier studies. The differences in results are therefore not likely to arise from a shift in the balance between countries but only due to more precise cross-country information.

Turning to the data used to capture fractionalization in the following, income inequality is measured as is standard by the Gini coefficient, taken from the Deininger and Squire (1996) database. To capture ethnic diversity, I use data from Alesina et al. (2003) measuring the probability of two randomly selected citizens of a country being of different ethnic background. As a measure of the third dimension of fractionalization – political diversity – I calculate the variance of the national answers of the WVS question on where people would place themselves on a scale from 1 (extreme left) to 10 (extreme right). Since this question is not included in the Latinobarometro or the Danish Social Capital Project, the sample size is somewhat reduced whenever using political diversity. Religion is measured as the share of the population that belongs to a Muslim, Protestant, Catholic, or Eastern (Buddhist, Hindu) denomination. These data derive from CIA (2004) supplemented by USDS (2004). I also use dummies for postcommunist countries, monarchies, and the Nordic countries as a control for specific Scandinavian features as, for example, remnants of Viking norms.

Political competition is measured as the ten-year average Herfindahl index of the legislature, such that a higher score means less political competition. The data to calculate these scores derive from Beck et al. (2001). Political trust is measured by the variable 'confidence in parliament', which derives from the WVS, and is the average national score on the question of how much confidence respondents have in parliament and thus in the political system. The answers are on a scale from 1 (no confidence) to 4 (full confidence), hence low scores mean a high degree of confidence. These data are supplemented by the scores of a similar question in the Danish Social Capital project.

Next, the policy variables derive from three different sources. Education is measured by the net enrolment in secondary school in 2000, taken from World Bank (2004). Rule of law, which measures the strength of the legal system, derives from the Kaufmann et al. (2003) dataset while democracy is measured in the standard way as the Gastil index in 2002. This variable, which is distributed between 1 (full political rights) to 7 (no political rights) derives from Freedom House (2003). A more recent publication from the same source (Freedom House, 2004) provides the data on press freedom, distributed from 1 (perfect freedom) to 100 (no freedom). Finally, welfare state effects are measured by two different indicators, overall government spending and the generosity of benefits. Government expenditure is measured as the ten-year average of government expenditure final consumption (World Bank, 2004) while the variable 'workers' remittances' is a measure of unemployment protection and the generosity of unemployment benefits. It is calculated by dividing the ten-year average of workers' remittances and compensation of employees taken from World Bank (2004) by total GDP.

Table 1. Descriptive statistics

	Mean	Standard deviation	Observations
Catholics	33.03	39.18	90
Democracy	2.47	1.72	88
Eastern religions	4.53	18.50	90
Ethnic diversity	.36	.23	88
Government expenditure	15.76	5.54	86
Income inequality	39.19	10.58	82
Log GDP per capita	8.93	.99	89
Monarchy	.16	.37	91
Muslims	8.97	22.06	90
Openness	80.69	54.38	87
Political competition	.71	.23	86
Political diversity	5.13	1.89	77
Political ideology	.06	.54	89
Postcommunist	.25	.44	91
Price distortion	1.52	.73	88
Protestants	15.53	27.08	90
Rule of law	.35	1.04	89
Secondary schooling	81.74	28.74	84
Social trust	26.99	13.14	88
Workers' remittances	2.97	4.76	83

Finally, a set of additional variables is used in a further section that explores the heterogeneity of parameter estimates and the potential indirect effects. The log to the size of the population derives from the Penn World Tables (Heston et al., 2002), which is also used to calculate the variable termed 'price distortion - the ratio of the investment price level to the general price level – and the ten-year rate of trade volume to GDP,

termed 'openness'. Finally, 'political ideology' is based on the database in Beck et al. (2001) and calculated as the ten-year average of the ideology of the parties in government, weighted by their share of seats in parliament and based on a categorization of parties into leftwing (given the score -1), centre parties (0) and rightwing parties (1). These data go into the regressions presented in the following.

DIRECT DETERMINANTS OF SOCIAL TRUST

I now turn to estimating the determinants of social trust. Throughout this section, I rely on simple OLS supplemented by a robust regression technique;[6] readers interested in formal causality tests are referred to Uslaner (2002) and Bjørnskov (2005), both of which employ instrumental variables techniques to sort out the causal directions. The exceptions are a set of new variables not tested in previous studies for which separate instrumental variables estimates are referred to in footnotes. All instrumental variables are, as far as possible, chosen on the basis of existing studies under the condition that they pass standard tests of exogeneity. As such, all sets of instruments reported in the following pass Sargan tests for overidentification.

To provide a first look, Figure 2 provides a histogram suggesting the effects of a set of variables that previous research in Uslaner (2002) and Bjørnskov (2005) has found to be important and robust determinants. From the difference between the first two columns, one can grasp the importance of income inequality, as the left-hand column – countries with a below-average level of inequality – is much higher and hence countries with relatively equal income distributions a priori seem to be more trusting. In the second set of columns, it is easy to see that monarchies seem to have substantially more trusting populations, while the following columns also support that ethnically diverse (Diversity) and postcommunist countries are less trusting, and populations predominantly belonging to non-hierarchical religions are more trusting.[7] These differences are highly significant with the odd exception of having a communist past, which is only significant at $p<.12$. Which of these differences are real and which of the additional potential determinants are associated with social trust is explored in the following.

Regression results

The estimates are presented in Tables 2 and 3, where the former presents the baseline specification and the potential effects of culture and fractionalization and the latter presents the results of including policy variables. The estimates are obtained without regional effects for which no support was found.[8] Before proceeding to the results, column 1 in Table 2 first of all tackles the problem of untrustworthy trust observations.

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[6] Robust regression techniques work by running OLS regressions iteratively and reweighting the observations based on their residuals after each iteration until the process converges. These techniques therefore have a much higher breaking point than ordinary regressions.

[7] Hierarchical religions are Orthodox and Catholic Christianity and Islam while non-hierarchical religions include Hinduism, Buddhism, and Protestant Christianity, the latter mostly consisting of Lutherans and Anglicans. It should be stressed that although I do not in any way attempt to correct for this, there is some reasons to believe that the North American arm of the Catholic Church, having to compete with a vast number of other churches and religions, is less hierarchical than the Roman church in the rest of the world.

[8] A test for the joint significance of dummies for Asia, Latin America, North Africa and the Middle East and South-Saharan Africa in the baseline specification showed that regional effects do not have any explanatory power and as such should be left out of the specification ($F=.857$; $p<.74$).

Uslaner (2002) chooses to exclude China from all samples as the trust score is on level with the Scandinavian countries and is a clear outlier in most analyses; in Bjørnskov (2005) I note the same worry with respect to the Iranian trust score available from the most recent wave of the WVS. In column 1 of Table 2, it is evident that these two observations should be excluded as they seem to be more than two standard deviations larger than would be expected from the baseline specification.[9] In all the following analyses, I therefore exclude both Iran and China.

Figure 2. Differences in social trust
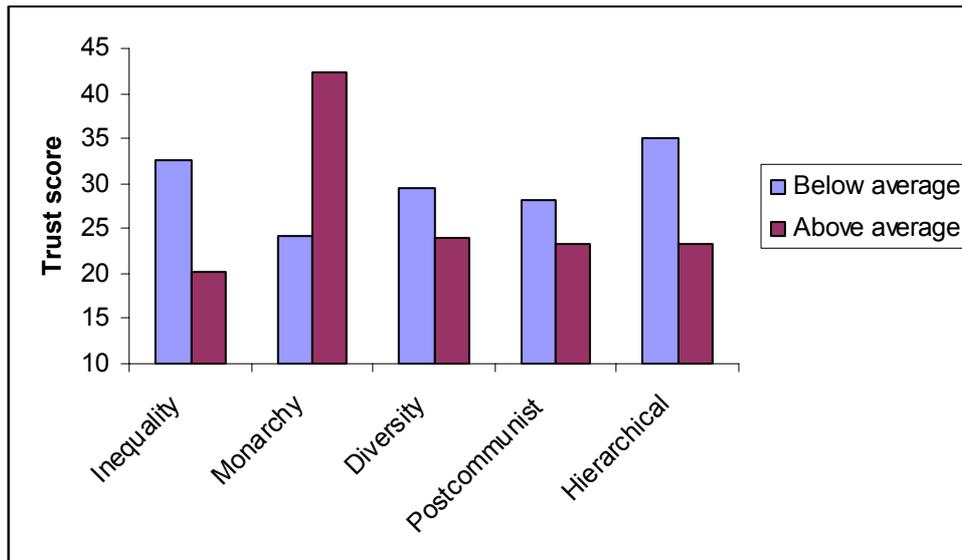
Focusing on the rest of the table and comparing across columns, it is first of all obvious that fractionalization in the form of income inequality is the strongest explanatory factor, as suggested by most previous studies. The coefficient is significant at $p<.01$ and only fails this level once in Table 3. There is thus again very strong support for the notion that social fractionalization is detrimental to the creation of social trust. It should, however, be noted that estimates in Bjørnskov (2005), relying on IV estimates, indicate that there may be a feedback effect due to trusting populations being more supportive of redistributive policies. As such, the effects of income inequality may be slightly underestimated due to the potential downwards bias arising from the feedback. On the other hand, ethnic diversity is in general not significant although it remains of roughly the same size and sign in both Table 2 and 3 with the exception of column 4, which includes political diversity and uses a somewhat smaller sample of countries. The coefficient is again significant in the robust regression with the full sample in column 6 while it fails significance in column 7. However, as stressed above ethnic diversity probably captures a latent conflict, which might only be realized under certain

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[9] With respect to China, it is interesting to note that Hong Kong, which shares central cultural characteristics with communist China scores 27% on the trust index. The difference between the official Chinese average score of 55% minus the effect of the China/Iran dummy quite precisely corresponds to that plus the estimated effect of having a communist past. One should of course not put too much faith in this simple result, yet other analyses point in the same direction. Relying on the rather large residual of China in cross-country regressions with corruption, governance, legal quality or education as the dependent variable, a 'true' Chinese trust score of about 20% also seems a reliable guess.

conditions. The concluding section therefore returns to this problem. Conversely, the effects of political diversity – the third fractionalization variable – are highly significant and of the expected negative sign. As a final measure of fractionalization, column 5 includes a Herfindahl index, which is significant at $p<.10$, indicating that political competition is detrimental to social trust. However, when instrumenting this variable, it becomes insignificant and even changes sign.[10] The correlation therefore more likely reflects either the reverse causality or a spurious relation.

Proceeding to the factors that a priori could be associated with individuals' trust radii and turning firstly to the effects of having a communist past, the tables again replicate the results of previous studies as the coefficient is negative throughout. Hence, while communist countries reduced social fractionalization they to an even larger extent reduced their citizens' trust radii, resulting in an overall loss of social trust. The coefficient nevertheless fails to be significant in a number of cases including the robust regressions. As I suggest in Bjørnskov (2005), there are rather varied responses to the postcommunist transition in Central and Eastern Europe, a potential reason for this difference from previous studies that have tended to use trust data from earlier waves of the WVS is that some of these countries are recovering from the detrimental effects of communism. Although one should be careful to conclude anything, this result might give some reason to be optimistic on behalf of postcommunist societies.

Another historical effect is that of having a monarchy, which is highly significant throughout the table, indicating that the populations in monarchies are approximately nine percentage points more trusting than in comparable republics. As stressed above, this could be evidence of a demonstration effect of the monarchs and their families that could provide role models for society or it could be evidence of an unknown factor that affects both trust and the survival of the institution of monarchy. As a simple first test for this difference, it could be expected that countries that have been monarchies in historical times also contain traces of the latter features.[11] This effect, were it there, would have to show up as systematic variation associated with former monarchies. However, there is no evidence to suggest that these countries have different trust levels, all other things being equal (not shown). Even though this question should be left to future research, the most likely explanation therefore seems to be that monarchies provide their populations with strong symbols of unity and potential role models for the entire society.

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[10] The instrumental variables rule of law, and dummies for postcommunism, bicameralism and common law are not overly strong in the first stage regression (F=6.34; pseudo R square=.140) but nonetheless produce a coefficient of -5.270 (standard error 10.715), i.e. even relatively weak instrumentation makes the coefficient change sign. On the other hand, the instrumented estimate of political diversity, using regional dummies and the log to GDP per capita as instruments (F=16.99; pseudo R square=.656) produces a coefficient of -3.456, (standard error 1.081), which is slightly larger than the OLS estimate. However, although this might indicate a two-way causality social trust nevertheless turns out to be insignificant in regressions explaining political diversity.

[11] These countries include France (which disposed of the monarchy in 1789), Portugal (1910), Russia (1917), Austria and Hungary that formed the Austro-Hungarian Empire (1918), Bulgaria (1946), Italy (1946), and Greece (1967). Finland, having been part of Sweden until 1809 and an autonomous part of Russia until 1917, and Iceland, which was part of Denmark until 1944, also fall into this category.

Table 2. Determinants of social trust – culture and fractionalization

Estimation method	OLS					Robust	
	1	2	3	4	5	6	7
Income inequality	-.424***	-.441***	-.396***	-.339***	-.409***	-.299**	-.319**
	(.127)	(.126)	(.118)	(.105)	(.117)	(.119)	(.147)
Postcommunist	-6.093*	-6.428*	-6.020*	-7.992**	-4.837	-3.024	-5.022
	(3.356)	(3.343)	(3.305)	(3.417)	(3.222)	(3.193)	(3.467)
Protestants	.129**	.126**	.046	.020	.052	.133**	.081
	(.062)	(.061)	(.077)	(.075)	(.074)	(.053)	(.063)
Muslims	-.111**	-.116***	-.115***	-.094***	-.108***	-.098*	-.078
	(.042)	(.042)	(.043)	(.032)	(.039)	(.056)	(.060)
Catholics	-.035	-.037	-.031	-.057	-.021	-.015	-.036
	(.033)	(.033)	(.033)	(.039)	(.032)	(.031)	(.037)
Eastern religions	.083**	.081**	.082**	.074	.094**	.112**	.091
	(.037)	(.038)	(.036)	(.060)	(.039)	(.056)	(.067)
Monarchy	9.632***	9.456***	9.586***	6.546**	10.035***	9.204***	7.849**
	(3.149)	(3.107)	(3.034)	(2.908)	(3.041)	(2.947)	(3.167)
Ethnic diversity	-9.627*	-10.886**	-7.729	1.125	-6.068	-12.251**	-4.133
	(5.327)	(5.303)	(5.649)	(7.093)	(5.838)	(4.832)	(6.041)
Nordic countries			15.248**	17.682***	16.874**	10.005*	14.205**
			(6.485)	(6.367)	(6.616)	(5.773)	(6.385)
Political diversity				-2.486***			-1.831**
				(.825)			(.777)
Political competition					9.106*		
					(4.932)		
China and Iran	-36.199***						
	(7.104)						
Observations	83	81	81	66	79	81	66
Pseudo R squared	.570	.534	.568	.677	.585	-	-
F-statistic	17.25	17.75	29.97	26.62	29.33	13.99	12.84
RMSE	9.455	9.317	8.972	8.054	8.903	-	-

Note: robust standard errors in parenthesis; *** (**) [*] denotes significance at p<.01 (p<.05) [p<.10].

Most previous studies have also found significant effects of religion, yet before turning to these effects a word of caution is necessary when interpreting the estimates across columns. Most people in most of the countries in the sample belong to a religious denomination, making the control group consisting of non-religious people, Jews and people belonging to indigenous beliefs rather small while the bulk of the potential effects of Orthodox Christianity are picked up by the postcommunism dummy. The estimated differences between Protestantism, Catholicism, Islam and Eastern religions (Buddhism, Hinduism) should therefore be interpreted *relative* to each other rather than as absolute effects. The results show that Muslim countries are less trusting than comparable countries while the negative effects of Catholicism are not significant and the positive effects of Protestantism and Eastern religions are positive, as suggested by previous studies.

However, if a dummy for the Nordic countries (Denmark, Finland, Iceland, Norway and Sweden) is entered, Protestantism looses its significance while the dummy becomes significant at p<.05, indicating that these countries are on average 16 percentage points more trusting, all other things being equal. Whether this exercise is informative or not is not a priori clear as these countries are the only ones in the sample except the United Kingdom in which the bulk of the population is Protestant. Yet, judging from the coefficient on Protestants in column 2, the Nordic countries where an average of 90% of the populations belongs to a Protestant denomination would only be 11 percentage points more trusting than comparable countries. Furthermore, if the Nordic countries are excluded from the sample (not shown) the Protestant effect entirely disappears while leaving the remaining coefficient virtually unchanged. It must therefore be acknowledged that the effect of Protestantism may not be of religion per se, but could cover an effect of much deeper historical factors such as social mobility in medieval times or remnants of Viking norms of honesty. For example, the Nordic languages still use the Viking saying "a word is a word", sometimes followed by "and a man is a man", indicating that if a man was to break his word he would no longer qualify to be treated as such.[12]

Other support for this being a Nordic effect and not an effect of Protestantism derive from regional comparisons, two of which are particularly indicative. Splitting the 1999 WVS responses from Western Germany into regions, there are no visible differences between Catholic and Protestant Bünder, as the regional average trust scores are fairly similar. The exception is the northern-most region of Schleswig-Holstein in which approximately half of the population states that most people can be trusted compared to the total German average of 36%. While the inhabitants of Schleswig are no more Protestant than the rest of Germany, it is worth considering that the region belonged to the Kingdom of Denmark until the second war of Schleswig in 1864 and was one of the centres of Viking trading activity.[13] The second indicative regional comparison is between England and Scotland, where Catholicism is substantially stronger than in the rest of the United Kingdom. While, for example, members of the

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[12] It is worth noting that the Nordic sagas are full of examples of what might happen to men who did not hold their word. The Nordic reputation for honesty is even so widely known in neighbouring countries that the German comedian Otto Waalkes wrote a (very funny) song a few years ago entitled "Dänen lügen nicht" (Danes don't lie).

[13] The Northern half returned to Denmark after a plebiscite following World War I and is now known as Sønderjylland while the southern half and all of Holstein continues to belong to Germany. The division has left large minorities on both sides of the border that, contrary to the situation in almost all other border regions in the world, are well integrated and have never constituted a social or political problem.

Anglican Church outnumber Catholics by a factor 6.3 in England, the same number is only 2.6 in Scotland, relying on the most recent census data. Yet, the 83 Scotsmen answering the trust question in the 1999 wave of the WVS seemingly had a much higher propensity to trust than the average Brit.[14] Although it would be rash to rely on averages based on so few observations, it is quite contrary to what could be expected had Protestantism exerted a positive influence. The examples as well as the empirical evidence therefore cast doubt on whether the effects of Protestantism found by previous studies are really effects of religion. Further care is warranted by the robust regressions in columns 6 and 7, which show a significant Protestant effect in the full sample but not in the reduced sample.

Turning to the effects of policy variables presented in Table 3 supports the pessimistic view of the potential for public policy to influence the creation of social trust. In column 1, education is entered showing that it is not significantly associated with social trust. This clearly is contrary to e.g. the cross-country estimates in Knack and Zak (2002) and individual-level estimates in Uslaner (2002) while being consistent with the evidence in Bjørnskov (2005). The rule of law, democracy and press freedom neither exert any significant influences although all are of the expected sign. The absence of an effect could be due to either reverse causality or a bias in the OLS estimates induced by bidirectional causality. Yet, while the present paper does not present instrumented estimates, it is worth considering a simple argument. Most countries in the world have experienced improvements in the rule of law and education during the last few decades. Had social trust been an effect of such factors, one should expect that trust levels had increased during that period. Yet, the trust levels across countries have stayed remarkably stable (Uslaner, 2002; Volken, 2002; Bjørnskov, 2005). For this to have been the case, the proponents of a causal direction going from e.g. rule of law to trust must furthermore assume some unknown global force working against social trust with a stronger impact in countries that have improved their legal systems the most. As the instrumented estimates in Berggren and Jordahl (in press) and Bjørnskov (2005) point in opposite causal directions, it seems most safe to conclude that there probably is an effect of trust on the rule of law and maybe also an influence in the opposite direction picked up by the choice of historically determined instruments in the former study. Yet, it is worth stressing that what the relation between social trust and the quality of formal institutions looks like in the very long run are not ascertainable in such types of analysis.

When turning to the conjectures in Rothstein (2003) and Torpe (2003) that countries with a high degree of confidence in politicians and the political system are more likely to trust their fellow citizens, the coefficient is again of the expected sign but far from being significant. The non-significance could naturally be due to OLS estimates being biased by bidirectional causality, but an instrumented estimate clearly rejects this conjecture.[15]

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[14] The British average in the 1999 survey was 30% while 41 of the 83 Scottish respondents (49%) stated that most people can be trusted. Although the number of respondents is very small, this result is replicated in the 1998 British Social Attitudes survey (Casey, 2004).

[15] An instrumented estimate yields a coefficient of -.114 (standard error 6.229) with a set of instrumental variables consisting of the log to GDP per capita, the log to population size and regional dummies (F=12.07; pseudo R square=.439), indicating that any association between the two variables reflects that trusting populations are also more likely to trust their politicians and the political system.

Table 3. Determinants of social trust - policy variables

	1	2	3	4	5	6	7
Income inequality	-.345***	-.352**	-.354***	-.399***	-.444***	-.517***	-.298**
	(.129)	(.136)	(.120)	(.124)	(.134)	(.139)	(.136)
Postcommunist	-7.746**	-5.306	-6.242*	-6.018*	-5.149*	-6.261*	-4.767
	(3.518)	(3.767)	(3.402)	(3.368)	(2.979)	(3.775)	(3.552)
Protestants	.014	.035	.024	.048	.053	.037	.021
	(.082)	(.078)	(.083)	(.079)	(.076)	(.073)	(.084)
Muslims	-.134***	-.107**	-.114***	-.115**	-.127**	-.121	-.112**
	(.039)	(.051)	(.042)	(.046)	(.048)	(.051)	(.044)
Catholics	-.044	-.032	-.047	-.029	-.035	-.047	-.034
	(.034)	(.033)	(.038)	(.035)	(.033)	(.036)	(.035)
Eastern religions	.081**	.082**	.068	.083**	.061	.071*	.041
	(.038)	(.037)	(.042)	(.038)	(.049)	(.038)	(.055)
Monarchy	7.870**	9.156***	9.568***	9.609***	10.988***	9.445***	10.574***
	(3.231)	(3.038)	(3.015)	(3.093)	(3.165)	(3.092)	(3.639)
Ethnic diversity	-5.823	-6.710	-7.631	-7.752	-7.578	-7.338	-8.218
	(6.448)	(5.884)	(5.699)	(5.862)	(5.670)	(6.416)	(5.956)
Nordic countries	16.305**	15.663**	15.805**	15.209***	16.537**	13.701**	17.082
	(6.346)	(6.453)	(6.527)	(6.586)	(6.699)	(6.256)	(6.599)

Continued overleaf

Table 3 continued

Secondary schooling	.069 (.059)						
Rule of law		.870 (1.651)					
Democracy			-.619 (.852)				
Press freedom				.004 (.063)			
Government expenditure					-.326 (.262)		
Confidence in parliament						-3.264 (3.690)	
Workers' remittances							-.242 (.188)
Observations	78	81	81	80	80	73	75
Pseudo R squared	.577	.563	.565	.561	.568	.589	.562
F-statistic	27.25	26.85	27.33	26.52	26.75	24.28	27.01
RMSE	9.011	9.018	9.007	9.101	8.992	9.142	9.013

Note: robust standard errors in parenthesis; *** (**) [*] denotes significance at $p<.01$ ($p<.05$) [$p<.10$].

Lastly, turning to the effects of welfare states proposed by e.g. Rothstein (2003) reveal that, all other things being equal, the association between the two welfare measures and social trust is negative, i.e. it has the 'wrong' sign if Rothstein's theory were right. Both estimates are insignificant although that of workers' remittances is not far from significance.[16] Hence, the notion of the beneficial effects of the welfare state can safely be rejected, at least as far as standard indicators can inform about them. These results seem to leave little room for public policy. However, two further ways of influencing social trust remain to be explored: indirect effects and factors influencing whether or not ethnic fractionalization has real effects. These questions are addressed in the next sections.

<div align="center">INDIRECT EFFECTS</div>

Although the results in Table 3 reject that policy variables have any direct effects on social trust, possibility exists that they may affect the degree of social fractionalization in the form of income inequality and political diversity as implied by Uslaner (2004b). As such, public policy could have indirect effects on trust, a possibility that is explored in Table 4 below that regresses the two measures on a set of policy variables.[17] Beginning with income inequality, the table first of all shows the well-known Kuznets curve as economic development (the log to GDP per capita) shows a relation with inequality shaped as an inverted U. It also supports the notion that postcommunist countries have more equal income distributions although the shortcomings of the income statistics in these countries should be kept in mind (e.g. Henderson et al., 2005). Turning the attention to the policy variables, popular beliefs are supported as political ideology (distributed from left to right) is significantly associated with inequality, i.e. countries in which voters tend to vote for the right wing have more skewed income distributions. Finally, democracies have substantially less income inequality, a finding that opens up for potential effects of public policy: going from no political rights (democracy=7) to full rights (1) entails a 7-point drop in the Gini coefficient, which in turn would lower social trust by approximately 3 percentage points (21% of a standard deviation). Hence, even if there is no evidence of any direct influence of democracy or economic freedom in the medium run, such institutions could have a beneficial indirect influence on trust through lowering the degree of social fractionalization. On the other hand, there are no significant effects of political competition or the much-advertised effects of globalization (openness), leaving democratization as the only viable policy option through this channel.

Next, the determinants of political diversity show that economic development also seems responsible for a decline in this dimension of fractionalization. Although democracy is negatively associated with diversity in the OLS regressions this effect proves not to be robust, and neither are any effects of political competition or openness. On the other hand, political ideology is negatively associated with the degree of political fractionalization; hence rightwing countries tend to be politically more homogenous. An

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[16] An instrumented estimate actually makes the coefficient significant at p<.10 with a negative sign. However, the instruments (the log to GDP per capita and the log to population size) just fail to meet the standard test of having at least an F-statistic of ten (F=9.18; pseudo R square=.267). There is thus no need to put any real faith in the estimate as it might well be overly influenced by weak instruments.

[17] A number of other variables were, naturally, included in the analysis. These variables are not reported here as they proved never to be significant. This, for example, includes ethnic diversity, which Glaeser (2006) argues is important for income inequality.

interesting final implication of these results is thus that political ideology is not associated with social trust as a calculation of the total indirect effect through both income inequality and political diversity yields a small, insignificant positive effect. A shift in ideology thus only induces a shift in the structure of social fractionalization, not the overall extent.

Table 4. Determinants of inequality and political diversity

| | Income inequality | | Political diversity | |
	OLS	Robust	OLS	Robust
Postcommunist	-8.723***	-8.824***	-.735	-.685
	(2.506)	(2.966)	(.487)	(.541)
Democracy	1.171**	1.176**	-.198**	-.201
	(.450)	(.561)	(.097)	(.149)
Log GDP per capita	49.802***	52.052***	-1.609***	-1.650***
	(12.879)	(14.141)	(.292)	(.303)
Log GDP squared	-2.845***	-2.972***		
	(.759)	(.829)		
Political ideology	2.758**	2.722*	-.631**	-.645**
	(1.173)	(1.436)	(.315)	(.324)
Openness	.018	.019	-.006*	-.006
	(.014)	(.015)	(.003)	(.005)
Political competition	-1.329	-1.707	-.949	-.806
	(2.773)	(2.758)	(.704)	(.709)
Observations	74	74	66	66
Pseudo R squared	.800	-	.688	-
F-statistic	34.87	24.16	13.26	13.70
RMSE	4.858	-	1.085	-

Note: robust standard errors in parenthesis; *** (**) [*] denotes significance at $p<.01$ ($p<.05$) [$p<.10$]. All regressions include regional dummies.

Finally, it is worth pointing out an often neglected problem in economics, namely that of parameter heterogeneity. As noted above, ethnic diversity is in general not significant although it becomes highly so when using the robust regression technique in the full sample. Taking a closer look at the raw data, the problem is also clear as most ethnically diverse countries seem less trusting while a few quite obviously have been able to cope with diversity. For example, New Zealand scores .39 on the ethnic diversity index - meaning that there is a 39% chance that two randomly matched citizens will not share the same ethnic background – although the trust score at 49% is much higher than the global average. Consequently, future research should probably look further into the conditions under which ethnic diversity is detrimental to trust. Table 6 in the concluding section does so – in a very preliminary manner- by splitting the sample in countries characterized by a high/low degree of political competition and a high/low investment price level relative to the general price level, based on the presumption that the trust effects of ethnic diversity could arguably be related to either the political repercussions of large-scale immigration – the degree to which it can become a salient issue – and economic integration into society – i.e. a civilizing effect of trade. Hence, countries could be vulnerable to immigration from third world countries to the degree that they are able to cope with such immigration in both economic and political terms. Along with the set of indirect effects working through social fractionalization along income and political lines, there could therefore be some scope for public policy even when no direct effects can be identified. The final section summarizes the findings and discusses these policy implications.

SUMMARY AND POLICY IMPLICATIONS

This paper has explored the cross-country determinants of social trust. The paper began with a discussion of previous findings, categorizing potential determinants as either factors influencing the social fractionalization of society or factors affecting individuals' trust radii within those societies. Estimating the determinants of social trust in a sample of 81 countries for which a full set of credible data is available – a substantially larger sample than used in previous studies – showed that the strongest determinants are those associated with fractionalization, and in particular income inequality and political diversity. The results furthermore showed that countries with large Muslim populations are less trusting than other comparable countries and gave some support for the notion that countries with large populations belonging to Eastern religions (Buddhism and Hinduism) are more trusting. The positive effects of Protestantism that previous studies have identified, on the other hand, are most likely to be due to positive effects specific to the Nordic countries that potentially might be traced back to particular Viking norms. The results also indicate that monarchies have more trusting populations while the effects of having a communist past identified in previous studies seem to be less precisely identified in more recent data, indicating that some of these countries may be recovering from the morally detrimental effects of communism. To gain an impression of the size of the various determinants, Table 6 provides estimates of the relative influence of the factors.

Table 6. Effect evaluation

Shock to	Effect on trust of one standard deviation shock		
	OLS	Robust	No outliers
Income inequality	-3.90***	-3.16***	-3.54***
	(30%)	(24%)	(27%)
Political diversity	-4.69***	-3.46***	-3.39**
	(36%)	(26%)	(26%)
Muslims	-2.54***	-2.16***	-2.82***
	(19%)	(16%)	(21%)
Eastern religion	1.52**	2.07**	1.63***
	(12%)	(16%)	(12%)
Protestants	1.25	3.60**	3.62**
	(9%)	(27%)	(27%)
Ethnic diversity	-2.24	-2.82**	-1.69***
	(17%)	(21%)	(13%)
Below median	*Effects of ethnic diversity*		
Political competition	-5.81**	-6.06***	
	(44%)	(46%)	
Price distortion	-3.39**	-3.29*	
	(26%)	(25%)	
Above median			
Political competition	.85	1.14	
	(6%)	(9%)	
Price distortion	-.86	-1.06	
	(7%)	(8%)	

Note: numbers in parenthesis are percentages of a standard deviation. The effects of ethnic diversity above and below the median price distortion and political competition are not calculated without outliers due to the particularly small sample sizes.

On the other hand, the paper also includes a number of negative findings. Although previous studies have suggested that the rule of law, education, democracy, and welfare

state institutions affect social trust, the influence of such policy variables that theoretically would all be associated with an increase in individuals' trust radii could not be confirmed. As immediate policy variables seem to have very little influence on social trust, it may therefore be most reasonable to understand trust and trustworthiness defined by individuals' trust radii as an institution that, in a Hayekian sense, has evolved spontaneously. Social fractionalization tends to be rather stable in the long run with the important exception of large-scale immigration from dissimilar countries. As such, this leaves very little room for public policy except efforts to assimilate immigrants into the moral fabric of society. Yet, while the effects of income inequality and political diversity are precisely identified, the results showed that this third type of social fractionalization – ethnic diversity – must be recognized as a measure of latent conflict, which is likely to be realized only when certain conditions are satisfied. Two such conditions can be hinted at as shown in the lower half of Table 6: ethnic diversity tends to lead to lower social trust in societies characterized by a high degree of political competition and a low investment price level relative to the general price level.[18] In societies characterized by the opposite, ethnic diversity is not associated with social trust, a difference that gives rise to policy implications.

The degree of political competition is determined by historical tradition and by the percentage of the total vote required for parties to enter parliament, indicating that systems with only few leading parties are better suited to resist the pressure of ethnic issues in the political system that could realize conflicts and increased perceived fractionalization. Conversely, the Scandinavian countries that have for decades had highly competitive political systems are probably much more vulnerable to such pressures. In such systems, the hard competition for voters will make otherwise peripheral issues such as ethnic special interests increasingly salient in efforts to gain extra voters, which could make people more aware of ethnic differences as well as making these differences more divisive. While historical tradition can understandably not be changed, the vote requirements to gain entry into parliament are a matter of constitutional design that could be changed in the foreseeable future. On the other hand, low investment prices for a given price level of final goods must logically reflect a low demand for investment goods that can be influenced in the short to medium run. Although one can only speculate as to the causes of the lack of investment demand, part of it is quite likely to be an outcome of business regulations or other institutional deficiencies within the immediate control of politicians. Consequently, the policy implication must be that countries should focus on good institutions and conservative economic policy in order to avoid this situation.

Hence, what is interesting from a policy perspective is the effect of ethnic diversity, not the more obvious types of policy variables suggested in the literature. With a considerable immigration from third world countries, Western Europe and North America face an inflow of people that ideally ought to be economically, socially as well as morally integrated into society. The results show that if the bulk of the individuals that form this immigration wave are to be morally integrated into modern high-trust societies, public policy should probably be directed towards easing the barriers to

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[18] An easy way to look for such conditions consists in two steps: 1) calculate the DFBEta associated with the variable in question – which here is ethnic diversity; and 2) explore whether this scores, which will necessarily reflect any potential parameter heterogeneity of the variable, are systematically associated with other factors. This is the approach that yielded the two conditions emphasized here. Further details on the analysis are available from the author.

investments and thus labour market integration. In poor countries, on the other hand, democratization is likely to have an influence on the formation of social trust as it will probably bring about a reduction in social fractionalization.

As a final remark, it is worth considering that the policy implications of previous studies have all centred on increasing individuals' trust radius by strengthening the rule of law, increasing education or setting up welfare systems. None of the findings in this paper suggest that this is possible, as all significant cross-country determinants are more likely associated with social fractionalization. In other words, it seems a prudent advice that politicians interested in affecting this factor of society should realize that one cannot change people's fundamental behavioural patterns but only the context in which they behave. Historically, attempts at doing otherwise have always lead to dismal outcomes.

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Table A1. Countries and social trust data

Country	Trust	Country	Trust
Albania	25.7	Jordan	27.7
Algeria	11.2	Latvia	20.3
Argentina	20.8	Lithuania	25.9
Armenia	24.7	Luxembourg	25.9
Australia	43.8	Macedonia	10.9
Austria	32.8	Malaysia	10.3[D]
Azerbaijan	20.5	Malta	20.7
Bangladesh	22.2	Mexico	25.1
Belarus	30.5	Moldova	18.4
Belgium	31.4	Morocco	23.5
Bolivia	17[L]	Netherlands	53.9
Brazil	4.8	New Zealand	49.0
Bulgaria	28.6	Nicaragua	20[L]
Canada	46.9	Nigeria	22.7
Chile	22.5	Norway	63.9
China	54.6	Pakistan	25.7
Colombia	10.8	Panama	25[L]
Costa Rica	7.4[D]	Paraguay	23[L]
Croatia	21.0	Peru	7.8
Czech Republic	27.5	Philippines	6.9
Denmark	60.1	Poland	23.7
Dominican Republic	26.4	Portugal	15.7
Ecuador	8.9[D]	Romania	14.9
Egypt	37.9	Russia	28.4
El Salvador	14.6[D]	Singapore	16.9
Estonia	23.9	Slovakia	21.9
Finland	56.4	Slovenia	18.2
France	23.3	South Africa	22.2
Georgia	18.7	South Korea	32.5
Germany	36.1	Spain	33.6
Ghana	22.4	Sweden	62.3
Greece	23.7	Switzerland	42.1
Guatemala	28[L]	Taiwan	38.2
Honduras	25[L]	Tanzania	8.1
Hong Kong	26.8[D]	Thailand	38.9[D]
Hungary	25.9	Turkey	10.4
Iceland	41.5	Uganda	7.6
India	38.3	Ukraine	29.1
Indonesia	51.6	United Kingdom	36.9
Iran	65.4	Uruguay	22.1
Ireland	41.2	USA	42.1
Israel	23.5	Venezuela	14.8
Italy	31.4	Vietnam	41.3
Japan	42.9	Zimbabwe	11.9

Note: observations marked [L] derive from the 1995 Latinobarometro; observations marked [D] derive from the 2003-2004 Danish social capital project. All other data are averages of all available observations in the World Values Survey.