

# COOPERATION WITHOUT TRUST IN CONFLICT-RIDDEN SOCIETIES SURVEY RESULTS FROM BOSNIA AND THE NORTH CAUCASUS

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## INTRODUCTION

Imagine that your spouse has been killed, your daughter lost her eyesight in a bomb explosion, your house and village destroyed in air raids, and you have been forced to resettle far away from your ancestral home. You live in a small one-bedroom apartment in a large city with your four children; you cannot find a job because the ethnic group you belong to is associated with terrorist activities.<sup>1</sup> All of this is the result of a long and bloody civil war, which at times pitted people of different ethnic origins against each other. Given this scenario, do you believe that people from different ethnic groups can cooperate, even if they can never again fully trust one another? Moreover, while you may still believe that inter-ethnic cooperation is a possibility, why do some of your friends, who lived through the same conflict, discard it? Enduring social conflicts are not only hard to endure, but are enduring.

These sorts of questions motivate this study. Conventional wisdom, as well as extensive scholarship on social capital and conflict, suggests that societies wherein people and different ethnic groups have (been) mobilized in violent struggle against one another are unlikely to be characterized by interpersonal and inter-ethnic trust and cooperation (e.g., Woodward 1999; Cook, Hardin and Levi 2005). Yet, we have very little systematic empirical knowledge about cooperation and trust—or, for that matter, other developments—in societies affected by violent conflict. In this study, we use survey data from December 2005 in both Bosnia and the North Caucasus (N=2000 in each site) to investigate differences in levels of belief in inter-ethnic cooperation among ethnic groups in these two conflict-ridden societies. In order to improve the validity and comparability of survey responses from respondents of different (cultural, economic, and social) backgrounds, we use an anchoring vignette, which is a technique intended to measure and correct for response category incomparability (King, Murray, Salmon and Tandon 2005). This permits a better comparison of individuals among and across these two societies.

To preview our conclusions, in our statistical analysis we find that cultural, rather than experiential, variables are most likely to affect variation in cooperation/trust in Bosnia and North Caucasus. Irrespective of the experiences of violence that respondents report, some ethnic groups seem to feel differently about the possibilities for inter-ethnic cooperation. However, for those who have experienced improvement in their situation, or who assess their material status as being at least satisfactory, there is a greater willingness to embrace cooperation. In general, Russians stand out in our sample as being pessimistic about the possibilities for inter-ethnic cooperation. Ossetins, on the other hand, associate higher levels of violence with a greater degree of faith in inter-ethnic cooperation, in contradistinction to all other studied groups. Thus, experience with inter-ethnic violence and conflict has differential effects in different groups: some groups associate more violence with greater cooperation, whereas most groups view violence as a constraint on cooperation.

The paper has three major contributions. Theoretically, it builds on the social capital and conflict literatures by examining the determinants for inter-ethnic trust/cooperation in a cross-country, large-n analysis. Empirically, the study is the first to make use of comparative survey data from two of the most conflictual regions in the post-Cold War era. It also reports on the first ever survey of the North Caucasus region. Methodologically, the study incorporates new techniques aimed at improving the validity of the conclusions we can draw from research relying on survey data.

## THE CASES: CONFLICT HISTORY AND COMPARABILITY

Bosnia and the North Caucasus are ethnically diverse, post-communist societies, where the different ethnic groups at times have co-existed peacefully and at other times have found themselves at odds with one another or their governments.<sup>2</sup> In the Spring of 1992, civil war broke out in Bosnia and Herzegovina, when the former Yugoslav republic's three constituent ethnic groups—the Croats, Serbs, and Bosnian Muslims (Bosniaks)—failed to agree on the political future of the republic after the unraveling of Yugoslavia in 1991: Were they to remain part of Yugoslavia along with Serbia, Montenegro, and Macedonia; seek independence as a multinational state; or, were each of the different ethnic groups to seek independent statehood, just like Croatia and Slovenia had done? (Woodward 1999). In a referendum in March 1992, The Croats and Muslims in the Bosnian population overwhelmingly voted in favor of secession from Yugoslavia, and the chairman of the republic's Muslim majority government, Alija Izetbegovi, declared the republic independent. However, the large (40%) minority Bosnian Serbs, who favored remaining part of Serb-dominated Yugoslavia, boycotted the elections and staged protests and attacks against Muslim towns. While this initially pitted

<sup>1</sup>Recounted to one of the authors in Moscow during May of 2005.

<sup>2</sup>They share a communist background. Bosnia, now an independent country, was a republic in the former Yugoslavia, while the republics and oblasts in the North Caucasus are located in one of the former Soviet republics, Russia.

Croats and Muslims against the Serbs, the conflict soon developed into a violent territorial grab among the three different ethnic groups. The Serbs, Croats, and Muslims each engaged in *ethnic cleansing* strategies in Bosnia, although the enormity of the Serb actions was notably larger and more extreme.<sup>3</sup> The International Criminal Tribunal for the former Yugoslavia estimates that more than 100,000 people lost their lives in Bosnia between 1992 and 1995, and more than two million fled abroad. Even though most of these are now believed to have returned, the internal displacement of ethnic groups is believed to be extensive and widespread. The Dayton accord in 1995 set up a process of military demobilization and carved Bosnia and Herzegovina into a loose federation between the Bosnian Muslim-Bosnian Croat Federation of Bosnia and Herzegovina and the Bosnian Serb Republika Srpska. Importantly, it also brought the war to an end.

In the North Caucasus, the main conflict region is Chechnya, where civil war broke out in 1994 when Moscow responded to Chechen demands for independence with military force. In neighboring Ingushetia and North Ossetia, tensions led to violent conflict in the early 1990s. In 1992, informal militias representing the Ingush population concentrated in North Ossetia's Prigorodny Raion clashed with North Ossetian militias, both sides laying claim to the territory. The violent phase of the conflict, which was relatively short-lived, resulted in a large outflow of Ingush settlers from North Ossetia. While not resolved and still a politically hot topic, this conflict has not resulted in large-scale violence since November 1992.<sup>4</sup> Since the late 1990s, the major source of conflict in the North Caucasus has been the war in Chechnya. By 1999 that conflict increasingly began to spill over into the neighboring regions, in particular Dagestan, Ingushetia, and Kabardino-Balkaria, each of which also face their own internal conflicts. As recently described by a long-time scholar and observer of Russia and the Chechen conflict:

In the immediate neighborhood of this zone of terror [Chechnya] is the area that could be called "no-go highlands," which include the mountainous areas of Chechnya and western Dagestan, most of Ingushetia and the southern part of Kabardino-Balkaria. These territories are effectively outside of any control from Moscow or the republican capitals and the periodic incursions of Russian troops cannot "tame" the highlanders of various ethnic origins. The forms of local rule also vary considerably, from Islamic communities that live by Sharia law to bandit strongholds ruled by the gun. Most of the bases of the Chechen resistance are concentrated in this area . . . . The wider area around the war zone includes all the republics of the North Caucasus—and everyone of them have their peculiar combination of tensions and risks that come together in a broad landscape of smoldering instability (Baev 2006).

According to one estimate, at least 17 insurgent organizations of varying sizes (50-2000 members) are currently active in the Northern Caucasus (Lyll 2006). Moscow's federal envoy in the region, Dmitry Kozak, claims that the conflicts in the North Caucasus are spurred by corruption, poverty and unemployment, clan-based rivalries and power struggles, while observers of the region also point to readily available weapons, radical Islamist forces, and religious discrimination as contributing factors.<sup>5</sup> While the population in both Bosnia and North Caucasus has experienced inter-ethnic violence, Bosnia has been the scene of ethnic cleansing and genocide in the form of rapes and murders on a scale not seen in the North Caucasus. At least since the late 1990s, the North Caucasus has been characterized by violence directed at Russian military targets, local police, and government officials rather than civilians (Lyll 2006), although there is a considerable amount of kidnapping of civilians. This mix of shared background characteristics (post-communism, ethnic diversity, and conflict history) but variation in terms of timing and type of violence allows us to comparatively investigate the effects of violence and competing explanations on levels of cooperation/trust in conflict-ridden societies.

#### LITERATURES AND HYPOTHESES

The political science literature that has most extensively addressed the determinants and effects of trust is based on the idea of social capital. Scholars have addressed the ways in which interpersonal trust may affect social order and governance (Cook, Hardin and Levi 2005), transitions to democracy and market economy (e.g., Kornai, Rothstein and Rose-Ackerman 2004), economic development and prosperity

<sup>3</sup>The United Nations's International Criminal Tribunal for the former Yugoslavia (ICTY) in the Hague has formally ruled that Bosnian Serbs engaged in genocide in the Srebrenica massacre of July 1995, where more than 8,000 Bosnian Muslim men were executed.

<sup>4</sup>See for example (Fuller 2006).

<sup>5</sup>Many accounts are available in the scholarly as well as popular press (Roshchin 2005; Bullough 2005; Smirnov 2005; Ware 2005; Mayr 2005; Matsuzato and Ibragimov 2005).

(e.g., Knack and Keefer 1997), as well as the likelihood of peace and conflict. Indeed, according to Widner, restoring trust in post-conflict societies is an important step in the rebuilding of societal exchange and compromise (2004:222). Cook, Hardin, and Levi point out that violent conflict may actually engender a certain type of trust, as external threats to a community, such as an ethnic group, “may create greater dependency within the network or community, and mobilization for change may create new trust relations and new bases for cooperation” (2005: 168). However, this kind of within-group trust is often assumed to be an obstacle to society-wide trust, which in turn is assumed to help prevent conflict.<sup>6</sup> Although the international relations literature on the security dilemma in ethnic conflicts (Posen 1993) does not address trust per se, implicit in the argument is the idea that a security dilemma emerges when the two parties at odds cannot trust each other. The cornerstone of Hobbes’ argument that underpins the notion of the security dilemma is the anarchical state of nature where no one can trust one another (Kydd 2005, pages 12-13). Along these lines, Weingast (1998, page 165) argues that preventing ethnic violence requires mutual trust, which is the result of political institutions that credibly commit the state and its ethnic groups not to take advantage of each other:

Trust results when institutions make it far less likely that one group will be able to capture the state and take advantage of the other. Trust can therefore be constructed and institutionalized, which will greatly reduce the chances of explosive violence due to fears of victimhood.

Whether trust needs to be constructed or is more of a *natural* societal trait, the lesson seems to be that trust facilitates peace and that conflict destroys trust. Given the importance of trust, what do we know about the factors that are likely to bring about or promote trust, in particular inter-ethnic trust, in post-conflict and otherwise conflict-affected societies?

The study’s main hypotheses concern experiences of violence. Most research on post-conflict societies assumes that violent conflict damages or destroys interpersonal trust/cooperation (e.g. Widner 2004, Posen 2004). In particular, if a violent conflict pits people of different ethnic backgrounds against one another, we would expect inter-ethnic trust to be low. As discussed above, the conflict in Bosnia led to some of the most gruesome atrocities since World War II, bringing terms such as *ethnic cleansing* and *genocide* back into our everyday vocabulary. While killings and torture of civilians are not unheard of in the conflicts in the North Caucasus, these conflicts have primarily pitted rebel groups against either the federal government in Moscow or sub-national oblast or republic governments. These governments are typically associated with or represented by a majority ethnic group, but the North Caucasus conflicts have nonetheless had less of an inter-ethnic character than the war in Bosnia, which might lead to the expectation that inter-ethnic trust would be higher in the North Caucasus than in Bosnia. If, however, it is the case that *time heals all wounds*, we would expect that the further in the past the violence took place, the more likely people are to trust one another. Based on this logic, we would expect a respondent from Bosnia to be more likely to exhibit a faith in cooperation than a respondent from the North Caucasus, where violence has flared up again since 1999. However, we recognize that the cultural context is different and that the same question may engender different responses in these two societies; accordingly, we use anchoring vignettes to adjust responses to a common, underlying framework.

These two explanations linking violence and trust address group-level variables and fail to consider that not everyone who lives through a conflict experiences violence first-hand. Indeed, we would expect that a person who has either personally experienced or witnessed an instance of ethnic violence is less likely to trust people of different ethnic origin than a person without that kind of experience. In a study of trust in the United States, Alesina and Ferrara (2002) find that recent traumatic experiences are associated with low levels of interpersonal trust. To assess this hypothesis, we include a variable that measures a respondent’s answer to the question about whether she/he or her/his family has witnessed an incident of nationalist violence. Like all survey measures this a self-report, and may suffer from some measurement error. In particular, we recognize that many respondents may *experience* things via electronic media, or other non-direct ways. Unfortunately, we have no way of knowing the extent of such over-reporting, nor how it is distributed across different groupings of individuals.

In addition, a number of non-violence related variables might help explain individual variation in the degree of inter-ethnic trust. Drawing on Putnam’s (1993) work, Cook, Hardin, and Levi (2005) see trust primarily as the result of contextual factors, in particular “ongoing relationships in which the individuals

<sup>6</sup>However, based on survey data from Russia, Bahry, Kosolapov, Kozyreva and Wilson (2005) find that in-group or “particularistic” trust does not prevent the formation of cross-ethnic trust.

have personal knowledge of each other or knowledge acquired through inclusion in a well-connected network” (2005:2). Personal relationships and networks of social relations influence trust/cooperation by providing individuals with information about each other (reputation mechanism). This gives each individual in the network the chance to punish non-trustworthy individuals by passing on negative information to the others in the network (sanction mechanism). In a related vein, in his work on inter-ethnic violence in India, Varshney (2001) finds that in localities where Hindus and Muslims regularly meet through networks such as professional associations, business organizations, reading and film clubs, sports clubs, unions, NGOs, and political parties, ethnic violence is less likely to occur than in societies where this type of civic engagement happens along ethnic lines. In order to assess whether civil society engagement has a similar effect on inter-ethnic trust/cooperation, we include a variable based on the survey respondents’ answer to whether they participate in voluntary associations, social clubs, or any other type of community engagement. We expect a positive correlation.

Several psychological or attitudinal factors may also influence levels of trust/cooperation. According to social psychology research on social identity, people tend to favor their group, even when the group label in itself may carry very little meaning. In general, people seek to see themselves in a positive light, i.e. have a positive social identity, and they achieve that by comparing their identity group (the in-group) to other relevant groups (the out-group(s)). In experimental settings, researchers have shown that even when individuals are randomly assigned to a group with no substantive meaning, they tend to favor their own group. The implication is that conflicts can arise out of inter-group relations even where there are no apparent material conflicts of interest (Hewstone and Greenland 2000; Brown 2000, among others). Perhaps the most well-known argument in this tradition is that of Horowitz (1985), who argues that the initiators of violence in ethnic conflicts are most often *backward* groups that are driven by both fear and a wish to boost their self-esteem and, thus, seek to catch up with the more developed groups. Scholars have made similar arguments about trust—people tend to trust their in-group but not their out-group (e.g. Alesina and Ferrara 2002). In order to capture this argument, we include a measure for whether an individual expresses pride in his or her ethnic group: It is reasonable to expect that individuals who express great pride in their own ethnic group (the in-group) are less likely to trust members of the out-group than individuals who are less proud of their own group.

In the same vein, a central hypothesis of social identity theory is the contact hypothesis, which suggests that inter-group peace and harmony is the result of contact between different groups. Contact creates knowledge and, thus, more favorable attitudes to members of the out-group. Practical conflict research has picked up on this argument and, for example, sought to bring together Protestant and Catholic grass-root leaders Northern Ireland as means to promote peace (e.g. Trew 1986). Based on the logic of this hypothesis, we would expect that individuals who have close friends among members of ethnic groups different from their own are more likely to trust members of other ethnic groups, and we include a variable based on a question about the nationality of the respondent’s closest friends.<sup>7</sup> Similarly, Alesina and Ferrara (2002) find that in the United States, people who dislike inter-racial contacts are less likely to trust others, the more heterogeneous their community is. Thus in the ethnically heterogeneous Bosnia and North Caucasus, we would expect that if a person expresses that she would like to have more friends among people of different nationalities, she would be more likely to trust people of different nationalities than someone who wants to have a more ethnically homogenous group of friends.

We further expect that individuals who have a positive outlook on the state of ethnic relations as well as the current situation to be more likely to trust others. Previous research has demonstrated that feelings of safety are likely to have a positive impact on an individual’s ability to trust others (Widner 2004). One of the survey questions asked the respondents to assess the degree to which ethnic relations are getting better or worse, and we include this as an independent variable in our analysis. We also include a variable based on the respondents’ assessment of the current situation around them. If the respondent’s answer is that it is *impossible to tolerate*, we would expect him to have a hard time trusting others, while we take the response *not so bad* to imply feelings of safety, which are likely to promote trust. This question is a standard question in Russian national surveys, typically included to measure the overall state of affairs. In Russia this may be primarily driven by material circumstances, but in the North Caucasus may entail a mix of material and political-conflict circumstances. As a result care is required in its cross-cultural interpretation.

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<sup>7</sup>We should note, however, that it is not entirely clear what the causal direction is: It could be that a person who trusts members of other ethnic groups is more likely to have members of those groups as friends.

We further include measures for the respondents' material status, level of education, age, and gender. Material status is widely hypothesized to be positively correlated with interpersonal trust. A wealthy individual may have fewer financial worries and, as such, feel more secure than a poor individual, and it is reasonable to expect such a sense of security to engender trust (Freitag 2003). In terms of education, based on the logic of the contact hypothesis, we would expect more educated people to be more exposed to people of different ethnic groups (either through personal contact or by reading more widely), which would be positively correlated with inter-ethnic trust. As for age, given that older generations in both societies lived through the communist period where ethnic tensions and violent conflict were rare, we would expect them to be more inclined to believe in inter-ethnic trust and cooperation than younger generations who have grown up in a far more conflictual time (Bahry et al. 2005). We also know that the core of the militias in Bosnia and the North Caucasus are composed of young men. Finally, we anticipate that women and men will have different perceptions of the possibility of inter-ethnic cooperation and trust.

Despite this set of well-informed prior expectations about the correlates of inter-ethnic cooperation and trust, no one has a good idea about the ways in which these factors may be combined. As a result, most studies have relied on a simple model in which components enter in a linear and additive way into a statistical model, in this case an ordered probit model. In future research we will explore some nonparametric alternatives, but for now we concentrate on a more catholic analysis of the surveys.

#### DATA AND METHODS

The main data for this study consisted of responses to two surveys conducted in 2005. The aim of the surveying design was to link thematic data for a wide range of important actors and institutions: data from aggregate geographic units (rayoni in Russia and opštini in BiH) derived from government sources (such as the Russian Census 2002) as well as data on individuals who are chosen to participate in the survey questionnaire based on a geographic design that includes all types of districts in the two study regions. To organize our data collection and to overlay and integrate the spatial coverages for the different types of data, we developed a GIS to efficiently display the information collected.

Since there is a scarcity of work on war outcomes in the affected region around Chechnya, we begin with an exploratory approach for the most part. By contrast, BiH has been the site of detailed examination of the political and economic effects of the 1992-1995 war and has been the focus of numerous surveys (e.g. those of the Southeast and Eastern Europe Social Survey Project at the Norwegian University of Science and Technology - <http://www.svt.ntnu.no/iss/ringdalweb/SEESSP%20Surveys.html>) and international agency data collection (e.g. the quarterly UNDP report on the country). We measure and document the nature of attitudes and preferences towards the contemporary situation, social networks, socio-demographic and national characteristics, and the nature of cross-national relations in the light of experiences of conflict and continued unsettled political environment of the region.

Our general entry point is an examination of the key distributions and correlations that will track the nature of postwar adjustments. The foci are separated into two main categories, geographic distributions of politically sensitive attitudes and explanatory relationships that account for these attitudes. We systematically analyze the effects of socio-economic and ethnic characteristics on attitudes and perceptions as well as examine the separate, cumulative and controlled effects of both sets of predictors on the extent of changes since the breakup of the Soviet Union and of Yugoslavia in 1991.

The key element of our work is the implementation of a large public opinion survey of 2000 persons in each region in December 2005. The North Caucasus is typically not included in Russian national surveys and while there have been some small localized surveys in individual republics of the region, we believe that ours is the first scientific public opinion survey of the whole area (minus Chechnya and Ingushetia). It includes representative numbers of all the major nationalities and while we can't be completely certain of its representative character because of migration and temporary residences, comparison to the Census 2002 data suggest that the ratios for each major group in our survey are appropriate, recognizing that Chechens in Chechnya and those also in refugee camps in Ingushetia were not sampled. Similarly, the last census of population for Bosnia was 1991 and while population estimates are available, enormous dislocations, ethnic cleansing, internal migration and emigration have made these numbers problematic.

Given the lack of previous localized post-war research, we look at three basic propositions: (1) Gains and losses from the war are differentially distributed by nationality and locality in the North Caucasus and in BiH) but gains and losses are more differentiated with respect to economic issues and institutional access. Migration, either voluntary or forced, thus, is effective in generating winners and losers; (2) Social interaction

is differentially distributed across class, with highest levels found in middle class households but interaction might vary by geographic locale, even after class is controlled; and (3) Nationalism is related to the level of alienation-optimism about the future of the postwar transition (economic, democratic and state-building) in Russia and in the region but we also expect nationalism will vary by personal experience with the local and federal state agencies and inter-group attitudes and relations. This particular study examines facets of the second and third propositions.

Since we cannot completely cover all the 115 rayoni and cities of Stavropol krai and the four ethnic republics of the North Caucasus and the 109 opstini of BiH, we have to be selective in the choice of study sites for the surveys so that we have enough respondents in each community and also ensure that we are sampling correctly for differences in the sizes of nationalities. King, Keohane & Verba (1994) caution against selection of cases on the basis of the dependent variable; such an error would be selection of the most conflictual and war-affected locales to study postwar outcomes. Since conflict is not uniformly present across the region, our explanatory variables help us to understand what parts are most affected by war and what parts less so. Following the best practice of case selection (Dion, 1998), we select observations to ensure variation in the explanatory variables, such as the mix of nationalities, population change, environmental character as measured by land use and land cover, relative economic standing, urban and rural regions, and distance from conflict zones (Chechnya).

The data collection involved 3 stages: (1) collection in the North Caucasus of aggregate thematic data (mostly census 2002 data) of the whole of the regions at the smallest geographic units available, rayoni and cities, from the statistical offices of the respective republics<sup>8</sup>; In BiH, the equivalent data are 1991 population and ethnic data; (2) stratification of the sub-areas of the study sites for selection as survey sites; and (3) survey of populations using a random procedure. A non place-based, random sample of the republic's population (the norm in sociological studies of attitudes) would not adequately test the degree to which levels of postwar adjustment vary with respect to place of residence, conditional on national group membership, material well-being, or political attitudes. Systematic stratification on the basis of geographical units - in this case, districts (rayoni/opstini) and cities/villages - allows for a thorough investigation of the central hypotheses listed above.

Data that we employed in the stratification of the republics' rayoni/cities originate from several sources. Together, these data constitute four aggregate measures: ethnic diversity, material well-being, electoral measures, and environmental conditions (population density, urban-rural status). The sources and types of data include: 1) Aggregate socio-economic data: Data from the Russian October 2002 census (as well as changes since the previous 1989 census) constitute the most consistent, albeit partial, picture of changing social and economic circumstances among the regions' nationalities and their material status. We employed data on ethnic population composition, population change since 1989, occupation, agricultural ratio, industrial ratio, doctors per capita, birth and death rates, infant mortality, average salaries, phones per capita, crime rate, and pupils in school as a ratio of the population. The BiH census data must come, unfortunately, from the 1991 Yugoslav updated by numbers on refugee returns from the UNHCR; data on land use and land abandonment are taken from Corine Land Cover (from Landsat 30 meter imagery); data on housing damage and destruction from the OHR (Office of High Representative); and data on Parliamentary election results 2003 and 2004 data for Russia included the vote percentages for the major national parties and for the Presidential candidates are from official statistics. For BiH, there have been numerous elections and we used the data from the 2000 Parliamentary contest for our classification purposes. Because parties are so strongly aligned with ethnicities, these data provide a very useful surrogate for population distributions.

We stratified the districts of the study areas according to the total of 26 variables using the approach employed by Taub et al. (1984) in their analysis of crime, race and neighborhood change in Chicago. We deliberately use only independent explanatory variables in order to avoid selection bias that would result from sampling districts on the basis of political activism or indicators of violence (King, Keohane & Verba, 1994, 128-149). We use a grouping algorithm (Ward's hierarchical method) in order to cluster types of rayoni/cities and opstini in terms of the socio-demographic indicators. At each stage of clustering, an error term is generated and we picked the 6-cluster solution as the best compromise between gross aggregation and cluster complexity. For each of the clusters, districts were sampled randomly except that the main cities were also included in the sample rayoni. By strategically sampling a wide variety of counties and cities, we created a representative sample of districts. On this basis, we are able to correlate the nature

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<sup>8</sup>These aggregate data were collected with the assistance of Valery Belozarov, Vice-Rector, and Alexander Panin, Assistant Professor of Geography at Stavropol State University.

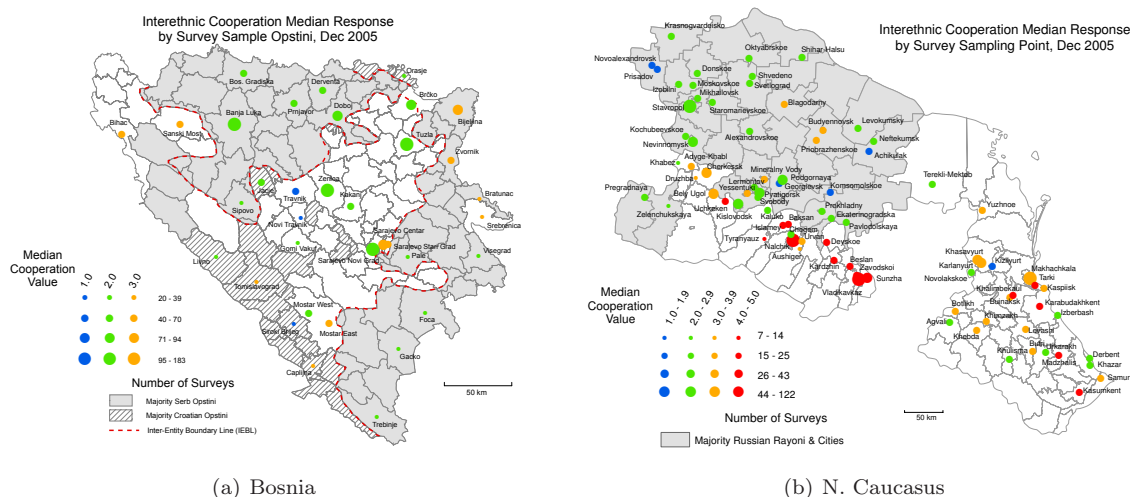


FIGURE 1. *inter-ethnic Cooperation.*

of postwar conditions, national attitudes and ethnic interactions with the explanatory social-demographic variables and thus determine if contextual and (personal) compositional factors are significant with respect to the variation.

A survey questionnaire was administered to a random sample of adults over the age of 18 (voting-age population) in each of the 35 counties/cities in the North Caucasus. The distribution was roughly proportionate to the number of adults in each republic/krai and was composed as follows: Dagestan 625, Kabardino-Balkaria 246, Karachaevo-Cherkessia 121, North Ossetia 198, and Stavropol krai 810 for a total of 2000 persons; a weights vector was included to adjust the sample proportionate to the regional populations. In Bosnia-Herzegovina, the sample was distributed proportionately to population in 35 opstini, so no weights are necessary.

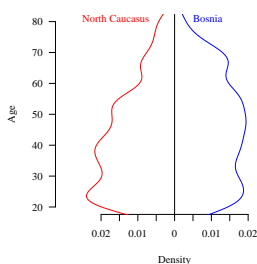


FIGURE 2. *The age distribution of survey respondents in Bosnia and the North Caucasus.*

was 45 minutes, and the surveys were conducted in Russian in the North Caucasus by a survey team from Krasnodar, Moscow and Stavropol, and in Bosnian, Serb or Croat in the respective regions of BiH by local interviewers.

Figure 1 illustrates which localities were sampled along with a indication of the median response to the main dependent variable in each locale we surveyed. Low values in this presentation indicate that the respondent agrees that inter-ethnic cooperation is possible, even if trust can not be established. Thus, green

<sup>9</sup>We thank A. Graždankin and his colleagues of the Levada Center and Dino Djipa and Marina Francic of Prism Research, Sarajevo for their timely, professional, and friendly cooperation that made this part of the study possible.



and blue dots, for example, show sampling regions in which the modal response to this instrument is to agree that cooperation is possible; Red dots signify that the average respondent does not believe that cooperation is possible across ethnic groups who do not have a pre-existing basis for trust. In general, we find that there is a higher level of average belief in inter-ethnic cooperation in BiH than in the sampled parts of Russia. Moreover there is considerable clustering of individuals who do not believe that inter-ethnic trust is possible along the western borders of Chechnya, and to a lesser extent on the eastern borders of the Caucasus region. In general, we find that Bosnia has a higher level of trust, on average, than does the North Caucasus region.

Our typical respondent is a middle-aged (44 year old) woman. Interestingly, of all of our 4000 respondents, 2242 are women and 1758 are men. This somewhat skewed gender ratio may be related to men being more reluctant to talk about the conflict and ethnic relations in these regions, as men are more likely than women to have been combatants or they are more likely to have been accused of being combatants. This inkling is supported by the observation that the gender distribution is slightly more skewed in Bosnia than in the North Caucasus. Although the average age is 44, Figure 2 illustrates that the single largest age groups represented are 21, 24, 25, 26, as well as 40, and 55, and portrays the specifics of the age distribution of respondents in Bosnia and North Caucasus. As for socio-economic status, the typical respondent has finished secondary or technical high school and, when asked if about assessing her family's material status on a scale that included *we can purchase all we want*, *we have money for food and clothes only*, *we have money for food only*, or *we have no money for food*, responded that *we have money for food only*. The second most frequent response was *we have money for food and clothes only*.

In the North Caucasus survey, the largest ethnic groups represented are Russians (871), Avars—the largest group in Dagestan (179), Darghins—comprising the second largest group in Dagestan (137), Kabardinians (139), and Ossetians (130). In Bosnia, the largest ethnic groups represented are Bosniacs (Muslims) (879), Serbs (717), and Croats (316), while there are relatively few who identify themselves as Bosnian which implies a civic identity as a citizen of BiH and a rejection of ethnic labels (58) or of mixed origins (9). These are shown in Figure 3.

Respondents were also asked a number of questions about ethnicity and ethnic relations, such as the extent to which they feel proud to be a member of their national group, the nationality of their closest friends, whether they would like to have more friends among national groups, and whether they considered ethnic relations to be improving or not. Figure 4(a) illustrates the extent to which respondents in Bosnia and the North Caucasus desire friends of different nationalities. Figure 4(b) illustrates the strong difference among aggregate opinions about the direction of ethnic/national relations during the period since 2000: Respondents in BiH are decidedly more pessimistic about the recent past than are inhabitants of the North Caucasus.

The study's main hypothesis concerns the experience of violence. The majority of our respondents (2849) have no personal experience with violence—neither they nor their closest family members have witnessed a violent nationalist incident. While about a quarter of the respondents (500) in both Bosnia and the North Caucasus have had that kind of experience, 1500 respondents in the North Caucasus responded that they have no such experience, while the *no* category in Bosnia is about 1300, with a larger number of respondents either answering *I don't know* or refusing to answer. While still a minority, about 25% in both BiH and North Caucasus say that they or close family members have witnessed injury or death. The vast majority of Ossetins report that they have witnessed violence, but this may be an effect of the Beslan incident occurring so close to the site of survey administration.

Our dependent variable, inter-ethnic trust, is a categorical variable based on the following question: *Among national groups, it is possible to create cooperation but never to fully trust*. The answers vary from strongly agree (1) to strongly disagree (5), and the distribution is represented in Figure 5. Again we see the aggregate pessimism of the respondents in BiH compared with those in the North Caucasus. A typical estimation technique when the dependent variable is an ordinal variable like ours is ordered probit or logit. Because we want to measure and correct for survey response incomparability by using the anchoring vignette,

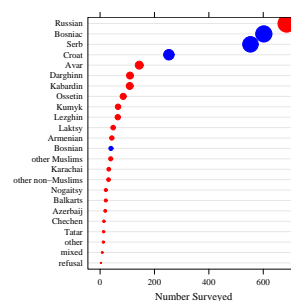


FIGURE 3. *The distribution of respondents in Bosnia (Blue) and the North Caucasus (Red) by self-reported, major national groupings.*

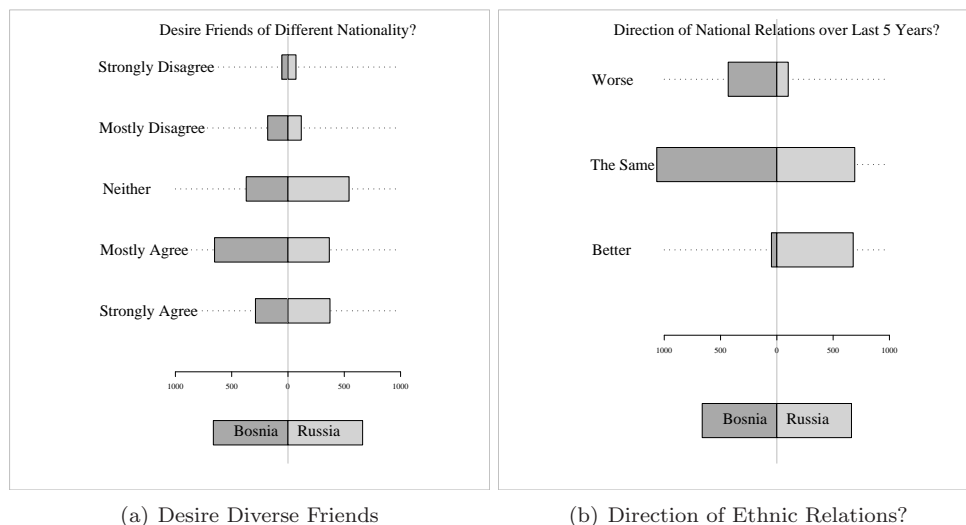


FIGURE 4. Comparing BiH and N. Caucasus on two attitudinal questions.

we use an estimation technique called chopit (short for compound hierarchical ordered probit), which allows us to incorporate anchoring vignettes.<sup>10</sup>

Anchoring vignettes allow one to measure how much of a difference there is among different respondents' understanding of a survey question. Because the respondents in any given survey have different backgrounds—different cultures, countries, ethnic groups, classes, et cetera—they may understand the same question in very different ways. Take as an example the following scenario: It is 1975 and you are an Italian citizen. You are asked how often you participate in a major political protest—very often, often, from time to time, rarely, hardly ever. In the last year, you have participated in two political protests, and you answer *hardly ever* to the question. The same question is asked of a Russian citizen in 1975. She has also participated in two protests in the last year, but her answer is *often*. We know that in the 1970s, political protests in Italy took place quite frequently, while such events were few and far between in communist Russia, so it makes sense to us that the Italian and the Russian would judge their frequency of protest participation differently—they have different standards. The problem is, however, how can we measure such response incomparability? The solution proposed by King, Murrin, Salomon, and Tandon (2004) is to use anchoring vignettes, which typically are short descriptions of hypothetical people and situations. The survey respondents are asked to assess these hypothetical situations on a scale similar to the one that they are asked to assess themselves on. If we stick to the example above, the self-assessment question is about the respondent's own political protest activity. The anchoring vignette could describe a hypothetical persons' political participation (*Alice goes to political meetings once a month.*), and the respondents would then be asked to assess whether this is very often, often, from time to time, rarely, or hardly ever. Because the level of participation of Alice in the vignette is set, the variation in the respondents' assessment of Alice's political participation is due to interpersonal incomparability. Knowing the size of this incomparability allows us to correct for it when analyzing the self-assessment question in the statistical analysis. This approach has been used successfully in World Health Organization surveys of health status across the globe.

In this study, the self-assessment question we're interested in asks the respondents if they think inter-ethnic trust is a possibility, and the answer alternatives range from "strongly agree" to "strongly disagree." But what if "strongly agreeing" with this statement means something else for a Chechen than for a Bosniak?

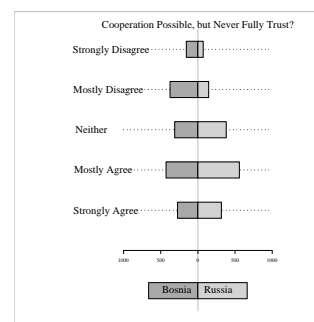
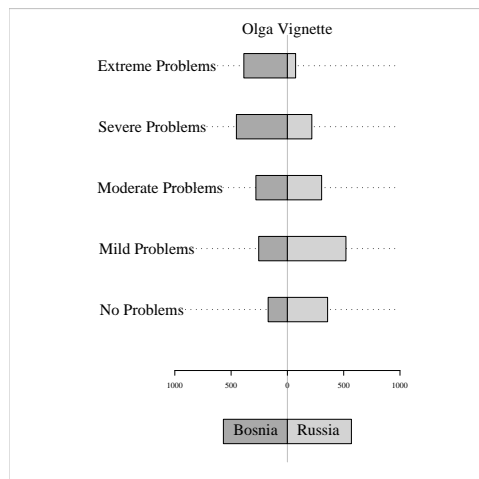


FIGURE 5. Inter-ethnic cooperation, without trust?

<sup>10</sup>To run chopit with Stata, see Rabe-Hesketh and Skrondal (2002). For chopit in R, see Wand and King (2005). Our experience is that, uncharacteristically, the R-procedure is many orders of magnitude faster.

FIGURE 6. *Vignette Responses.*

In order to measure the agree-disagree scale that each of the respondents operates with when it comes to interpersonal trust, they were asked to assess the following hypothetical situation, which is modified from a WHO anchor:

[Olga] gets on well with people she knows but has no close friends. She has not spoken to her mother in 5 years and does not want to see her. Because of this tension, her family usually excludes her from family gatherings. Overall, how much difficulty does [Olga] have with personal relationships or participation in the community? Do you think she has no difficulties, mild difficulties, moderate, severe or extreme difficulties?

We take the respondents' answer to this vignette into consideration to correct for response incomparability. As Figure 6 illustrates, our respondents in Bosnia and the North Caucasus appear to have substantially different standards for measuring Olga's putative difficulties. Whereas the majority of the respondents in Bosnia believe that Olga has from moderate to extreme difficulties in dealing with personal relationships, the respondents in the North Caucasus believe her difficulties range from none to moderate in this regard. Likewise, people of different ethnic origins have different standards as well.

#### STATISTICAL RESULTS

We report the results of a conditional hierarchical ordered probit alongside the results from a conditional hierarchical ordered probit in Table 1. As expected, the chopit model permits a calibration of different thresholds in Bosnia and the North Caucasus. The result of this calibration yields a fundamentally different result. The main result is that respondents from BiH are more dubious of trust, on average, than are those respondents in the North Caucasus regions. We return to this finding in discussing Figure 7 below. We note first, however that older and female respondents are more dubious of the possibility of inter-ethnic cooperation. Those who assess their material status (a proxy for income/wealth) as healthy are more inclined to believe in the possibility of inter-ethnic cooperation. At the same time, those who assess their current situation as being worse than it was in the previous period also express doubts about the potential for inter-ethnic cooperation. Each of these findings is strongly revealed by the Chopit estimations, *but is missing in the ordered probit specification*. At the same time, we find that exposure to violence does not seem to exhibit an independent effect on the level of optimism about inter-ethnic cooperation. The results from an ordered probit as well as a conditional hierarchical ordered probit are presented in Table 1.

We included indicator variables for three national/ethnic groupings, based on an analysis of marginal patterns. Russians, Ossetins, and Croats each showed distinct patterns, in comparison to the other groups (taken collectively). While these findings must be carefully considered, we find that Russians, on average, are less dubious about the possibilities of inter-ethnic cooperation than most other groups; so too are the Croats. The Ossetins, on the other hand, are substantially more doubtful about inter-ethnic cooperation. We note that a recent survey (by RFE-RL on April 11, 2006) in Ossetia revealed the following curious result, which is in line with our findings: in an April 2006 poll, 79% of Ossetins surveyed want to return the Prigorodny

TABLE 1. *Estimates of Doubt about Inter-ethnic Cooperation via ordered Probit as well as Conditional Hierarchical Ordered Probit (CHOPit); Neither  $\tau$ 's nor  $\gamma$ 's are shown. See Figure 7.  $N=3017$ . Estimates significant at  $p < .05$  are shown in bold.*

Variable	Ordered Probit			Chopit		
	Estimate	$\sigma$	t-value	Estimate	$\sigma$	t-value
Bosnia	<b>-0.534</b>	0.057	-9.407	<b>0.648</b>	0.089	7.313
Gender	0.008	0.039	0.210	<b>0.144</b>	0.060	2.377
Age	0.000	0.001	0.181	<b>0.006</b>	0.002	3.316
Education	0.009	0.019	0.465	0.033	0.029	1.140
Material status	-0.035	0.027	-1.275	<b>-0.129</b>	0.042	-3.055
Ethnic relations	-0.059	0.035	-1.661	0.069	0.055	1.267
Current situation	-0.025	0.037	-0.674	<b>0.155</b>	0.057	2.727
Ethnic friends	<b>0.072</b>	0.021	3.485	-0.032	0.032	-0.991
Closest friends	<b>0.088</b>	0.027	3.307	0.045	0.041	1.102
Pride	<b>0.091</b>	0.021	4.330	0.025	0.033	0.780
Member of Ethnic Organization	-0.029	0.097	-0.303	0.085	0.149	0.572
Violence	<b>0.176</b>	0.045	3.876	0.095	0.070	1.354
Russian	<b>-0.558</b>	0.059	-9.500	<b>-0.559</b>	0.092	-6.087
Ossetin	<b>0.924</b>	0.129	7.168	<b>2.198</b>	0.224	9.799
Croat	<b>-0.214</b>	0.074	-2.879	<b>-0.827</b>	0.115	-7.165

rayon to Ingushetia in spite of the fact that they had wrested it from the Ingush in the 1992 war in which thousands died.

It is quite striking that it does not appear that attitudinal factors such as one's general view on ethnic relations, whether the respondent desires more contact across groupings, the existence of an ethnically diverse group of close friends, and pride in one's ethnic group do not appear to strongly influence belief in the possibility of inter-ethnic cooperation. Neither does experience with violence, despite how widespread this is in our respondents (approximately 25%). Perhaps the main effect of violence on inter-ethnic cooperation is in BiH, where the ethnic cleansing of the mid 1990s was on a scale far beyond that seen in the North Caucasus.

The main covariates of importance are the age, gender, nationality—none of which changes much over time—and evaluations of the extent of material well being and the extent to which the current situation has changed in the last five years. These latter two variables are similar to the well-known pocketbook questions in many surveys. If respondents are economically stable and if they perceive the situation to be improving, they are more likely to believe in the prospect of inter-ethnic cooperation.

Figure 7 illustrates the estimated levels of believe in cooperation in each set of respondents as well as the individual thresholds for BiH and North Caucasus respondents. BiH shows (in blue on the left) a higher level of belief in inter-ethnic cooperation. Indeed, it shows a mean level which falls within the 95% confidence bands around the putatively “correct” response in the vignette as illustrated by the gray bar and  $\theta_1$ . North Caucasus respondents are much less dubious of inter-ethnic cooperation. At the same time, this illustration shows that each of the corresponding thresholds estimated to separate different responses from one another are also higher in BiH than in the North Caucasus. It should be pointed out however that the majority in both samples do agree or strongly agree that inter-ethnic cooperation is possible, as seen by the mass of each estimated density over the strongly agree and agree categories. This finding should perhaps overshadow some of the findings about the impact of various covariates.

#### CONCLUSION

It is quite surprising that experience with violence does not seem to play an important role in determining prospects for inter-ethnic cooperation. This clearly merits further investigation. It might be that respondents who are located in the sites of particularly nasty violence such as Buddyenovsk, Nalchik, Beslan—all scenes of major hostage standoffs with a large attendant loss of life—or Srebrenica, Sarajevo, derventa, Brcko in BiH where even more loss of life occurred might be better proxies for the impact of violence

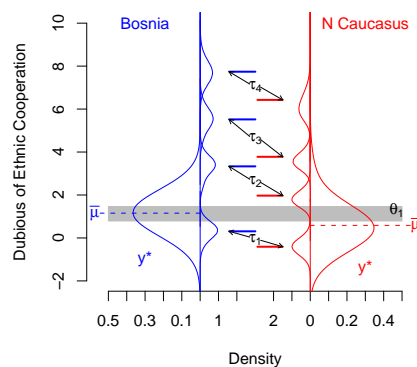


FIGURE 7. *Threshold Variation for Evaluation of the Possibility of inter-ethnic Cooperation in Bosnia and the North Caucasus.* Density estimates of all the  $\tau$  are given in the center of this plot, along with an indication of the difference in corresponding values in Bosnia and the North Caucasus Region. Density plots of the underlying trust variables in each survey are also provided on the far right and left in this graphic. The gray bar shows the 95% confidence interval for the vignette response ( $\hat{\theta}$ ) and  $\hat{\mu}$  indicates the mean level in each sample. Bosnia shows more pessimism about inter-ethnic cooperation, as well as higher corresponding thresholds.

than self-reports. It is also the case that our data from specific sampling points might be strongly influenced by events nearly contemporaneous with our surveys. For example, while Beslan and North Ossetia were surveyed about 14 months after the Beslan school tragedy, Nalchik and Karbardino-Balkaria were surveyed within 6 weeks of the militants' attack there in October 2005.

It is clear from the analyses, however, that we are studying two different situations: the legacy of hate, distrust, and suspicion in BiH remains strong, but the state of inter-ethnic relations in the North Caucasus is not yet so bad. Part of the reason is that the war in the Caucasus has not been as dramatic as in BiH, but is more geographically confined to Chechnya and immediate borders. Unfortunately, we were unable to conduct surveys in Chechnya, surveys which might have shed further light on the state of inter-ethnic cooperation. Further, the war in Chechnya does not involve all groups but is more of a classic irredentist rebellion of the state versus rebels, where BiH was seen as a fight for survival for all three groups.

In short, we find that there is a substantial belief in the possibility of inter-ethnic cooperation both in BiH and the North Caucasus, in spite of substantial inter-ethnic violence in each location. Moreover, it appears that while the violent ethnic conflict in the recent history of BiH has created greater barriers to inter-ethnic cooperation, but the vast majority of Croats, Bosniacs, and Serbs, agree or strongly agree that cooperation is possible, even without the elusive inter-ethnic "trust." The same is true in the North Caucasus region, although we have not been able to conduct surveys in Chechnya or Ingusetia. Beyond ascriptive and demographic characteristics, very few attitudinal variables seem to be important in determining this belief in the possibility of cooperation. However, "pocketbook" issues seem quite prominent as those in BiH and the North Caucasus who believe that things are getting better and who also have higher levels of material well being are more optimistic about cooperation. Those still struggling to survive, or who perceive their situation to continue to deteriorate are less optimistic about inter-ethnic cooperation.

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TABLE 2. Summary statistics for survey in North Caucasus and Bosnia, Winter 2005.

	Observations	Mean	$\sigma$	Minimum	Maximum
inter-ethnic Cooperation possible	3017	2.60	1.19	1 (strongly agree)	5 (strongly disagree)
Violence	3017	0.26	0.44	0 (no)	1 (yes)
Organization	3017	0.04	0.20	0 (no)	1 (yes)
Closest friends	3017	2.35	0.80	1 (high)	5 (low)
Ethnic friends	3017	2.41	1.06	1 (low)	5 (low)
Pride	3017	1.66	0.93	1 (high)	5 (low)
Ethnic relations	3017	1.94	0.64	1 (high)	3 (low)
Current situation	3017	2.07	0.58	1 (good)	3 (bad)
Material status	3017	2.61	0.82	1 (good)	4 (bad)
Education	3017	3.05	1.21	1 (low)	5 (high)
Age	3017	43.65	16.89	17	87
Gender	3017	0.56	0.50	0 (male)	1 (female)
Vignette: Olga	3017	2.92	1.34	1 (low)	5 (high)

The following questions from the surveys were analyzed in this paper, along with self-reported demographic information.

- To what extent do you agree with the following statement? Among national groups, it is possible to create cooperation but never to fully trust.
  - (1) Strongly agree
  - (2) Mostly agree
  - (3) Neither agree nor disagree
  - (4) Mostly disagree
  - (5) Strongly disagree
- During the war or its aftermath, have you or your close family members ever witnessed a national incident that involved injury or death? Yes or no.
- Are you or any member of your family a member of local community organization like a street committee or maintenance of the building? Yes or no.
- To what extent do you feel proud to be a member of your national group? Would you say you are very proud, somewhat proud, little proud, are not proud at all, or you are neutral about this question?
  - (1) Very proud
  - (2) Somewhat proud
  - (3) I am neutral about this question
  - (4) Little proud
  - (5) No pride at all
- Who are your closest friends? Are they all from your nationality, mostly from your nationality, mixed nationalities, mostly from other nationalities, or they are all from other nationalities?
  - (1) All from my nationality
  - (2) Mostly from my nationality
  - (3) Mixed nationalities
  - (4) Mostly from other nationalities
  - (5) All from other nationalities
- To what extent do you agree with the following statement? I would like to have more friends among people of different nationalities in this region.
  - (1) Strongly agree
  - (2) Mostly agree
  - (3) Neither agree nor disagree
  - (4) Mostly disagree
  - (5) Strongly disagree
- In this locality over the past 5 years, are national relations getting better, worse or they are staying the same?
  - (1) Better

- (2) Staying the same
- (3) Worse
- Which of the following statements best corresponds to your current situation in your locality?
  - (1) Things are not so bad, it is possible to live well
  - (2) Life is difficult but it is possible to get by
  - (3) To tolerate our difficult condition is no longer possible
- In relation to purchasing power, how would you rate your family's income level?
  - (1) We can purchase all we need
  - (2) We can purchase all we need except for durable objects
  - (3) We only have enough money to provide food
  - (4) We do not have enough money to provide food
- Could you tell me what is your highest level of education?<sup>11</sup>
  - (1) Primary or below
  - (2) Uncompleted secondary school
  - (3) Completed secondary school, including technical high school
  - (4) Technical college
  - (5) University, finished or partial
- Now, we shall tell you a short story and ask you a question about it. X gets on well with people she knows but has no close friends. She has not spoken to her mother in 5 years and does not want to see her. Because of this tension, her family usually excludes her from family gatherings. Overall, how much difficulties does X have with personal relationship or participation in the community? Do you think she has no difficulties, mild difficulties, moderate, severe or extreme difficulties?<sup>12</sup>
  - (1) Extreme
  - (2) Severe
  - (3) Moderate
  - (4) Mild
  - (5) None

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<sup>11</sup>The scale of this question was different in the two surveys, so we recoded it to the scale you see here.

<sup>12</sup>In the survey, the ordering of the answer alternatives was the reverse, but we switched it around in the analysis, so that the direction of the scale on the self-assessment question (on trust) and the vignette was the same.



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