Borders and bullies: How borders shape perceptions of security and foreign policy preferences

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Abstract

Contested borders raise the question of how to provide security without provoking a stronger neighbor. Using novel survey data from Georgia, we investigate how proximity to disputed borderlines and variation in the nature of borderlines shape security perceptions and foreign policy preferences. People near the ambiguous border to South Ossetia are substantially more likely to worry about border insecurity than those near the fortified borderline to Abkhazia. Yet those near South Ossetia are least likely to demand a stronger stance against Russian supported creeping borderization and are not consistently more in favor of a stronger alliance with NATO. This exploratory study points to important within-country variation and that those most affect by instability do not necessarily favor more hawkish foreign policies.

Keywords
security · perceptions · borders · foreign policy · post-conflict · Georgia

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Introduction

Borders influence political and economic interactions between countries and directly impact the lives of those living in their vicinity. These consequences are particularly daunting around contested borderlines, as border conflicts around the globe regularly remind us of. Given how important borders are for citizens' lives, we know surprisingly little about attitudes towards border security (Gravelle 2022). We investigate how contested borders affect perceptions of security and foreign policy preferences by asking three questions. First, how does proximity to contested borderlines affect people's sense of security? Second, how does proximity shape foreign policy preferences? Finally, does the effect of proximity on attitudes depend on boundary lines' characteristics?

We address these questions with novel survey data from Georgia because this country poses a particularly interesting case for these questions. First, Georgia has two contested boundary lines that differ in their degree of fortification, although being formally equivalent.[1] Second, foreign policy issues are highly salient, especially the question of how to deal with a militarily superior potential aggressor (Kupatadze & Zeitzoff 2021). We compare perceptions of security and foreign policy attitudes of those who live in close vicinity to boundary lines with those who live further away. We compare the impact of a fortified, clearly visible and stable boundary line with the effect of a more tenuous one. Past research has equated physical proximity to borders with greater visibility and argued that proximity and visibility make individuals experience borders in a more concrete manner (Cortina 2020; Gravelle 2022; Mutz & Simmons

[1]The lines of separations between Georgia and the two breakaway regions South Ossetia and Abkhazia are called "Administrative Boundary Lines" by the European Union, "occupation lines" by Georgia and are seen as international borders by Russia.

2022; Trope & Liberman 2010). We separate proximity to borderline from their visibility, or degree of fortification. We investigate whether physical distance to and physical appearance of borders impact attitudes *differently*.

Our study highlights that border security is "largely in the eyes of the beholder, enhancing a sense of psychological rather than material security" (Simmons & Kenwick 2022, 16). It advances our understanding of the effect of borders on perceptions and preferences by uncovering complex within-country variation in how contested boundary lines shape attitudes. We show that this variation is driven not just by proximity, but also by border characteristics. By de-coupling proximity from visibility and fortification, we highlight that the effect of proximity to borders on attitudes depends on the nature of the borderline. Our study also cautions about how perceived insecurity translates into foreign policy preferences. Personal security risks do not automatically push individuals towards favoring a hawkish foreign policy. With much stronger neighbors, this relationship is more complicated.

How borders shape perceptions

Borders are designed to restrict and control the movement of goods and people and to display sovereignty over territory (Hassner & Wittenberg 2015). They project political authority to the outside world and towards their own citizens (Simmons & Kenwick 2022). Borders shape expectations, perceptions and de facto implementation of sovereignty and of peace processes (Krasner 2001; Lake 2003; Morgan-Jones et al. 2020). They establish a sense of belonging and unity for those encircled by a common

boundary line. Leaders even build border walls to strengthen support, similar to the "rally around the flag" effect (Linebarger & Braithwaite 2022).

But the impact of borders on attitudes depends on how borders are experienced. First, political phenomena, including formal and informal borders, are experienced differently by those in geographic proximity compared to those to whom the phenomenon is a more abstract concept due to greater physical distance (Cortina 2020; Gravelle 2018; Trope & Liberman 2010). For example, support for the U.S.-Mexico border wall varies not only by characteristics of the individual, but also by proximity to the border (Cortina 2020; Gravelle 2018, 2022).

Second, borders vary greatly in their physical manifestations and projection of sovereignty within and outside their territory. While some consist of concrete walls with highly regulated transit points, others lack any manifestations of where exactly the border is (Simmons & Kenwick 2022). Weakly fortified or ambiguous borders often have a destructive impact on their environment (Barak 2010). Ambiguous borders can lead to political or military insecurity and conflict (Cederman et al. 2022). Border insecurity shapes the stability of social networks and social trust, and therefore the potential for conflict, for centuries to come (Abramson et al. 2022). Borders fortified by concrete walls are associated with greater border security (Mutz & Simmons 2022). But border ambiguity can enable politicians to lay claim to areas beyond these boundaries, even if they have lost effective control (Barak 2010). But how do geographic proximity to more or less ambiguous borders affect perceived security and foreign policy preferences?

Georgia's Administrative Boundary Lines and their effect on perceptions and attitudes

Georgia's two breakaway regions, Abkhazia and South Ossetia (referred to as *Tskhinvali region* in Georgia), are prime examples of different contested borderlines.[2] Neither is recognized as international border by Georgia or the majority of the international community. But Georgia does not have effective control over the "occuption lines" or over the two de-facto states. Beyond these similarities, the two administrative boundary lines (ABLs) differ in their physical form, their ambiguity and how they regulate transit.

Abkhazia is cut off from the rest of Georgia by a clear and effective physical border. Topography facilitates its visibility, stability, and predictability. For large sections, the borderline roughly follows the Enguri river and is not passable; the majority of passable sections are clearly demarcated by fences and walls (Rzeszutko 2022). The ABL between Georgia and South Ossetia is substantially longer and cuts across predominantly passable areas. Only a small proportion is clearly demarcated with barbed wire fences, installed by Russian and South Ossetian border guards (Rzeszutko 2022). Many areas lack any sign of the borderline. This invisible borderline, often cutting across farmland and villages, leaves residents at risk of being detained by Russian and South Ossetian border guards for supposedly crossing into South Ossetian territory. This ambiguity and weak fortification allows for "creeping occupation", referring to Russian border forces shifting the borderline by erecting

[2]For a discussion of these two de facto states, see, for example, Hoch & Souleimanov (2020) and Toal & O'Loughlin (2013).

barbed wires or moving them further into Georgian territory (IDFI 2015; Khatchvani 2019; Mindiashvili & Tavakarashvili 2019).

Georgians living in the borderland to Abkhazia can see where effective control of the Georgian government ends. Its visibility and permanency provides stability and dependability despite not being officially recognized. For those near the South Ossetian ABL, invisible and shifting borders threaten their livelihood and physical security as they risk detention by border guards (Amnesty International 2018; Brun 2019).

How does proximity to these different boundaries shape attitudes among the Georgian population? Official statistics suggest that people on the Georgian-controlled side of *both* ABLs are regularly detained by Russian border guards.[3] Despite the personal risks in physical proximity to both ABLs, proximity to a visible, established, fixed boundary line suggests dependability. The borderline is not an unknown quantity and is more likely seen as a "normal" feature. We do not expect that proximity to the Abkhaz ABL is associated with greater perceived personal insecurity.[4]

We expect that people who live close to the South Ossetian ABL have a very different perception of how this boundary affects their safety. The lack of permanent and in parts visible structures is a reminder of the unresolved questions of territorial control. This unstable situation, exemplified by the ambiguous boundary line, can reinforce the perception that peace and security might only be temporary. We expect

[3]See Figure A.1.1 in the Appendix.

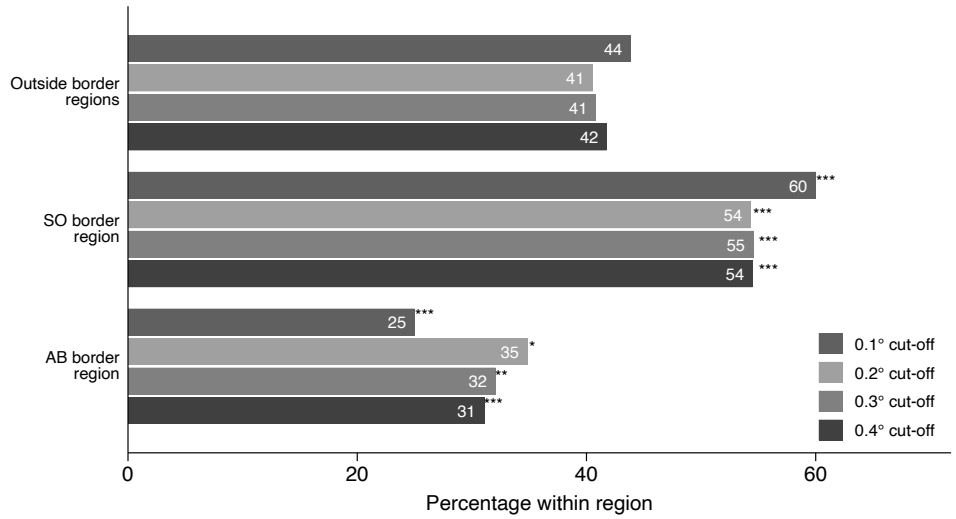
[4]Cortina (2020) finds that proximity to the U.S.-Mexican border reduces support among Republicans for a border wall compared to Republicans who live further away, because proximity creates familiarity and enables interactions. While the Abkhaz ABL does not facilitate interactions, its physical form might create familiarity.

that greater proximity to the South Ossetian ABL is associated with greater perceived personal insecurity.

The possibly more pressing question is how living in the vicinity of disputed boundary lines shapes expectations on how to counter expansionist policies by a substantially stronger neighbor. People might support escalating a crisis when provoked by a militarily superior opponent (Clary et al. 2021). In Georgia, prior to its 2008 war with Russia, "the entire political spectrum of Georgian voters [...] desired that their government pursue aggressive wartime bargaining behaviors vis-à-vis Russia" (Driscoll & Maliniak 2016, 270). But this "war initiation bump" for brinkmanship was driven by those *outside* the conflict zones.

While greater proximity to an ambiguous boundary might lead to greater perceived individual insecurity, this proximity, and perceived insecurity, might not translate into more hawkish foreign policy preferences. Driscoll & Maliniak (2016)'s findings highlight that those near conflict zones do not support aggressive bargaining. Getmansky et al. (2019) find that those who would be most affected by militarized border disputes are less supportive of hawkish policies. While we expect people in greater proximity to an ambiguous boundary to feel more insecurity, we do not expect these same individuals to prefer a stronger stance against creeping borderization – *even at the cost of continued border ambiguity or physical encroachment on their territory* – because those individuals would have to carry the brunt of a potential military confrontation.

Figure 1. Border insecurity as severe personal security risk



Note: The stat. sign. levels refer to the difference in means between the border region and the equivalent region outside both border regions, *** p<0.001, ** p<0.01 * p<0.05

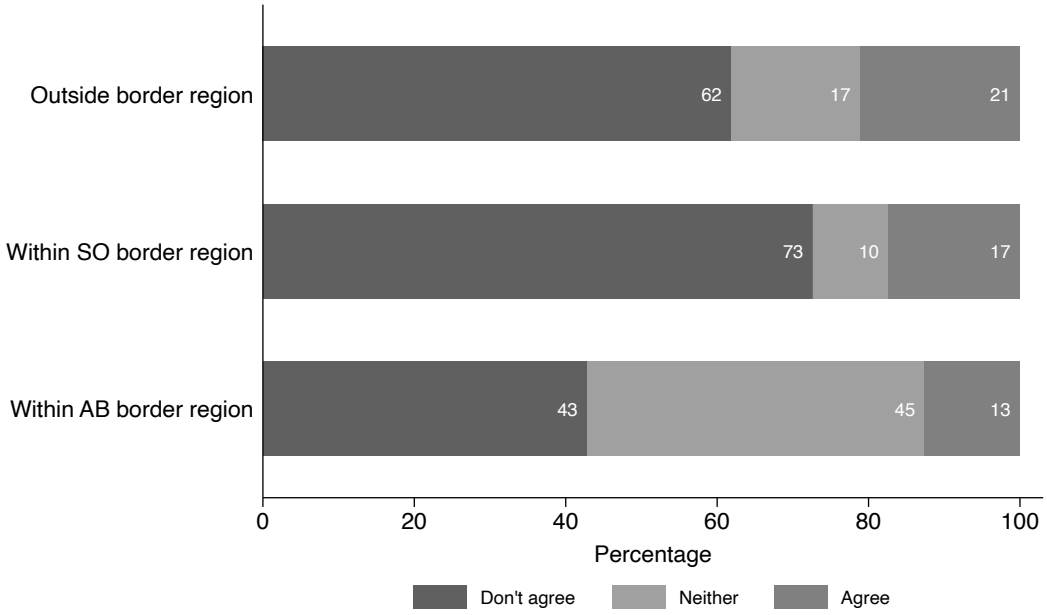
Data and descriptive patterns

We use data from an original face-to-face survey of 2,033 respondents in Georgia in 2018. The sample is representative of the Georgian adult population, excluding populations of South Ossetia and Abkhazia. We oversampled in the border regions near the Abkhaz and South Ossetian ABLs to be able to draw inferences from these two populations.[5]

Georgians view border insecurity as a highly salient problem. Figure A.1.2 in the Appendix shows that when asked about what severely threatened their personal security, border insecurity is by far the most commonly identified issue after poverty. How does proximity to boundaries affect perceptions? Figure 1 shows the percentages of respondents who live in the South Ossetia border region, the Abkhazia border region, and of those outside both border regions, who view the border as a severe personal security risk. We identify border region as increasingly larger areas, ranging

[5]More details on sampling methods are provided in the Appendix.

Figure 2. Should Georgia use force to prevent SO border change?

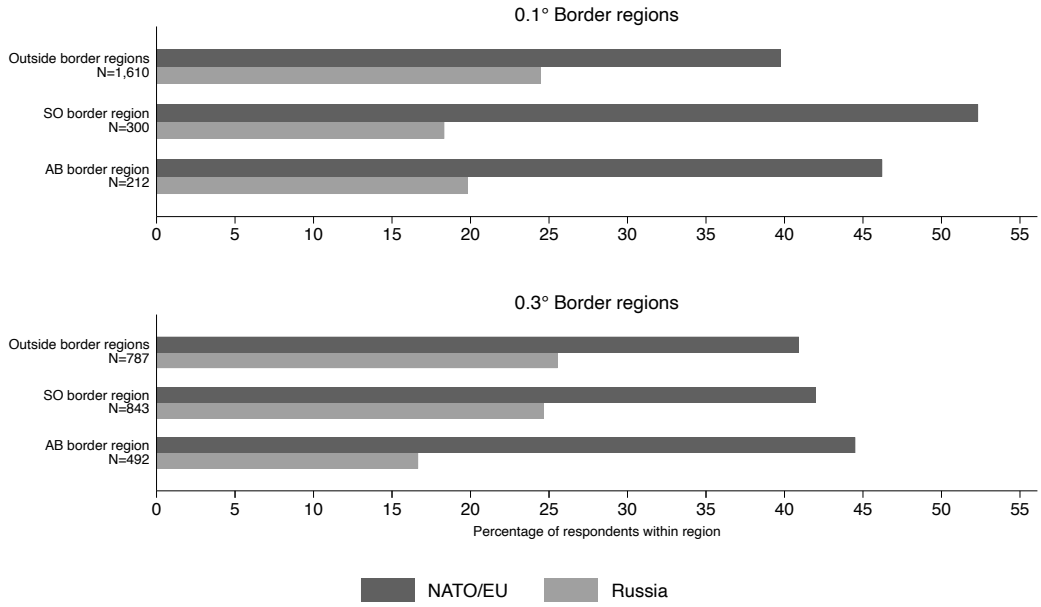


from within 0.1° to 0.4° of the Administrative Boundary Lines.[6] The levels of statistical significance refer to the difference in means tests between those in the respective border region compared to those outside both border regions. Respondents near the South Ossetian ABL are more likely to mention border insecurity as a severe personal security risk, while those near the ABL to Abkhazia are *less* likely to do so.

Given the insecurity due to "creeping borderization", we asked whether the Georgian army should use force to prevent moving the ABL to South Ossetia further into Georgia. Figure 2 suggests that although the majority of respondents near the South Ossetian borderline perceive border instability as a severe personal security risk, an even larger share does *not* support using force to prevent moving the boundary line. Viewing the border as a personal security risk does not translate into supporting the use of force to prevent further encroachment on their territory, although this creeping

[6] 0.1° is equivalent to approximately 11.1 kilometer.

Figure 3. Preferred military partner



borderization threatens their livelihoods and survival (Amnesty International 2018; Brun 2019).

Do those who are directly affected by Russian supported creeping borderization wish for closer military collaboration with NATO as potential deterrent against further aggression? The ABLs might act as a reminder of past conflicts with Russia.[7] Figure 3 shows the percentage of people in the three areas who chose NATO/EU or Russia as their preferred closest military partner, using two different cut-off lines for border areas. Respondents were given the option of choosing between China, NATO, Russia, EU, USA, Other, and "none of these", as well as "don't know" and "refuse to answer". For readability of the figure, we only show the choice for Russia and for NATO/EU.[8] About 40% of respondents outside the borderlands chose NATO or EU and 25% Russia.

[7]If people are reminded of past Russian aggression, they are more likely to view Russia as a threat and more likely to support Georgia joining NATO (Kupatadze & Zeitzoff 2021).

[8]See Table A.1.2 in the appendix for the distribution of answers across all options.

Those in close proximity to the South Ossetian boundary line are more likely to choose NATO as partner compared to other respondents, but this difference disappears for respondents within 0.3° of the ABL. Across all groups, support is substantially stronger for NATO and EU as military partner rather than Russia.

Multivariate analyses

We investigate perceived risk to personal security, attitudes towards using force to counter creeping borderization, and preferred military partner in multivariate analyses. We first run the analyses on the complete sample and identify respondents within 11km and 33km of the ABLs with binary variables. Next, we constrain the sample to both border regions to compare responses between the two. The last two models only include respondents from within 0.3° of either ABL to check whether individual characteristics shape responses in these areas differently. We control for individual characteristics that might affect attitudes towards the ABL and policy preferences.[9] The binary variable `Tbilisi` identifies respondents in the capital. `Heard about border violence` indicates whether respondents have (very) often heard about people being detained, beaten, abducted or killed in the border region.[10] `Harmed in war` identifies respondents who answer that they or someone they personally know had been physically harmed during the wars in the early 1990s or in 2008. We capture respondents' subjective assessment of their `own economic condition`, ranging from "1 – very bad" to "5 – very good". We control for high level of education (university

[9]Tables A.1.6 to A.1.8 show all results without the control variables.

[10]We asks about these four types separately, with four answer categories for each. The variable is coded "1" if respondents report to have often heard of at least one of these incidences.

degree), whether the respondent was female and three categories of age, using the youngest age bracket as reference point.[11] We use logit (Table A.1.3) and multinomial logit models (Tables A.1.4 and A.1.5) with standard errors clustered on the primary sampling unit.

Models 1 and 2 in Table A.1.3 in the Appendix confirm that people near the South Ossetian ABL are more likely than others to view border insecurity as a severe personal security threat. Figure 4 visualizes perception of border security comparing respondents within and outside the 11km borderline (Model 1).[12] Respondents near the ambiguous South Ossetian borderline are most likely to see the border as severe risk, those near the fortified Abkhaz border are least likely to share this concern – even less than those outside both border areas. This is surprising since people are oftentimes abducted near the Abkhaz ABL (see Figure A.1.1). When excluding respondents outside both border regions, respondents near the South Ossetian ABL are more likely to see the border as a severe security risk than those near the Abkhaz ABL. The clearly delineated borderline is associated with reduced perceived risk to personal security. Having regularly heard about violence at the border is consistently associated with greater concerns about border insecurity across all models, including when only looking at the border region near the Abkhaz ABL.

In the face of creeping borderization, we asked whether respondents agreed with the statement that the Georgian Army should use force to prevent the South Ossetian

[11]The wording of the key survey items and summary statistics of all variables are shown in Tables A.1.1 and A.1.2. The variance-covariance matrix suggests that multicollinearity is not a problem with most values being well below 0.01.

[12]Figure A.1.3 in the appendix shows the predicted probabilities based on Model 2, using 0.3° to identify border areas. The results are basically identical.

ABL being moved further into Georgian-controlled areas. We use multinomial models to assess the impact of borderlands on the three outcome options, using the category *Neither agree nor disagree* as baseline. Table A.1.4 in the Appendix shows the results, using the same four samples and control variables as in Table A.1.3, plus the binary variable for whether border insecurity is seen as a severe threat to personal security.

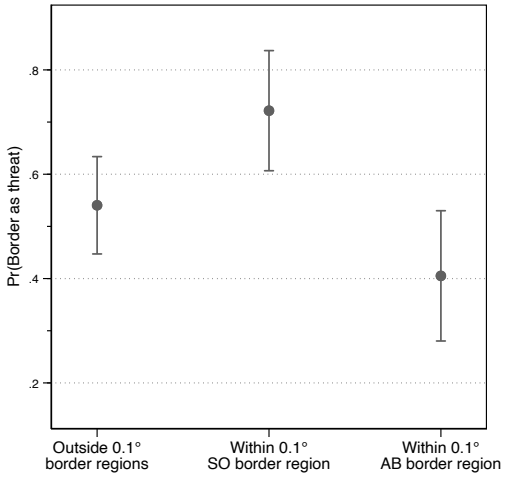
Respondents near the South Ossetian ABL are more likely to *disagree* with using force to counter creeping borderization. Those near the Abkhaz border "sit on the fence", they are least likely to voice a preference. It is not surprising that those near the South Ossetian border are more likely to express an opinion than those near the Abkhaz ABL (see Model 8), because the latter are less effected by the instability of the South Ossetian ABL. But this does not explain why they are less likely to voice a clear opinion than those outside the border regions. Interestingly, viewing border insecurity as personal threat does *not* strongly or systematically affect attitudes towards militarily defending it. Even though people are concerned about border insecurity, they judge taking a military stance as too risky and unrealistic in the face of a far superior opponent.[13]

Figure 5 simulates the predicted probabilities of Model 6 in Table A.1.4. Those living closest to the contested boundary are most strongly *against* defending it with force, despite suffering the most under the creeping borderization and being most concerned about border insecurity. Those most affected by insecurity are not necessarily most supportive of a hawkish foreign policy against a far superior neighbor.

Finally, we analyze whether border proximity affects preferences for military partners. Being close to the boundary line, and being able to see Russian forces

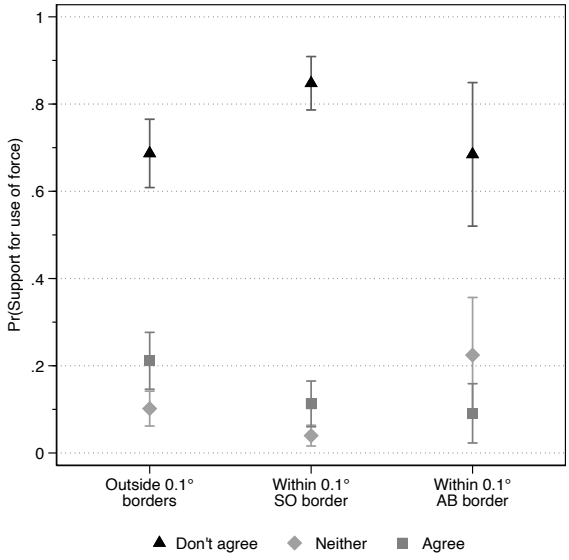
[13]This has been a recurring argument made by our interviewees.

Figure 4. Likelihood of perceiving border as threat



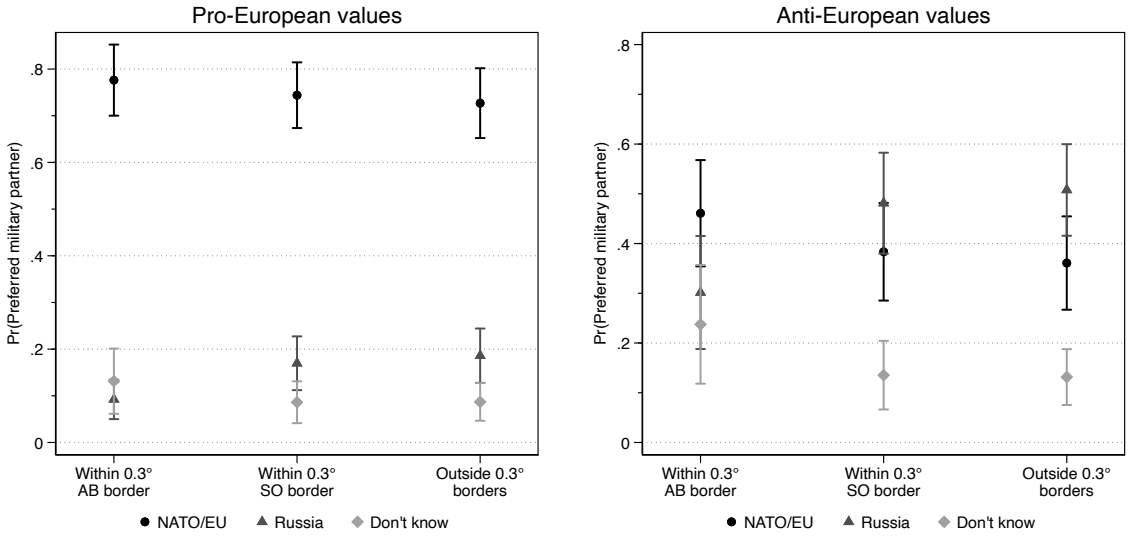
Note: Simulations are based on Model 1 in Table A.1.3. The figure shows the point estimates and 95% confidence intervals of the predicted probabilities of identifying border insecurity as a severe risk to personal among several alternative options. Control variables are held at their modal value.

Figure 5. Support for use of force at South Ossetian ABL



across the fence, as is the case along parts of the South Ossetian ABL, might lead to a stronger demand for collaborating with NATO to protect against potential future incursions. We recode the answers to our question about preferred military partner into three categories, *NATO/EU*, *Russia*, and *don't know*. These categories represent

Figure 6. Preferred partner for Georgian armed forces by values



Note: Simulations are based on Model 12 from Table A.1.5. The figure shows the point estimates and 95% confidence intervals of the predicted probabilities for different age cohorts. Control variables are held at their modal value.

the most common answers, as shown in Table A.1.2 in the Appendix.[14] Table A.1.5 shows the results of the multinomial analyses, with Russia as reference category, using the same independent variables as in Table A.1.4.

If we focus only on the two border regions (Model 13), those near the South Ossetian ABL are *less* likely than those near the Abkhaz ABL to choose NATO/EU or say they don't know, although they are most affected by creeping borderization. People in this region might be motivated by pragmatism or greater support for Russia. Media reports covering the period just before and during our survey report increasingly anti-Western messages in Georgia, directed primarily against the United States, NATO, and the EU as partners (Media Development Foundation Georgia 2018, 2019). Several interviewees suggested that Russia-friendly messages were particularly prominent near the South Ossetian ABL, which might have contributed to this finding.

[14]The options US, China, other or none of these were treated as missings.

Since attitudes towards Russia or NATO are likely shaped by overall attitudes towards the EU, we add two variables that capture whether respondents see European political values as incompatible with Georgian ones or whether they think Georgia would benefit from European political values. Across all models in Table A.1.5 pro-European attitudes are strongly correlated with preferring partnering with NATO or EU, while anti-European political values are strongly and consistently linked with favoring Russia. Figure 6 shows the predicted probabilities of these preferences when setting pro-European values to 1 (left panel), which is also the modal value, and anti-European values to 1 (right panel). The driving force behind attitudes towards preferred military partner seems to be attitudes towards European values.[15] Perceived border threat does not influence these preferences. The oldest age cohort is consistently less likely to choose NATO/EU over Russia as favored military partner. [16]

Conclusion

We investigated how two borderlines that are not recognized as legitimate boundaries but differ in their formalization affect perceptions and preferences of those living in their shadows. We separated the impact of proximity to borders from their physical stability and visibility on perceptions. Our findings reflect the impact boundaries have on security perceptions. Living in close proximity to clearly demarcated and physically enforced borders reduced perceived threats in volatile contexts, while proximity to

[15]Figure A.1.4 shows the predicted probabilities for those who answered "don't know" to the European values question. For those, Russia is the least likely answer, while NATO/EU is indistinguishable from "don't know".

[16]Figure A.1.5 shows the predicted probabilities of these preferences by age groups.

weaker fortification was associated with greater perceived insecurity. Insights from this study also suggest that threat perceptions do not automatically translate into demanding a stronger military response or protection. Faced with a significantly superior opponent, people in ambiguous borderlands are wary of provoking a reaction that could massively deteriorate their security situation.[17] Living in contested borderlands might come with a particular sensitivity towards the complexity of the situation.

Our study has several implications for countries with unstable borders towards militarily superior neighbors. First, while proximity to borders influences preferences, this impact is moderated by physical characteristics of the border. In contentious contexts strong borders and walls might indeed improve perceived border security for those living in their shadows. More temporary structures, particularly when the exact location of the boundary lines is ambiguous, heighten perceived personal insecurity. Second, greater perceived border insecurity does not automatically translate into demanding a stronger fortification or border defense. Our results point to the complexity of the problem created by a much stronger neighbor that pursues expansionist goals. Perceived threats do not automatically translate into preferences for hawkish policies. Third, foreign policy preferences, such as preferred allies, are not necessarily driven by proximity to contested boundaries. Instead, they might be shaped by more general patterns of norms and preferences that vary primarily between generations. Finally, our study highlights the complexity and difficulty of

[17]The fear of angering Russia also became evident in our interviews. One interviewee told us that in a town near the South Ossetian ABL the police refrained from venturing into the town's northern part, facing the boundary line, in fear of inadvertently crossing into South Ossetia and triggering a potential escalation.

how to provide security and stability in contested regions while avoiding provoking a much stronger aggressor.

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Appendix

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Sabine C. Carey and Jürgen Brandsch

Appendix Contents

A.1 The survey

The survey was carried out by the Caucasus Research Resource Center (CRRC) between April and May 2018. The questions were developed in close cooperation with our local partner, the CRRC, who also checked their wording for clarity, relevance and ethics to ensure that the questions put neither the enumerators or respondents in undue uncomfortable situations. The research was approved by the Ethics Committee from the University of Mannheim in March 2018. The English wording of the questionnaire served as a basis for the translations into Georgian, which was carried out by the CRRC. Table A.1.1 offers an overview of the survey items' wording in the questionnaire and the coding of the corresponding variables in the dataset.

Sampling method

Stratified clustered sampling was used, with the borderlines, urban and rural areas as strata. The borderline stratum was divided into the two substrata for the borderline areas near South Ossetia and Abkhazia (of about 33km depth from the Administrative Boundary lines). To ensure adequate geographic distribution of the sample, the urban and rural strata were further subdivided into northeast, northwest, southeast, southwest and Tbilisi substrata. In the first sampling stage, voting precincts were randomly selected in each substratum with the probability proportional to the number of registered voters in the precincts. In the second stage, households were selected by a systematic random walk procedure. Respondents were randomly selected from the chosen households using the Kish Table method.

Survey items

Table A.1.1 shows the wording of the survey questions used to code the main variables. Table A.1.2 shows the summary statistics of the analysis dataset. For the categorical values the table shows the distribution of respondents across the different categories and the respective percentages in parentheses. For binary or ordered variable the first value represents the mean, with the standard deviation in parentheses.

Table A.1.1. Wording of survey items

Item	Coding
Border as threat	
Let us now talk about what you think about your personal security. Which of the following, if any, do you think currently pose a SEVERE risk to your personal security? Enumerators were instructed to code up to two answers.	0= corruption 0= non-democratic politicians 0= violent crime poverty 0= visible tension b/w different ethnic groups 0= visible tension b/w religious groups 0= visible tension b/w political groups 1= insecurity of Georgia's borders 0= other [please specify] 0= nothing poses a risk to my security NA= don't know / refuse to answer
Should Georgia use force to prevent South Ossetian border change?	
Over the past few years South Ossetia's administrative borderline has changed by Russian and South Ossetian armed forces. How strongly do you agree or disagree with the following statement: "If necessary, the Georgian Army should use force to prevent such behaviour in the future"?	1= Do not agree at all 1= Do not agree 2= Neither agree nor disagree 3= Agree 3= Completely agree NA= Don't know / refuse to answer
Preferred military partner	
In your opinion, which of the international actors on this CARD should Georgia's armed forces have the closest cooperation with?	0= China 1= NATO 2= Russia 1= EU 0= USA 0= other 0= none of these
European political values	
Which of the following statements is closest to your view? *Statement 1: European political values are not compatible with Georgian political values.* *Statement 2: Georgia will benefit from sharing European political values.* Enumerators: After choice of statement ask how strongly respondent agrees with the statement.	
European values not compatible	1= completely agree with statement 1 1= somewhat agree with statement 1 0= somewhat agree with statement 2 0= completely agree with statement 2 0= Agree with neither 0= Don't know NA= Refuse to answer
European values benefit	0= completely agree with statement 1 0= somewhat agree with statement 1 1= somewhat agree with statement 2 1= completely agree with statement 2 0= Agree with neither 0= Don't know NA= Refuse to answer

Table A.1.2. Summary statistics

	Summary
N	2,021
Using 0.1° cut-off	
Outside border region	1,533 (75.9%)
Within SO border region	289 (14.3%)
Within AB border region	199 (9.8%)
Using 0.3° cut-off	
Outside border region	743 (36.8%)
Within SO border region	811 (40.1%)
Within AB border region	467 (23.1%)
Border insecurity	0.46 (0.50)
Use of force	
Don't agree	1,133 (62.3%)
Neither	364 (20.0%)
Agree	323 (17.7%)
Preferred partner	
China	2 (0.1%)
NATO	569 (28.2%)
Russia	467 (23.1%)
EU	296 (14.6%)
USA	184 (9.1%)
Other	14 (0.7%)
None of these	133 (6.6%)
Refuse to answer	14 (0.7%)
Don't know	342 (16.9%)
European politial values	
Don't know	488 (24.1%)
Europ. values not compatible	471 (23.3%)
Europ. values benefit	1,062 (52.5%)
Tbilisi	0.09 (0.28)
Heard about border violence	0.76 (0.43)
Harmed in war	0.53 (0.50)
Own economic condition	2.49 (0.80)
University degree	0.28 (0.45)
Female	0.61 (0.49)
Age	
Age 18-40	603 (29.8%)
Age 41-60	695 (34.4%)
Age 61-98	723 (35.8%)

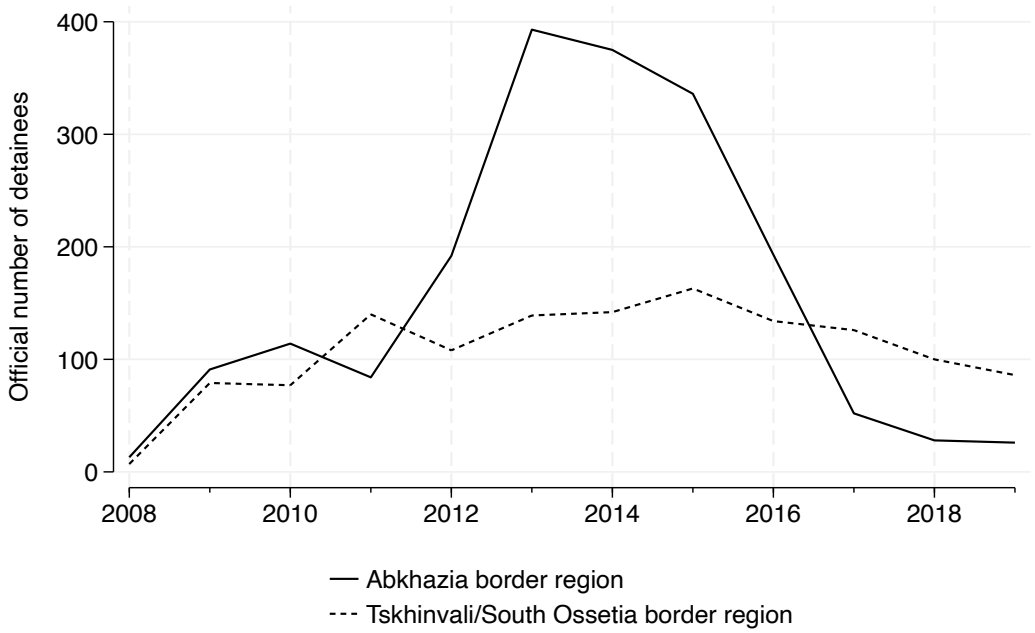
Categorical variables: distribution across categories (percentages)

Level variables: mean (std. dev.)

A.2 Number of detainees in border regions, 2008-2019

Figure A.1.1 plots the officially recorded number of people who were detained by Russian, Abhkaz or South Ossetian forces near the Administrative Boundary Lines between 2008, after the Georgian-Russian war at the South Ossetian border and when the two breakaway regions were recognized as independent states by Russia, and 2019, one year after our survey. The graph shows that since 2011 about one hundred people were detained every year near the Tskhinvali region/South Ossetia border region. The regular abductions pose a massive threat for the local population, as detailed in the report by Amnesty International (2018) and confirmed in our interviews. Locals cross their fields, for example to retrieve their cattle, not realizing that they had entered an area controlled by South Ossetia, and are then detained by Russian or South Ossetian forces for crossing the boundary line. At the time of our interviews and survey in mid-2018, the situation was less dramatic near Abkhazia, though in previous years the number of people detained in this border region were significantly higher than in the South Ossetian borderland. Despite the well established border, people were still detained by authorities from Abkhazia.

Figure A.1.1. Official number of detainees in border regions

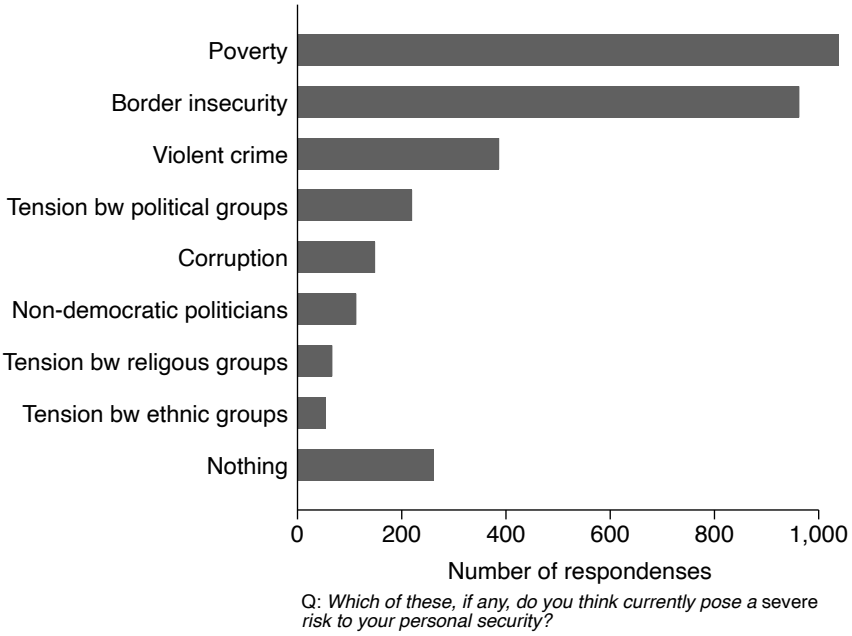


Source: Ministry of Reconciliation and Civic Equality, Georgia

A.3 The prevalence of border insecurity as perceived threat

To assess how the two boundary lines affects the lives and attitudes of those in the borderland regions, we asked respondents about what they consider a severe risk to their personal security. They were given eight options, plus the opportunity to add their own suggestion. They could choose up to two answers.

Figure A.1.2. Perceived threats to personal security



A.4 Result tables of the main analyses

Table A.1.3. Logit estimates of border as perceived threat to security

Dependent variable:	*Perception of border insecurity as severe threat to personal security*				
	Complete sample		Border regions	SO border	AB border
	Model 1	Model 2	Model 3	Model 4	Model 5
Within SO border region	0.791**				
	(0.288)				
Within AB border region	−0.546*				
	(0.265)				
Within SO border region		0.845***			
		(0.252)			
Within AB border region		0.041			
		(0.283)			
Within 0.3° SO border			0.794**		
			(0.288)		
Tbilisi	0.595*	0.918***			
	(0.250)	(0.273)			
Heard about border violence	0.729***	0.719***	0.834***	0.716**	0.994**
	(0.152)	(0.153)	(0.190)	(0.259)	(0.307)
Harmed in war	0.472***	0.483***	0.640***	0.422*	1.106***
	(0.127)	(0.119)	(0.158)	(0.198)	(0.254)
Own economic condition	0.161*	0.158*	0.174	0.310**	−0.079
	(0.070)	(0.070)	(0.095)	(0.106)	(0.168)
University degree	−0.025	−0.066	−0.206	−0.067	−0.424*
	(0.107)	(0.105)	(0.132)	(0.174)	(0.175)
Female	−0.024	−0.033	−0.022	0.014	−0.125
	(0.101)	(0.101)	(0.124)	(0.164)	(0.187)
Age 41-60	0.007	−0.018	0.055	0.218	−0.283
	(0.126)	(0.124)	(0.168)	(0.200)	(0.282)
Age 61-98	−0.041	−0.069	−0.025	0.229	−0.509
	(0.133)	(0.138)	(0.182)	(0.231)	(0.307)
Constant	−1.483***	−1.754***	−1.932***	−1.466***	−1.289**
	(0.281)	(0.296)	(0.394)	(0.424)	(0.465)
Wald χ^2	67.93***	67.38***	52.66***	22.27**	47.33***
AIC	2673.80	2653.00	1650.41	1096.45	545.32
Number of clusters	114	114	61	39	22
Number of observations	2039	2039	1286	818	468

Note: Values are coefficients with robust standard errors in parentheses, clustered on the primary sampling unit. Models 3-5 use the 0.3° distance to identify the borderland.

* p<0.05, ** p<0.01 ** p<0.001 (two-tailed test).

Table A.1.4. Multinomial logit models of attitudes towards use of force at South Ossetian Administrative Boundary Line

Dependent variable:	*Agreement with using force to prevent moving the ABL to South Ossetia further into Georgian territory*									
Outcome type:	Don't agree	Agree	Don't agree	Agree	Don't agree	Agree	Don't agree	Agree	Don't agree	Agree
Sample:	Full sample Model 6		Full sample Model 7		0.3° border regions Model 8		SO border region Model 9		AB border region Model 10	
0.1° SO border region	1.149***	0.308								
	(0.283)	(0.300)								
0.1° AB border region	−0.794	−1.635***								
	(0.406)	(0.387)								
0.3° SO border region			0.438	0.062						
			(0.246)	(0.245)						
0.3° AB border region			−1.394***	−1.564***						
			(0.292)	(0.254)						
SO border region					1.808***	1.620***				
					(0.275)	(0.248)				
Border as threat	0.424*	0.232	0.380*	0.205	0.542*	0.266	0.298	0.000	0.648	0.510
	(0.168)	(0.195)	(0.163)	(0.194)	(0.212)	(0.250)	(0.236)	(0.297)	(0.375)	(0.409)
Tbilisi	−0.448	−0.477	−0.810*	−0.863*						
	(0.347)	(0.421)	(0.362)	(0.439)						
Heard border violence	0.696***	0.848***	0.472**	0.688**	0.493*	0.883**	−0.132	0.453	0.766*	0.891*
	(0.211)	(0.205)	(0.174)	(0.211)	(0.221)	(0.284)	(0.326)	(0.440)	(0.332)	(0.454)
Harmed in war	0.261	0.221	0.307*	0.273	0.396*	0.545**	−0.220	−0.022	0.845***	0.806*
	(0.151)	(0.163)	(0.148)	(0.159)	(0.191)	(0.207)	(0.300)	(0.263)	(0.252)	(0.319)
Own economic condition	0.006	0.048	−0.016	0.017	0.032	−0.052	0.106	−0.084	−0.041	0.136
	(0.076)	(0.094)	(0.078)	(0.093)	(0.088)	(0.110)	(0.146)	(0.160)	(0.124)	(0.203)
University degree	0.142	−0.388*	0.108	−0.420*	−0.012	−0.373	0.069	−0.164	0.064	−0.657
	(0.136)	(0.187)	(0.137)	(0.186)	(0.175)	(0.236)	(0.233)	(0.309)	(0.246)	(0.405)
Female	0.065	0.051	0.074	0.070	0.127	0.236	0.188	0.314	0.140	0.214
	(0.127)	(0.141)	(0.128)	(0.141)	(0.135)	(0.166)	(0.213)	(0.255)	(0.198)	(0.220)
Age 41-60	0.274	−0.096	0.244	−0.112	0.006	−0.466*	0.209	−0.226	−0.154	−0.672
	(0.185)	(0.197)	(0.179)	(0.192)	(0.228)	(0.233)	(0.360)	(0.324)	(0.333)	(0.376)
Age 61-98	0.534**	0.072	0.540**	0.085	0.492*	0.077	0.156	−0.182	0.710**	0.126
	(0.178)	(0.201)	(0.177)	(0.195)	(0.227)	(0.209)	(0.388)	(0.360)	(0.269)	(0.262)
Constant	−0.024	−0.786*	0.557	−0.235	−0.952*	−1.920***	1.591***	0.430	−1.247*	−2.423***
	(0.379)	(0.400)	(0.334)	(0.408)	(0.370)	(0.439)	(0.441)	(0.648)	(0.510)	(0.721)
Wald χ^2	121.08***		161.12***		124.41***		39.10**		160.65***	
AIC	3234.96		3166.37		1943.59		1135.36		811.91	
Number of clusters	113		113		60		38		22	
Number of observations	1831		1831		1164		734		430	

Note: Outcome variable baseline category *Neither agree nor disagree*. Values are coefficients with robust standard errors in parentheses, clustered on psu.
* p<0.05, ** p<0.01, *** p<0.001.

Table A.1.5. Preferred partner of Georgian armed forces, baseline Russia

Dependent variable:	*Who should the Georgian armed forces collaborate with most closely?*									
Outcome type:	NATO/EU	Don't know	NATO/EU	Don't know	NATO/EU	Don't know	NATO/EU	Don't know	NATO/EU	Don't know
Sample:	Full sample Model 11		Full sample Model 12		0.3° border regions Model 13		SO border region Model 14		AB border region Model 15	
0.1° SO border region	0.554	0.108								
	(0.285)	(0.395)								
0.1° AB border region	0.386	0.240								
	(0.331)	(0.469)								
0.3° SO border region			0.114	0.082						
			(0.183)	(0.297)						
0.3° AB border region			0.766**	1.112***						
			(0.238)	(0.330)						
SO border region					−0.725**	−1.092**				
					(0.255)	(0.396)				
Border as threat	0.071	−0.168	0.144	−0.074	0.346	−0.002	0.476	−0.062	0.136	−0.004
	(0.159)	(0.191)	(0.150)	(0.211)	(0.203)	(0.278)	(0.246)	(0.357)	(0.398)	(0.380)
Tbilisi	0.084	0.263	0.185	0.567						
	(0.273)	(0.449)	(0.280)	(0.457)						
Heard border violence	0.211	−0.597**	0.278	−0.432	0.271	−0.456	0.093	−0.828*	0.622	−0.007
	(0.204)	(0.219)	(0.195)	(0.231)	(0.262)	(0.309)	(0.329)	(0.387)	(0.403)	(0.485)
Harmed in war	0.143	−0.432*	0.128	−0.442*	0.046	−0.415	0.330	−0.248	−0.526	−1.014**
	(0.145)	(0.173)	(0.140)	(0.175)	(0.190)	(0.229)	(0.247)	(0.282)	(0.315)	(0.393)
Own economic condition	0.120	0.043	0.128	0.056	0.078	−0.008	0.061	0.028	0.074	0.013
	(0.081)	(0.106)	(0.080)	(0.107)	(0.093)	(0.137)	(0.115)	(0.166)	(0.153)	(0.208)
University degree	0.156	−0.358	0.125	−0.402	−0.131	−0.877**	0.084	−0.600	−0.671***	−1.372***
	(0.147)	(0.214)	(0.148)	(0.219)	(0.180)	(0.268)	(0.268)	(0.324)	(0.200)	(0.381)
Female	0.258*	1.045***	0.245*	1.052***	0.247	1.147***	0.642**	0.882**	−0.498	1.062**
	(0.117)	(0.180)	(0.117)	(0.189)	(0.162)	(0.255)	(0.196)	(0.304)	(0.297)	(0.403)
Age 41-60	−0.207	−0.126	−0.212	−0.156	−0.193	−0.137	−0.313	−0.307	0.228	0.349
	(0.168)	(0.189)	(0.170)	(0.200)	(0.234)	(0.272)	(0.306)	(0.392)	(0.376)	(0.427)
Age 61-98	−0.839***	−0.345	−0.856***	−0.364	−1.004***	−0.393	−1.142***	−0.519	−0.643	−0.135
	(0.162)	(0.190)	(0.164)	(0.195)	(0.222)	(0.245)	(0.254)	(0.359)	(0.370)	(0.379)
Europ. values not compatible	−0.747***	−1.671***	−0.777***	−1.737***	−1.154***	−1.998***	−0.849*	−2.459***	−1.360**	−1.591***
	(0.204)	(0.243)	(0.210)	(0.238)	(0.260)	(0.311)	(0.337)	(0.449)	(0.425)	(0.477)
Europ. values benefit	0.920***	−1.133***	0.928***	−1.146***	0.697**	−1.373***	0.994**	−1.794***	0.532	−0.849
	(0.191)	(0.207)	(0.184)	(0.198)	(0.266)	(0.289)	(0.307)	(0.385)	(0.543)	(0.507)
Constant	−0.220	0.630	−0.388	0.195	0.843	1.702***	−0.365	1.199*	1.498*	1.312
	(0.354)	(0.405)	(0.322)	(0.412)	(0.497)	(0.444)	(0.530)	(0.535)	(0.709)	(0.727)
Wald χ^2	464.74***		505.09***		405.82***		255.63***		.	
AIC	2945.68		2921.44		1819.94		1066.30		743.99	
Number of clusters	114		114		61		39		22	
Number of observations	1674		1674		1069		653		416	

Note: Outcome variable baseline category *Russia*. Values are coefficients with robust standard errors in parentheses, clustered on psu.
* p<0.05, ** p<0.01, *** p<0.001.

A.5 Main analyses without control variables

The next three tables replicated the main analyses in the paper, but only including the binary measure for the different border areas as control variables. Therefore, the last two analyses in each table drop out, since they were limited to the South Ossetian and the Abkhaz border regions only.

Table A.1.6. Logit estimates of border as perceived threat to security

	Complete sample		Border regions
	0.1° region	0.3° region	0.3° regions
Within SO border region	0.652		
	(0.338)		
Within AB border region	−0.852**		
	(0.273)		
Within SO border region		0.554*	
		(0.231)	
Within AB border region		−0.380	
		(0.275)	
Within 0.3° SO border			0.934**
			(0.309)
Constant	−0.247*	−0.371**	−0.751**
	(0.121)	(0.131)	(0.243)
Wald χ^2	15.79***	10.22**	9.16**
AIC	2894.52	2888.33	1803.04
Number of clusters	114	114	61
Number of observations	2151	2151	1350

* p<0.05, ** p<0.01 ** p<0.001 (two-tailed test).

Table A.1.7. Attitudes towards use of force at South Ossetian ABL

Outcome type:	Don't agree	Agree	Don't agree	Agree	Don't agree	Agree
Sample:	Full sample		Full sample		0.3° border regions	
0.1° SO border region	1.234***	0.431				
	(0.258)	(0.338)				
0.1° AB border region	−1.067*	−1.967***				
	(0.456)	(0.440)				
0.3° SO border region			0.693**	0.336		
			(0.224)	(0.248)		
0.3° AB border region			−1.331***	−1.482***		
			(0.324)	(0.292)		
SO border region					2.023***	1.817***
					(0.316)	(0.287)
Constant	1.110***	0.021	1.290***	0.216	−0.040	−1.265***
	(0.153)	(0.148)	(0.167)	(0.180)	(0.278)	(0.231)
Wald χ^2	60.60***		58.59***		50.85***	
AIC	3456.79		3375.96		2064.78	
Number of clusters	113		113		60	
Number of observations	1918		1918		1213	

Note: Outcome variable baseline category *Neither agree nor disagree.*

Values are coefficients with robust standard errors in parentheses, clustered on psu.

* p<0.05, ** p<0.01, *** p<0.001.

Table A.1.8. Preferred partner of Georgian armed forces

Outcome type:	NATO/EU	Don't know	NATO/EU	Don't know	NATO/EU	Don't know
Sample:	Full sample		Full sample		0.3° border regions	
0.1° SO border region	0.564*	0.040				
	(0.247)	(0.457)				
0.1° AB border region	0.362	0.580				
	(0.299)	(0.568)				
0.3° SO border region			0.061	−0.034		
			(0.173)	(0.283)		
0.3° AB border region			0.511*	1.048**		
			(0.216)	(0.341)		
SO border region					−0.451	−1.083**
					(0.235)	(0.389)
Constant	0.485***	−0.310*	0.471***	−0.499***	0.982***	0.549
	(0.085)	(0.142)	(0.104)	(0.152)	(0.190)	(0.306)
Wald χ^2	7.20		10.42*		7.77*	
AIC	3648.88		3624.93		2298.52	
Number of clusters	114		114		61	
Number of observations	1772		1772		1127	

Note: Outcome variable baseline category *Russia.*

Values are coefficients with robust standard errors in parentheses, clustered on psu.

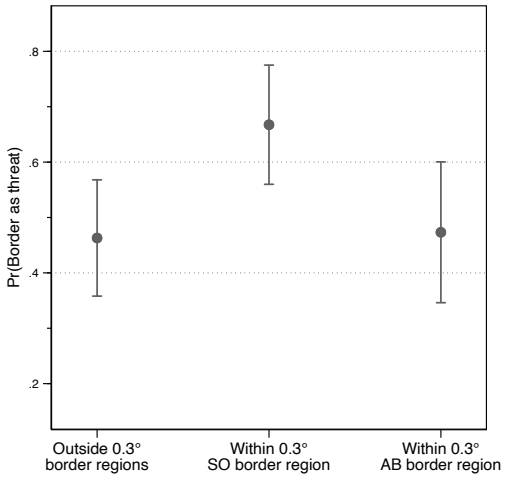
* p<0.05, ** p<0.01, *** p<0.001.

A.6 Additional predicted probabilities

Perception of border insecurity as personal security risk, using 0.3° distance as cut-off

Figure A.1.3 shows the predicted probabilities for perceiving border instability as a severe risk to personal security for respondents in the three regions, within the South Ossetian border area, the Abkahz border area and outside these border, using the 0.3° distance from the border to determine the border regions.

Figure A.1.3. Likelihood of perceiving border insecurity as personal security risk



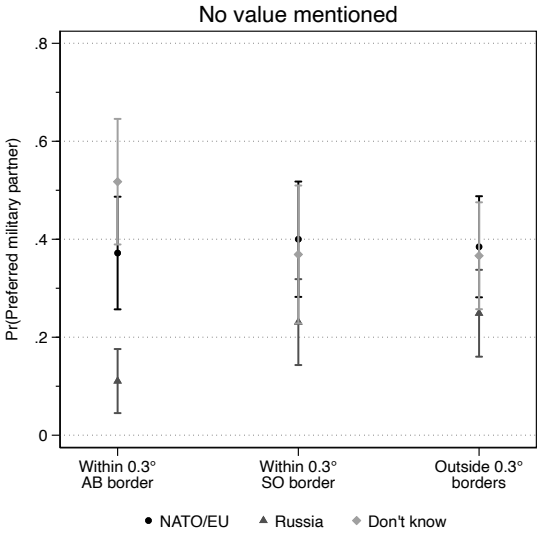
Note: Simulations are based on Model 2 from Table A.1.3. The figure shows the point estimates and 95% confidence intervals of the predicted probabilities of identifying border insecurity as a severe risk to personal among several alternative options. Control variables are held at their modal value.

Preferred partner for Georgian armed forces by border region

Figure A.1.4 shows the predicted probabilities for choosing NATO/EU or Russia, or answering "don't know", to the question of who the preferred partner of Georgian armed forces should be. The calculations are based on Model 12 in Table A.1.5, setting all other variables at their modal category, *except* for the two indicators for attitudes towards European political values, which are set to 0, therefore modelling the predicted probabilities for those who answer "don't know" to this question. It shows that there are no noticeable differences in preferences for NATO across the regions. While preferences for NATO/EU are much stronger than for Russia, Russia is more

likely chosen than saying "don't know" within 33km of the South Ossetian ABL and outside any border region, but not within the 33km area to the Abkhaz ABL.

Figure A.1.4. Preferred partner for Georgian armed forces



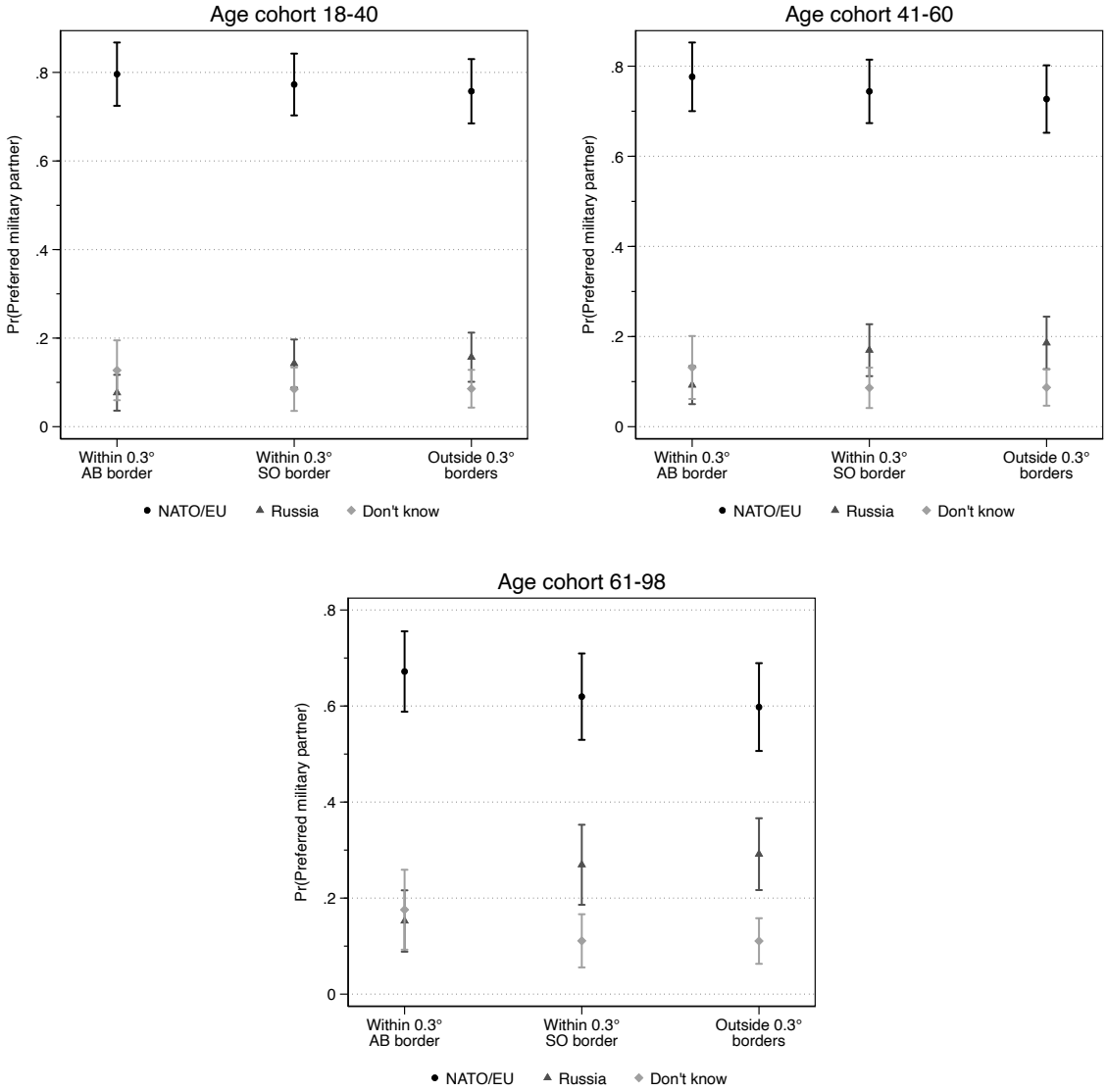
Note: Simulations are based on Model 12 from Table A.1.5. The figure shows the point estimates and 95% confidence intervals of the predicted probabilities for the different regions. Control variables are held at their modal value, except the two measures for attitudes towards European political values are set to zero.

Preferences for military partners by age and border region

Based on Model 12, the analysis of the complete sample from Table A.1.5, Figure A.1.5 shows the predicted probabilities for military partner preferences by age group and border regions. As already indicated in the Table, there are noticeable differences primarily between the 18-40 year-olds and the over 61 year-olds.[18] The two younger groups are far more likely to favor NATO/EU as closest partner over Russia, while the difference in the oldest age group between these two potential partners disappear – except for people living in the Abkhaz borderland. For all ages, the gap between choosing NATO/EU over Russia is greatest in this region.

[18]The oldest respondent reported an age of 98.

Figure A.1.5. Preferred partner for Georgian armed forces by age cohort



Note: Simulations are based on the second model from Table A.1.5, using the full sample. The figure shows the point estimates and 95% confidence intervals of the predicted probabilities for different age cohorts. Control variables are held at their modal value.