

IZA DP No. 10331

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October 2016

Forschungsinstitut zur Zukunft der Arbeit Institute for the Study of Labor

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Discussion Paper No. 10331 October 2016

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ABSTRACT

What's in a Name in a War*

We propose a novel empirical strategy for identifying and studying nationalism using name choices. We first show that having been given a first name that is synonymous with the leader(s) of the fascist Croatian state during World War II predicts volunteering for army service in the 1991-1995 Croatian war of independence and dying during the conflict. Next, we use the universe of Croatian birth certificates and the information about nationalism conveyed by first names to contrast the evolution of nationalism and its intergenerational transmission across locations affected by extreme war-related experiences. Our evidence suggests that in ex-Yugoslav Croatia, nationalism was on a continuous rise starting in the 1970s, that its rise was curbed in areas where con- centration camps were located during WWII, and that nationalist fathers consider the nationalism-transmission trade-off between within-family and society-wide transmission channels suggested by Bisin and Verdier (2001).

JEL Classification: D64, D74, Z1

Keywords: Ustaše, nationalism, names, intergenerational transmission

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^{*} We would like to thank Orley Ashenfelter, Patrick Gaulé, Josip Glaurdić, Emir Kamenica, Jan Kmenta, Kateřina Králová, Nikolas Mittag, Vinko Muštra, Jan Zápal, and Krešimir Žigić for their valuable comments. Kovač would also like to thank the Croatian Ministry of Veterans and Ministry of Public Administration for access to the veteran database and birth certificate database, respectively.

1 Introduction

During WWII, Croatia was ruled by the Ustaše movement, which blended fascism, Roman Catholicism, and Croatian nationalism. The military wing of the movement became the army of the Croatian fascist state and its Ustaše government enacted race laws patterned after those of the Third Reich. It established concentration camps in Croatia and members of the movement murdered hundreds of thousands of primarily Serbs, Jews and Roma.

The movement was founded and led (until its dissolution in 1945) by Ante Pavelić, who also acted as dictator during WWII. The name Ante thus has similar connotations in Croatia as Adolf has in Germany. Unlike Adolf in Germany, however, the name is in continued use, as are names of other leading Ustaše generals and politicians.¹ The use of these names ebbed after WWII, but they gained in popularity in the late 20th century as Croatian nationalist sentiments were on the rise.

In this paper, we study the 1991-1995 Croatian war of independence, one of Europe's deadliest conflicts since World War II, and show that men whose first names are synonymous with the notorious leader(s) of the Ustaše movement, i.e., with the WWII history of the fascist, first modern independent Croatian state, were more likely to volunteer to fight in the Croatian army and that they were more likely to die during the full-scale armed conflict between Serbs and Croats. The analysis, based on the complete registry of almost half a million veterans of the War of Independence, links two conflicts between neighboring nations and implies that having a 'nationalist' name predicts nationalistic behavior in war, presumably due to values transmitted from parents.²

¹In Germany, Adolf vanished from birth statistics by 1950. In contrast, Ante is in the top-10 name list according to the 2001 Croatian census. Ante is a Croatian form of Antonius (Anthony); there are distinct alternative versions of Anthony in use in Croatia. The name Ante also refers to Ante Starčević, the 19th century Croatian politician and writer who is considered to be one of the founders of Croatian nationalism.

²Throughout the paper, we could have alternatively used the term patriotism to refer to the values we approximate using first-name choices. There is a large literature on the history of nationalism and of political violence in the Balkans (e.g., Biondich, 2011).

The rise in the popularity of nationalist names starting in the 1970s thus foreshadows the War of Independence. Using the universe of over 3 million Croatian male birth certificates from 1930 to 2000, we show that the rise is curbed around the locations of concentration camps operated by the Ustaše during WWII, i.e., places where atrocities were committed by the Ustaše movement. We also show that the use of the name Ante for newborns reaches WWII levels in locations that experienced high combat exposure during the Croatian-Serbian 1991-1995 war and spikes dramatically in locations affected by extended enemy siege or occupation after the siege (occupation) ended in 1995.³

We thus demonstrate that first names can contain an informative signal about one's nationalism, a signal that correlates with extreme war experiences and that predicts behavior in a life altering situation—in a war for national independence. This allows us to use name choices to study the spread of nationalism. While we study 20th-century Croatian nationalism, our approach to approximating the regional evolution of political values is applicable in other countries that feature a sharply divided ethnic mix, in federative countries, and in settings where leader's names (or the symbolic names of historical figures) are notoriously associated with their actions and political beliefs. Given the existence of birth certificate records in most countries, our approach allows one to explore many historical settings.

Next, we use the birth certificate data to illustrate the usefulness of our approach for the study of intergenerational transmission of nationalism. We focus on name choices made during the War of Independence when the use of nationalist names peaked. For fathers with nationalist names, we find evidence consistent with the presence of purposeful transmission of nationalism, as suggested by the Bisin and Verdier (2001) model. In a subset of the analysis, we ask whether veterans of the 1991-1995 war who experienced more carnage in their units during the war are more likely to give their sons nationalist names.

This is an important application as intergenerational transmission of identity and of political and cultural values affects political outcomes, economic development, inter-group

³These 'siege' municipalities are located near the border between Croatia and Serbia or Bosnia and Herzegovina. DellaVigna et al. (2014) show that nationalism in this region was affected by mass media.

and inter-national tensions, and cross-border migration outcomes (e.g., Bisin and Verdier, 2000; Guiso et al., 2006; Montgomery, 2010; Voigtländer and Voth, 2015). Survey data now offer direct measures of political values and attitudes across recent generations (Albanese et al., 2014; Dohmen et al., 2012; Dhar et al., 2016; Ojedaa and Hatemi, 2015). However, the dearth of historical data with which one could connect such values across generations implies that much of the work on intergenerational links focuses on easily measured traits such as education (Currie and Moretti, 2003), welfare dependence (Dahl et al., 2014), and occupational choice (Dal Bó et al., 2009). The research on socioeconomic mobility deals with the lack of historical data by utilizing the fact that surnames provide a signal about one's socioeconomic standing (Clark, 2014; Güell et al., 2015). In a recent analysis, Olivetti and Paserman (2015) use information about socioeconomic status conveyed by first names to measure historical intergenerational socioeconomic mobility in the US.

In comparison, our approach is to use first names for the measurement of political values. In the Croatian case, and possibly more generally during the decades when six distinct nations shared the Yugoslav federation, names carried an informative signal, accumulated through history, geography, and ethnic identity, about their owners' nationalist values. The values we measure using names are related to key events in the modern history of Croatia.⁵ The signal we observe is strong enough to allow us to explore factors that correlate with the spread (or lack thereof) of such values and to shed light on their intergenerational transmission.

⁴Surnames have also recently been used to study population structure (Novotný and Cheshire, 2012), to explore the persistence of political attitudes (Ochsner and Roesel, 2016), to characterize cultural regions (Mateos, 2014), and to understand voting patterns (Borja et al., 2016).

⁵It is not clear how strongly these values may mix nationalism with right-wing political values (Hedl, 2005). We certainly do not mean to imply that volunteering for the war for independence is equivalent to holding fascist views. We would also like to stress that while we focus on names linked to the fascist history of Croatia, left-wing and, indeed, anti-fascist forces have always been strong in Croatia. The Yugoslav Partisan movement during WWII, which in Croatia included disproportionate shares of Serbian fighters and leaders, is often considered Europe's most effective anti-Nazi resistance movement. Anti-fascist Croatians were among the victims of the Ustaše dictatorship.

2 Related Literature

Our analysis is related to several literatures. First, our exploration of the use of names synonymous with a fascist dictatorship is related to work on persistence of political attitudes (Voigtländer and Voth, 2013, 2015; Fouka and Voth, 2013) and to the literature suggesting that wars and changes in state structures have dramatic consequences for political or ethnic identity (e.g., Mayhew, 2004; Bellows and Miguel, 2009; Petersen, 2012; Fontana et al., 2016, Ochsner and Roesel, 2016). Our measurement of WWII-linked nationalism in former Yugoslavia is related to the political science of ethnic conflicts (Petersen, 2002), specifically to the notion that such conflicts often stem from the accumulation of protracted tensions (Fearon and Laitin, 2003).

Second, the intergenerational transmission of political party identification is an extensively researched topic in political sociology (Ojedaa and Hatemi, 2015) and at least two recent studies imply that right-wing attitudes are strongly transmitted within families over generations (Avdeenko and Siedler, in press; Ochsner and Roesel, 2016). There is also a growing, largely theoretical literature in economics on the intergenerational transmission of values and preferences (Akerloff and Kranton, 2000; Bisin and Verdier, 2001; Becker et al., 2016; Doepke and Zilibotti, 2015). In the most closely related work to ours, Campante and Yanagizawa-Drott (2015) uncover significant intergenerational transmission of war service, but not of military service in peacetime, in US families. Their evidence is consistent with cultural transmission of war service from fathers to sons, as opposed to corresponding to occupational choice transmission or economic incentives. Similar to Campante and Yanagizawa-Drott (2015), our analysis is also related to the issue of whether living memory of a previous war helps countries overcome the collective action problem of getting citizens

⁶As Yugoslavia did not run free multi-party elections, we are not able to study voting behavior after WWII, unlike Fontana et al. (2016), who link German occupation in Italy during WWII to post-war voting patterns, or Ochsner and Roesel (2016), who uncover long-lasting consequences of WWII-related events on voting patterns in Austria. Glaurdić and Vuković (2016) relate post-1995 voting patterns in Croatia to the 1991-1995 war experience.

to volunteer for military service in wartime.

Third, our work is closely linked to the exploration of the information content of names and to the literature on child name choices. Sociologists have long recognized that the choice of first names is an expression of cultural or religious identity (Disdier et al., 2011; Hacker, 1999; Haan, 2005; Lieberson, 2000; Twenge et al., 2016). A growing set of studies shows that one's name affects how one is treated by others in schools (Figlio, 2005), labor markets (Bertrand and Mullainathan, 2004; Biavaschi et al., 2013; Rubinstein and Brenner, 2014), and financial markets (Kumar et al., in press). Such evidence can correspond to preference-based or statistical discrimination; under the latter, one's name may identify one's ethnic identity, and it may also signal one's unobservable characteristics within ethnic groups, presumably because the formation of productivity (or, in our case, political identity) in childhood is correlated with name choices through parental decisions. In this regard, our findings resemble those of Fryer and Levitt (2004), who suggest that the surge in distinctively Black names in the US since the seventies corresponds to a rise in Black cultural identity.

Why do parents give names to their children that may cause discriminatory treatment? If utility depends directly on identity (group membership), as in Akerloff and Kranton (2000) and Bisin and Verdier (2001), parents may aim to maximize their children's well-being by giving them group-specific names. Algan et al. (2013) consider this trade-off while studying the transmission of Arabic versus Non-Arabic first names in France; they show that this transmission is affected by the local-labor-market economic costs of having an Arabic first name. In comparison, we study behavioral correlates of name choices outside of the labor market and ask about location-specific factors determining the intergenerational transmission of one's political, as opposed to ethnic, identity.

The entire literature on name choices, our study included, is unable to decompose the

⁷There is also a growing body of work on reputation effects of corporate names (Wu, 2010; Green and Jame, 2013; McDevitt, 2014). In related research, Benos and Jochec (2013) show that firms whose name contains the words "America(n)" or "USA" earn abnormal stock returns during the periods when the U.S. is engaged in a war (except during the Vietnam war).

predictive power of names into the part corresponding to one's upbringing (values inculcated by parents) and the part corresponding to the potential impact of society's or one's own expectations about the identity of a person with a certain name, to the extent that such effects are plausible.⁸ Our analysis asks whether name attributes predict the behavior of their owners in a life-altering situation; we assume that the extreme choices we study primarily reflect parental influence over one's identity. In this sense, our approach is similar to the exploration of the correlates of racial attributes of first names in the US, where Aura and Hess (2010) show that name features predict education, happiness, and early fertility, and where Cook et al. (2015) suggest that they are related to mortality.

3 The War of Independence

In June 1991, Croatia declared its independence from the Yugoslav federation. The Croatian War of Independence, referred to as the Homeland War in Croatia, was waged from the summer of 1991 to the end of 1995 between the Croatian army and the Serb-controlled Yugoslav People's Army (JNA) and local Serb forces opposing secession. During 1991 and 1992, the JNA conducted combat operations in Croatia and helped to establish the Republic of Serbian Krajina, covering the quarter of Croatian territory mostly corresponding to areas with high shares of Serbian nationals. After the ceasefire of January 1992, the front lines were entrenched until 1995, when Croatia launched two offensives known as Operation Flash and Operation Storm, which effectively ended the war in its favor. Approximately 20,000 people were killed in the war, most of them civilians.

Our analysis of behavior during the war is based on the complete registry of military

⁸Nelson and Simmons (2007) and Knewtson and Sias (2010) study the hypothesis that names have a direct effect on behavior through their symbolic linguistic properties. The evidence on *implicit egotism*, the notion that employer or occupational choices are influenced by name similarity, is mixed (Simonsohn, 2011).

⁹Although the conflict began as a war for independence, the violence in Yugoslav wars often involved attempts to create ethnically "pure" states and was waged primarily against civilians (Naimark, 2001). Tabeau and Bijak (2005) illustrate the difficulty of forming estimates of total casulties in the Yugoslav wars.

personnel of the Croatian Ministry of Veterans, which includes information on 480,092 male soldiers serving during the war,¹⁰ 97% of whom were involved in combat operations. During the roughly eight million man-months these soldiers spent in active duty during the war, 6,060 of them (1.3%) were killed in action (KIA)—a category which in our case includes deaths caused by wounds sustained in action as well as deaths in captivity.¹¹

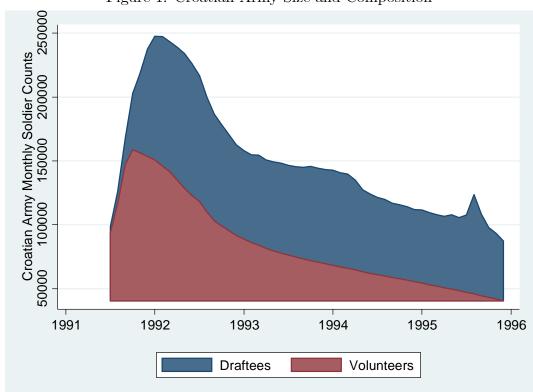


Figure 1: Croatian Army Size and Composition

As of the start of the war, Croatia had no regular army since the JNA was under Serbian control. The Croatian army was thus initially formed from volunteers and grew in size

 $^{^{10}}$ We exclude from the analysis the 5% of female soldiers who all served in non-combat support jobs.

¹¹In total, 9,378 soldiers died during the war, 7,747 in active duty. For 7,346 of these, we observe the cause of death. 77% were killed in action as opposed to dying in an accident or of natural causes. We do not observe the cause of death for 401 soldiers who died while in active duty and we assume they were also killed in action.

significantly in late 1991, when a draft process began based on the registry of Croatian nationals who had served earlier in the JNA.¹² Figure 1 shows the evolution of the size of the Croatian army and of its volunteer/draftee composition.¹³ In total, there were 162,267 male volunteers serving during the war and 317,825 draftees.

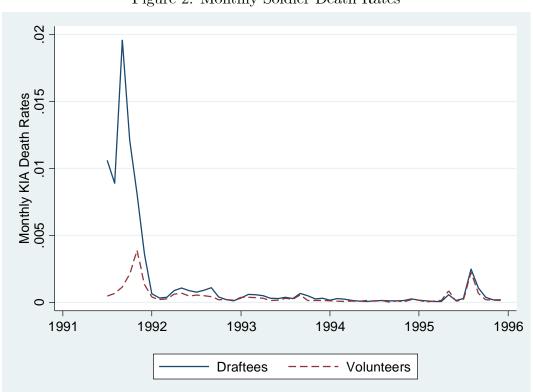


Figure 2: Monthly Soldier Death Rates

Figure 2 shows the evolution of monthly death rates—the ratio of soldiers dying in a given month to the number of active-duty soldiers as of the start of the month—separately for volunteers and draftees. The war was at its deadliest in the fall of 1991 (55% of KIA

¹²The Croatian Act of Defense made military service mandatory for all male reservists aged 18 to 65. Failure to respond to the draft call resulted in prosecution and imprisonment. Exemptions from service were possible on health grounds, but the medical checks were strict and exemptions seldom granted (UN, 1995).

¹³The status of a volunteer is governed by the Croatian Act of Homeland War Veterans; it affects welfare support available to veterans and their families.

deaths occurred during the first six months of the war) and in August 1995. Soldiers drafted during 1991 faced particularly high risk of death. This could be due to selection. First, volunteers may be relatively more skilled soldiers, especially during the first few months of the war. Second, volunteers joined the army earlier and served longer; at a given point in time, they are thus more likely to serve in higher ranks than draftees. Unfortunately, our data does not include rank and this complicates the analysis of KIA death determinants as rank is generally negatively correlated with the chances of dying in a war.

Importantly for our analysis, we observe soldier's place of birth. As of 2015, Croatia, a country of over 4 million, consisted of 21 administrative districts ('županije'), 555 cities and municipalities ('općine i gradovi'), and 6,750 settlements ('naselje'). Most of the fighting during 1991-1995 occurred in the 10 districts located along Croatia's eastern border. Correspondingly, the settlements of Croatia were affected by the war in a most uneven fashion. Part of our analysis is based on merging the veterans registry with settlement-level data from the 1991 Croatian census based on the soldiers' place of birth. In particular, a set of 177 settlements was directly exposed to extensive combat or was under extended occupation by the JNA during the war. Hereafter we refer to these locations as the 'siege settlements'. ¹⁵

Finally, we note that as of the start of hostilities, Croatia included a large Serbian minority. Based on the 1991 Census, 78% of Croatia's inhabitants were Croats, 12% were Serbs, 1% were Muslims, and 9% belonged to other nationalities. We do not observe soldiers' nationality, but infer nationality from names, as detailed in the next section.

4 Nationalist Names

Our first task is to classify the first (male one-word) names appearing in the veteran register. We are chiefly concerned with studying names linked to the Ustaše movement. But first, we

¹⁴For example, Ante Gotovina, who became a leading general during the 1995 Operation Storm, already had combat experience in 1991 when he volunteered for the Croatian army.

¹⁵This set is defined in the Croatian Act on Areas of Special State Concern.

measure the 'nationality content' of first names in order to identify Croat nationals among Croatian army soldiers (who are all citizens of Croatia). We do this in order to construct a useful benchmark for studying correlates of the Croatian nationalist names in the multinational mix of the Croatian army. Our first goal is thus to exclude Serbian and Muslim veterans from the analysis of nationalist names. We can do so because in the countries of former Yugoslavia, first names carry a strong nationality signal thanks to the close link between religion and nationality. As in most European countries, newborns' names are chosen from a list of first names corresponding to an annual calendar of name days (which are celebrated similarly to birthdays). Croats are predominantly Catholic so that parents rely on a Catholic-saint name calendar¹⁶ while Serbs are predominantly Orthodox and use an Orthodox name calendar.¹⁷

Specifically, 81% of Croatian-army veterans have names that appear on the Catholic and/or Orthodox calendars. 33,259 of these veterans (7% of all veterans) have names that appear on both calendars and thus cannot be classified as having either Croatian or Serbian nationality. In sum, 74% (354,773) of Croatian-army veterans have a name that appears only on the Catholic name calendar and only 0.4% have Orthodox calendar (Serbian) first names. For completeness, we have also inspected all of the distinct male first names appearing in the veterans register and identified a subset of 885 names as Muslim. Under 2% of veterans have Muslim names. The remaining veterans, i.e., those we do not classify as Croat, Serb, or Muslim, typically have non-Yugoslav names (primarily Italian and English) or have names that appear on both calendars. The fact that we identify 74% percent of veterans as Croats

¹⁶With one exception (Marko), all of the top-10 (most frequent) Croatian male names according to the 2001 census (a set which includes Ante) appear on the Catholic calendar.

¹⁷There are 374 distinct first male names on the Catholic (Croatian) calendar and 275 distinct first male names on the Orthodox (Serbian) name calendar. The same Christian saints correspond to different versions of the same name on the two calendars, as in Ivan (Croat version) v. Jovan (Serbian version) or Stjepan v. Stefan/Stepan. 35 names appear on both calendars and we do not code these as distinctly national.

¹⁸The most frequent Muslim names are Samir, Mirsad, Senad, Safet, Muhamed, Ervin, Ismet, Ibrahim, Omer, and Amir.

is broadly in line with the fact that, as of 1991, 78% of Croatia's inhabitants were Croatian nationals. In most of our analysis, we thus focus on the 354,773 Croatian army veterans who have Croatian first names. In this Croatian sub-population of veterans, the basic features of the veteran registry remain intact including the share of volunteers (at 35% in the Croatian sub-population, up from 33% in the universe of veterans) and the risks of KIA deaths (at 1.28%, up from 1.26%).

We are now ready to define nationalist names using the link between nationalism and the Ustaše movement. The prime name corresponding to the movement is, of course, Ante, the first name of the Ustaše founder Ante Pavelić. In addition, we code a 'Nationalist name' indicator corresponding to the first names of the 22 leading Ustaše politicians and generals who received the most important Nazi decoration during WWII—the Knighthood of the Independent State of Croatia.¹⁹ Further, we include in the 'Nationalist name' indicator a set of 4 additional names of the Ustaše leaders who were chiefly responsible for the Holocaust in Croatia during WWII.²⁰ Our purpose is to form a sufficiently wide group of names related to the WWII Croatian state so as to support (or reject) the interpretation that we attach to the primary Ustaše name Ante. But this approach leads us to include in the 'Nationalist name' indicator also names that have strong non-Ustaše nationalist connotations.²¹ We expect the

¹⁹The Knighthood was received by the following generals: Salko Alikadić, Eduard Bunić, Jure Francetić, Franjo Šimić, Ladislav Aleman, Vilko Begić, Rafael Boban, Matija Čanić, Fedor Dragojlov, Milan Desović, Duro Grujić, Artur Gustović, Slavko Kvaternik, Vladimir Laxa, Vjekoslav Luburić, Franjo Lukać, Josip Metzger, Ivan Perčević, Krunoslav Perčić, Dragutin Rubčić, Adolf Sabljak, and Slavko Štancer. All of the Ustaše names appear on the Catholic calendar; Ivan and Josip are also in the top-10 list of Croatian names based on the 2001 census. Josip Metzger was a general and chief organizer of a concentration camp. Ivan Perčević was one of the leaders of the movement; when Ante Pavelić visited Adolf Hitler, Perčević was among the small party of Ustaše leaders to accompany him. Both were executed after WWII.

²⁰The "Jewish question" ideologists Andrija Artuković and Mile Budak, and the following (non-knighted) notorious commanders of concentration camps: Miroslav Filipović and Dinko Šakić.

²¹First and foremost, the leader of the Partisan resistance movement and of post-WWII Yugoslavia was Josip Broz Tito. There are also well-known Partisan leaders called Ivan (e.g., Ivan Rukavina). It is difficult to define a separate Partisan-name indicator since a large fraction of Partisan leaders were Serbs. Instead,

sign of the effects of the two mutually exclusive indicators ('Ante' and 'Nationalist name') to be the same.

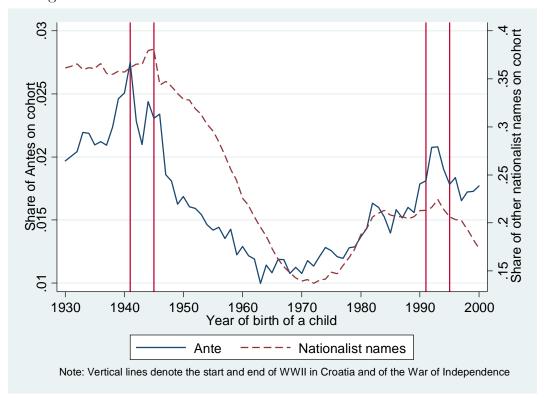


Figure 3: Shares of Ante and other nationalist names in birth cohorts

8,001 Antes served in the Croatian army during the 1991-1995 war, forming a group of 1.7% of all veterans and 2.3% of the Croatian-name sub-population of veterans. In addition, 25.9% of Croatian-name veterans (21.4% of all veterans) carry other nationalist names. These shares are well in line with the general popularity of these names in Croatia as implied by our secondary data source—the population of Croatian birth certificates from 1930 to 2000, which covers 3,002,491 live male births. As Figure 3 attests, the share of newborn boys named Ante and the corresponding share of nationalist names on Croatian birth cohorts follow a similar pattern. These names, Ante in particular, experienced an increase in popularity during both WWII and the War of Independence. Following WWII, their share in birth cohorts declines

we provide direct comparisons between the effects of Ante and both Josip and Ivan in the next section.

by over a half, then rebounds during the 1980s, which may suggest Croatian nationalism was increasing long before the breakup of Yugoslavia.²² This pattern is consistent with the use of these names corresponding to nationalist sentiments.²³ We test this hypothesis in the next section.

5 Names and Behavior in War

5.1 Volunteering

Our first question is whether there are nationalist-name patterns in the volunteering behavior of Croat males in 1991 and 1992. The goal is to estimate such patterns without data on non-active reservists, i.e. without a direct sample of the population at risk of volunteering. As documented in Figure 1, volunteering choices were largely made before the draft process started in earnest. Given that the draft was name-blind, ²⁴ the draftees approximate a random sample of the reservist population after volunteering choices were made, so that our data on volunteers and draftees represent a choice-based sample. Because unobservables affecting the choice to volunteer directly affect the sampling probability, which is thus not independent of the dependent variable conditional on the explanatory variables, consistency requires that we weight the criterion function to be minimized by the inverse probability of selection (Wooldridge, 1999), which in our case corresponds to 1 for volunteers and to the cohort-

²²Croatian nationalism remained dormant until the 'Croatian Spring' movement of the early 1970s, which called for more rights for Croatia within Yugoslavia, and which was suppressed by force (Motyl, 2001).

²³Other names have their own popularity 'waves'. In the Appendix Figure 7, we contrast the evolution of popularity of all male top-10 names in the population according to the 2001 census. Only the 3 names we refer to as nationalist (Ante, Ivan, and Josip) peak both during WWII and during the 1991-1995 war.

²⁴The draft procedure did not involve names in any explicit fashion. We confirm that the draft was nameblind by combining the birth certificate data with the veteran data: being named Ante or having another Ustaše name does not predict the name-cohort-specific draft rate; the effect is close to zero and precisely estimated.

Table 1: Predicting Volunteering

		redicting v	Oldlicciii	115		
	(1)	(2)	(3)	(4)	(5)	(6)
Ante	0.0593	0.0474	0.0446	0.0450	0.0428	0.0429
	(0.0067)	(0.0042)	(0.0036)	(0.0041)	(0.0045)	(0.0043)
'Nationalist name'	0.0441	0.0213	0.0181	0.0223	0.0206	0.0215
	(0.0109)	(0.0068)	(0.0055)	(0.0058)	(0.0065)	(0.0068)
Top-10 name		0.0187	0.0125	0.0184	0.0087	0.0181
		(0.0074)	(0.0059)	(0.0059)	(0.0070)	(0.0076)
Siege settlement		0.0575	0.0766	$\boldsymbol{0.0602}$	0.0661	0.0523
		(0.0055)	(0.0053)	(0.0046)	(0.0098)	(0.0054)
Ante * Siege settlement						0.0806
						(0.0056)
'Nationalist name' * Siege s.						-0.0026
						(0.0115)
Top-10 name* Siege s.						0.0122
						(0.0156)
Age-in-years fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
District fixed effects		Yes	Yes	Yes	Yes	Yes
Excluding Civil Defence unit			Yes			
Serbian/Muslim fixed effects				Yes		
Only all-Croat settlements					Yes	
N	354,773	354,773	322,706	480,092	225,444	354,773

Notes: Each column corresponds to an OLS regression explaining the binary volunteering indicator. Bolded coefficients are statistically significant at the 10% level based on clustering at the name level.

The first column of Table 1 shows the estimated coefficients from a parsimonious volunteering linear probability model controlling for only the step function in age and for the two name indicators of interest. (As motivated in the previous section, the base group consists of soldiers with Croatian names.) The regression implies that Antes are about 6 percentage points more likely to volunteer for army service in the War of Independence than other Croat

²⁵The cohort-specific draft rates are highest, at 0.35, for the youngest cohorts born after 1973, and they gradually decline to 0.10 for the 1950 cohort.

males. The difference in volunteering likelihood is somewhat smaller for those with other nationalist names, but both differences are highly statistically significant.²⁶

In column (2), we ask to what extent volunteering patterns may correspond to geographical differences in the prevalence of nationalist names correlated with the pattern of active military operations during the war. To this effect, the regression in column (2) additionally controls for a set of district fixed effects and also for an indicator of the place of a soldier's birth being under siege (a property defined in the previous section). Further, we ask to what extent the effects estimated in column (1) correspond to having a generally popular name. If a name that is popular in Croatia is identified as particularly 'Croatian', then popular names could be nationalistic without any historical reference. Hence, we also condition on an indicator for popular first names; specifically, for the top-10 most popular Croatian names (other than Ante,²⁷ but including the strongly 'nationalist' Ivan and Josip) from the 2001 Census. These additional controls lower the coefficients for the Ante and 'Nationalist name' indicators to about 5 (2) percentage points, respectively. Both coefficients remain highly statistically significant, but the 'Nationalist name' coefficient, which is now chiefly based on names outside of the top-10 list, is statistically indistinguishable from the top-10-name coefficient.²⁸

To shed more light on the importance of having a popular vs. nationalist name, we additionally estimated the specification from column (2) on the subset of soldiers with names from the top-10 Croatian name list. When compared to all other top-10 names, Antes were over 2 percentage points more likely to volunteer (and this effect was statistically significant

 $^{^{26}}$ All of our inference is based on clustering of residuals at the name level.

²⁷ As there is simply no way to extricate Ante from its most notorious representative, Ante Pavelić.

²⁸See footnote n. 21 for the strong nationalist connotations of two of the top-10 names. We have also asked whether the subset of names on the 'Nationalist name' list corresponding to ideologues of the holocaust in Croatia differs in its volunteering impact from the rest of the names on the list. For all practical purposes, the two subsets of the 'Nationalist name' list have an identical effect on volunteering. These results are available upon request.

at the 5% level). Comparing the Ante coefficient to the coefficients for other specific popular names from the top-10 list implied that the volunteering share of Antes (conditional on location of birth and age) is statistically significantly larger (at the 10% level) than that of all other popular names, with the exception of Ivan, which is included in the 'Nationalist name' indicator. Hence, Ante and Ivan are two popular names that both have historical nationalist connotations and that both strongly predict volunteering, in comparison to all other Croatian names as well as in comparison to all popular Croatian names.

Next, we perform a number of robustness checks.²⁹ In column (3), we replicate the specification from column (2) after excluding the large unit of Civil Defense, which has a high share of volunteers, but low risks of KIA death. Doing so does not affect the key estimated coefficients. In column (4) we include in the estimation all veterans of the War of Independence, not only those with Croatian names, and we additionally control for having a Serbian or a Muslim name (as defined in the previous section). This again does not have any important effect on the estimated coefficients of interest.³⁰ In column (5), we minimize the chances of including Croatian citizens of non-Croatian nationality in our analysis by restricting the set of soldiers with Croatian names (used in column (2)) to its subset consisting of soldiers who were born in settlements that, according to the 1991 census, had over 90% of Croatian nationals in them. The estimates in column (5) are again fully in line with those in column (2), except that the top-10-name coefficient is no longer statistically significant.

So far, our estimates imply that the effect of being named Ante on volunteering is quantitatively comparable to the effect on volunteering generated by one's birth place being under enemy siege and that the broader group of other nationalist names also has a significant,

²⁹In addition to robustness checks reported in this paragraph, we also estimated the specification from column (2) without the choice-based-sample weights and the estimates were not materially affected. Next, we compared the OLS coefficients reported here to probability derivatives corresponding to a Probit model. Again, the results were identical for all practical purposes. These results are available upon request.

³⁰In this specification, we find that compared to the base case of having a Croatian name, having a Serbian or a Muslim name lowers volunteering probability by 4 and 9 percentage points, respectively.

albeit smaller effect on volunteering. Finally, in column (6) we ask whether the effects of being Ante and of having another nationalist name differs for soldiers coming from settlements that are under enemy siege. The interaction-coefficient estimates suggest that being named Ante predicts volunteering particularly strongly in areas that were most exposed to the war for independence. It may be that the nationalist implications of being raised as an Ante are particularly strongly activated under direct threat of war. In settlements under enemy siege, Antes are over 12 percentage points more likely to volunteer than other Croats. This is a large effect considering that the overall volunteering rate was about 12 percent.³¹ In sum, the evidence on volunteering for war service is consistent with Antes having strong nationalist sentiments.

5.2 KIA Risks

In this section, we ask whether having a nationalist name predicts being killed in action (KIA) during the War of Independence for soldiers involved in combat situations. We ask this question to check (refute or fortify) the interpretation that the volunteering analysis of the previous section offers: that being called Ante correlates with nationalist values (inculcated by one's parents). We face a major obstacle in the KIA analysis: the lack of soldier rank information. In any war, higher-ranked soldiers are less likely to die. The rank issue may be particularly important for volunteers who joined the army first and who may be particularly skilled soldiers. At a given point in time, volunteers are thus more likely to serve in higher ranks than draftees. Long-serving draftees are also likely to serve in higher ranks. We therefore minimize these issues by focusing on draftees and their KIA risk during 1991. Draftees during the first six months of the war are the group least likely to serve in higher ranks, and it is also the group facing by far the highest death rates (see Figure 2).

More specifically, for the purpose of the KIA analysis, we first omit soldiers who were

³¹This estimate is calculated using the average draft rate of 0.27 (which is based on combining the birth-certificate and soldier data) to estimate the potential-draftee population.

Table 2: Predicting Being Killed in Action

	(1)	(2)	(3)	(4)	(5)
Ante	0.0063	0.0095	0.0103	0.0044	0.0097
	(0.0008)	(0.0008)	(0.0012)	(0.0012)	(0.0008)
'Nationalist name'	0.0033	0.0027	0.0029	0.0035	0.0018
	(0.0017)	(0.0015)	(0.0014)	(0.0017)	(0.0013)
Top-10 name		0.0017	0.0016	0.0020	0.0025
		(0.0015)	(0.0014)	(0.0014)	(0.0013)
Siege settlement		0.0183	0.0200	0.0179	0.0185
		(0.0042)	(0.0038)	(0.0085)	(0.0059)
Ante * Siege settlement					-0.0016
					(0.0060)
'Nationalist name' * Siege s.					0.0185
					(0.0089)
Top-10 name* Siege s.					-0.0149
					(0.0078)
Age-in-years fixed effects	Yes	Yes	Yes	Yes	Yes
Month of entry fixed effects	Yes	Yes	Yes	Yes	Yes
District fixed effects		Yes	Yes	Yes	Yes
Serbian/Muslim fixed effects			Yes		
Only all-Croat settlements				Yes	
N	72,586	$72,\!586$	96,281	48,462	72,586

Notes: Each column corresponds to an OLS regression explaining the binary indicator of being KIA during 1991. The sample includes only soldiers drafted during 1991. Bolded coefficients are statistically significant at the 10% level based on clustering at the soldier name level.

never in combat. This excludes the entire (40-thousand-strong) Civil Defense unit of the Croatian army, and under 3% of the rest of the army. Within this subset, 1.1% of draftees and 1.6% of volunteers are KIA. Next, we omit all volunteers and also those draftees entering service after December 1991. We only consider KIA deaths occurring during 1991. As a result, we are left with 72,586 draftees with Croatian first names, a group of which 1.9% is KIA during 1991. The results are presented in Table 2, which is structured similarly to Table 1. The only difference via-à-vis the specifications used in Table 1 is that we always

condition on a set of 6 fixed effects corresponding to the month of army entry (during 1991) in order to minimize the effect of rank differences, to the extent these are correlated with the length of service, and also, more fundamentally, in order to control for the length of KIA risk exposure.³²

The basic sets of estimates in column (1) and (2) are fully consistent with the volunteering effects estimated in the previous section. Antes and, to a lesser extent also those with other nationalist names, are more likely to be killed in action during the first six months of the war, when the war was at is deadliest. Compared to the average KIA death rate for early draftees (0.019), the Ante coefficient in column (2) increases KIA risks by about a half. The effect of being from a 'siege settlement' is again stronger than the Ante effect and the KIA effect of top-10 popular names is similar in magnitude to that of the 'Nationalist name' indicator, although it is not precisely estimated in column (2).

We have additionally estimated the specification from column (2) using only top-10 Croatian names, and the Ante coefficient estimated against this narrower benchmark group was again statistically significant (at the 1% level) and similarly large (at 0.0073). When compared to all other specific top-10-name coefficients, the Ante coefficient is statistically significantly larger than all but one (Mario). Hence, combining the volunteering and KIA evidence, Ante is the only name that consistently predicts behavior in the war compared to the 'placebo effects' of other popular names. As was the case with the volunteering estimates, the KIA effects are not sensitive to including non-Croatian-name soldiers (in column (3)) and to studying only soldiers from almost-all-Croatian settlements (in column (4)).³³ The Ante coefficient is smaller in column (4), but it remains highly statistically significant and one cannot reject the hypothesis that it is equal to the coefficient in column (1).

Finally, in column (6), we ask whether nationalist names predict KIA risks differently

³²Note that our focus on draftees and the results of the volunteering analysis imply that the Antes drafted in 1991 are likely to be less nationalistic than the average Antes in the population. Hence, the results presented here provide a lower-bound on the effect of being Ante on the chances of being killed in action.

³³We also obtain highly similar effects using the Probit model.

for soldiers who were born in 'siege settlements'. The effect of being named Ante does not differ between siege and non-siege settlements. Recall that Antes from 'siege settlements' were particularly likely to volunteer (see previous section) and so these highly patriotic Antes are under-represented in the draftee sample used in the KIA analysis. On the other hand, those with other nationalist names, for whom being from 'siege settlements' did not increase chances of volunteering, are more likely to be KIA when they come from these locations most affected by the war. We also obtain a puzzling negative siege interaction coefficient for the top-10 Croatian names.

Overall, the pattern of volunteering and KIA estimates is strongly consistent with the hypothesis that nationalist names and Ante in particular provide a significant signal about one's nationalistic values as manifested by volunteering in a war of national independence and dying in the war, which suggests fighting more valiantly. Nationalistic values (presumably inculcated by parents) linked to WWII history matter in the 1991-1995 war.

6 The Use of Nationalist Names and War Experiences

A growing literature (see Section 2) suggests that wars have dramatic and long-lasting consequences for political identity. Hence, it is plausible that the War of Independence, when Croatia was invaded by largely Serbian forces, strengthened nationalistic attitudes in Croatia. In this section we ask whether the 1991-1995 siege (during which civilians suffered greatly, see, e.g., Naimark, 2001) and the extent of combat operations (proxied by KIA regional concentration) strengthened regional nationalist attitudes. We also explore nationalism patterns related to WWII: The Ustaše dictatorship supported nationalist tendencies by establishing the first modern Croatian independent state. However, during WWII, the Ustaše regime murdered hundreds of thousands (Macdonald, 2002) and the memory of the atrocities perpetrated in Ustaše-operated concentration camps may have subsequently at-

tenuated nationalistic tendencies in Croatia.³⁴ In absence of direct measures of individual nationalism, we use the information about nationalism conveyed by first names.

The analysis is based on the birth certificate data introduced in Section 4, i.e., on over 3 million father-son name couples corresponding to all Croatian male live births between 1930 and 2000. We match the birth-location strings to names of three types of locations: 21 'high-KIA locations' (proxying for exposure to combat operations), 177 'siege settlements' during the War of Independence, and 10 WWII 'concentration-camp locations'. In the veteran data, KIA deaths during the 1991-1995 war occur in 216 distinct settlements; from these we denote as high-KIA locations those 21 (one tenth) with the highest share of all KIA deaths. This list includes notorious battlefront towns (e.g., Vukovar, Osijek) as well as major cities directly affected by combat operations (e.g., Dubrovnik, Zadar).

In total, 14% of Croatian births occur in these high-KIA locations.³⁶ For comparison, about 5% (6%) of births during 1930-2000 occur in 'siege settlements' (concentration-camp locations).³⁷ Each of these three sets of locations thus covers a sizeable portion of the Croatian birth population. Furthermore, Appendix Figures 8, 9, and 10 show that the three sets of locations are geographically diverse. Hence, it is unlikely that differences in the use of

³⁴In the Jasenovac concentration camp alone, at least 80 thousand perished during WWII, primarily Serbs, but also Jews, Roma, and anti-fascist Croats. While estimates differ and are not available for all camps, victim counts range well over 10 thousand for the Jadovno (Gospić) or the Slana (Pag) camp as well. See Macdonald (2002) for a discussion of the contemporary interpretations of the Balkan Holocaust.

³⁵See section 3 for definition of the 'siege settlements' and of the three administrative levels of geographic units in Croatia. The major Ustaše-operated concentration-camp locations in Croatia (Jasenovac, Stara Gradiška, Jadovno near Gospić, Slana on Pag, Metajna, Sisak, Koprivnica, Jastrebarsko, Osijek, Đakovo) are taken from Kraus (1996, p. 90).

³⁶We could alternatively denote as high-KIA locations those settlements where the KIA *rate* is high, but such a set of locations overlaps heavily with the set of mostly small-sized siege settlements.

³⁷Siege and concentration-camp locations do not significantly overlap: only 0.3% of births occurs in locations that share both features. In contrast, as expected, there is significant overlap between siege and high-KIA locations: 1.5% of births occur in locations sharing both attributes.

nationalist names across these locations is driven by idiosyncratic location-specific factors.

What are the geographic differences across these three sets of locations in the time pattern of popularity of nationalist names, in comparison to the Croatia-wide pattern shown in Figure 3? In Section 5, we compared the 1991-1995 war behavior of men with nationalist names to that of men with Croatian (Catholic-calendar) names. We identified 74% percent of soldiers as Croats using their first names. The analysis was not sensitive to including all names or controlling for Muslim- and Serbian-name indicators. We classify birth-certificate first names using the same approach, i.e., as Croatian (Catholic-calendar), Muslim, Serbian, and unidentified-nationality names. There is an important difference, however. While the war-behavior analysis focused on a relatively short time period, the description of name patterns for newborns covers seven decades. Two key processes thus affect the location-specific measurement of nationalist-name popularity:

First, in 'siege settlements', most of which were under Serbian rule for much of the 1991-1995 war, the share of Serbian and Muslim names given to newborns is twice higher during the five years preceding the war and more than four times higher during the first five years after the war when compared to the share during the five years of the war. This clearly corresponds to the changing ethnic composition of these locations.³⁸ Hence, for the purpose of comparing Croatian nationalist-name popularity across locations, we omit from the analysis all newborns with Serbian or Muslim names.³⁹ Second, across Croatia and also within all three types of locations we consider, the share of (non-Serbian non-Muslim) names that correspond to the Catholic calendar is declining after 1970. This is related to the increasing popularity of international (English, Italian) names that do not appear on the traditional Catholic Croatian calendar. We inspected this trend across the sets of locations and found it to be highly similar both in size and the time pattern.⁴⁰ Since our primary

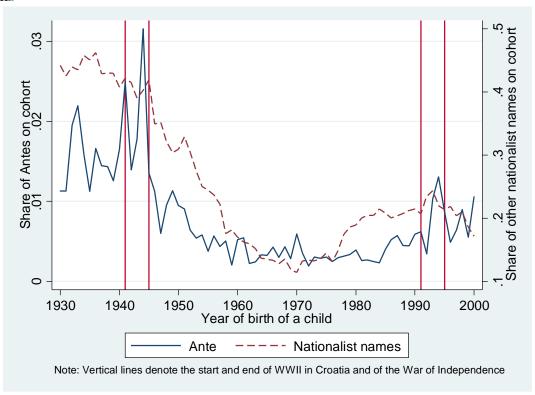
³⁸There are no significant changes in the share of Serbian and Muslim names during these time periods in either the high-KIA or the concentration-camp locations.

³⁹We could not obtain municipality-level nationality shares from the post-independence-war censuses.

 $^{^{40}}$ The decline in the share of Catholic-calendar names between 1970 and 1990 is 15 percentage points in

goal is to compare time trends across locations differently affected by war experiences, and since choosing a name for a newborn boy outside of the Croatian calendar corresponds to not using a nationalist name, the analysis presented below is based on using all name types (other than Serbian and Muslim) to calculate the shares of nationalist names on each cohort and birthplace type. After excluding the set of newborns with Muslim and Serbian first names, the main features of Figure 3, which plots the Croatia-wide evolution of the share of nationalist names, are not materially affected. The share of Antes (other nationalist names) during WWII still peaks at about 2.5% (38%), drops to 1% (15%) around 1970 and rebounds to about 2% (20%) during the War of Independence.

Figure 4: Shares of Ante and other nationalist names on cohort in concentration-camp locations



the high-KIA and concentration-camp locations and also in locations that do not fall under any of our three categories of interest. The decline is 20 percentage points in the siege locations.

Figure 4 shows that in areas where Ustaše-operated concentration camps were located during WWII, the popularity of nationalist names during WWII was comparable to that in the rest of Croatia (shown in Figure 3). However, the decline in the popularity of these names was steeper than elsewhere in Croatia, and the rise in the popularity of Ante before and during the 1991-1995 war is significantly slower in these areas than elsewhere in Croatia. The share of Antes never rebounds to WWII levels and remains at about half of the Croatia-wide level during 1991-1995. In contrast, in Figure 5 we see a return to WWII-level popularity of Ante in locations where a high share of KIA deaths occurred during the 1991-1995 war. Here, the spike in Ante popularity during the War of Independence may correspond to the exposure of the population to combat operations. In both sets of locations, the popularity of other nationalist names evolves similarly to the nation-wide pattern.

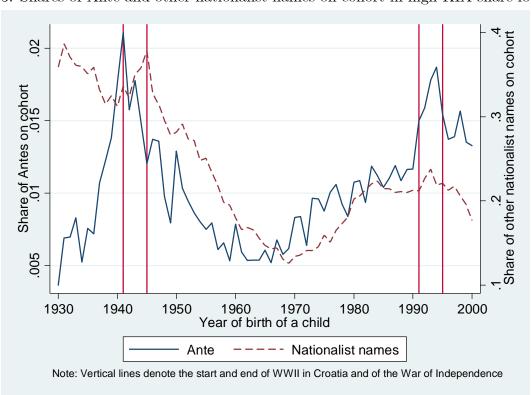


Figure 5: Shares of Ante and other nationalist names on cohort in high-KIA-share locations

Finally, Figure 6 shows the evolution of the popularity of nationalist names in locations that were under Serbian siege or occupation during the 1991-1995 war; hence, it is natural that the share of Croatian nationalist names there is low during the war. After the war, however, the shares of nationalist names increases dramatically. The share of Antes surpasses WWII levels; both shares are above the Croatia-wide shares of the late 1990s. This pattern likely corresponds in part to declining shares of the Serbian population not captured by our Serbian- and Muslim-name indicator, which limits the use of the siege locations for the analysis of intergenerational transmissions of nationalism (in the next section). Nonetheless, the spike in the prevalence of nationalist names after the War of Independence in these locations is suggestive of the nationalist content of these names.

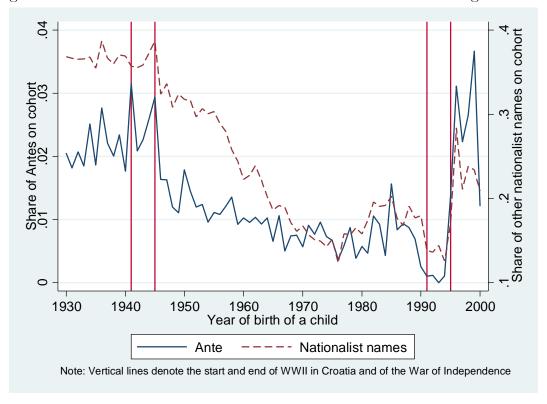


Figure 6: Shares of Ante and other nationalist names on cohort in siege locations

 $^{^{41}}$ For both Ante and other nationalist names, the difference compared to the rest of Croatia is statistically significant at the 1% level.

The descriptive analysis presented in this section is consistent with nationalist sentiments (as reflected in the use of Ante for newborns) reacting strongly to war exposure during 1991-1995 and being affected by long-lived memories of WWII atrocities. An important question for future research is whether the geographic differences in nationalist sentiments induced by the War of Independence persist. Ante is among the 10 most frequently given male names for newborns in 2000 when our birth certificate data ends, five years after the War of Independence. As of 2015, however, Ante is no longer among the top-10 newborn names.⁴²

7 Intergenerational Transmission of Nationalism

We now turn to the analysis of intergenerational transmission of nationalist names. The time and geographic comparisons provided above suggest that the experience of the 1991-1995 war, when the use of nationalist names was peaking in Croatia, offers an interesting case to study the intergenerational transmission of nationalism. We therefore focus our analysis on nationalist-name transmission during the independence war, i.e., for boys born during 1991 to 1995. This is also the period during which we established the nationalism signal (information content) of nationalist names in Section 5. We again rely on the birth certificate data. Since fathers of sons born during 1991-1995 can be expected to have been born before the rapid decline in the use of Catholic names in Croatia, we constrain the set of fathers' names (but not sons' names) to those that appear on the Catholic calendar (mirroring the approach used in Section 5, where we studied men who were adults in 1991).

To assess the extent to which nationalism spreads through intergenerational transmission, we study first name choices for sons depending on whether their fathers have a nationalist name. Campante and Yanagizawa-Drott (2015) present a simple model of purposeful transmission of political or cultural traits (in the spirit of Bisin and Verdier, 2001), which predicts that shocks strengthening such traits (including, possibly, the war experiences outlined above)

⁴²According to the Croatian Ministry of Public Administration, in 2015 Ante is among the top-5 male names in 2 out of 21 Croatian districts, but not in those most affected by the 1991-1995 war.

induce increased effort in transmitting one's traits to one's offspring.⁴³ In our case, such increased effort corresponds to a higher probability of giving one's son a nationalist name, Ante or other. Based on the name use analysis provided above, we contrast transmission rates for the (opposite) shocks corresponding to the high-KIA and concentration-camp areas.

Further, the Bisin and Verdier (2001) model allows values to be transmitted either directly from parents to offspring or 'obliquely' by offspring interacting with society outside the family. It predicts that there is substitution between intergenerational transmission of cultural or political traits and the oblique transmission from society at large: nationalist fathers may invest less in inculcating nationalist values (may be less likely to transmit a nationalist name) if there is a strong chance that those values will be passed on by a local society where they are widespread. Under strong substitution, i.e., if direct transmission of nationalism decreases as the prevalence of the nationalist trait in the local population grows, nationalism would not be completely absent or completely prevalent in any location. We thus test whether the Ante-Ante (nationalist-nationalist) transmission is weaker for fathers with nationalist names in locations where the prevalence of nationalist names is stronger.⁴⁴ An alternative, simpler, explanation for nationalist-name geographic patterns is that name choices of all parents (nationalist or not) co-move with regional trends of name popularity driven by cultural or political factors, including the two wars we observe.

Table 3 shows regression coefficients from two types of specifications. In the top panel, we regress either an indicator for a newborn son being given the name Ante or having any nationalist name (including Ante)⁴⁵ on binary indicators for the concentration-camp and

⁴³Consistent with the prediction of their model, Campante and Yanagizawa-Drott show that having served in a war is related to applying an authoritative parenting style.

⁴⁴We are not primarily interested in comparing the Ante-Ante rate to other same-name transmission rates; rather, we study geographic differences in the evolution of the nationalist-nationalist and non-nationalist-nationalist rates.

⁴⁵We include Ante in the 'Nationalist name' indicator to lower the number of transition types we need to track.

Table 3: Predicting Ustaše Names for Newborn Boys during the 1991-1995 War

Child name	Ante	Ante	Nationalist	Nationalist				
	(1)	(2)	(3)	(4)				
Specifications without pre-war municipality shares of nationalist names								
Concentration camp locations	0.003	-0.013	-0.018	-0.012				
	(0.028)	(0.001)	(0.009)	(0.005)				
High-KIA locations	0.007	-0.003	0.008	-0.003				
	(0.013)	(0.001)	(0.007)	(0.004)				
Specifications with pre-war municipality shares of nationalist names								
Concentration camp locations	-0.039	-0.001	-0.003	0.005				
	(0.019)	(0.001)	(0.009)	(0.009)				
High-KIA locations	-0.011	0.001	-0.006	-0.009				
	(0.033)	(0.001)	(0.010)	(0.009)				
Pre-war share of Antes	-0.368	1.092						
	(0.081)	(0.020)						
Pre-war share of all nationalist names			0.753	0.961				
			(0.086)	(0.066)				
Father named Ante	Yes	No						
Father with any nationalist name			Yes	No				
N	2,353	102,718	28,680	79,288				

Notes: Each column corresponds to an OLS regression explaining the binary indicator of a boy born during 1991-1995 being named Ante or any nationalist name (including Ante). Siege locations are excluded, as are birth certificates with Muslim or Serbian first names. Prewar shares of Ante or all nationalist names correspond to the five year period preceding the 1991-1995 war and are calculated at the higher-level municipality level. Bolded coefficients are statistically significant at the 10% level based on clustering at the municipality level in the bottom panel and based on robust standard errors in the top panel.

high-KIA locations. These descriptive regressions are estimated separately for fathers with nationalist names and those with other (Croatian) names. With the exception of the name choices made by Ante fathers, the estimates imply that the use of nationalist names is lower during the 1991-1995 war in the concentration-camp locations than in the rest of Croatia. For the high-KIA locations, we detect no difference in nationalist naming patters.⁴⁶

 $^{^{46}}$ This is consistent with Figure 5 and Figure 3. However, high-KIA areas display a smaller gap between

In the bottom panel of the Table, we additionally condition on the pre-war share of nationalist names at the municipality level.⁴⁷ The pre-war shares are measured in the five-year period prior to the 1991-1995 war. The average share of Antes on boys born during the five-year period preceding the war is 1.4% and the average share is lower, at 0.5%, in the concentration camp locations and similar to the national average, at 1.2%, in the high-KIA locations. There is little difference across the groups of locations in terms of the pre-war shares of all nationalist names: the averages are all between 19% and 21%.⁴⁸ The regression coefficients for the pre-war shares test the prediction of the 'oblique' transmission channel from the Bisin and Verdier (2001) model applying to nationalist fathers vs. the simpler alternative of area-specific name-popularity trends affecting all fathers.⁴⁹ In line with the model's prediction, we find that fathers named Ante are less likely to transmit their name to their sons during a war of national independence when the share of Antes is generally high in their municipality. Further, once we control for this channel, the 'base' effect of being from a concentration-camp location becomes negative (as concentration-camp locations have a lower-than-average share of Antes before the war).

For fathers not named Ante, however, we find that the share of Antes in one's area is positively associated with the share of Antes among newborns. This explains why the share of Antes was low in the concentration-camp areas in column (2) in the upper panel of the table. Hence, based on the name whose use is most sensitive to the wars our analysis covers, we find evidence consistent with nationalist fathers (named Ante) being less likely to transmit

WWII levels and War-of-Independence levels of the share of Antes on newborn boys than the rest of Croatia.

⁴⁷See section 3 for definition of the 555 municipalities/cities. There is much variability in the way (historical) addresses (places of birth) are recorded on birth certificates, but we are able to match most of the birth records to one of the Croatian municipalities or cities. The match rate is over 90% for cohorts born after 1990, but it is below 50% prior to 1950.

⁴⁸However, within each group of locations, the share ranges from about 10% to about 40%.

⁴⁹Note that our use of the population of births to measure the share of nationalist names in an area eliminates measurement error bias that is likely present in studies, such as Bisin, Topa, and Verdier (2004), that rely on shares estimated off survey data.

nationalist names when they reside in an area (a) affected by long-lived memory of WWII atrocities related to the history of nationalism, and (b) where nationalism is prevalent in the regional society at large. However, for fathers who are less nationalist as implied by our name proxy, we find that they use the name Ante in tandem with the overall popularity of the name in their region and that they do not behave differently depending on the historical experience of their region. The results in column (3) and (4), which study the broad group of nationalist names (including Ante), are consistent with most of these fathers not recognizing the family vs. society (oblique) transmission trade-off and following the general area-specific name-popularity trends when choosing their sons' names.⁵⁰ The three positive coefficients corresponding to pre-war shares of nationalist names are similar in magnitude; under our interpretation of nationalist name choices, they imply that during the war, i.e. during a spike in nationalism, the regional structure of nationalism reinforced itself.

In sum, the long-view descriptive evidence provided above suggests that Ante is a name whose use is particularly sensitive to war experiences. The regression evidence in Table 3 focusing on the War of Independence, i.e., on a particularly dramatic episode when a nation's territorial integrity is at stake, is consistent with Ante fathers having nationalist views, being affected in their nationalism by WWII history through their locations consistent with the Campante and Yanagizawa-Drott (2015) model, and purposefully reflecting the political-trait-transmission trade-off between family and society channels captured by the Bisin and Verdier (2001) model.⁵¹ It may be that Ante fathers frequently choose the name Ante for their sons born outside of the highly nationalist 1991-1995 period.⁵² For all other fathers,

⁵⁰Again, these results are robust to including names that are not on the (Croatian) Catholic calendar. We also interacted the two location types with the pre-war municipality shares of nationalist names, but none of the interactions reached conventional levels of statistical significance in any of the specifications.

⁵¹This interpretation assumes that Ante fathers in a high-Ante-share location are equally nationalistic as Ante fathers in a low Ante-share-location.

⁵²With information on first names of fathers and sons alone we cannot link birth certificates by father identity and so we do not know whether Ante fathers are more likely to use the name Ante for their first-born sons or not. The share of boys born to fathers named Ante is similar during the pre-war five-year period

the evidence is consistent with the use of nationalist names in tandem with the nationalism tendencies in their area. It may be that fathers who are not named Ante, i.e., less nationalist fathers, are less concerned with the efficiency of the transmission of nationalist values to their offspring; they simply react to the war-related spike in nationalism in their area.

7.1 Supplementary Analyses

Our preceding analysis of intergenerational transmission of nationalism was conducted in absence of direct evidence on parenting choices of fathers with nationalist names and those of other fathers. The purpose of this section is to provide initial indirect evidence on parenting strategies. Specifically, we ask whether secondary-school in-class behavior of sons born during 1991-1995 depends on whether their fathers have a nationalist name. In-class behavior (i.e., well-behaved vs. unruly) is plausibly related to the degree to which fathers choose an authoritative parenting style, which, in turn, is plausibly related to nationalism.⁵³ We observe 2008-2012 grades corresponding to high-school in-class behavior for the population of 5,625 sons born during 1991-1995 to veterans of the war for Croatian independence and we study the average of these grades over the 5-year period.⁵⁴ The regression we estimate controls for a step function in fathers' years of age and is based on the subset of veterans with Croatian first names (as in Section 5); this limits the analysis to 4,243 sons. Sons of Ante fathers are statistically significantly less likely (at the 5% level) to have behavioral issues reflected in grades while we detect no (economically or statistically) significant effect of other nationalist names. The 'Ante' effect on behavior grades corresponds to 5% of the standard

and the 1991-1995 war period.

⁵³See Campante and Yanagizawa-Drott (2015) for a similar approach.

⁵⁴We omit from the analysis of parenting styles sons of fathers who died or were severely injured during the war as such traumatic experience is likely to have a first-order effect on child outcomes. See Kovac (2016) for an exploration of this separate question. Kovac (2016) also describes the school data in more detail. The war-service injury-type information comes from the veteran database we employ in Section 5; the database does not record the date of wounding.

deviation in behavior grades. While this evidence is certainly limited, it is consistent with Ante fathers choosing more authoritative parenting strategies, which is plausible for strongly nationalist fathers.

Finally, we complement our main analysis of intergenerational transmission by asking whether veterans of the 1991-1995 war who experienced more carnage in their military units during the war are more likely to give their sons nationalist names. This sheds light on the effect of close exposure to violence of war on nationalism. For a sub-set of the veterans we analyzed in Section 5 who were seriously injured or killed in the war, we observe the names of their children. More specifically, we observe the names and birth dates of children of the 23,354 veterans who collected veteran benefits linked to their severe injury during the war (or who died in the war and whose families claimed the benefits).⁵⁵ This sub-sample of veterans, which is selected on having been at least partially disabled during the war, also allows us to ask whether veteran father-son name transitions align qualitatively with our main findings.

The answer is that they do. First, we find that volunteers named Ante who have at least one son born before the war are 5 percentage points (statistically significantly) more likely to have named (one of) their son(s) born before the war Ante, but there is no such relationship present for the draftees. This is consistent with volunteer (but not draftee) Ante fathers considering their name as an expression (symbol) of their nationalist beliefs. We obtain similar results for the transmission of any nationalist name. Next, for fathers who did not die during the war and whose sons were born during or after the war, the higher the exposure to carnage in their unit measured using the share of their unit that was killed in the war, the lower the probability of transmitting both Ante and the other nationalist names to their sons; the effects are stronger among volunteers.⁵⁶ While these results are at most tentative, due to the selected nature of the sample, we find them tantalizing. Future research could employ our approach for identifying political values and the intergenerational transmission thereof for random samples of veterans or civilians differentially exposed to violent conflicts.

⁵⁵See Kovač (2016) for more details on this data.

⁵⁶All of these results are available upon request.

8 Conclusions

In this paper, we demonstrate that, at least in the Croatian case, names predict behavior in a life-and-death situation—in a war for national independence. We thus show that first names can carry an informative signal about nationalism (patriotism) and that they can be used to study the spread of such values through history and geography, and, potentially, as input into the study of ethnic and civil conflicts (e.g., Novta, in press). It could be that our approach is mainly useful in countries that feature a sharply divided ethnic mix and in federative countries where national identity can affect many dimensions of one's life. Our approach could also be particularly useful in periods of heightened nationalist tensions and in war-like situations where leader's names are notoriously associated with their actions and political beliefs. Given the existence of birth certificate records in most countries, our approach allows for the study of the intergenerational transmission of name-related cultural, political, and ethnic-identity values in various historical settings. Our findings thus open promising avenues for future research; for instance, if one finds that the use of names corresponding to leaders of Nazi Germany is over-represented among supporters of right-wing parties in post-WWII Germany, one could use easily accessible name statistics to map the evolution of such values over populations not covered by survey data directly eliciting such values. Similarly, using our approach, one could explore the information content and the prevalence of first-name choices corresponding to prominent generals of the US civil war, to differentiate Ukrainian and Russian versions of several first names in Ukraine during its conflict with Russia, or, to return to the former Yugoslavia, to measure the prevalence of Chetnik first names in Serbia.⁵⁷

Based on the insight that names serve as a proxy for holding nationalist values, we study the evolution of nationalism in Croatia and its transfer from fathers to sons. The use of nationalist names that were popular in Croatia during WWII rebounds starting in the 1970s and peaks during the 1991-1995 War of Independence. We contrast these naming patterns

⁵⁷Chetniks (Četniki) were members of a Serbian nationalist guerrilla force responsible for mass civilian murder during WWII.

across Croatian locations exposed to dramatic events, which are likely to establish shocks to nationalist attitudes. Specifically, we study the effects of the presence of concentration camps during WWII and of high KIA rates and long-term siege by enemy forces during the War of Independence. These effects are of interest in their own right and they also illustrate the usefulness of our approach for identifying factors that affect the intergenerational transmission of political values. In concentration-camp locations, the popularity of names synonymous with extensive crimes against humanity during WWII increases during the War of Independence, but substantially less so than in the rest of the country. In contrast, the use of nationalist names reaches WWII levels immediately after Croatian control is re-established in locations that were under extended Serbian siege during the 1991-1995 war and in areas with high exposure to combat operations during the war. Our evidence on intergenerational transmission of nationalism is consistent with (Ante) fathers with strong nationalist views being affected in their nationalism by WWII history through their locations, and reflecting the nationalism-transmission trade-off between within-family and society-wide channels captured by the Bisin and Verdier (2001) model. For all other fathers, however, our results are consistent with general region- or country-wide (nationalism) trends driving name choices for newborn sons.⁵⁸

In sum, our paper suggests that names can signal nationalism, that the use of nationalist names increases during wars, especially in areas directly affected by military operations, that values presumably inculcated by parents (who choose nationalist names for their sons) affect volunteering for war-time military service and dying in the war, and that strongly nationalist fathers are conscious of the trade-off between alternative channels that support transmission of nationalist values across generations.

One view of the Yugoslav wars is that after years of peaceful coexistence, violence erupted

⁵⁸Our analysis of the nationalist name patterns after the War of Independence may be suggestive of the approach taken by the Croatian society towards understanding the war. Rivera (2008) implies that the Croatian state has dealt with the war memory through cultural re-framing rather than through public acknowledgment.

unexpectedly (e.g., Bardhan, 2005, p. 169). Our evidence on the nationalistic content of the Ustaše-linked name Ante together with the continuous rise in the popularity of nationalist names during the 1970s and 1980s is perhaps better aligned with the alternative notion that internal wars stem from accumulation of protracted sentiments and conflicts (Fearon and Laitin, 2003), and that the strength of nationalism in Croatia was increasing for over a decade before the war erupted.

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9 Appendix

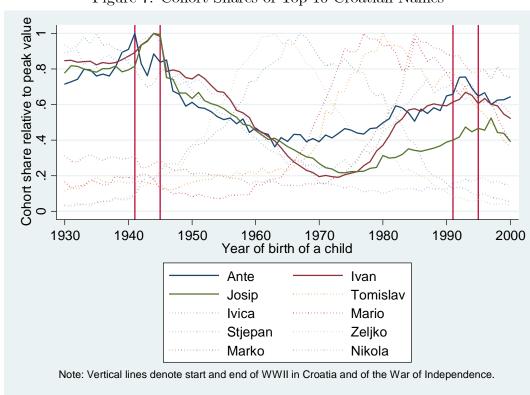


Figure 7: Cohort Shares of Top-10 Croatian Names

