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The Economics of Nation-Building: Methodological Toolkit and Policy Lessons

Abstract

This article reviews the recent burgeoning political economics research on nation-building. We focus on three main aspects of this body of work. First, we discuss methodological issues related to measuring nation-building outcomes and provide a synthesis of studies that employ different techniques, such as surveys on identity, lab-in-the-field methods, and direct observation of actions signaling identity. Second, we explore preconditions for effective nation-building, particularly focusing on ethnolinguistic polarization and segregation, and discuss how these factors may influence policy choices and their effectiveness. We also consider geopolitical factors. Finally, we review advances in the literature evaluating the effects of major nation-building policies, including those that encourage inter-group contact, the choice of national education curriculum, propaganda, leadership, decentralization, and foreign interventions. We highlight instances when these policies work and when they backfire.

JEL-Codes: D740, H110, H560, H770, N400, O100, Z100, P000.

Keywords: nation-building, national identity, social cohesion, conflict.

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1 WHY FOCUS ON NATION-BUILDING?

Peace, prosperity, inclusive development, and social safety are common goals of contemporary societies. These goals are easier to achieve when a society is cohesive. This means a shared understanding of what these goals actually mean and the willingness of all members of society to contribute toward achieving these goals together (including for the benefit of other members of society). Nation-building is a process of creating and maintaining such cohesiveness through developing a common "national" identity within a society defined by given country borders. It is associated with a wide range of desirable intermediate outcomes, such as the absence of internal conflicts, increased trust and cooperation, public goods provision, accountable governments, and higher defense capabilities, all of which help achieve the ultimate goals at the country level.¹

The concept, the outcomes, and the determinants of nation-building have been widely studied in social sciences outside economics (e.g., Rose & Deutsch, 1954; Smith, 1987; Gellner, 1991; Calhoun, 1993; Gellner, 2006; Laitin, 2007; Sambanis et al., 2015; Wimmer, 2018). In economics, the body of research on nation-building has emerged only recently, coinciding with the empirical revolution and the growth of the fields of political economics, economics of culture, and economics of institutions. There are almost no surveys of this new literature. One exception is our introductory chapter (Rohner & Zhuravskaya, 2023b) to the collected volume (Rohner & Zhuravskaya, 2023a) published by CEPR. Targeting a broader nonacademic audience, the Rohner & Zhuravskaya (2023a) volume features 26 chapters written mostly by economists who explain the lessons from their pioneering research on nation-building in a non-technical manner. This article aims to review the recent economics literature on nation-building in greater depth and breadth. It addresses an academic audience and focuses on both the results and methodological aspects of the literature.

As nation-building is about creating a common identity of a nation, the literature on nationbuilding is innately related to other strands of the social science and particularly economics literatures that have received their reviews: The literature on social identity and preferences is reviewed by Shayo (2020). Paluck & Green (2009) focus their review on eliminating prejudice. Ginsburgh & Weber (2020) review the literature on linguistic diversity. Recent surveys of conflict are Blattman & Miguel (2010); Anderton & Brauer (2021); Rohner & Thoenig (2021); Rohner (2024a,b). The state capacity literature is reviewed by Besley & Persson (2011). For the discussion of the literature on the size and number of nations, see Alesina & Spolaore (2005); Spolaore (2022); Allen (2023). Support for democracy is a focus of recent work by Rivera et al. (2024); Manacorda et al. (2024). Finally, the effects of traditional and social media on the formation of identity, political preferences, and social capital are discussed, for instance, in these reviews: DellaVigna & Gentzkow (2010); Zhuravskaya et al. (2020); Campante et al. (2022).

The remainder of this article is structured as follows. In Section 2, we provide a brief conceptual overview of what is meant by "nation-building" and how this notion is linked to related concepts. Section 3 provides an overview synthesis of the methodological toolkit applied by cutting-edge studies, with a special focus on the measurement of nation-building. Pre-conditions for different approaches to nation-building are discussed in Section 4. Section 5 investigates a series of major policies. Finally, Section 6 concludes.

¹As discussed later in more depth, a strong "national" identity also bears risks, in particular in the absence of democratic safeguards.

2 CONCEPTS

We define nation-building as creating group identity, where the group is defined as all residents of a particular country, namely, a nation-state.² Research on identity, which is relatively recent but has already become a classic, defines a general utility function taking formation of social identity into account (Akerlof & Kranton, 2000; Shayo, 2009; Chen & Li, 2009). Group identity makes an individual altruistic toward other members of the group. When the group is one's country and the same identity is shared by other residents, this altruism results in high levels of equilibrium trust and cooperation.

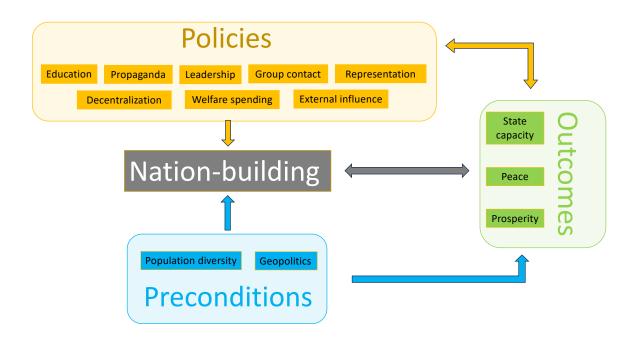
As there are always different competing identities because individuals belong to many social groups at the same time, identity is, in part, a choice variable and it could be changed. The salience and the status of different groups, as well as the differences in the costs and benefits of feeling part of each (potential) group, determine how strongly individuals associate themselves with their country, and as a result, how cohesive the country's population is. We equate nation-building with making individuals identify more strongly with their country of residence, which may or may not mean that they identify less with their ethnic group or their subnational region.

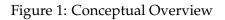
In turn, the salience, costs, and benefits of identifying oneself with a nation depend on various factors. Some of these factors are defined at the individual level and vary for different people within the same country; these include cultural, ethnic, and socio-economic background of individuals. Other factors vary at the country or regional level. Some can be considered as the country's preconditions that are (usually) not a choice variable for the country's policymakers. These include country-level population heterogeneity, such as racial, ethnic, and religious composition, (post-)colonial history, and the presence of neighboring countries with similar ethnic or religious groups.

Policies also affect the salience, costs, and benefits of national identity of a country's residents. For example, education, propaganda outside classrooms, and leadership can influence whether and how strongly individuals identify with their nation. Educational curriculum could ensure teaching a common language and shared historical narrative, while propaganda could provide common inspiration. Programs for young people (i.e., individuals in their impressionable years) that expose them to representatives of other cultural and ethnic groups in the same country and provide incentives for cross-group cooperation could also have similar effects by increasing benefits of a common identity and making group differences less salient. Including minorities, for whom assimilation is more costly, in decision-making through both political representation and decentralization can decrease alienation and resentment toward a common national identity. Welfare spending could have a similar effect on the poor. Policies could also be divisive: ethnic favoritism and exclusion as well as propaganda of differences between subgroups within society can severely undermine nation-building.

In **Figure 1**, we provide an illustration by presenting nation-building at the center of a system of interlinked concepts. Nation-building prospects are affected by exogenous preconditions (depicted in the bottom blue box) and by an endogenously selected set of policies (represented in the orange top box). Below, we discuss the effects of the preconditions and of the policies in depth. On the right, we list key outcomes (in a green box). The outcomes are affected by nation-building and feature feedback loops to policies and nation-building, highlighting the challenges of identifying causal effects.

²One could also think of nation-building in a situation where the group identity is defined at the supra-national level, such as at the level of the European Union. With few exceptions, this article focuses on research about nation-building within pre-defined country boundaries. The size of nations is discussed by Alesina & Spolaore (2005).





3 METHODOLOGICAL TOOLKIT FOR AN EMPIRICAL STUDY OF NATION-BUILDING

Empirical researchers striving to study nation-building generally face two problems. The first problem is related to measuring the strength of national identity, which usually is not directly observable. The second problem is potential endogeneity stemming from the fact that the nation-building outcomes, national identities, and nation-building policies could be jointly determined in equilibrium with feedback loops from the outcomes (as illustrated by **Figure 1**) and that they all could be affected by a third factor. In this section, we illustrate how cutting-edge research has dealt with these issues.

3.1 Measurement

Typically, the following approaches are used to overcome the observability problem and find suitable proxies for measuring the strength of identification with one's own nation-state as well as the strength of other potentially-competing group identities such as ethnic, religious, or regional ones. First, one can directly ask people about how strongly they identify with their country (see Stantcheva, 2023, on using surveys to reveal the invisible). Second, people often reveal or even signal their identity to others directly or indirectly, for example, through their names or consumption patterns (see Atkin et al., 2021, on using revealed preferences to measure identity). Third, researchers could use observable behavior that is informative of how salient within-country group divisions are, such as intermarriages or other mixing choices. Fourth, a researcher can observe costly actions that benefit others, ranging from tax compliance to heroic self-sacrifices during wars; these actions signal how altruistic people feel toward other members of the society. Below, we describe how these different approaches are utilized by existing research. Supplemental Material Table A.1 contains a synthesis of different measures of nation-building and the underlying data these measures are based on.

3.1.1 Asking people about their identity in surveys

Surveys with identity questions Several studies have made use of survey data to construct proxies for the strength of national identity. The following multi-country survey datasets are particularly widely used. *Afrobarometer* (https://www.afrobarometer.org, accessed June 13, 2024), which covers a large set of African countries (e.g., 34 countries in wave 2022), contains the following question asked consistently in all survey waves since 2005: "Let us suppose that you had to choose between being a [member of the group which identifies your county citizens, e.g., Ghana-ian/Kenyan/etc.] and being a [member of your ethnic group]. Which of the following best expresses your feelings?" with potential answers: (1) Ethnic identity only; (2) Ethnic identity more than national; (3) National and ethnic identity equal; (4) National identity more than ethnic; (5) National identity only. This question was used to measure nation-building, for example, by Rohner et al. (2013a); Depetris-Chauvin et al. (2020); Carlitz et al. (2023).

The International Social Survey Programme, ISSP survey (https://issp.org, accessed June 13, 2024) covers many countries across the globe (e.g., 33 countries in wave 2013). It contains four questions related to national identity of respondents that are asked consistently in several waves of this survey: "How close do you feel to [your country]?" with potential answers ranging on a Likert scale form 1 (Very close) to 4 (Not close at all); and "I would much rather be a citizen of [your country] than of any other country in the world"; "Generally speaking, [your country] is a better country than most other countries"; "[Your country] should follow its own interests, even if this leads to conflicts with other nations" with potential answers to each of these questions ranging form 1 (Agree strongly) to 5 (Disagree strongly). Examples of research that uses ISSP data are: Mayda & Rodrik (2005); Shayo (2009).

World Value Survey, WVS (https://www.worldvaluessurvey.org/, accessed June 13, 2024) covers an even larger set of countries (e.g., 66 in the last wave conducted between 2017 and 2022). It contains one question directly addressing national identity: "How proud are you to be of nationality of this country?" with answers ranging from 1 (Very proud) to 4 (Not at all). These data were used, for instance, by Shayo (2009).

Eurobarometer (https://europa.eu/eurobarometer, accessed June 13, 2024) can be used to measure pan-European identity of residents in over 30 EU countries. Up to 2009, there were four questions of the following form: "To what extent do you personally feel you are: European, a member of your nationality, a member of your region, a citizen of the world?" With answers for each of these groups randing on a scale from 1 (To a great extent) to 4 (Not at all). From 2010 onwards, Eurobarometer substituted these with a single question: "Do you see yourself as [choose one]: your nationality only; your nationality and European; European and National; European only" (for the example of the use of these data, see: Gehring, 2022).

The literature also made use of a number of single-country surveys: Clots-Figueras & Masella (2013) use the Centro de Investigaciones Sociologicas survey for Catalonia, Casas et al. (forthcoming) rely on the Baròmetre d'Opinió Política also for Catalonia, Cáceres-Delpiano et al. (2021) use the General Spanish Social Survey conducted in Spain, Dehdari & Gehring (2022) draw on a survey of the Observatoire Interregional du Politique (OIP) in France. Several studies conducted their own original surveys: Cantoni et al. (2017) in China; Okunogbe (2024) in Nigeria, and Ronconi &

Ramos-Toro (2023) in Argentina.

Surveys with inter-group trust questions Researchers also use survey data to measure the extent of trust between different ethnic groups. Higher trust between representatives of different ethnicities within the same country is also a proxy for social cohesion. Inter-ethnic trust questions from Afrobarometer were used, for example, by Rohner et al. (2013a); Depetris-Chauvin et al. (2020). Shayo (2009) uses a related question from WVS. Original surveys also use this kind of questions extensively: see Clingingsmith et al. (2009) for Pakistan, Blouin & Mukand (2019) for Rwanda, Izumi & Park (2023) for Korea, and Okunogbe (2024) for Nigeria. In addition to intergroup trust questions, Cilliers et al. (2016) ask about forgiveness of groups that perpetrated war crimes during Sierra Leone Civil War.

3.1.2 Signaling identity through revealed preferences

Naming patterns By choosing the mode of socialization for their children, parents affect children's culture and identity (see Bisin & Verdier, 2023, for a recent survey of the theoretical literature on cultural transmission). First names that parents give to their children is one of many socialization tools. Depending on the parental choice, it could make it easier or harder for the child to fit in and, therefore, identify with different social, cultural, ethnic and racial groups. Name is a credible and costly signal of identity: for instance, names have been shown to affect economic outcomes (e.g., Bertrand & Mullainathan, 2004; Biavaschi et al., 2017). Several papers use the names to construct proxies for nation-building by measuring the extent to which parents give their children more or less ethnically distinctive names within ethnically diverse countries. Bazzi et al. (2019) use this approach for Indonesia, Assouad (2020) for Turkey, and Chiovelli et al. (2021) for the Spanish Empire. Fryer Jr & Levitt (2004) compute the index of the "blackness" of first names in the US to measure the strength of black ethnic identity. Abramitzky et al. (2020); Fouka (2020); Saavedra (2021); Gagliarducci & Tabellini (2022) use naming patterns to measure assimilation of immigrants in the United States. Esposito et al. (2023) calculate the fraction of citizens of Confederate versus Unionist states in the United States who give their offspring names considered typical in former enemy areas after the Civil War. A higher propensity to select such an "enemy name" is seen by the authors as a sign of greater scope for national reunification.³

National language use As we discuss below, common languages are important attributes of a national culture, helping to create common narratives and facilitating communication and understanding between different members of the society. Several papers focus on whether people speak in their homes the pan-national language as opposed to languages of smaller ethnic groups, including Bazzi et al. (2019, 2023) for Indonesia, Gagliarducci & Tabellini (2022) for the United States, and Blanc & Kubo (2024) for historical France. Apart from investing in learning the national language, migrants could invest in learning other aspects of common culture. Gagliarducci & Tabellini (2022) use data on naturalizations as a proxy of assimilation of migrants. The citizens of diverse countries could invest in learning more about other groups in their country. Okunogbe (2024) assesses factual knowledge on areas of Nigeria outside the homelands in her original survey,

Consumption and investment patterns Atkin et al. (2021) use food consumption patterns to uncover the strength of ethnic and religious identities in India. Dehdari & Gehring (2022) measure

³First names are also used by researchers to measure identities beyond national or ethnic lines, such as religious identity (e.g., Sakalli, 2019; Andersen & Bentzen, 2024). Names can also indicate culture and values, such as individualism (e.g., Knudsen, 2024; Cantoni et al., 2024) or democratic and bourgeois values (e.g., Andersen & Raster, 2024; Andersen, 2024).

the strength of regional identity with subscriptions to a regional newspaper in France. Caprettini & Voth (2023) use the War Bond purchases in the United States during World War II as a revealed preference of support for the US national government.

Voting and political preferences In many federal countries with diverse populations, political parties differ in their views on nation-building. Certain parties advocate for national unity, emphasizing the significance of a strong central government and a shared culture. Other parties support greater regional autonomy, seeking increased local control and decision-making authority while promoting regional cultures. Furthermore, some countries have parties that advocate for full secession of their regions, aspiring to establish independence. The voter choices can be used to study the attitudes of the population. Data on political participation, voting for regionalist parties and pro-independence and pro-autonomy preferences in Spain has been used by Clots-Figueras & Masella (2013), Cáceres-Delpiano et al. (2021) and Casas et al. (forthcoming). Blanc & Kubo (2024) have used the vote in the 1969 constitutional referendum on regionalization in France as a measure of French national identity. Cantoni et al. (2017) included questions on trust in government, beliefs about democracy and voting behavior in China in their survey. Cinnirella & Schueler (2018) used as an outcome variable the share of pro-nationalist votes in elections for the Reichstag in Imperial Germany. Bazzi et al. (2023) proxied attitude toward the secular nation-state of Indonesia by the political support for the secular versus religious policies and parties, drawing on original survey data from Pepinsky et al. (2018). Dehdari & Gehring (2022) made use of voting data in several referenda related to regionalism and in an election in France.

3.1.3 Behavior revealing salience of inter-group conflict within countries

The theory predicts that, when individuals can choose whom to interact with, one should observe more mixing between members of different ethnic groups if group differences and, therefore, group identities are less salient. Researchers have used this prediction to find proxies for the salience of group identity.

Inter-ethnic marriage and friendship links A number of studies use inter-ethnic marriage rates as a proxy for nation-building as well as for the assimilation of migrants: see, for instance, Bazzi et al. (2019) for Indonesia, Fouka (2020) and Gagliarducci & Tabellini (2022) for German and Italian immigrants, respectively, in the United States, and Carlitz et al. (2023) for Tanzania. Similarly, survey data on friendship and romantic relationships between different groups were used by Cáceres-Delpiano et al. (2021); Okunogbe (2024).

Geographical mobility and residential integration Okunogbe (2024), in her survey, elicits the information on whether people currently live outside their birth state as well as their self-reported willingness to potentially move elsewhere. This information is also available in the Life in Transition Survey III conducted in 2016 (https://www.ebrd.com/what-we-do/economic-research-and-data/data/lits.html, accessed June 13, 2024), which covers 34 countries, mostly in Central and Eastern Europe. Gagliarducci & Tabellini (2022) study the residential integration of Italian immigrants in the United States.

Inter-group violence and toxic language toward the out-group Data on inter-group conflict and riots can also be used to measure societal cohesion with a revealed-preference approach (see, for example, Jha, 2013; Cederman et al., 2015; Mueller & Rohner, 2018; Depetris-Chauvin et al., 2020; Chiovelli et al., 2021). The literature has also used text-analysis tools to study traditional and social

media, particularly to measure how unifying or divisive the language is and how patriotic it is. For example, Esposito et al. (2023) illustrate national reunification with rhetoric used by local newspapers in the US, whereas Zhuang (2023) analyses the anti-Japanese sentiment on Weibo, a Chinese microblogging platform, and Müller & Schwarz (2021, 2023) study anti-immigrant sentiment on Facebook in Germany and anti-Muslim sentiment on Twitter in the U.S.

Experimental measures of cooperation Blouin & Mukand (2019) have designed a series of experiments which they conduct in the field to elicit the willingness to cooperate with representatives of the former enemy group in the post-genocide Rwanda. In particular, they measure in different areas in Rwanda, whether the subjects had different rates of picking co-ethnics vs. representatives of the other group in a task of selecting a partner and whether there were systemic cross-sectional differences in the results of the trust game played between Hutu and Tutsi vs. between co-ethnics. Habyarimana et al. (2007) construct similar lab-in-the-field experimental measures of between-group cooperation for Uganda. Mousa (2020) collected a series of inter-religious cooperation measures in an RCT featuring mixed soccer teams in Iraq. Samii (2013) measures the extent of cooperation of respondents during a survey to measure their inter-ethnic prejudice; in particular, they calculate the difference in response rate to sensitive questions when the interviewer is from the same vs. from a different ethnic group.

Tests of the salience of group differences Social psychologists have designed tests that reveal an individual's hidden and subconscious biases. The most widely used is the Implicit Association Test (IAT) which measures the strength of subconscious association between concepts, on the one hand, and evaluations or stereotypes, on the other hand. In the context of the salience of ethnic group differences, this would mean eliciting the association between typical morphological features of these groups, such as skin color, and evaluations such as good vs. bad, lazy vs. hard-working, or save vs. dangerous; it could also be such stereotypical features as different economic sectors or education levels. Morehouse & Banaji (2024) survey how IAT is used to measure racial biases in the psychology literature. The work of Lowes et al. (2015) is an example of the use of IAT in economics. Another test related to IAT, also developed by psychologists, is the Salience of Identity Test (SIT). The analysis by Blouin & Mukand (2019) is a prominent example of its use by economists. They measure whether subjects in their lab-in-the-field experiment subconsciously or consciously categorize others based on ethnicity, specifically Hutu or Tutsi. The test involves a recall task where participants match pictures of Hutu and Tutsi men with associated generic (neutral) statements. If an individual consistently misattributes a statement related to one Hutu to another Hutu rather than a Tutsi, it indicates that ethnicity is salient for that subject.

3.1.4 Costly behaviors that benefits others

Volunteering and heroism People's willingness to sacrifice their life for their country has been used as measure of altruism toward compatriots. Blanc & Kubo (2024) use the local level of participation to the French resistance against the Nazis in World War II as a measure of French identity. Fouka (2020) focuses on volunteering during World War II among German immigrants in the United States. Relatedly, Esposito et al. (2023) use U.S. Navy casualties as proxy for local enlistment during World War I. Caprettini & Voth (2023) draw on data about volunteering in World War I and II and military medals for the United States. Izumi & Park (2023) study mobilization of citizens of Colonial Korea in the Japanese army during World War II.

Redistribution Luttmer (2001); Klor & Shayo (2010); Benjamin et al. (2010) have demonstrated that individuals are more inclined to support redistribution when the benefits go to groups with

which they identify. Macintyre et al. (2023), for instance, indicate that a stronger national identification correlates with higher tax compliance. Consequently, tax compliance and preferences for broad redistribution can serve as indicators of altruism toward others. However, Shayo (2009) finds a significant negative correlation between national identification and the level of redistribution across democracies. This implies that the average citizen perceives the beneficiaries of redistribution as outsiders, such as migrants, rather than fellow nationals. In a similar vein, Mayda & Rodrik (2005) suggest that individuals with more "patriotic" attitudes are more likely to exhibit protectionist tendencies.

3.2 Identification strategies

As in other areas of economics that have undergone an empirical revolution, the literature on nation-building predominantly relies on utilizing "natural" historical and policy experiments for identification. There is nothing particularly special about the identification strategies in nation-building literature compared to other subfields of empirical political economics.

In some cases, identification is based on the exogenous geographical heterogeneities in state policies, such as resettlement programs (Bazzi et al., 2019), random geographical or demographic assignment in the military or youth service (Samii, 2013; Cáceres-Delpiano et al., 2021; Okunogbe, 2024), and different language restrictions in elementary schools across U.S. states (Fouka, 2020). In other cases, exogenous historical borders or geographical features are exploited, as for the "Pale of Settlement" area in the Russian Empire (Grosfeld et al., 2013), the division of Alsace-Lorraine (Dehdari & Gehring, 2022) or Medieval South Asian harbors suitable for trade ports (Jha, 2013). Similarly, Gehring (2022) exploits geographical proximity to an external enemy. Arbitrary administrative thresholds are used to identify the effects of policies, as in Blanc & Kubo (2024) for state-sponsored education in France. There are also studies that analyze reforms that are staggered across regions or cohorts (Clots-Figueras & Masella, 2013; Cantoni et al., 2017; Bazzi et al., 2023), or that exploit exogenous heterogeneity in radio exposure, movie distribution or leader visit scheduling (e.g., DellaVigna et al., 2014; Blouin & Mukand, 2019; Assouad, 2020; Esposito et al., 2023). Relatedly, Depetris-Chauvin et al. (2020); Casas et al. (forthcoming) exploit the exogenous timing of survey interviews, to compare answers given right before and right after the event. Caprettini & Voth (2023) implement an instrumental variable approach to estimate the causal impact of the U.S. "New Deal" program on patriotism. Finally, as we mentioned above in relation to measuring national identification, some studies implement lab-in-the-field and field experiments and perform randomized control trials (e.g., Rivera et al., 2024; Cilliers et al., 2016; Mousa, 2020).

4 PRE-CONDITIONS FOR NATION-BUILDING

Initial conditions and countries' histories have a lasting effect on the availability and efficacy of different nation-building policies (Almagro & Andrés-Cerezo, 2020).

4.1 Ethnolinguistic structure of the population (polarization, segregation)

In the introductory chapter to the nation-building volume (Rohner & Zhuravskaya, 2023b), we argue that the nation-building strategy crucially depends on a nation's population composition. To create a simple framework to think about the preconditions for different nation-building strategies, we focus on ethnolinguistic polarization (maximized when the country is comprised of two equalsize groups) and segregation (maximized when different groups live in different regions of the country) and abstract from other differences in population structure. High polarization makes within country group divisions particularly salient and therefore increases potential antagonisms

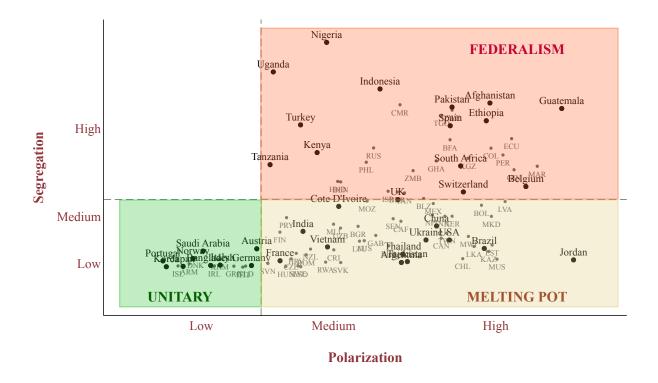


Figure 2: Different Nation-Building Strategies in the Polarization-Segregation Space

Note: Source: Rohner & Zhuravskaya (2023b). The figure presents all countries, for which there exist ethnic-linguistic diversity data that allow constructing polarization and segregation indices (the data sources are: Montalvo & Reynal-Querol, 2005; Alesina & Zhuravskaya, 2011). Selected countries are highlighted with their full names, while all other countries are marked with ticks.

within society. High segregation adds a geographical dimension to these antagonisms: it makes the threat of secession more credible and reduces contact between different groups, diminishing inter-group trust and cooperation.⁴

A close look at countries in the polarization-segregation space is helpful as it highlights three groups of countries with distinct nation-building challenges and strategies to cope with them. We refer to these strategies as "unitary," "federalism," and "melting pot" (as presented in **Figure 2**). Countries with low polarization and segregation tend to be homogeneous in practice. Some of the countries in this group, such as Japan and Iceland, are homogenous due to their geographic isolation. Others, such as Greece after its population exchange with Turkey, became homogenous through forced population exchanges. Some of these countries used forced assimilation policies that homogenized their populations, as in Bismarck's German Empire. Others have even darker pages in their history with regimes that engaged in mass killings or expulsions of minorities.

Due to their current relatively homogenous population structure, these countries have little risk of separatist conflicts and have little risk of internal ethnic conflicts leading to a "failed state." Such countries can build national cohesion around common culture, such as language and focusing on positive aspects of common historical narratives, which we refer to as unitary nation-building strategy. Yet, several countries in this group experienced fascist regimes in the 1930s, illustrating that

⁴Both of these two features of population composition have been linked to the functioning of the state and the risk of inter-group violence (for polarization see Montalvo & Reynal-Querol, 2005; Esteban et al., 2012, 2015), (for segregation see Alesina & Zhuravskaya, 2011; Corvalan & Vargas, 2015). Beyond armed conflict, polarization has also been found to matter for discrimination in lab-in-the-field experiments (e.g., Anderberg et al., 2024). See also Arbath et al. (2020) for the concept of interpersonal population diversity, going beyond ethnic fractionalization and polarization.

the relative ease of nation-building in this group comes at a cost of an increased risk of autocratic rules turning the national cohesion into aggressive nationalism in the absence of democracy.

Countries in the second group, those with both high ethnic polarization and high ethnic segregation, have homogenous regions, populated by different groups. Such population structure is often associated with strong regionalist identities which could come with the possible rejection of a national identity, creating the potential for separatism and secession, up to a break-up of countries, as well as other forms of instability and civil conflict. These risks are real and their realization is usually very costly, as illustrated by the devastating Yugoslav wars that accompanied the breakup of Yugoslavia and the somewhat delayed post-USSR-breakup conflicts, such as the Chechen wars and the Nagorno-Karabakh conflict. The main example of a peaceful breakup is Czechoslovakia.

A potentially effective strategy to diminish these risks in high-segregation countries is to build a federalist system with power sharing and decentralization, as we discuss in more detail below. In Rohner & Zhuravskaya (2023b), we discuss Switzerland as a model case. The 1847 war between Catholic and Protestant areas was a secessionist conflict. After the Protestant victory, they implemented a new constitution in 1848 with checks and balances leading to power sharing between Protestants and Catholics. This included bicameralism, proportional representation, coalition governments, and regular popular votes, ensuring that no group could dominate. Switzerland has been at peace since. Multilingualism, federalism, and direct democracy became key components of Swiss national identity, not merely policy responses to high segregation. More generally, power sharing and federalism matter for peace and stability in segregated states, e.g., the UK's power devolution in Northern Ireland, Spain's bilingual education, South Africa's cooperative governance post-Apartheid, and Belgium's power-sharing institutions between Flemish and French speakers. Northern Ireland's Troubles, ETA's violence in Spain, challenges in post-Apartheid South Africa, and periods of government absence in Belgium show that there are no perfect solutions, but powersharing institutions and federalism most likely have helped prevent worse outcomes in these settings.

To avoid federalization, autocratic regimes of some initially segregated states homogenized their populations top-down through education and propaganda. (Autocratic governments are more likely to undertake such reforms because these reforms can be very costly for minorities, as we discuss below, see also Alesina et al., 2021; Aghion et al., 2019). Almagro & Andrés-Cerezo (2020) discuss the differences in policy approaches of France and Spain toward their Catalonian populations, which eventually brought the two countries into different areas of Figure 2 despite starting from similar initial conditions. Another example is the comparison of Tanzania and Kenya, two highly segregated countries (Miguel, 2004; Almagro & Andrés-Cerezo, 2020). Only Tanzania pursued policies to homogenize the population, making ethnic differences much less salient, although not fully erasing them, as in France. This can be seen in Figure 2, where both countries appear segregated, although Tanzania less so.

The third group of countries, with high polarization levels and low segregation, feature group divisions without any geographical dimension. Different ethnic groups in these countries live in close proximity and have no option of secession. Introducing a federal structure also could not solve problems created by inherent divisions in these countries. In this case, to promote social cohesion a policymaker needs to implement policies that make the ethnic differences less salient by fostering non-group identity. These policies can be characterized as "melting pot" nation-building strategies. Polarized states with low segregation have no choice but promote common culture and values among their diverse populations if they want to avoid internal conflicts. In practice, governments have sought to achieve this, again, though education and propaganda, as we discuss below.⁵

⁵Note that promoting common values is not the same as homogenization because these common values could be associated with tolerance and openness. Opening to immigration actually can make nation-building easier in highly

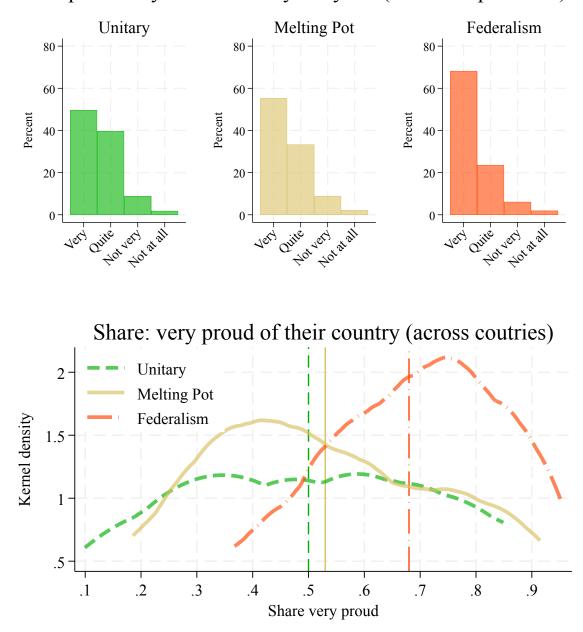
To illustrate the nation-building outcomes in these three groups of countries, we use the only survey with a large country representation and a question related to nation-building, namely, the WVS's question, "How proud are you to be a national of this country?" Since different countries are featured in different waves, we use data only from the most recent wave for each country. The resulting sample spans five waves between 1998 and 2022 and includes 71 countries with data on polarization and segregation. It is worth noting that national pride does not measure social cohesion well. On one hand, citizens in countries with a recent history of civil conflict could be ashamed (rather than proud) of their country's history but have a common understanding that reconciliation is a path forward. On the other hand, representatives of different groups in a highly polarized society could be proud of profoundly different aspects of it. However, this is the only source of data for a large set of countries. The top panel of Figure 3 presents the distribution of individual responses to the national pride question, separately for respondents in countries with low polarization (unitary group), high polarization and low segregation (melting pot group), and high polarization and high segregation (federalism group). In the bottom panel of the figure, we aggregate the data to the country level and present kernel densities of the share of respondents who are very proud, again separately for each group of countries.

Overall, 59% of WVS respondents report that they are very proud of their countries. There is a large variation in the prevalence of national pride across countries. In a simple cross-sectional regression, national pride is positively associated with both polarization and segregation, irrespective of whether one flexibly controls for the level of democracy and log per capita GDP, as well as individual socio-economic characteristics. One standard deviation increases in segregation and in polarization are associated with 4 to 5 percentage point increases in the probability that a country's citizen is very proud of their country. Figure 3 illustrates this correlation: the share of very proud respondents is the lowest among states with low polarization and low segregation. It is slightly larger among countries with low segregation and medium to high polarization. And it is the highest among countries with high levels of both segregation and polarization. This association highlights the endogeneity of nation-building policies: national unity is hard to achieve in polarized and segregated countries, but this is exactly where national pride and unity are particularly sought as, otherwise, these countries might be ravaged by internal conflicts. Thus, in settings with threats to national unity, more efforts are exerted to promote national identity than in unitary states where cohesion comes more naturally. This may explain why federalist countries display the highest levels of national pride on average. In addition, the lower panel of the figure shows that the distribution of the share of the very proud is densest among countries in the federalism group and, in contrast, most spread out in the unitary group.

4.2 Artificial borders and geopolitics

Artificial borders that divide the homeland of a single ethnic group into separate states (Alesina et al., 2011) severely complicate nation-building. This phenomenon represents a significant postcolonial legacy in various regions worldwide, particularly prevalent in Africa. Michalopoulos & Papaioannou (2016) demonstrate that ethnically divided groups in Africa suffer from higher probabilities of facing discrimination, being at economic disadvantage, and involved in ethnic conflicts (see also a review of a broader literature of the colonization legacies in Africa by Michalopoulos & Papaioannou, 2020). These artificial borders, along with broader post-colonial legacies, have sown the seeds for territorial disputes and foreign interference in domestic affairs among neighboring countries (Sambanis et al., 2020). Many long-lasting conflicts, such in Nagorno-Karabakh, Kash-

polarized countries as it lowers polarization and increases fractionalization, which reduces the salience of group differences. Bazzi et al. (2019) find for Indonesia that ethnic fractionalization is associated with stronger nation-building, while high ethnic polarization tends to boost ethnic devisions.



How proud of your nationality are you? (across respondents)

Source: WVS, most recent wave per country. Waves: 1998-2022 103640 respondents. Countries: 11 - unitary, 35 - melting pot, 25 - federalism.

Figure 3: National pride by country type

mir, the Aouzou strip, Western Sahara, Bosnia, and others, trace their origins to these factors. Also, split ethnic groups served as a pretext for Russia's invasions of Georgia and Ukraine.⁶ Overall,

⁶See Fearon (2004) for "sons of the soil"-type conflicts, Berman & Lake (2019) for proxy wars, Mueller et al. (2022) for ethnic violence across space, Martinez (2017) for transnational insurgency, and Depetris-Chauvin & Özak (2024) for

the endogeneity of nation-building policies and the lack of consistent measures of nation-building outcomes across countries are important reasons why most well-identified papers in the literature study single-country settings, and comparative research is scarce (except for a few studies that we discuss in this review). More comparative research is needed to deepen our understanding of the prerequisites for successful nation-building and of the policies needed to overcome negative legacies.

5 POLICIES

In this section, we review the economics literature on policies aimed at fostering nation-building.

5.1 Contact

Inter-ethnic trust is essential for successful nation-building in a diverse society. While building trust is often extremely hard, particularly, with a history of group conflict, an influential theory from psychology, known the *contact hypothesis* proposed by Allport (Allport, 1954), suggests that increased inter-group contact can enhance trust under certain fairly restrictive conditions, such as equal status among groups and common goals. This hypothesis has substantial empirical support in psychology literature (see the meta-analysis by Pettigrew & Tropp, 2006) and aligns well with recent dynamic models of conflict, which connect inter-group interaction with trust formation (Rohner et al., 2013b).

Several recent articles in economics have tested the effectiveness of policies promoting interethnic contact, while respecting the conditions required for Allport's contact hypothesis, in fostering inter-ethnic trust and diminishing the salience of group differences. Cáceres-Delpiano et al. (2021); Bagues & Roth (2023) find that intergroup contact fosters national unity and nation-building in Spain. Using random assignments of military conscripts, the two papers show that, for men from regions with weak Spanish identity, a posting in another region boosts self-identification as Spanish, increases the likelihood of voting in national elections, enhances trust and sympathy toward people from other regions, and lowers the likelihood of casting a vote for a regionalist party. These effects are long-lasting. Samii (2013) utilizes a military reform in Burundi for identification to show that serving in an ethnically integrated (i.e., mixed) military unit reduces ethnic prejudice. Okunogbe (2024) finds consistent results for Nigeria, focusing on random assignment under Nigeria's national youth service program. Having one's service located in a state with a different ethnic majority increases personal lifetime geographic mobility, the likelihood of inter-ethnic romantic relationships, and national pride. Importantly, in Nigeria's context, these outcomes are achieved without crowding out ethnic identity, highlighting the fact that there does not necessarily need to be a tradeoff between national and ethnic identities.

A specific form of contact is reconciliation forums in a post-conflict reconstruction context. As shown by Cilliers et al. (2016) using an RCT in Sierra Leone, reconciliation ceremonies led to greater forgiveness of perpetrators and strengthened social capital, yet at the price of worsened psychological health. Another RCT by Mousa (2020) facilitated Christian-Muslim interaction in Iraq through mixed soccer teams, finding positive impacts on inter-group cooperation, yet limited to the soccer pitch. For other tests of the contact hypothesis also in somewhat restricted settings, see: Boisjoly et al. (2006); Algan et al. (2016); Finseraas & Kotsadam (2017); Scacco & Warren (2018); Carrell et al. (2019); Rao (2019); Corno et al. (2022).

Preconditions for Allport's contact of equals are often not met in unregulated environments. When they are not met, more contact can lead to an *increase* in tensions and the emergence of social

historical ethnic borders and contemporary conflict.

group identity (e.g., Tajfel, 1982). Social identity also emerges when group differences are salient, for instance, when the level of polarization is high. As we mentioned above, Bazzi et al. (2019) draw on exogenous changes in the local population composition due to a population resettlement program in Indonesia to test both the contact hypothesis and social identity theory. They find support for both theories: inter-group contact strengthens national identity in ethnically fractionalized communities, whereas for ethnic polarization, the effect is the opposite. Kukić (2023) also shows that more diverse localities (for exogenous historical reasons) in Yugoslavia just before its disintegration had a larger share of people who identified as Yugoslav (rather than with their own ethnic group) and who intermarried across ethnic groups.

In line with social identity theory, Grosfeld et al. (2013) document that the identity of the non-Jewish majority in the "Pale of Settlement" region of the Russian Empire, where Jews were the largest minority, was shaped by social comparisons. Non-Jews defined themselves in contrast to a stereotypical (as defined by Bordalo et al., 2016) member of the Jewish community, seen as a trader or creditor. This fostered an anti-market and anti-entrepreneurial culture in the long run. Historical animosity, highlighted by proximity to anti-Jewish pogrom sites, intensified these sentiments.

Even with opposing social identities and a history of past ethnic tensions, conflict is not inevitable, as demonstrated by Jha (2013). He formulates three conditions that can prevent intergroup violence in a highly polarized society: (1) economic complementarity between groups, which makes cooperation economically desirable, (2) intangible comparative advantage of the minority, which reduces the risk of expropriation by the majority, and (3) low cost of mobility and good outside options for the minority, allowing it to flee in case of potential conflict. Applying this framework to Hindus and Muslims in South Asia, he finds that towns with natural harbors preconditions for the creation of medieval trading ports dominated by Muslim traders—exhibit lower Hindu-Muslim violence and a sustained legacy of ethnic tolerance that persists to this day.

While economic complementarity and intangible comparative advantage were present in both South Asia and the Russian Empire, Jewish mobility was restricted in the Pale of Settlement. This difference in mobility—between the relatively immobile Jews of the Russian Empire and the mobile maritime Muslim traders of South Asia—led to vastly different outcomes. Grosfeld et al. (2020) show that anti-Jewish pogroms in the Russian Empire occurred during economic and political shocks that disrupted economic cooperation, while it was very hard for Jews to flee.

Gagliarducci & Tabellini (2022) also connect historical data on religion to contact and intergroup relations. They study the assimilation of Italian immigrants in the United States between 1890 and 1920 and find that the presence of a Catholic Church in the neighborhood reduced intermarriages and residential mixing with locals. However—if anything—it encouraged the adoption of "American" names by U.S.-born children of Italian migrants and improved the children's English-speaking abilities. These differences between parents and children highlight both the costs of giving up one's own minority culture and the benefits of socializing one's children into the majority culture.

5.2 Education

State-sponsored education can serve as a powerful policy tool to promote national unity. A common curriculum can ensure widespread proficiency in a national language, which facilitates communication and trust; it can also transmit common values and shape cultural traits. While instilling a common national identity through education could strengthen cohesion for the majority, it could also marginalize those minorities for whom assimilation is particularly costly.

As mentioned above, nation-building policies, including the supply of state-organized schooling, are endogenous. Bandiera et al. (2019) illustrate this point by showing that state-level compulsory schooling laws in the US during the 19th century were adopted significantly earlier as a nation-building tool in states that had a higher proportion of migrants from European countries that lacked a history of civic values education in their home countries. The main challenge in evaluating the causal impact of education policies on nation-building is finding exogenous sources of variation.

Blanc & Kubo (2024) exploit an apparent discontinuity of the application of the so-called Guizot Law in 19th century France, which mandated municipalities above 500 inhabitants to provide primary public schools for boys with publicly-trained schoolteacher and a common curriculum, which included the French language, national history, and civic values. The authors empirically test the hypothesis proposed by Weber (1976) that this reform had a crucial effect on French nation-building. They find that French state-sponsored education resulted in homogenization of spoken language, namely, residents in settlements with population above the threshold in 1900 spoke language closer to the Parisian French than residents of smaller settlements and later, during WWII, had more war heroes. Cinnirella & Schueler (2018) study a similar question in the context of Imperial Germany. They present an exploratory analysis that shows that an increase in the federal share of financing of primary education (compared to local funding) was associated with a higher vote share for pro-nationalist parties and higher voter turnout in federal elections at the turn of the 19th and 20th centuries. These correlations are robust to controlling for constituency and time fixed effects.

German and French 19th-century government education efforts unified diverse countries. Izumi & Park (2023) show that education can also instill the colonizer's national identity in a colony. Specifically, they examine the expansion of access to public primary education in the early 1920s in Korea, which was under Japanese control. Identification is based on the quasi-exogenous policy goals of the colonial government and the variation across cohorts. The authors find that the expansion of schools in Korea significantly increased the military mobilization of Koreans in the Japanese army during World War II and led to a lasting, favorable perception of the Japanese among the treated cohorts.

Cantoni et al. (2017) study the effects of a change in school curriculum, employing a differencein-differences analysis of panel data. They leverage a staggered introduction of new textbooks across Chinese provinces between 2004 and 2010. This reform aimed to instill Chinese Communist Party ideology among the youth. Identification in the study is ensured by the absence of pre-trends among cohorts unaffected by the reform. The authors find that exposure to the new curriculum resulted in more positive views of the Chinese government, influenced attitudes toward democracy, and increased skepticism toward free markets.

Similarly, Chen et al. (2023) examine the effects of the introduction of new textbooks in Taiwan in 1997. The authors isolate the effect of the change in curriculum from other confounding factors by using a regression discontinuity at the birthdate of students who were taught using new vs. old textbooks. They find that the new curriculum boosted Taiwanese identification in the long run: young adults who studied under the new curriculum (when they were kids) are more likely to identify as Taiwanese only rather than either Chinese or both Taiwanese and Chinese compared to their peers who studied using the old textbooks.

Sometimes changes in the educational curriculum are part of a larger set of policy changes. Carlitz et al. (2023) study the Ujamaa program in Tanzania, which involved creating planned, ethnically diverse villages along with educational reforms. Relocation to these new centers was compulsory, and the policy aimed to increase both the geographical and ideological proximity of citizens to the state. Identification in the study relies on sharp differences between treated and untreated cohorts within a difference-in-differences framework. This bundle of policy measures proved successful from the perspective of the authoritarian regime that implemented it: it led to a boost in national identification and increased support for the one-party rule and authoritarian

politics.7

Education can also strengthen regional self-identification if designed to do so. Clots-Figueras & Masella (2013) exploit cross-cohort differences in exposure to an educational reform in Catalonia conducted in 1983, when education system transitioned to a bilingual model, incorporating Catalan alongside Spanish as languages of instruction in schools. Analysis of survey data from Catalonia reveals that individuals with prolonged exposure to Catalan education exhibit stronger Catalan identity. This effect is observed even among those whose parents are not of Catalan descent.

The papers discussed above demonstrate that education shapes identities and, on average, shifts culture and preferences in the direction intended by the designers of the educational curriculum. However, it is usually not equally effective for everyone and can backfire on subgroups of population. Carvalho et al. (forthcoming) develop a theory explaining why and how minorities may resist cultural education. Fouka (2020) and Bazzi et al. (2023) provide empirical evidence. Specifically, Fouka (2020) investigates the prohibition of German-language instruction in U.S. elementary schools, a policy adopted by several states after World War I. Using the policy discontinuity at arbitrary state borders for identification, the author finds that ethnic Germans in states with German language restrictions were less likely to volunteer during World War II, more likely to marry within their ethnic group, and more likely to choose distinctly German names for their children compared to those in states without such policies. Thus, the policy instigated a backlash, alienating the German minority. Similarly, Bazzi et al. (2023) demonstrate that Indonesia's campaign to enhance secular primary school education had the unintended consequence of expanding the market for Islamic secondary schools. This shift led to increased religiosity, undermining the development of a secular national identity.

5.3 Beyond Education: Propaganda, Leadership, Common Experiences

Every autocratic regime engages in media propaganda to further its goals. Similar to education, media propaganda may backfire on certain subgroups of the population but is generally persuasive (DellaVigna & Gentzkow, 2010). This is especially true when access to alternative information is restricted, which is why autocrats often engage in censorship. The goals of autocrats differ: some choose to incite hatred and violence (e.g., Yanagizawa-Drott, 2014; Adena et al., 2015), while others aim for unity and reconciliation.

Blouin & Mukand (2019) study the impact of Kagame's government radio propaganda on reducing the salience of ethnicity in the aftermath of Rwandan genocide. Exploiting variation in exogenous radio exposure due to Rwanda's mountainous topology for identification and lab-inthe-field experiments to measure outcomes, they find that exposure to radio lowered the salience of ethnicity and increased interethnic trust and willingness to cooperate between Tutsi and Hutu. Importantly, media and internet resources are subject to heavy censorship in Kagame's Rwanda, and it is unlikely that such reconciliation could have been achieved in a more democratic environment with free access to information (social media, in particular, could be used as a counter-tool to incite ethnic hatred and violence Müller & Schwarz, 2021, 2023).⁸

While propaganda can occasionally be fueled by good intentions, more often than not it is divisive and scapegoats one or several societal groups to strengthen patriotic feelings in the majority

⁷See Testa (2018) for the trade-offs that autocratic regimes face in education provision, which result in education based on propaganda and indoctrination.

⁸There is also a number of studies that implement RCTs exposing subjects to materials with nation-building narratives that prime a common identity. The results are mixed. For example, Levendusky (2017) find a reduction in affective polarization as a result of exposure to an article about the strengths of America and Americans. In contrast, Rivera et al. (2024) find little or—if anything—a backlash effect of a nation-building video in Mexico in the aftermath of apex corruption scandals.

group. A divisive narrative of 1915 blockbuster movie "The Birth of a Nation" provides an illustration as demonstrated by Esposito et al. (2023) and Ang (2023). The revisionist and racist retelling of the US Civil War in this movie has been found by these studies to have promoted national reunification, but at the heavy price of exacerbating racial discrimination. Unintended effects of nationalistic media have also been observed in other contexts. For example, DellaVigna et al. (2014) find that cross-border nation-building Serbian radio intended for Serbs in Serbia fueled ethnic hatred toward Serbs in Croatia.

There are different means of values inculcation. Kersting & Wolf (2024) study the impact of the early forms of nation-building propaganda, e.g., speeches, proclamations, festivals, and brochures, by the Prussian state in the 19th century. Using unexpected border changes for identification, they document a change in the naming patterns with higher shares of national first names instead of names associated with the ruler in localities exposed to propaganda. Serving in the military could also have long-lasting nation-building effects. Using conscription lottery for identification, Ronconi & Ramos-Toro (2023) study the impact of serving in Argentina's army. They document a stronger national identity and social integration several decades after serving.

Leadership and role models can shape identities and attitudes through direct contact with leaders and political rallies and not only through media. Assouad (2020) studies the effects of Mustafa Kemal Atatürk's visits on the formation of modern Turkish identity. She uncovers that a visit from Atatürk led to a substantial and growing increase in the use of first names in "Pure Turkish," the new national language.

In some contexts, a leader's charisma can help to solidify a nascent nation-state democracy, as seen in the pivotal roles played by Nelson Mandela in South Africa and Mahatma Gandhi in India. However, in other contexts, charismatic leadership and rallies can lead to the erosion of democratic institutions and the rise of authoritarian regimes. Examples include Adolf Hitler's dark charisma and the spread of Nazi propaganda through popular marches and rallies (Caesmann et al., 2021), as well as the influence of Maréchal Philippe Pétain's devotion, which contributed to French collaboration with the Nazis by inspiring veterans who admired him during WWI (Cagé et al., 2023).

Joint positive experiences not orchestrated by the state can also have nation-building effects, as they make a common identity more appealing to citizens. For example, Depetris-Chauvin et al. (2020) show that important national football team victories in sub-Saharan Africa lead to more national as opposed to ethnic identification, greater inter-group trust, and a reduction in political violence.

5.4 Representation, decentralization, and welfare spending

Democracy and power-sharing help to reduce social tensions and armed conflict between different ethnic or religious groups in fragmented societies (see, e.g., Mueller & Rohner, 2018; Laurent-Lucchetti et al., 2024).

Decentralization and the institutional rules governing local autonomy play a crucial role in lowering conflict, especially in combination with power-sharing arrangements (Cederman et al., 2015; Keil & Anderson, 2018). The centralization policies can, in contrast, backfire. Casas et al. (forthcoming) find that in Catalonia, a judicial decision to restrict further autonomy has provoked a backlash, leading to increased pro-autonomy sentiments and stronger regional identification. Chiovelli et al. (2021) demonstrate that the establishment of central power agents in the Spanish colonial empire in Latin America during the 18th century increased crown revenue but intensified anti-Spanish sentiment among Creole elites, which likely played a role in the emerging independence movement. More generally, negative experiences with the national government policies lead to stronger regionalist identities, as shown by Dehdari & Gehring (2022) for Alsace-Lorraine. Welfare state policies also can foster national unity and national identity. As shown by Caprettini & Voth (2023), the large-scale public social assistance program "The New Deal" after 1933 in the United States led to a surge in patriotism among those benefiting from it: during WWII, they bought more war bonds, volunteered more, and, as soldiers, won more medals.

5.5 External interventions

The question of which policy measures can be employed by external powers to influence nationbuilding abroad has attracted considerable attention (see, e.g., the recent syntheses of the effects of a range of outside interventions by Rohner, 2024a,b). Notwithstanding certain high-profile instances of success—such as the denazification and democratization processes undertaken in Germany, Austria, Italy, and Japan following World War II—the evidence shows that numerous efforts at external intervention have yielded adverse outcomes for the outside power.

As documented by Dimant et al. (forthcoming), an increase in U.S. military aid is associated with a rise in anti-American terrorism. This effect is mediated through corruption and exclusionary practices in recipient countries, which exacerbate anti-American sentiment. In a related context, Dell & Querubin (2018) investigate the consequences of U.S. involvement in the Vietnam War. They find that a greater use of firepower by American forces, rather than a strategy aimed at winning hearts and minds, has led to an increase in insurgent attacks and more intense anti-American atti-tudes. Relatedly, Dube & Naidu (2015) examine the impact of U.S. military aid on political conflict in Colombia and documents more paramilitary homicides during election years in places that received US military assistance. At the same time and in contrast, Berman et al. (2011) show that improved service provision by the U.S. through small targeted local projects reduced insurgent violence in Iraq.

External threats often foster national identity, as they make the benefits of identifying with one's nation more salient. Gehring (2022) shows that the Russia's invasion of Crimea in 2014 has led to a surge in European Union identity in high-threat European states, defined by proximity to Russia and the presence of Russian minority, compared to low-threat European nations, where these events were less salient. In autocratic states, the rules often create a narrative of an external threat to induce "rallying around the flag." Real external threats motivate the rulers to invest in homogenization and nation-building (Aghion et al., 2019; Giuliano et al., 2022).⁹ In line with the work of Tilly & Ardant (1975), Alesina et al. (2020) build a model of how wars affect nation-building by building mass conscription armies, stepping up public good provision and cultural homogenization.

6 CONCLUSIONS

This article discusses the recent burgeoning political economics literature on nation-building. We focus on three aspects of this literature.

First, we consider methodological aspects, particularly, discussing how nation-building outcomes are measured. We showcase various approaches used in the literature, ranging from surveys on identity and trust or lab-in-the-field methods of measuring the salience of group differences to direct observation of actions reflecting identity, such as naming choices, language use, consumption patterns, voting behaviors, or heroic actions.

Second, we discuss the preconditions of nation-building, focusing on the two aspects of the ethnolinguistic structure of the population, namely, polarization and segregation. We formulate a

⁹Giuliano et al. (2022) show that internal threats to the regime also provide important motivation for homogenizing population. They show that nation-building policies precede democratizations.

number of hypotheses about how these preconditions call for different policy approaches to nationbuilding. We also discuss the importance of geopolitical factors.

Finally, we review the literature that evaluates key nation-building policies, such as promoting inter-group contact, educational reforms, the use of propaganda, providing role models and the effects of leadership, decentralization, power-sharing, welfare-state policies, and foreign interventions.

While the literature has uncovered a series of policies that "work" successfully on average in specific contexts, the synthesis of existing work mostly highlights that there is no "one size fits all" solution. Despite significant advances, many open questions remain. Comparative analyses of the effectiveness of different policies are largely lacking. Much empirical research on nation-building has focused on a small set of specific countries and historical contexts, which, on one hand, allow causal identification and precise measures, but, on the other hand, make it hard to draw general conclusions with external validity. Creating standardized measures of national identity across subnational units of a large set of countries, varying over time, would help refine our understanding of both the determinants and results of nation-building policies and identify effective policies suited for different contexts.

References

- Abramitzky R, Boustan L, Eriksson K. 2020. Do immigrants assimilate more slowly today than in the past? *American Economic Review. Insights* 2:125–141
- Adena M, Enikolopov R, Petrova M, Santarosa V, Zhuravskaya E. 2015. Radio and the rise of the nazis in prewar Germany. *Quarterly Journal of Economics* 130:1885–1939
- Aghion P, Jaravel X, Persson T, Rouzet D. 2019. Education and military rivalry. *Journal of the European Economic Association* 17:376–412
- Akerlof GA, Kranton RE. 2000. Economics and identity. Quarterly Journal of Economics 115:715–753
- Alesina A, Easterly W, Matuszeski J. 2011. Artificial states. *Journal of the European Economic Association* 9:246–277
- Alesina A, Giuliano P, Reich B. 2021. Nation-building and education. *Economic Journal* 131:2273–2303
- Alesina A, Reich B, Riboni A. 2020. Nation-building, nationalism, and wars. *Journal of Economic Growth* 25:381–430
- Alesina A, Spolaore E. 2005. The size of nations. Mit Press
- Alesina A, Zhuravskaya E. 2011. Segregation and the quality of government in a cross section of countries. *American Economic Review* 101:1872–1911
- Algan Y, Hémet C, Laitin DD. 2016. The social effects of ethnic diversity at the local level: A natural experiment with exogenous residential allocation. *Journal of Political Economy* 124:696–733
- Allen T. 2023. The topography of nations. National Bureau of Economic Research WP 27073, DOI 10.3386/w27073
- Allport GW. 1954. The nature of prejudice. Cambridge, MA: Addison-Wesley
- Almagro M, Andrés-Cerezo D. 2020. The construction of national identities. *Theoretical Economics* 15:763–810
- Anderberg D, Dahl GB, Felfe C, Rainer H, Siedler T. 2024. Diversity and discrimination in the classroom. National Bureau of Economic Research WP 32177, DOI 10.3386/w32177
- Andersen L. 2024. Germanic culture and democracy. Mimeo
- Andersen L, Bentzen J. 2024. In the name of God! religiosity and the transition to modern growth. Mimeo
- Andersen L, Raster T. 2024. From Vagabonds to virtues: The ideological roots of entrepreneurship. Mimeo
- Anderton CH, Brauer J. 2021. Mass atrocities and their prevention. *Journal of Economic Literature* 59:1240–1292
- Ang D. 2023. The birth of a nation: Media and racial hate. American Economic Review 113:1424–1460

Arbatlı CE, Ashraf QH, Galor O, Klemp M. 2020. Diversity and conflict. Econometrica 88:727–797

- Assouad L. 2020. Charismatic leaders and nation-building. Mimeo, Hall Open Science Archive: halshs-02873520v2
- Atkin D, Colson-Sihra E, Shayo M. 2021. How do we choose our identity? a revealed preference approach using food consumption. *Journal of Political Economy* 129:1193–1251
- Bagues M, Roth C. 2023. Interregional contact and the formation of a shared identity. *American Economic Journal: Economic Policy* 15:322–350
- Bandiera O, Mohnen M, Rasul I, Viarengo M. 2019. Nation-building through compulsory schooling during the age of mass migration. *Economic Journal* 129:62–109
- Bazzi S, Gaduh A, Rothenberg AD, Wong M. 2019. Unity in diversity? how intergroup contact can foster nation building. *American Economic Review* 109:3978–4025
- Bazzi S, Hilmy M, Marx B. 2023. Religion, education, and the state. National Bureau of Economic Research WP 27073, DOI 10.3386/w27073
- Benjamin DJ, Choi JJ, Strickland AJ. 2010. Social identity and preferences. *American Economic Review* 100:1913–1928
- Berman E, Lake DA. 2019. Proxy wars: Suppressing violence through local agents. Cornell University Press
- Berman E, Shapiro JN, Felter JH. 2011. Can hearts and minds be bought? The economics of counterinsurgency in Iraq. *Journal of Political Economy* 119:766–819
- Bertrand M, Mullainathan S. 2004. Are Emily and Greg more employable than Lakisha and Jamal? a field experiment on labor market discrimination. *American Economic Review* 94:991–1013
- Besley T, Persson T. 2011. Pillars of prosperity: The political economics of development clusters. Princeton University Press
- Biavaschi C, Giulietti C, Siddique Z. 2017. The economic payoff of name americanization. *Journal of Labor Economics* 35:1089–1116
- Bisin A, Verdier T. 2023. Advances in the economic theory of cultural transmission. *Annual Review* of Economics 15:63–89
- Blanc G, Kubo M. 2024. French. Mimeo, University of Manchester
- Blattman C, Miguel E. 2010. Civil war. Journal of Economic Literature 48:3-57
- Blouin A, Mukand SW. 2019. Erasing ethnicity? propaganda, nation building, and identity in Rwanda. *Journal of Political Economy* 127:1008–1062
- Boisjoly J, Duncan GJ, Kremer M, Levy DM, Eccles J. 2006. Empathy or antipathy? the impact of diversity. *American Economic Review* 96:1890–1905
- Bordalo P, Coffman K, Gennaioli N, Shleifer A. 2016. Stereotypes. *Quarterly Journal of Economics* 131:1753–1794
- Cáceres-Delpiano J, De Moragas AI, Facchini G, González I. 2021. Intergroup contact and nation building: Evidence from military service in Spain. *Journal of Public Economics* 201:104477

- Caesmann M, Caprettini B, Voth HJ, Yanagizawa-Drott D. 2021. Going viral: propaganda, persuasion and polarization in 1932 Hamburg. CEPR Discussion Paper No. DP16356
- Cagé J, Dagorret A, Grosjean P, Jha S. 2023. Heroes and villains: The effects of heroism on autocratic values and Nazi collaboration in France. *American Economic Review* 113:1888–1932
- Calhoun C. 1993. Nationalism and ethnicity. Annual Review of Sociology 19:211–239
- Campante F, Durante R, Tesei A. 2022. Media and social capital. *Annual Review of Economics* 14:69–91
- Cantoni D, Chen Y, Yang DY, Yuchtman N, Zhang YJ. 2017. Curriculum and ideology. *Journal of Political Economy* 125:338–392
- Cantoni D, Mohr C, Weigand M. 2024. Individualism, identity, and institutional change: Evidence from first names in Germany, 1700–1850. Mimeo
- Caprettini B, Voth HJ. 2023. New deal, new patriots: How 1930s government spending boosted patriotism during World War II. *Quarterly Journal of Economics* 138:465–513
- Carlitz R, Morjaria A, Mueller JM. 2023. State-building in a diverse society. National Bureau of Economic Research WP 30731, DOI 10.3386/w30731
- Carrell SE, Hoekstra M, West JE. 2019. The impact of college diversity on behavior toward minorities. *American Economic Journal: Economic Policy* 11:159–182
- Carvalho JP, Koyama M, Williams C. forthcoming. Resisting education. *Journal of the European Economic Association* DOI=10.1093/jeea/jvae008
- Casas A, Curci F, De Moragas AI. forthcoming. Judicial decisions, backlash and secessionism: The Spanish constitutional court and Catalonia. *Economic Journal* Https://doi.org/10.1093/ej/ueae041
- Cederman LE, Hug S, Schädel A, Wucherpfennig J. 2015. Territorial autonomy in the shadow of conflict: Too little, too late? *American Political Science Review* 109:354–370
- Chen WL, Lin MJ, Yang TT. 2023. Curriculum and national identity: Evidence from the 1997 curriculum reform in Taiwan. *Journal of Development Economics* 163:103078
- Chen Y, Li SX. 2009. Group identity and social preferences. American Economic Review 99:431–457
- Chiovelli G, Fergusson L, Martinez LR, Torres JD, Valencia Caicedo F. 2021. Bourbon reforms and state capacity in the Spanish Empire. Mimeo
- Cilliers J, Dube O, Siddiqi B. 2016. Reconciling after civil conflict increases social capital but decreases individual well-being. *Science* 352:787–794
- Cinnirella F, Schueler R. 2018. Nation building: The role of central spending in education. *Explorations in Economic History* 67:18–39
- Clingingsmith D, Khwaja AI, Kremer M. 2009. Estimating the Impact of The Hajj: Religion and Tolerance in Islam's Global Gathering. *Quarterly Journal of Economics* 124:1133–1170

Clots-Figueras I, Masella P. 2013. Education, language and identity. Economic Journal 123:F332–F357

- Corno L, La Ferrara E, Burns J. 2022. Interaction, stereotypes, and performance: Evidence from South Africa. *American Economic Review* 112:3848–3875
- Corvalan A, Vargas M. 2015. Segregation and conflict: An empirical analysis. *Journal of Development Economics* 116:212–222
- Dehdari SH, Gehring K. 2022. The origins of common identity: Evidence from Alsace-Lorraine. *American Economic Journal: Applied Economics* 14:261–292
- Dell M, Querubin P. 2018. Nation building through foreign intervention: Evidence from discontinuities in military strategies. *Quarterly Journal of Economics* 133:701–764
- DellaVigna S, Enikolopov R, Mironova V, Petrova M, Zhuravskaya E. 2014. Cross-border media and nationalism: Evidence from Serbian radio in Croatia. *American Economic Journal: Applied Economics* 6:103–132
- DellaVigna S, Gentzkow M. 2010. Persuasion: Empirical evidence. *Annual Review of Economics* 2:643–669
- Depetris-Chauvin E, Durante R, Campante F. 2020. Building nations through shared experiences: Evidence from African football. *American Economic Review* 110:1572–1602
- Depetris-Chauvin E, Özak Ö. 2024. (de facto) historical ethnic borders and contemporary conflict in Africa. Mimeo, Center for Open Science
- Dimant E, Krieger T, Meierrieks D. forthcoming. Paying them to hate US: the effect of US military aid on anti-American terrorism, 1968-2018. *Economic Journal* Https://doi.org/10.1093/ej/ueae034
- Dube O, Naidu S. 2015. Bases, bullets, and ballots: The effect of US military aid on political conflict in Colombia. *Journal of Politics* 77:249–267
- Esposito E, Rotesi T, Saia A, Thoenig M. 2023. Reconciliation narratives: The birth of a nation after the us civil war. *American Economic Review* 113:1461–1504
- Esteban J, Mayoral L, Ray D. 2012. Ethnicity and conflict: An empirical study. *American Economic Review* 102:1310–1342
- Esteban J, Morelli M, Rohner D. 2015. Strategic mass killings. *Journal of Political Economy* 123:1087–1132
- Fearon JD. 2004. Why do some civil wars last so much longer than others? *Journal of Peace Research* 41:275–301
- Finseraas H, Kotsadam A. 2017. Does personal contact with ethnic minorities affect anti-immigrant sentiments? Evidence from a field experiment. *European Journal of Political Research* 56:703–722
- Fouka V. 2020. Backlash: The unintended effects of language prohibition in US schools after World War I. *Review of Economic Studies* 87:204–239
- Fryer Jr RG, Levitt SD. 2004. The causes and consequences of distinctively black names. *Quarterly Journal of Economics* 119:767–805
- Gagliarducci S, Tabellini M. 2022. Faith and assimilation: Italian immigrants in the US. National Bureau of Economic Research WP 30003, DOI 10.3386/w30003

Gehring K. 2022. Can external threats foster a european union identity? Evidence from Russia's invasion of Ukraine. *Economic Journal* 132:1489–1516

Gellner E. 1991. Nations and nationalism (new perspectives on the past). Wiley-Blackwell, 1st ed.

Gellner E. 2006. Nations and nationalism. Blackwell, illustrated, reprint ed.

- Ginsburgh V, Weber S. 2020. The economics of language. Journal of Economic Literature 58:348-404
- Giuliano P, Reich B, Riboni A. 2022. What motivates leaders to invest in nation-building? National Bureau of Economic Research WP 30268, DOI 10.3386/w30268
- Grosfeld I, Rodnyansky A, Zhuravskaya E. 2013. Persistent antimarket culture: a legacy of the Pale of Settlement after the Holocaust. *American Economic Journal: Economic Policy* 5:189–226
- Grosfeld I, Sakalli SO, Zhuravskaya E. 2020. Middleman minorities and ethnic violence: Anti-Jewish pogroms in the Russian Empire. *Review of Economic Studies* 87:289–342
- Habyarimana J, Humphreys M, Posner DN, Weinstein JM. 2007. Why does ethnic diversity undermine public goods provision? *American Political Science Review* 101:709–725
- Izumi Y, Park S. 2023. Education and wartime mobilization: Evidence from colonial Korea during WWII. Mimeo
- Jha S. 2013. Trade, institutions, and ethnic tolerance: Evidence from South Asia. *American Political Science Review* 107:806–832
- Keil S, Anderson P. 2018. Decentralization as a tool for conflict resolution. In *Handbook of territorial politics*, eds. K Detterbeck, E Hepburn. Edward Elgar Publishing, 89–104
- Kersting F, Wolf N. 2024. On the origins of national identity. German nation-building after Napoleon. *Journal of Comparative Economics* 52:463–477
- Klor EF, Shayo M. 2010. Social identity and preferences over redistribution. *Journal of Public Economics* 94:269–278
- Knudsen A. 2024. Those who stayed: Selection and cultural change in the age of mass migration. Mimeo
- Kukić L. 2023. The last Yugoslavs: Ethnic diversity and national identity. *Explorations in Economic History* 88:101504
- Laitin DD. 2007. Nations, states, and violence. Oxford University Press
- Laurent-Lucchetti J, Rohner D, Thoenig M. 2024. Ethnic conflict and the informational dividend of democracy. *Journal of the European Economic Association* 22:73–116
- Levendusky MS. 2017. Americans, not partisans: Can priming American national identity reduce affective polarization? *Journal of Politics* 80:000–000
- Lowes S, Nunn N, Robinson JA, Weigel J. 2015. Understanding ethnic identity in Africa: Evidence from the implicit association test (IAT). *American Economic Review* 105:340–345
- Luttmer EFP. 2001. Group loyalty and the taste for redistribution. *Journal of Political Economy* 109:500–528

- Macintyre A, Chan HF, Schaffner M, Torgler B. 2023. National pride and tax compliance: A laboratory experiment using a physiological marker. *Plos One* 18:e0280473
- Manacorda M, Ponticelli J, Tesei A. 2024. The international transmission of democratic values: Evidence from the African diaspora. Mimeo
- Martinez LR. 2017. Transnational insurgents: Evidence from Colombia's FARC at the border with Chávez's Venezuela. *Journal of Development Economics* 126:138–153
- Mayda AM, Rodrik D. 2005. Why are some people (and countries) more protectionist than others? *European Economic Review* 49:1393–1430
- Michalopoulos S, Papaioannou E. 2016. The long-run effects of the scramble for Africa. *American Economic Review* 106:1802–1848
- Michalopoulos S, Papaioannou E. 2020. Historical legacies and African development. *Journal of Economic Literature* 58:53–128
- Miguel E. 2004. Tribe or nation? nation building and public goods in Kenya versus Tanzania. *World Politics* 56:327–362
- Montalvo JG, Reynal-Querol M. 2005. Ethnic polarization, potential conflict, and civil wars. *Ameri*can Economic Review 95:796–816
- Morehouse KN, Banaji MR. 2024. The science of implicit race bias: Evidence from the implicit association test. *Daedalus* 153:21–50
- Mousa S. 2020. Building social cohesion between Christians and Muslims through soccer in post-ISIS Iraq. *Science* 369:866–870
- Mueller H, Rohner D. 2018. Can power-sharing foster peace? Evidence from Northern Ireland. *Economic Policy* 33:447–484
- Mueller H, Rohner D, Schönholzer D. 2022. Ethnic violence across space. *Economic Journal* 132:709–740
- Müller K, Schwarz C. 2021. Fanning the flames of hate: social media and hate crime. *Journal of the European Economic Association* 19:2131–2167
- Müller K, Schwarz C. 2023. From hashtag to hate crime: twitter and antiminority sentiment. *American Economic Journal: Applied Economics* 15:270–312
- Okunogbe O. 2024. Does exposure to other ethnic regions promote national integration? Evidence from Nigeria. *American Economic Journal: Applied Economics* 16:157–192
- Paluck EL, Green DP. 2009. Prejudice reduction: What works? a review and assessment of research and practice. *Annual Review of Psychology* 60:339–367
- Pepinsky TB, Liddle RW, Mujani S. 2018. Piety and public opinion: Understanding Indonesian Islam. Oxford University Press
- Pettigrew TF, Tropp LR. 2006. A meta-analytic test of intergroup contact theory. *Journal of Personality* and Social Psychology 90:751
- Rao G. 2019. Familiarity does not breed contempt: Generosity, discrimination, and diversity in Delhi schools. *American Economic Review* 109:774–809

- Rivera E, Seira E, Jha S. 2024. Democracy corrupted: Apex corruption and the erosion of democratic values. Stanford University Graduate School of Business Research Paper
- Rohner D. 2024a. Mediation, military, and money: The promises and pitfalls of outside interventions to end armed conflicts. *Journal of Economic Literature* 62:155–195
- Rohner D. 2024b. The peace formula: Voice, work and warranties, not violence. Cambridge University Press
- Rohner D, Thoenig M. 2021. The elusive peace dividend of development policy: From war traps to macro complementarities. *Annual Review of Economics* 13:111–131
- Rohner D, Thoenig M, Zilibotti F. 2013a. Seeds of distrust: Conflict in Uganda. *Journal of Economic Growth* 18:217–252
- Rohner D, Thoenig M, Zilibotti F. 2013b. War signals: A theory of trade, trust, and conflict. *Review* of Economic Studies 80:1114–1147
- Rohner D, Zhuravskaya E, eds. 2023a. Nation building: Big lessons from successes and failures. CEPR Press
- Rohner D, Zhuravskaya E. 2023b. Nation building: What could possibly go wrong? In *Nation building: Big lessons from successes and failures*, eds. D Rohner, E Zhuravskaya. CEPR Press, 1–28

Ronconi JP, Ramos-Toro D. 2023. Nation building through military service. Mimeo

- Rose AM, Deutsch KW. 1954. Nationalism and social communication: An inquiry into the foundations of nationality. *American Sociological Review* 19:105
- Saavedra M. 2021. Kenji or Kenneth? Pearl Harbor and Japanese-American assimilation. *Journal of Economic Behavior & Organization* 185:602–624
- Sakalli S. 2019. Secularization and religious backlash: Evidence from Turkey. Mimeo
- Sambanis N, Skaperdas S, Wohlforth W. 2020. External intervention, identity, and civil war. *Comparative Political Studies* 53:2155–2182
- Sambanis N, Skaperdas S, Wohlforth WC. 2015. Nation-building through war. *American Political* Science Review 109:279–296
- Samii C. 2013. Perils or promise of ethnic integration? Evidence from a hard case in Burundi. *American Political Science Review* 107:558–573
- Scacco A, Warren SS. 2018. Can social contact reduce prejudice and discrimination? Evidence from a field experiment in Nigeria. *American Political Science Review* 112:654–677
- Shayo M. 2009. A model of social identity with an application to political economy: Nation, class, and redistribution. *American Political Science Review* 103:147–174
- Shayo M. 2020. Social identity and economic policy. Annual Review of Economics 12:355–389
- Smith AD. 1987. The ethnic origins of nations. B. Blackwell, illustrated, reprint ed.
- Spolaore E. 2022. The economic approach to political borders. National Bureau of Economic Research WP 30800, DOI 10.3386/w30800

- Stantcheva S. 2023. How to run surveys: A guide to creating your own identifying variation and revealing the invisible. *Annual Review of Economics* 15:205–234
- Tajfel H. 1982. Social psychology of intergroup relations. Annual Review of Psychology 33:1-39
- Testa PA. 2018. Education and propaganda: Tradeoffs to public education provision in nondemocracies. *Journal of Public Economics* 160:66–81
- Tilly C, Ardant G, eds. 1975. The formation of national states in Western Europe. Princeton: Princeton University Press
- Weber E. 1976. Peasants into frenchmen: The modernization of rural france, 1870-1914. Stanford University Press
- Wimmer A. 2018. Nation building: Why some countries come together while others fall apart. Princeton: Princeton University Press
- Yanagizawa-Drott D. 2014. Propaganda and conflict: Evidence from the Rwandan genocide. *Quarterly Journal of Economics* 129:1947–1994
- Zhuang M. 2023. Protests, social media hate speech and WWII TV dramas in China. Mimeo
- Zhuravskaya E, Petrova M, Enikolopov R. 2020. Political effects of the internet and social media. *Annual Review of Economics* 12:415–438

Supplemental Material

Rohner and Zhuravskaya "The Economics of Nation-Building: Methodological Toolkit, Research, and Policy Lessons"

Annual Review of Economics

Paper	Measure	Data source	Country / Region	Years
Abramitzky et al. (2020, AER Insights)	American vs foreign names	US 1920 census, California birth certificats	United States	1920-2015
Assouad (2021, Working paper)	"Pure Turkish" (versus Arabic) names from historical birth certificates	General Directorate of Population Affairs	Turkey	1920-1950
Atkin et al. (2021, JPE)	Food consumption patterns linked to ethnic / religious identity	National Sample Survey	India	1987-2000
Bagues and Roth (2023, AEJ:EP)	Sympathy toward people from the region of service	Original online survey	Spain	2001
Bazzi et al. (2019, AER)	Self-reported language used at home	Census	Indonesia	2010
Bazzi et al. (2019, AER)	Self-reported inter-ethnic marriage	Census	Indonesia	2010
Bazzi et al. (2019, AER)	Self-reported naming choices	Census	Indonesia	2010
Bazzi et al. (2023, Working Paper)	Self-reported national language use at home	Population Census	Indonesia	2010
Bazzi et al. (2023, Working Paper)	Self-reported support for secular versus religious policies and parties	Original survey (from Pepinsky et al., 2018)	Indonesia	2008
Bland and Kubo (2024, working paper)	Language spoken (linguistic distance from Parisian French)	Atlas linguistique de la France	France	1900
Bland and Kubo (2024, working paper)	Participation to French Resistance in World War II	Atlas linguistique de la France	France	1900
Bland and Kubo (2024, working paper)	Voting in the 1969 constitutional referendum on regionalization	Atlas linguistique de la France	France	1900
Blouin and Mukand (2019, JPE)	Salience of Identity Test (to measure ethnic identity)	Lab-in-field experiment	Rwanda	2013-14
Blouin and Mukand (2019, JPE)	Partner selection task (to measure ethnic identity)	Lab-in-field experiment	Rwanda	2013-14
Blouin and Mukand (2019, JPE)	Trust survey question	Original survey	Rwanda	2013-14
Blouin and Mukand (2019, JPE)	Trust game	Lab-in-field experiment	Rwanda	2013-14
Caceres-Delpiano et al. (2021, JPubE)	Self-reported national identity	General Spanish Social Survey	Spain	2013, 2015, 2017

Table A.1: Overview of key measures used in the literature

Caceres-Delpiano et al.	Self-reported political participation	General Spanish	Spain	2013,
(2021, JPubE)	and voting choices	Social Survey	-1	2015, 2017
Caceres-Delpiano et al. (2021, JPubE)	Self-reported friendship links	General Spanish Social Survey	Spain	2013, 2015, 2017
Cantoni et al. (2017, JPE)	Self-reported national versus ethnic identity	Original survey	China	2013
Cantoni et al. (2017, JPE)	Self-reported political attitudes	Original survey	China	2013
Caprettini and Voth (2023, QJE)	War bond sales (average purchases per capita, excluding corporations)	County Data Book 1947 / Census Bureau	United States	1944
Caprettini and Voth (2023, QJE)	Volunteering in World War I and II	War Office / National Archive	United States	1914-1917, 1938-1946
Caprettini and Voth (2023, QJE)	Five military awards	Home of Heroes / Hall of Valor websites	United States	2022
Carlitz et al. (2023, Working Paper)	Self-reported national versus ethnic identity	Afrobarometer survey	Tanzania	2005, 2008
Carlitz et al. (2023, Working Paper)	Ethnic intermarriage	Demographic and Health Surveys (DHS)	Tanzania	1991, 1996
Casas et al. (2024, EJ)	Self-reported national vs regional identity	Baròmetre d'Opinió Política	Catalonia	2010
Casas et al. (2024, EJ)	Self-reported attitudes towards regional autonomy	Baròmetre d'Opinió Política	Catalonia	2010
Chen, Lin, and Yang (2023. JDE)	Identification as Taiwanese vs. dual identity (Taiwanese and Chinese) or Chinese	Repeated nationally representative survey	Taiwan	1997
Chiovelli et al. (2023, Working paper)	Ethnic naming choices	Baptismal records	Spanish Empire	1770-1800
Cilliers et al. (2016, Science)	Self-reported forgiveness and inter- group trust measures	Original survey	Sierra Leone	2011
Cinnirella and Schueler (2018, EEH)	Voting for the German Reichstag	Galloway Prussia Database	Imperial Germany	1887-1912
Clingingsmith et al. (2009, QJE)	Self-reported inter-group trust	Original survey	Pakistan	2006
Clots-Figueras and Masella (2013, EJ)	Self-reported national versus regional identity	Centro de Investigaciones Sociologicas	Catalonia	2001
Clots-Figueras and Masella (2013, EJ)	Self-reported voting for regionalist parties	Centro de Investigaciones Sociologicas	Catalonia	2001
Clots-Figueras and Masella (2013, EJ)	Self-reported preferences for regional independence	Centro de Investigaciones Sociologicas	Catalonia	2001
Corno et al. (2022, Working paper)	Race-related implicit association tests (IAT)	Original experiment	South Africa	2012

Corno et al. (2022,	Inter-racial attitudes and friendships	Original survey	South Africa	2012
Working paper)	1			
Dehdari and Gehring (2022, AEJ Applied)	Vote in referendum on regionalization and other referenda	L'Est Republicain (newspaper)	Alsace- Lorraine	1969
Dehdari and Gehring (2022, AEJ Applied)	Suscription to local newspaper "Le Republicain Lorraine"	Le Republicain Lorraine (newspaper)	Alsace- Lorraine	2014
Dehdari and Gehring (2022, AEJ Applied)	Vote for regionalist party	Official election results	Alsace- Lorraine	2015
Dehdari and Gehring (2022, AEJ Applied)	Self-reported regional versus national identity	Observatoire Interregional du Politique (OIP)	Alsace- Lorraine	1999, 2001, 2003
Dehdari and Gehring (2022, AEJ Applied)	Regional versus national identity	Cahiers de doléances	Alsace- Lorraine	1789
Depetris-Chauvin (2020, AER)	Self-reported national vs ethnic identity	Afrobarometer survey	Africa	2002-2015
Depetris-Chauvin (2020, AER)	Self-reported inter-group trust	Afrobarometer survey	Africa	2002-2015
Esposito et al. (2023, AER)	Patriotic versus divisive rhetoric in newspaper articles ("bag-of-words")	newspapers.com	United States	1910-1920
Esposito et al. (2023, AER)	Navy enlistments / volunteering (measured through casualties)	Bureau of Navigation of the Navy Department	United States	Mostly 1917/1918
Esposito et al. (2023, AER)	Enemy name index (measuring converging name choices of former foes)	U.S. census	United States	1920, 1930
Fouka (2020, ReStud)	First names of offspring	U.S. census	United States	1920, 1930, 1940
Fouka (2020, ReStud)	Volunteering in World War II	Army Serial Number Electronic File	United States	1938-1946
Fouka (2020, ReStud)	Inter-ethnic versus within-ethnic marriage	U.S. census	United States	1920, 1930, 1940
Gagliarducci and Tabellini (2022, Working paper)	Inter-ethnic versus within-ethnic marriage	U.S. census	United States	1900, 1910, 1920
Gagliarducci and Tabellini (2022, Working paper)	Residential segregation choices	U.S. census	United States	1900, 1910, 1920
Gagliarducci and Tabellini (2022, Working paper)	Naturalisations	U.S. census	United States	1900, 1910, 1920
Gagliarducci and Tabellini (2022, Working paper)	English proficiency	U.S. census	United States	1900, 1910, 1920

Gagliarducci and Tabellini (2022, Working paper)	Ethnic naming choices of US born children	U.S. census	United States	1900, 1910, 1920
Gehring (2022, EJ)	Self-reported EU identity and other questions on trust and support for EU	Eurobarometer survey	European Union	2010-2018
Habyarimana et al. (2007, APSR)	Inter- vs co-ethnic public good provision measure from lab experiment	Original experiment	Uganda	2005
Izumi and Park (2023, Working paper)	Wartime mobilization data	National Archives of South Korea	South Korea	1939-1945
Izumi and Park (2023, Working paper)	Self-reported perception of Japan	Korean General Social Survey (KGSS)	South Korea	2008, 2010, 2018
Kerstingand Wolf (2024, JCE)	German vs. former rule names	Archival data on bith registries	Prussia	1815
P&P)	Ethnicity-related implicit association test (IAT)	Original experiment	DRC	2014
Macintyre (2023, PLOS ONE)	Tax complicance measure from lab experiment	Original experiment	Australia	2013
Mayda and Rodrik (2005, EER)	Self-reported national attachment / pride	International Social Survey Programme	Several countries	1995
Mousa (2020, Science)	Inter-group cooperation behavior related to mixed soccer teams	Original RCT	Iraq	2018
Okunogbe (2024, AEJ: Applied)	Self-reported geographical mobility	Original survey	Nigeria	2021
Okunogbe (2024, AEJ: Applied)	Self-reported contacts / relationships outside home region	Original survey	Nigeria	2021
Okunogbe (2024, AEJ: Applied)	Factual knowledge of other regions	Original survey	Nigeria	2021
Okunogbe (2024, AEJ: Applied)	Self-reported interethnic trust	Original survey	Nigeria	2021
Okunogbe (2024, AEJ: Applied)	Self-reported national and regional identity	Original survey	Nigeria	2021
Rohner et al. (2013, JOEG)	Self-reported inter-ethnic trust	Afrobarometer survey	Uganda	2000-2008
Rohner et al. (2013, JOEG)	Self-reported national identity	Afrobarometer survey	Uganda	2000-2008
Ronconi and Ramos- Toro (2023, Working paper)	Self-reported measures of national identification	Original online survey	Argentina	2022
Saavedra (2021, JEBO)	American vs Japanese Name Index	IPUMS / U.S. Census	United States	1900-1930
Samii (2013, APSR)	Non-response to sensitive questions when interviewer of other ethnicity	Wartime and Postconflict Experiences survey	Burundi	2013

Shayo (2009, APSR)	Self-reported national pride and National Identity (6-item scale)	World Values Survey, Int. Social Survey Prog.	Several countries	1980-2001
Shayo (2020, ARE)	Self-reported national pride	World Values Survey	Several countries	1981-2013