Nationalism and Ethnic-Based Trust: Evidence from an African Border Region

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Abstract

In diverse societies, individuals tend to trust coethnics more than non-coethnics. I argue that identification with a territorially-defined nation, common to all ethnic groups, reduces the degree to which trust is ethnically bounded. I conduct a "labin-the-field" experiment at the intersection of national and ethnic boundaries in Malawi, which measures strength of national identification, experimentally manipulates national identity salience, and measures trust behaviorally. I find that shared nationality is a robust predictor of trust, equal in magnitude to the impact of shared ethnicity. Furthermore, national identification moderates the degree to which trust is limited to coethnics: while weak national identifiers trust coethnics more than non-coethnics, strong national identifiers are blind to ethnicity. Experimentally increasing national identity salience also eliminates the co-ethnic trust advantage among weak nationalists. These results offer microlevel evidence that a strong and salient national identity can diminish ethnic barriers to trust in diverse societies.

Existing research has documented ethnic bias among members of diverse societies for many socially relevant behaviors, including vote choice (Posner, 2004; Huber, 2012; Kasara, 2013; Adida, 2015), economic transactions (Grossman & Honig, 2013; Robinson, 2013; Michelitch, 2015), political responsiveness (McClendon, 2015), allocation of material resources (Franck & Rainer, 2012), altruism (Whitt & Wilson, 2007; Mironova & Whitt, 2014; Charnysh et al., 2015), and social sanctioning (Miguel & Gugerty, 2005; Bernhard et al., 2006; Habyarimana et al., 2009a). As a result, ethnic diversity is often characterized as an economic and political detriment to society. However, scholars have shown that such ethnic discrimination is not inevitable, and can be overcome via dense social networks (Dionne, 2014), residential integration (Kasara, 2013; Mironova & Whitt, 2014), political unity (Singh, 2011), or the activation of cross-cutting social cleavages (Dunning & Harrison, 2010).

I argue that increased identification with a common national identity can also reduce the negative effects of ethnic diversity on pro-social behaviors. I focus on trust because it is important for many political and economic outcomes (e.g., Putnam, 1993; La Porta et al., 1997; Zak & Knack, 2001), but is demonstrably weaker in diverse states (Knack & Keefer, 1997; Hooghe et al., 2009) due to ethnic trust discrimination (Fershtman & Gneezy, 2001; Kasara, 2013). I evaluate the impact of nationalism on ethnic-based trust in Sub-Saharan Africa, where states are extremely diverse (Easterly & Levine, 1997) and trust is particularly weak (Uslaner, 2008b).

Applied to the case of ethnically diverse African states, the argument is developed in two parts. First, I contend that territorially-defined national identities in Africa constitute meaningful social identities with the power to facilitate interpersonal trust, despite the commonly held view that nationalism in Africa is too weak to counter salient ethnic attachments. Second, I argue that variation in identification with the nation, both across individuals and across contexts, explains the degree to which trust is ethnically bounded. In particular, I expect that an increase in national identification should reduce the degree to which individuals

base their trust on shared ethnicity within a multi-ethnic nation.¹

To evaluate these expectations, I carry out a "lab-in-the-field" experiment in an ethnically diverse region of Malawi near the international border with Zambia, where previous research has documented intense ethnic antagonisms (Posner, 2004). By situating the study at the intersection of an ethnic and a national border, where coethnicity and conationality are orthogonal, I am able to empirically evaluate the impact of one shared identity while controlling for the other. To assess whether national identification ameliorates ethnic trust discrimination, the research design combines novel measures of each individual's strength of national attachment – distinguishing affective, behavioral, and cognitive forms of identification – with an experimental manipulation of national identity salience, and evaluates whether these two forms of variation in national identification explain the degree to which trust is conditioned on shared ethnicity. Trust is measured within-subjects, using standard behavioral economic trust games implemented in rural market settings.

Contrary to the popular image of African societies as primarily tribal, with very little loyalty tied to the territorial state (e.g., Collier, 2009), I find evidence that, on average, shared nationality is just as important as shared ethnicity for decisions about whom to trust. This suggests that the national identity in Malawi, and perhaps in other ethnically diverse states, has the potential to complement weak formal institutions by facilitating the kind of interpersonal trust necessary for efficient economic and social interactions, even across ethnic lines.

Further, both strength of national identification and the salience of the national identity reduce ethnic trust discrimination among conationals. First, the size of the coethnic trust premium decreases slightly as strength of cognitive identification (but not affective or behavioral identification) with the Malawian nation increases, largely as a result of increased trust in non-coethnics. Second, while most respondents tend to trust coethnics more

¹By nation I mean the territorially-defined, state-based identity group. Thus, the national in-group is defined by citizenship.

than non-coethnics, when the common national identity is (experimentally) made salient, coethnics and non-coethnics are trusted at the same rate. However, this effect is driven by weak national identifiers, who, in the absence of the prime, exhibit the largest coethnic trust premium.

These results suggest that ethnic-based trust discrimination may be reduced in diverse settings either by increasing the degree to which individuals see the nation as homogenous, and themselves as typical members, or by promoting "banal nationalism" (Billig, 1995) through the ubiquitous use of national symbology such as the national flag, national anthem, or national currency. However, these two methods of reducing ethnic trust discrimination may have different consequences for aggregate levels of trust: strong national identification extends trust to non-coethnics, while national identity salience simultaneously increases trust in non-coethnics and reduces trust in coethnics. This means that while increased strength of national identification and exposure to national symbols both eliminate the coethnic trust premium, the former reflects an extension of trust across ethnic lines while the latter achieves ethnic trust equality, at least partially, at the expense of overall levels of trust. While strong national identification is thus clearly beneficial for aggregage trust in diverse societies, the value of national identity salience is less clear: its utility ultimately depends on the relative benefits of strong but ethnically-bounded trust versus weaker but ethnically-blind trust. This set of findings thus motivates an important avenue for future research.

This research makes a number of important contributions to the literature on identity and trust. First, most micro-level studies on shared identity and cooperative behavior tend to consider only nominal group identities (e.g., Bernhard et al., 2006; Habyarimana et al., 2009a; Michelitch, 2015), rather than exploring variation in the degree of to which individuals actually identify with a given identity. And when variation in strength of identification is considered (e.g., Posner, 2004; Miguel, 2004), it tends to be captured only through country-level differences. By directly measuring individual-level differences in strength of national identification, this project advances our understanding of when and for whom shared identities

matter. Second, I theoretically and empirically distinguish between *strength* of identification with a particular identity and the contextual *salience* of that identity. While past research has tended to assume that the two are part of the same underlying form of group identification (e.g., Akerlof & Kranton, 2011; Benjamin et al., 2010; Sambanis & Shayo, 2013), the findings reported here suggest that they may have different implications for behavior. Third, this research reports behavioral decisions by members of real ethnic groups rather than artificial groups created in a laboratory, and among rural Malawians instead of convenience samples of university students or online participants. This increases the generalizability of the findings, and extends our understanding of nationalism and intergroup relations beyond industrialized countries and urban centers in developing countries.

Nationalism and the Coethnic Trust Premium

Generalized trust within a society is associated with better economic performance (Knack & Keefer, 1997; Whiteley, 2000; Zak & Knack, 2001), less corruption (Uslaner, 2008a), better governance (Putnam, 1993; La Porta et al., 1997; Knack & Zak, 2003; Alesina & Zhuravskaya, 2011), and greater capacity for collective action (Levi, 1998; Uslaner & Brown, 2005; Nannestad, 2008). However, generalized trust is markedly weaker in ethnically diverse states (Knack & Keefer, 1997; Alesina & La Ferrara, 2002; Putnam, 2007; Hooghe et al., 2009), presumably resulting from low levels of interethnic trust (Fershtman & Gneezy, 2001; Tanis & Postmes, 2005; Kasara, 2013). The existing scholarship has thus concluded, as Whiteley (2000, p.449) puts it, that "some societies, particularly those deeply divided by ethnic or racial divisions, may have strong ties and high levels of 'thick' trust within particular communities, but this does not generalize to society as a whole." This characterization of the negative impact of diversity on trust has been particularly applied to African states, which are among the most ethnically diverse in the world (Easterly & Levine, 1997) and

 $^{^2}$ Putnam (2000) characterizes in-group trust as "bonding" and out-group trust as "bridging."

exhibit the lowest levels of generalized trust across regions (Uslaner, 2008b).³

When faced with the reality of a multi-cultural society, how can trust be generalized to society as a whole? I argue that increased identification with a common, overarching national identity can form the basis of a trust community in African states, even amid ethnic diversity. However, this claim is at odds with the general perception that national identities in Africa are too weak to meaningfully impact behavior.⁴ Africanists have long been skeptical of the power of the territorially-defined nation as an "imagined community" in Africa, mostly because of the colonial origins of African states (Davidson, 1992). The borders of modern African states were determined by colonial partition of the continent without regard for existing patterns of group identification (Jackson & Rosberg, 1982; Herbst, 1989), resulting in the amalgamation of many cultural groups into a single state and the partition of other groups into multiple states (Asiwaju, 1985; Englebert et al., 2002). As a result, at independence most African states lacked a common language, history, and cultural traditions, the basic building blocks of territorial nationalism (Gellner, 1983; Horowitz, 1985). Further, the processes of "modernization" that allowed European states to surmount sub-national attachments and engender national identification (Bendix, 1964; Deutsch, 1953) are the same forces that are blamed for the supposed failure of African nations and their fragmentation along ethnic lines (Melson & Wolpe, 1970; Connor, 1972; Bates, 1983; Calhoun, 1993).

Thus, existing literature paints a pessimistic picture of the (lack of) impact national identities are likely to have on everyday behavior in African states. However, historical accounts of the rise of widespread national identification in Europe document that many

³In addition to diversity, low levels of generalized trust in Africa have also been attributed to the long-term effects of the slave trade (Nunn & Wantchekon, 2011).

⁴When nationalism is depicted as powerful in African states, it is typically portrayed as a divisive and violent force waged against "outsiders," as in recent spates of xenophobic violence in South Africa (Landau, 2006; Rusinga et al., 2012), or the social exclusion of refugees across the continent (Zhou, 2014).

of the problems purported to block territorial nationalism in Africa also existed in prenational Europe, including partitioned cultural groups (Sahlins, 1989; Harp, 1998; Zahra, 2008) and culturally diverse states (Weber, 1979). It is not clear why these hurdles were overcome in Europe, but are assumed to be insurmountable in post-colonial Africa. For this reason, Young (2004) has called into question the weakness of nationalism in African states, referencing its understated power as an explanation for the persistent unity of many fragile states.

Consistent with this skepticism of African exceptionalism, some empirical evidence suggests that national identities are in fact relevant to regular people in African states. Miles & Rochefort (1991) looked at the relative importance of multiple identities among the Hausa of Niger and Nigeria, and found that for this particular ethnic group, national identity was more important than ethnic identity in both countries. More recently, Robinson (2014) finds that processes of modernization across African states are associated with stronger national relative to ethnic identification, resulting in a net increase of national unity with modernization. However, both these findings are based on self-reported, attitudinal measures of national identification rather than its impact on behavior.

In order to make the case that national identification can promote interpersonal trust within a nation, it must first be shown that shared nationality is relevant for behavioral trust. Thus, I expect that:

H1: Conationality, along with coethnicity, will be associated with greater levels of trust.

My central argument, however, goes beyond the claim that territorially-defined national identities are relevant for trust. I suggest that increased identification with that nation can actually reduce the degree to which trust is conditioned on sub-national ethnic identities. While not explicitly focused on trust, Miguel (2004) similarly posits that strong nationalism in Tanzania helps explain high rates of interethnic cooperation, Singh (2011) demonstrates that a common Malayali identity fosters collective action in the diverse Indian state of Kerala, and Charnysh et al. (2015) find that priming the Indian national identity increases altruism

across religious lines. The expectation is also consistent with Putnam's (2007) insistence that diverse societies must "dampen the negative effects of diversity by constructing new, more encompassing identities ... a broader sense of 'we" (p.139). In the context of ethnically diverse African states, I argue that the territorially-defined nation can offer just such a pan-ethnic sense of "we."

This argument builds theoretically on two key findings in the social psychological study of intergroup relations. First, individuals tend to perceive members of their own in-group to be more trustworthy than members of out-groups, and thus to trust in-group members more than out-group members (Kramer & Brewer, 1984; Brewer & Kramer, 1985; Tanis & Postmes, 2005). This in-group favoritism results from the psychological desire to see groups to which one belongs as favorable to other groups, a central tenet of social identity theory (Tajfel et al., 1971; Tajfel & Turner, 1979; Brown, 2000). This trust bias generally results from positive in-group bias rather than negative out-group bias (Allport, 1954; Brewer, 1999). Thus, in the context of ethnically divided societies, observed trust differences between coethnics and non-coethnics should result from a "trust premium" for coethnics rather than reduced trust in non-coethnics (relative to some baseline context in which no groups are relevant). In contrast to strategic explanations of the coethnic trust premium (e.g., Habyarimana et al., 2009b), this psychological mechanism does not require that coethnics are actually more trustworthy, only that they are perceived to be when ethnic differences are salient.

Second, positive in-group bias, including greater perceived trustworthiness, can be extended to former out-group members by creating or emphasizing a common, superordinate identity group (Gaertner & Dividio, 2000). In the lab, increased national identity salience has been shown to reduce intergroup bias (Riek et al., 2010) and increase support for out-group-favoring policies (Transue, 2007). This effect is almost always the result of social recategorization (Gaertner & Dividio, 2000) – reclassifying previous out-group members as in-group members – rather than social decategorization and the loss of original group distinctions (Brewer, 1979; Wilder, 1981; Brewer & Miller, 1984). The territorially-defined nation

in Africa provides an inclusive in-group comprising individuals of different ethnicities: thus, as individuals identify more with the national identity, they should come to trust members of other ethnic groups at the same rate as members of their own ethnic group.

My argument is thus not just about nominal group membership, but instead about the degree to which individuals identify with that group. In other words, I treat *identification*, rather than just identity, as a variable. I focus in particular on two sources of variation in group identification: interpersonal differences in strength of identification and the situational salience of an identity within a particular context. Hale (2004) similarly characterizes these two forms of group identification as "chronically accessible" versus "situationally accessible," while Sniderman et al. (2004) refer to them as "predisposing factors" and "situational triggers" (Sniderman et al., 2004).

I define strength of identification as comprising three different ways in which individuals identify with social groups (Henry et al., 1999).⁵ Affective identification is associated with the literature on social cohesion, and emphasizes emotional attachment to the group and its other members (Piper et al., 1983). Affective nationalism is the most commonly studied component of national identification, especially the focus on national pride or patriotism (e.g., Huddy & Khatib, 2007; De Figueiredo & Elkins, 2003). Behavioral identification is central to the common fate literature, and focuses on the interdependence of members as a source of group identification (Dawson, 1995; Brewer & Gardner, 1996). Thus, behavioral identification with the nation should increase the more that an individual perceives her fate to be dependent on the nation's fate as a whole. Cognitive identification comes from the social identity literature, and theorizes that individuals categorize themselves as a member of a group based on shared attributes and perceived homogeneity of characteristics (Tajfel et al., 1971; Turner et al., 1986; Simon & Pettigrew, 1990). Thus, the more homogeneous an individual perceives the national group to be, and the more he sees himself as a typical

cognitive components.

⁸

member of that group, the stronger he should identify with the nation (Pickett & Brewer, 2001; Castano et al., 2003). Research shows that strength of identification can be fairly stable within individuals across time, resulting from long-term processes like socialization and social embeddedness (Markus & Kunda, 1986; Abrams, 1999). Based on the theory outlined above, I thus expect:

H2: The more strongly individuals identify with the nation, the more likely they will be to trust coethnic and non-coethnic members of the nation equally.

Situational identification with the nation, on the other hand, is defined as the salience of the national identity relative to other social identities in a particular context. When the national identity is made salient in a given context, individuals should identify more strongly with their national in-group in that moment (Akerlof & Kranton, 2011; Benjamin et al., 2010), and will thus be more inclined to use that identity in making decisions about whom to trust. Billig (1995) has argued that the most consequential form of national identification is "banal nationalism," in which the national identity is made salient in a subtle way across many everyday contexts through the ubiquitous display of national symbols, support for national sports teams, routinized national practices, and the use of first person plural pronouns that imply togetherness in the national media. The more aware someone is of a common identity, the less their trust should be based on differences along other identity dimensions. This suggests a third observable implication:

H3: If the national identity is made contextually salient, individuals will be less likely to condition their trust on coethnicity.

While I differentiate strength of identification from salience of the national identity conceptually, I also evaluate whether these two components of group identification interact. There are three possibilities. First, strength of national identification and national identity salience may each improve interethnic trust independently, but not interact. If so, national

identity salience would reduce the size of the coethnic trust premium for everyone, with weak nationalists still exhibiting a larger coethnic trust premium than strong national identifiers. Second, a positive interaction would imply that national identity salience impact strong national identifiers more than weak. Work in cognitive psychology suggests just such an additive effect – the more strongly one identifies with a group, the more cognitively accessible that identity is, and thus the more sensitive an individual is to its contextual saliency (Bargh et al., 1986; Bargh & Pratto, 1986). Consistent with this expectation, Butz et al. (2007) found that experimentally increasing the salience of the American national identity had a strong negative impact on hostility toward minorities, but only among strong national identifiers. Third, a negative interaction would mean that national identity impacts weak national identifiers more than strong. This could occur if strong national identifiers are already so cognizant of their national identity that there is no added effect of increased salience, while that same increased salience reminds weak national identifiers of their national identity, and mobilizes them to "catch up" with strong national identifiers. Consistent with this possibility, Sniderman et al. (2004) find that the experimental priming of the Dutch national identity has a larger effect on concern for national cultural preservation among citizens with weak national identification.

Given these three possibilities, what should we expect in the context of ethnically diverse African societies? It is difficult to predict since the differential impact of identity saliency across different degrees of national identification depends on the baseline relationship between national identification and ethnic based trust. For example, if, contrary to H2, the coethnic trust premium is similar across levels of national identification, then we may very well expect a bigger impact of increased salience on strong identifiers due to cognitive accessibility (positive interaction). However, if the coethnic trust premium is very small or non-existent among strong national identifiers, consistent with H2, then the marginal impact of increasing the salience of that national identity will necessarily be smaller than the impact on weak national identifiers (negative interaction). Thus, a priori it is not clear how

the interaction between strength and salience of national identification will impact interethnic trust, but the research design, discussed below, allows me to evaluate this relationship empirically.

Data and Methodology

To assess the claims laid out above, I carried out a lab-in-the-field experiment (Grossman, 2011) in an ethnically diverse border region of Malawi in October and November of 2011. The research design included measures of national identification strength, an experimental manipulation of national identity salience, and a behavioral measure of trust, collected in two stages (in the village and at the market). I describe the context, research design, and implementation below.

Field Site

Malawi is home to at least ten ethnic groups, though processes under colonialism reinforced three main ethno-regional identities – the Tumbuka in the North, the Chewa in the Center, and the Yao in the South (Vail & White, 1991; Kaspin, 1995) – which have remained politically salient under multi-party democracy (Posner, 2004; Ferree & Horowitz, 2010). Like many African states on the eve of independence, Malawian elites attempted to consolidate this diverse population into a coherent national citizenry (Forster, 1994). However, the language and cultural traditions of one ethnic group – the Chewa, who are the largest group in Malawi and the ethnic group of the first president, Dr. Hastings Kamuzu Banda, who ruled for over thirty years – were favored in the construction of the Malawian national identity (Kaspin, 1995). Such "Chewa-ization" of Malawian nationalism may have proven more devisive than unifying (Sidanius et al., 1997), resulting in weak territorial nationalism

overall. Indeed, public opinion data show that nationalism in Malawi is relatively weak,⁶ but that this weakness is not driven only by minority groups.⁷ In addition to weak territorial nationalism, interpersonal trust in Malawi is strongly circumscribed by ethnicity: 29 percent of Malawians surveyed expressed greater trust in their coethnics than Malawians from other ethnic groups, the fourth highest rate across sixteen Sub-Saharan African countries (Afrobarometer, 2006).⁸ Thus, Malawi well represents the popular image of African states, with weak territorial nationalism and ethnically-bound trust.

Within Malawi, data were collected in Traditional Authority Chulu in Kasungu District, Malawi. This region was selected because it is located at the intersection of the ethnic boundary between the Chewa and the Tumbuka and the national boundary between Malawi and Zambia (see Figure 1, Panel A). This simple fact lends great power to the research design by allowing me to vary common ethnic group membership and common national group membership independently within a very localized context. This allows for a within-subject measure of trust based on coethnicty and conationality within a realistic setting. For example, for Malawian Chewa respondents living in this border region, I am able to measure trust in four different types of individuals: a Chewa from Malawi (same nationality, same ethnicity), a Tumbuka from Malawi (same nationality, different ethnicity), a Chewa from Zambia (different nationality, same ethnicity). This design is part of a long tradition of studying ethnic

⁶Only 28 percent of Malawians identified as Malawian more than as a member of their respective ethnic group in 2005, which is lower than any other African country except Lesotho (25 percent) and Nigeria (17 percent) (Robinson, 2014).

⁷Across three rounds of data collection (2005, 2008, and 2012), only 33 percent of Chewa identified more nationally than ethnically, while 42 percent of Tumbuka and 48 percent of Yao did so (Afrobarometer, 2012).

⁸Questions about trust in coethnics and non-coethnics were only asked in the Afrobarometer Round 3 survey administered in 2005.

groups partitioned by national boundaries in Africa (Miles & Rochefort, 1991; Posner, 2006), including previous work on the same border showing that the Chewa-Tumbuka divide is particularly divisive in Malawi because of national political coalitions (Posner, 2004).

[Figure 1 about here.]

Panel B of Figure 1 shows a detailed map of the field site, including sixteen villages in Malawi from which the main participants were randomly sampled,⁹ villages in Zambia that contributed participants for some components of the study, the location of two weekly markets where study sessions were held, and the spatial distribution of the two groups within Malawi.

In Each Village

Within each of the 16 Malawian villages, 32 residents were randomly selected using point sampling, a random walk, and a random draw within each household. If the selected household member agreed to participate, 10 he or she was privately interviewed by a research assistant. 11

Measuring Strength of National Identification

Strength of national identification was measured by agreement with six original first-person statements expressing affective, behavioral, and cognitive identification with the national group, adapted from Henry et al. (1999). The components of the measure of national group

¹⁰The response rate for this portion of the study was greater than 99%, with only two potential respondents declining to be interviewed out of the 510 sampled.

⁹The sixteen study villages were selected in order to meet the following criteria: officially registered with the National Statistics Office, ethnically homogeneous (either Chewa or Tumbuka), and within walking distance to the weekly market site.

¹¹Five research assistants were employed in this study, one supervisor and four enumerators.

identification are listed in Table 1, along with the proportion of respondents who gave the response coded as more nationalist for each item.

[Table 1 about here.]

To construct a composite measure of national identification, I averaged over all six items on the scale, and standardized the resulting measure.¹² Figure A.1 of Appendix A shows that this novel measure is consistent with the most commonly used existing measure of national identification in African survey data.¹³ I similarly construct independent measures of the different components of national identification – affective, behavioral, and cognitive – by averaging the two constituent items on each scale and then standardizing. Affective national identification is weakly correlated with behavioral national identification across participants (r=0.14), but unrelated to cognitive national identification (r=0.00). Behavioral and cognitive forms of national identification are the most strongly correlated, but the relationship is still quite limited (r=0.19). These weak correlations suggest that the different sub-scales are indeed capturing distinct forms of identification with the nation. Summary statistics for all three measures of strength of national identification can be found in Table B.2 of Appendix B.¹⁴ After being interviewed, each participant was randomly assigned to an experimental session to be held during a market day the following week.¹⁵

¹²I also create an alternative measure of national identification by combining all six questions into a single indicator using principle component analysis. The main results are replicated using this alternative measure in Appendix D.

¹³The main results are replicated using the Afrobarometer measure of national relative to ethnic identification in Appendix D.

¹⁴Contrary to what we might expect given the "Chewaization" of Malawian national identity, Tumbuka respondents expressed slightly stronger national identification than Chewa respondents (Table B.4 of Appendix B).

¹⁵Of the 508 individuals interviewed, 428 (84%) attended the market session and completed the behavioral component of the study: a summary of their demographic characteristics,

At the Market

The market-based portion of the study was used to experimentally prime the national identity and measure trust in different types of individuals behaviorally. Each session was held in a building within the public market on market day. Each market session involved 60 individuals from four villages: 15 Malawian Chewa, 15 Malawian Tumbuka, 15 Zambian Chewa, and 15 Zambian Tumbuka. For example, assume that the following four villages from Panel B of Figure 1 were invited to an experimental session at Chisinga Market: A4, B4, C4, and D4. Two of the four villages, A4 and B4, were those that the research team had visited in the previous week to conduct household surveys (one Malawian Chewa village (A4) and one Malawian Tumbuka village (B4)). The other "convenience participants" were invited from a Chewa village (C4) and a Tumbuka village (D4) just across the border in Zambia.

At the beginning of each session, the behavioral activity was explained in detail to the entire group of participants in both local languages (Chichewa and Chitumbuka). It was publicly noted that the group included both Zambian and Malawian individuals, and both Chewa and Tumbuka individuals from each country. Appendix C provides the scripts used.

Experimental Manipulation of National Identity Salience

Respondents were called one at a time into private rooms with a research assistant where the rules of the trust game were explained again and informed consent was obtained. Then, a short survey, with an embedded experimental prime, was conducted. For a randomly assigned half of the participants, the survey included two extra questions about the Malawian national flag, described below, which served as a prime for national identity. The use of compared to those who did not complete the second component of the study, can be found in Table B.1 of Appendix B.

¹⁶Because assignment to treatment was randomized, treatment status should be orthogonal to all participant characteristics and, in fact, treatment and control groups were balanced in terms of strength of national identification, education, gender, ethnicity, and frequency of

the national flag as a salience prime builds on work in both political science (Sachs, 2010) and social psychology (Hassin et al., 2007; Butz et al., 2007).

In July 2010, the Malawian national flag was officially changed (see Figure 2).¹⁷ Because there was an ongoing debate about which flag should be used at the time data was collected, it was not odd to ask respondents their opinion on the two flags.¹⁸ Research assistants had large images of each flag in front of the participant, and explained the symbolism of each flag (they are very similar in meaning) and then asked the respondent which flag they thought best represented the Malawian nation. While the respondents' actual preferences were not of particular interest, simply asking respondents to consider the historical symbolism of the flags served to increase the salience of their Malawian national identity.¹⁹ The flags were left on the table after the completion of the survey, and remained there for the duration of trust decisions.

[Figure 2 about here.]

Measuring Trust

After completing the short survey, each respondent played the first round of a trust game four times, with four anonymous partners, one from each of the four different villages. The trust game is a two-player behavioral economic game in which a Trustor is given a sum of market engagement (Table B.5, Appendix B).

- ¹⁷In 2012, after the death of President Bingu wa Mutharika and the installation of the new president, Joyce Banda, the national flag was changed back to its original design.
- ¹⁸Using questions about the flag change, rather than simply exposing participants to the image of the national flag, reduced the likelihood that they were aware of our intention to prime national identity.
- ¹⁹No manipulation check was included in the design. However, the prime was pretested on a similar sample of respondents and showed that individuals exposed to the prime ranked their national identity higher than other identities in a post-survey task.

money and asked to decide how much money to send to a Trustee. Any money transferred from the Trustor to the Trustee is tripled by the experimenter, and the Trustee then decides how much of the tripled money to return to the Trustor. The amount of money transferred from the Trustor to the Trustee in the first round is interpreted as the degree of trust that the Trustor holds in the Trustee, and is the focus of all analyses here.²⁰ Originally designed for the lab (Berg et al., 1995), the trust game has been increasingly used in the field as a measure of trust (Barr, 2003; Karlan, 2005; Ashraf et al., 2006).

In addition to the standard trust game instructions, we also provided participants with an explicit frame for understanding the game. In particular, we framed the game as analogous to the decision about whether to sell one's surplus maize locally versus sending the maize with a virtual stranger to be sold in the capital for a much higher price (see Appendix C for the exact language used). The frame was included for two reasons. First, because of its abstract nature, the trust game can be difficult to understand. By framing the trust game as an economic transaction that most participants had engaged in, the trust game became both more familiar and easier to understand. Second, existing scholarship has shown that the way in which a game is understood vis-a-vis different cultural or economic frames affects the way in which individuals behave within that game (Ensminger, 2000; Burnham et al., 2000; Tracer, 2003; Ensminger, 2004; Cronk, 2007). Thus, explicitly providing a frame with which to understand the game reduces the likelihood that different individuals used different frames in making behavioral decisions.

Respondents made four trust decisions, each time with a different "type" of partner: a conational coethnic, a conational non-coethnic, a non-conational coethnic, and a non-conational non-coethnic. In order to obscure my interest in shared identity, information

²⁰Some scholars have questioned whether trust games really measure trust, or whether they instead capture altruism, cooperation, or risk acceptance (e.g., Cox, 2004; Cook et al., 2005; Schechter, 2007). This concern is partially allayed by the explicit framing of the game as a trust problem.

about the partners' ethnicity and nationality was conveyed indirectly by referencing the partner's home village.²¹ There were four different orders in which game partners were assigned, and use of these four order sets were balanced across subjects. Importantly, each participant made all four trust decisions before learning the outcomes of any of their partners' decisions about how much of their transfer to return.

For each trust decision, the participant was given an endowment of 60 MWK in the form of three 20 MWK bills.²² For each trust game, the participant decided privately how much of that endowment to entrust to their anonymous partner about whom they only knew village of residence. Across all trust decisions, the average amount entrusted was 30 MWK. Nothing was entrusted in 12% of decisions, while 20, 40, and 60 MWK were entrusted in 42%, 27%, and 19% of the games.

Empirical Models and Results

To model the impacts of conationality, coethnicity, national identification, and national identity salience on conditional trust, I construct a dataset that includes multiple trust games per individual – thus, the unit of analysis is the individual-trust game. While the

²¹Village of residence is a clear signal of both nationality and ethnicity. Within the very localized setting, it is common knowledge as to which side of the international border a village lies. Similarly, the 16 villages in the sample were chosen precisely because they are ethnically homogenous: every single Malawian participant reported their ethnicity as the one associated with their village and only 2 of the 363 Zambian participants reported their ethnicity as something other than the one associated with their village.

²²The official exchange rate in 2011 was roughly \$1 USD = 140 MWK. The endowment per decision is a meaningful sum of money in the local context, where *ganyu* (or day labor) is the only source (albeit irregular) of cash income for the vast majority, and pays 30-140 MWK per day (National Statistics Office of Malawi, 2004; Goldberg, 2015).

measure of trust – the amount entrusted to an anonymous partner – is a four-level ordinal variable (0, 20, 40, 60), I treat it as continuous for ease of interpretation. All analyses are replicated using ordered probit in Appendix D.

Shared Identity and Conditional Trust

within (s = 11.7 MWK) subjects.

H1 postulates that shared nationality, along with shared ethnicity, will influence interpersonal trust. Figure 3 shows the percentage of participants entrusting each of the possible amounts (0, 20, 40, or 60 MWK) for each of the four types of partners. The figure shows that, on average, there is indeed an increase in trust from sharing neither identity to sharing both identities: individuals trust conational coethnics the most (x = 34 MWK), conational non-coethnics and non-conational coethnics at similar rates (x = 30 MWK), and non-conational non-coethnics the least (x = 28 MWK). These averages suggest that conationality and coethnicity are given roughly equal weight in decisions about whom to trust.

These averages, however, pool decisions over individuals and do not account for the within-subject component of the research design.²³ In order to identify the within-subject effect of these shared identities on trust, I estimate the following model with participant random-effects:

$$Trust_{ij} = \alpha_i + \beta_1 CoNational_{ij} + \beta_2 CoEthnic_{ij} + \mathbf{X'}_{i}\gamma + \mathbf{Z'}_{j} + \epsilon_{ij}$$

where $Trust_{ij}$ is the amount of money sent in trust game j by respondent i, $CoNational_{ij}$ is an indicator of whether the partner is a conational in that game, $CoEthnic_{ij}$ is an indicator for whether the partner is a coethnic, \mathbf{X}_i is a vector of individual-level covariates, \mathbf{Z}_j denotes

23 There is significant variation in the amount entrusted both across (s = 14.6 MWK) and

a vector of fixed effects for the round in which a particular game was played (1st, 2nd, 3rd, or 4th), α_i is the individual random effect, and ϵ_{ij} represents the game-specific error term. The individual-level random intercept, α_i , accounts for individual-level differences in trust, allowing me to focus on changes in trust induced by the identity of one's partner.²⁴ The model is specified with and without individual-level covariates that may be related to levels of trust (\mathbf{X}_i), including gender (Buchan et al., 2008), level of education (Glaeser et al., 2000), and ethnic identity (Fershtman & Gneezy, 2001). I also include an indicator for market location in order to account for any differences across the two markets, and a measure of an individual's frequency of market attendance, a proxy measure of market integration, which previous research has shown to be correlated with "fair" play in other behavioral economics games (Ensminger, 2000, 2004). The result of these estimations are reported in Table 2.

[Table 2 about here.]

Consistent with H1, Table 2 shows that individuals are conditioning on shared nation-

ality – with an additional 2.6 MWK entrusted, on average – to the same degree as shared ethnicity (3.0 MWK).²⁵ While the effect sizes are clearly very modest (only 4-5% of the ²⁴Such individual-level differences account for almost half of the variation in trust behavior ($\rho = 0.49$). Modeling α_i as an individual fixed-effect results in virtually identical results (Hausman test, $\chi^2(5) = 0.32$, p = 0.99). I use random effects in the main analyses because this allows me to include individual-level predictors, such as the measure of national identification, in subsequent analyses.

²⁵Given that the monetary denominations were not continuous, no one could actually give 3 MWK more to one partner than another. Based on the ordered probit estimation in Appendix D, Table D.2 shows predicted probabilities of entrusting 0, 20, 40, or 60 MWK by partner type. The results show that both shared ethnicity and shared nationality reduce the probability of entrusting 0 MWK or 20 MWK, and increase the probability of entrusting 40 MWK or 60 MWK.

total endowment), such small amounts of money represent real decisions among the sample population, 99.5% of whom are subsistence farmers without reliable access to cash income. For reference, basic necessities such as salt and cooking oil cost approximately 3.5 MWK and 7 MWK at the time, respectively, to cook one meal for an average sized family. In addition, these average effect sizes do not take into account underlying differences in national identification or the experimental variation in national identity salience, both of which impact conditional trust, as I show below.

That nationality would be just as important as ethnicity in decisions about whom to trust in a rural region of sub-Saharan Africa goes against conventional expectations. The result is even more surprising given the context in which it appears. First, all participants are members of an ethnic group partitioned by colonial, and subsequently state, borders – a condition that is expected to make national identification less likely due to the perception that the states resulting from such partitioning are illegitimate (Bienen, 1983; Asiwaju, 1985; Englebert, 2002).²⁶ In addition, the border between partitioned coethnics in this region is quite porous, with over 70% of participants having close friends or family across the international border and around a third of them having crossed the border in the month preceding the study. The fact that this particular population is considering the nationality of their partner with equal weight as ethnicity, then, is an important indication that the identity group defined by the territorial nation is more important to interpersonal relations in rural Africa than previously appreciated.

²⁶One might expect that national identity would instead be *more* apparent in a border region than in the interior of the country (Miles & Rochefort, 1991). However, the Malawians in this study sample have even weaker national identification and lower generalized trust than a nationally representative sample from across Malawi (Afrobarometer, 2006) using the same question wording, even when the comparison is restricted only to demographically similar respondents.

National Identification, National Identity Salience, and Ethnic-Based Trust

The results above provide evidence that the national identity in Malawi is not, as is so often assumed, irrelevant for social decisions, such as whom to trust. However, these results only show that Malawians trust other Malawians more than they trust Zambians, controlling for coethnicity: it does not tell us anything about the impact of territorial nationalism on interethnic relations within the nation. In this section, I evaluate the impact of national identification and national identity salience on the degree to which trust is conditioned on shared ethnicity among conationals (i.e., Malawians trusting other Malawians).²⁷

To do so, I estimate the following model, which includes a triple interaction term:

$$Trust_{ij} = \alpha_i + \beta_1 CoEthnic_{ij} + \beta_2 NatID_i + \beta_3 Flag_i + \beta_4 CoEthnic_{ij} \times NatID_i +$$
$$\beta_5 CoEthnic_{ij} \times Flag_i + \beta_6 CoEthnic_{ij} \times NatID_i \times Flag_i + \mathbf{X}'_{i}\gamma + \mathbf{Z}'_{j} + \epsilon_{ij}$$

where $NatID_i$ is the standardized composite measure of strength of national identification and $Flag_i$ is a dichotomous indicator for whether an individual was exposed to the national flag prime or not. The model also includes their pair-wise interactions, as well as the triple interaction. The results of this estimation are reported in Model 1 of Table 3. This specification is repeated for each sub-measure of national identification – affective, behavioral, and cognitive – in Models 2–4.

[Table 3 about here.]

First, does increased identification with the national identity reduce the degree to which interpersonal trust is ethnically-based, as predicted in H2? To answer this question, I focus first on the individuals who were randomly assigned to not see the national flag prior to making trust decisions. At average levels of national identification (NatID = 0), coethnics

²⁷Thus, there are two observations per participant, one when deciding how much to trust a conational *coethnic* and one when deciding how much to trust a conational *non-coethnic*.

are entrusted with 5.5 MWK more, on average, than non-coethnics. However, consistent with expectations, identification with the nation is positively correlated with trust in non-coethnics (a 1.77 MWK increase in the amount sent to non-coethnics for each standard deviation increase in national identification), although this effect is not statistically significant at conventional levels (p = 0.15). Because there is no similar extension of trust for coethnics (the negative coefficient on $CoEthnic \times NatID$ interaction washes out the positive coefficient on $National\ Identification$), this results in an overall reduction in the size of the coethnic trust premium with increasing nationalism. This can be seen graphically in Figure 4a: among weak nationalists – those who do not identify very strongly with their Malawian identity – coethnics are trusted at a higher rate than non-coethnics, while among the strongest nationalists in the sample, ethnicity is essentially irrelevant for trust.

[Figure 4 about here.]

I next evaluate the effects of the different components of the national identification measure – affective, behavioral, and cognitive national identification – separately. Models 2-4 of Table 3 show striking differences in the degree to which the different types of national identification are related to ethnic-based trust. Emotional attachment to the Malawian nation (affective national identification) is unrelated to trust in coethnics, trust in non-coethnics, or the size of the coethnic trust premium (Figure 4b). Perceptions of linked fate and behavioral interdependence among members of the nation – reflected in the measure of behavioral national identification – show the same patterns as the composite measure, but smaller and statistically insignificant effects (Figure 4c). Finally, viewing members of the nation as homogenous – measured as cognitive national identification – is the most strongly related to the extension of trust to non-coethnics. A one standard deviation increase in cognitive national identification is associated with an increase in trust in non-coethnics of 2.1 MWK, an effect that is statistically significant at conventional levels. Because there is no equivalent increase in trust for coethnics, cognitive national identification is negatively related to the overall size

of the coethnic trust premium, with that trust premium eliminated among the most nationalist (Figure 4d). In sum, consistent with H2, the more strongly one identifies as Malawian, especially in terms of cognitive identification, the more strongly one trusts Malawians from other ethnic groups, ultimately eliminating ethnic trust discrepancies among the strongest nationalists.

Finally, I evaluate the impact of experimentally increasing the salience of the national identity, which is expected to reduce the size of the coethnic trust premium (H3). Based on estimates from Model 1 of Table 3, Figure 5 graphs the size of the coethnic trust premium by identity salience treatment and underlying national identification. It shows that the national identity prime did indeed significantly reduce (and even eliminate) the coethnic trust premium among the weak national identifiers, who, in the absence of the national identity prime, demonstrate the largest coethnic trust bias. Again, the effects differ by subcomponent of national identification: while there is no statistically significant effect of the national prime at any level of affective or behavioral national identification, the flag prime reduced ethnic trust discrimination among weak cognitive national identifiers.

[Figure 5 about here.]

The effect of the national identity prime is thus analogous to what Sniderman et al. (2004) call a "mobilizing" effect: the presence of a national flag "mobilized" Malawian citizens who would otherwise be inclined to base their trust on coethnicity to ignore ethnic differences. This effect among weak nationalists is driven by an increase in trust in non-coethnics, as theory predicts, but also by a reduction in trust in coethnics (Figure E.1 of Appendix E shows predicted amount entrusted).

Together, these results suggest two important conclusions. First, under conditions in which the national identity is not made contextually salient, an individual's pre-existing strength of cognitive national identification is negatively related to the coethnic trust pre-mium – the more strongly one identifies with the nation, the less she discriminates between other members of that nation based on sub-national ethnic differences. As a result, there

is a subset of people who identify very strongly with the Malawian nation and who trust coethnics and non-coethnics equally. Second, national identity salience also reduces the ethnic trust gap among weak national identifiers, who otherwise trust coethnics more than non-coethnics. The absence of a treatment effect among participants with stronger national identification could be because their national identity is already so salient that priming it has no additional effect, or because their coethnic trust premium is already so small that there is little room for improvement.

Because these results are based on a single field site in rural Malawi, it is important to consider the scope of their generalizability. Consistent with the findings reported here, in nationally-representative survey data from seventeen sub-Saharan African states (Afrobarometer, 2006), the average degree to which respondents prioritize their national identity vis-a-vis their ethnic identity is negatively associated with the average degree to which coethnics are trusted more than non-coethnics (Figure F.1 of Appendix F). Further, national relative to ethnic identification is also negatively related to the size of the coethnic trust premium within countries (Figure F.2 of Appendix F). While these data are attitudinal rather than behavioral, they suggest that the micro-level findings reported here are not unique to the specific location in which the data were collected.

Discussion

This study applies social psychological theories of intergroup relations and historical accounts of nationalism to the study of a central question in comparative political science – how to facilitate trust in diverse societies. Three principal findings offer important insight on the effect of nationalism on ethnic-based trust. First, conationality is just as important as coethnicity in decisions about whom to trust. This finding runs counter to the general image of African states as being almost exclusively organized around tribal loyalty, with little credence given to the power of territorial nationalism (Smith, 1983; Connor, 1994; Collier, 2009).

Instead, the evidence is consistent with an alternative view in which territorially-defined national identities in Africa are meaningful and consequential for at least some portion of the population. For those who have argued that national forms of group identification should be considered alongside ethnic and tribal identification (e.g., Miles & Rochefort, 1991; Young, 2004), this finding provides empirical support.

Second, individual-level variation in pre-existing strength of national identification is negatively related to the degree to which coethnics are trusted more than non-coethnics. Among weak national identifiers, coethnics are trusted at a higher rate than non-coethnics, but among strong national identifiers, this coethnic trust premium all but disappears and non-coethnics are trusted almost as much as coethnics. This relationship, however, is driven by a particular form of national identification, namely seeing the nation as homogenous and oneself as a typical member. This is significant because it suggests that deep emotional attachments and overt nationalist pride – what we tend to picture when we think of nationalism, and what nation-building efforts tend to emphasize (Lentz, 2013) – is not conducive to bridging the ethnic trust gap. It also suggests a broader theoretical takeaway, namely that group identification may facilitate trust among group members because it leads individuals to see other members of their group as more similar to themselves. Future research should therefore address the importance of perceived similarity on interpersonal trust, and the role of common group identification in fostering such perceptions of similarity amid cultural diversity.

Third, when the national identity is made contextually salient, the coethnic trust premium is eliminated entirely among weak nationalists. This finding is consistent with past research (e.g., Sniderman et al., 2004) that finds that priming the national identity has the largest effect for those for whom the national identity is not chronically salient. However, this finding is driven, at least in part, by the fact that strong national identifiers already trust coethnics and non-coethnics at roughly the same rate, and thus the national identity prime has less room to improve interethnic trust. Nevertheless, these results demonstrate that

national identity salience can improve interethnic relations, even when underlying strength of national identification is relatively weak.

These findings contribute to scholarship on intergroup relations in general by identifying the impact of an overarching, common identity outside the traditional lab setting, using real ethnic groups nested within a diverse nation, an approach that has proven surprisingly rare (see Charnysh et al. (2015) for a recent exception). They also contribute to our understanding of nationalism in Africa, which has previously relied on country-level differences without measuring national identification directly or manipulating it experimentally (e.g., Miguel, 2004).

These findings may also have important implications for nation-building policies in ethnically diverse African states by suggesting two different ways to build a nation in which all citizens, regardless of ethnicity, are part of the same trust community. The first is to foster wide-spread identification with the national group such that average citizens' primary allegiance is to the nation, above and beyond their loyalty toward other groups. This form of nation-building has been most often tied to strong, centralized states and the centripetal pull of modernized economies (Tilly, 1975; Weber, 1979; Gellner, 1983; Hobsbawm & Ranger, 1983; Anderson, 1983; Breuilly, 1994; Robinson, 2014). The second way to engender nationalism is to activate the national identity in everyday contexts through the ubiquitous presence of national flags, mundane exposure to national symbols on currency, and the creation and promotion of national sports teams, among other things. Billig (1995) has argued that such "banal nationalism" is an effective form of nation-building in that it serves as a subtle but constant reminder of the common national identity. The results of this study suggest that either form of nation-building can be effective at reducing the degree to which ethnicity impacts trust in multi-ethnic nations, but they also raise a number of new questions to be addressed in future research.

First, why does strength of national identification appear to extend trust to non-coethnics while national identity salience both extends trust to non-coethnics and retracts the trust

premium previously afforded to coethnics? Most models of social identification (e.g., Akerlof & Kranton, 2011; Benjamin et al., 2010; Sambanis & Shayo, 2013) conceptualize salience as capturing the marginal effect of strength of identification. However, the results reported here instead suggest that strength and salience of the common identity, at least in Malawi, may activate different mechanisms for alleviating ethnic-based trust discrimination. This could be a result of the particular national symbol chosen to increase national identity salience – the Malawian national flag – or a more fundamental difference between those for whom a stable, strong sense of national identity has shifted their definition of the in-group, and those for whom a temporary reminder of the shared national identity serves to eliminate sub-national differences altogether.

Second, and relatedly, the ultimate value of increased national identity saliences depends on our assessment of the tradeoff between higher levels of particularized trust and lower levels of generalized trust. In other words, is it better for diverse states to have high rates of trust that are circumscribed by ethnicity or lower rates of trust that are ethnically-blind? If low levels of trust are the main impediment to development in Africa, then perhaps ethnic-based trust is actually an improvement over more limited, personalized trust. However, if the segmentation of trust along ethnic lines is more detrimental than absolute levels of trust, then national identification could improve outcomes, even if this means a loss of ethnic-based trust premiums. This is ultimately an empirical question, and one that can and should be addressed as the amount of public opinion data on both generalized and particularized trust across societies continues to grow.

Finally, we must consider other implications of increased nationalism beyond its impact on intergroup trust. Theoretical work has suggested that nationalism may directly engender both economic development (Greenfeld, 2001) and civil peace (Sambanis & Shayo, 2013), but these claims call for empirical evaluation. Increased nationalism may also have more pernicious effects. For example, it has long been claimed that nationalism, at least in certain forms, can foster interstate hostilities and war (Van Evera, 1994; Herrmann et al., 2009;

Schrock-Jacobson, 2012). In addition, increased nationalism in multicultural settings often exacts a toll on the preservation of diversity over the long run (Weber, 1979; Kymlicka, 2001; Laitin & Reich, 2003). How should these costs be weighed against the potential benefits of stronger nationalism for intergroup relations? These are difficult question that require additional empirical research and serious normative evaluation.

While many questions remain to be answered, the results of this study offer some cause for optimism. They provide micro-level evidence that territorially-defined nations in post-colonial Africa can form the basis of a trust community. Further, increasing the relevance of the common national identity in the lives of citizens could help to reduce the degree to which coethnicity dictates interpersonal trust, ultimately breaking the link between ethnic diversity and low levels of interpersonal trust.

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 Table 1: National Group Identification Measures.

| | We all belong to many different types of groups. Which of the following statements is closest to your view? | |
|------------|---|-----|
| | While I am proud of my Malawian identity, there are other groups that I feel more proud to belong to. | |
| Affective | While I am proud of many of the groups to which I belong, I am most proud of my Malawian identity. | 83% |
| Affe | Imagine that a story in the international media criticized Malawians. Which of the following statements is closest to how you would feel? | |
| | I would not like it, but it would not feel like a personal insult. | |
| | I would not like it, and I would feel personally insulted. | 68% |
| | Which of the following statements is closest to your view? | |
| 'al | How well other Malawians are doing does not really affect how well I am doing. | |
| | How well I am doing really depends on how well other Malawians are doing. | 68% |
| Behavioral | Which of the following statements is closest to your view? | |
| Beh | Malawians from different regions of the country cannot manage without help from Malawians in other regions. | 74% |
| | Malawians from different regions of the country don't really have to rely on one another in order to manage. | |
| | Which of the following statements is closest to your view? | |
| | I see myself as quite similar to most Malawians. | 84% |
| lve | I see myself as quite different from most Malawians. | |
| Cognitive | Which of the following statements is closest to your view? | |
| ŭ | Even though there is a lot of cultural variety among Malawians, we are more the same than we are different. | 56% |
| | Because there is a lot of cultural variety among Malawians, there is very little that makes us the same. | |

Bolded items coded as 1 (stronger national identification).

The final column shows the percent of respondents who were coded as 1 for each item.

Source: Household survey, n = 508.

Table 2: The effect of shared nationality and shared ethnicity on trust in an anonymous partner.

| | Amour | nt Entrusted (MWK) |
|---|----------------|--------------------|
| | (1) | (2) |
| Conational | 2.59 (0.67) | 2.59 (0.67) |
| Coethnic | 2.95 (0.66) | 2.95 (0.66) |
| Constant | 26.15 (1.03) | 23.26 (2.09) |
| Round Fixed Effects | Yes | Yes |
| Controls | No | Yes |
| Decisions (N_j) Participants (N_i) | 1700 428 | 1700 428 |

GLS regressions with participant random-effects and the following control variables: gender, education, ethnicity, frequency of market interaction, and market location. Participant-clustered standard errors in parentheses.

Table 3: The effect of national identification, national identity salience, and their interaction on the size of the coethnic trust premium among conationals.

| | | Amount Entr | usted (MWK) | |
|--|--|---------------------------------------|--|--|
| | (1) Composite National Identification | (2) Affective National Identification | (3) Behavioral National Identification | (4) Cognitive National Identification |
| Coethnic | 5.50 (1.31) | 5.19 (1.34) | 5.35 (1.31) | 5.41 (1.30) |
| National Identification | 1.77 (1.25) | -0.25 (1.41) | 0.64 (1.31) | 2.12 (1.18) |
| Coethnic \times National Ident. | -1.95 (1.29) | 0.84 (1.40) | -1.08 (1.18) | -2.44 (1.34) |
| National Identity Prime | 0.36 (1.85) | 0.24 (1.87) | 0.22 (1.86) | 0.32 (1.85) |
| Coethnic \times Prime | -2.92 (1.99) | -2.57 (2.02) | -2.80 (1.99) | -2.84 (1.99) |
| Prime \times National Ident. | -3.20 (1.89) | 1.26 (1.95) | -2.52 (1.82) | -2.92 (1.85) |
| Coethnic \times Prime \times National Ident. | 4.63 (1.67) | $0.30 \\ (1.85)$ | 2.43 (1.72) | 3.88 (1.82) |
| Constant | $25.13 \\ (2.61)$ | 25.61 (2.60) | 25.33 (2.59) | 25.22 (2.58) |
| Round Fixed Effects | Yes | Yes | Yes | Yes |
| Controls | Yes | Yes | Yes | Yes |
| Decisions (N_j) Participants (N_i) | 855 428 | 855 428 | 855 428 | 855 428 |

GLS regressions with participant random-effects and the following controls: gender, education, ethnicity, frequency of market interaction, and game session location. Participant-clustered standard errors in parentheses.

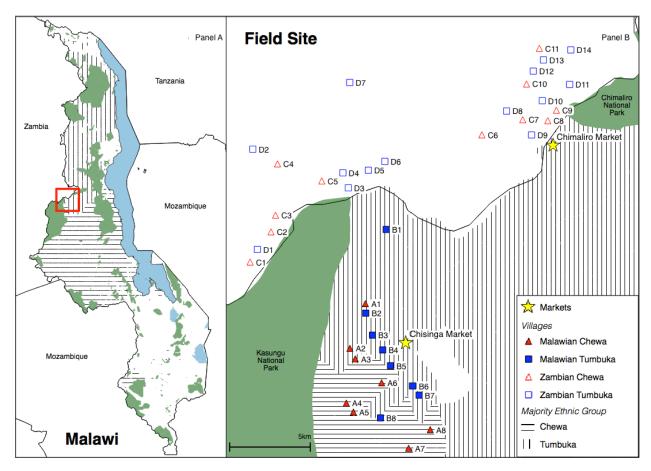


Figure 1: Panel A shows the distribution of members of the Chewa and Tumbuka ethnic groups within Malawi and the location of the field site.

Panel B provides greater detail of the field site, including the location of all study villages, their ethnic make up, and the location of the two weekly markets.



Figure 2: National Identity Prime: Discussion of the symbolism of the 1964 Malawian national flag (left) and the 2010 Malawian national flag (right).

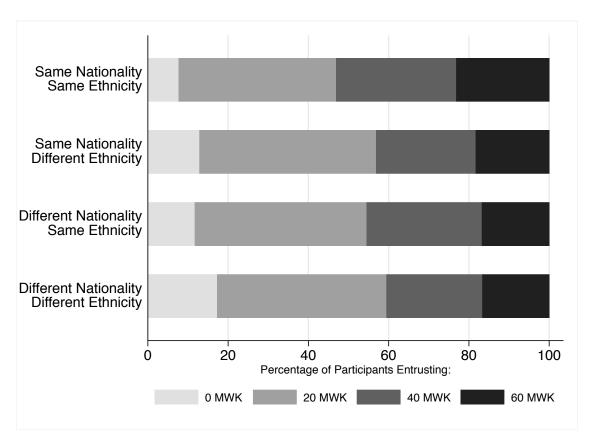
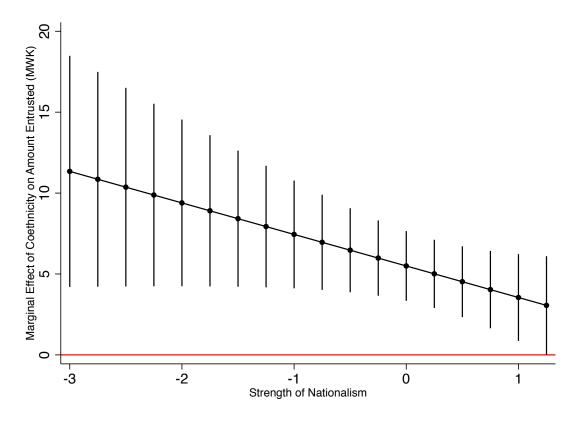
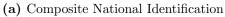
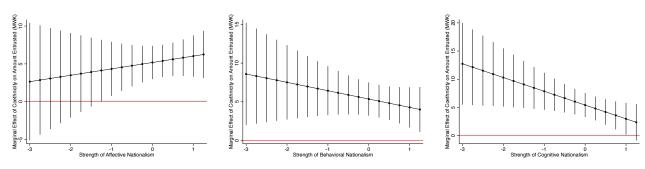


Figure 3: Contributions entrusted to different partner types.

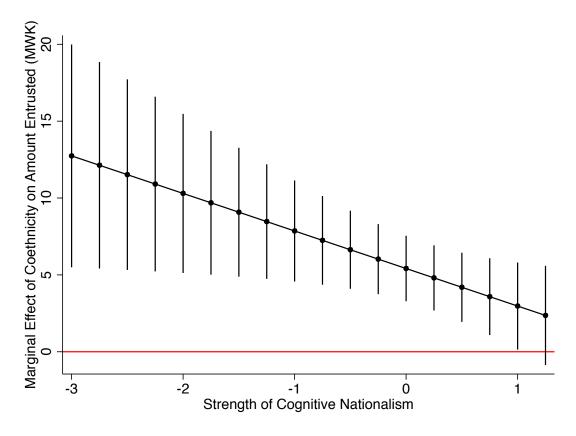




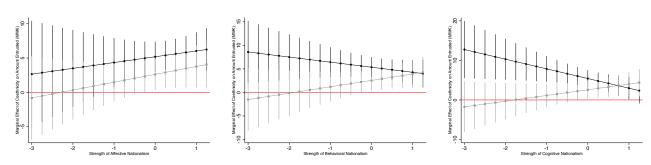


(b) Affective National Identification (c) Behavioral National Identifica-(d) Cognitive National Identification tion

Figure 4: The effect of shared ethnicity on amount entrusted to an anonymous partner as a function of four different measures of national identification (when national identity is not primed). Bands represent 90% confidence intervals.



(a) Composite National Identification



(b) Affective National Identification (c) Behavioral National Identifica-(d) Cognitive National Identification tion

Figure 5: The effect of shared ethnicity on amount entrusted to an anonymous partner as a function of four different measures of national identification and the experimental priming of the national identity. Bands represent 90% confidence intervals.

Online Appendix:

Nationalism and Ethnic-Based Trust: Evidence from an African Border Region

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Appendix A Measuring Strength of National Identification

Because I developed a new measure of strength of nationalism, I also included the standard Afrobarometer question that measures national relative to ethnic identification on the study questionnaire. The Afrobarometer question asks "Let us suppose that you had to choose between being a [Ghanaian/Kenyan/etc.] and being a [respondent's identity group]. Which of these two groups do you feel most strongly attached to?" with response categories being "I feel only [Ghanaian/Kenyan/etc.]," "I feel more [Ghanaian/Kenyan/etc.] than (r's groups)," "I feel equally [Ghanaian/Kenyan/etc.] and (r's groups)," "I feel more (r's group) than [Ghanaian/Kenyan/etc.]," and "I feel only (r's group)."

Figure A.1 shows that my composite measure of national identification and the Afrobarometer question are strongly related: the strongest average national identification by my measures is observed for those respondents who claimed to identify only with their national identity in response to the Afrobarometer question, and national identification strength decreases as the national identity becomes less preferred relative to the ethnic identity in the Afrobarometer question. For example, among respondents who answered the Afrobarometer question with "I feel only [Ghanaian/Kenyan/etc.]," the average strength of national identification using my novel composite measure is 0.10. This number decreases to 0.04 for those who said "I feel more [Ghanaian/Kenyan/etc.] than (r's groups)," to 0.02 for those who said "I feel equally [Ghanaian/Kenyan/etc.] and (r's groups)," to -0.21 for those who said "I feel more (r's group) than [Ghanaian/Kenyan/etc.]," and to -0.26 for those who said "I feel only (r's group)."

While this speaks to the validity of the measure, there are several reasons why the composite measure I developed is preferable to the standard question. First, my measure captures strength of national identification without anchoring to ethnic identification. The standard Afrobarometer question implicitly assumes that national and ethnic forms of group identification are antithetical, but research has shown that this is not necessarily the case (De la Garza et al., 1996; Sidanius et al., 1997). As a result, the relative measure may not always offer a good indication of strength of nationalism: a respondent with both weak national and weak ethnic identification will look similar to a respondent with equally strong ethnic and national identification, even though the latter has much stronger national identification. Second, unlike the Afrobarometer question, the measure I developed gives concrete statements and asks whether the respondent agrees or disagrees. Such binary response categories increase inter-respondent question validity. Third, my measure allows for the desegregation of national identification into different types. This makes it possible to evaluate whether different "types" of national identification have different impacts on interethnic trust.

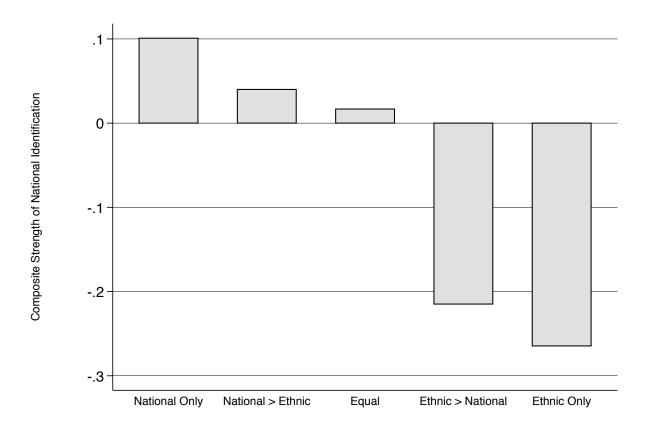


Figure A.1: Strength of national identification as a function of response to the standard Afrobarometer measure of national relative to ethnic identification.

Appendix B Summary Statistics

Descriptive Statistics

The household survey data was collected for 508 Malawians (31–32 per village in 16 villages), and the survey and behavioral games were carried out for 428 of those 508 Malawians (206 Chewa and 222 Tumbuka).²⁸ 465 (92%) of the 508 Malawians who were invited actually showed up for their assigned game session. Of those 465, data were not collected on 14 because they showed up late or enough participants had already shown up from their village, and 23 people were excluded from the dataset because their demographic information (age, gender, marital status, level of education) did not match across the two surveys, suggesting that the market study participant was not the same person as the individual originally interviewed. The 428 participants do not differ significantly from the 80 participants excluded as mismatches, no shows, and late shows in terms of composite or constituent measure of strength of national identification, or education level (Table B.1). However, excluded potential participants were, on average, more likely to be male and from the Chewa ethnic group and had weaker affective nationalism.

Table B.1: Covariate Balance for Sample vs. No Shows

| | No Shows | Sample | Difference |
|-------------------------|----------|--------|-------------|
| National Identification | 0.03 | -0.01 | 0.04 |
| Affective NatId | -0.18 | 0.03 | -0.21^{*} |
| Behavioral NatId | 0.06 | -0.01 | 0.07 |
| Cognitive NatId | 0.01 | -0.00 | 0.01 |
| Education Completed | 6.41 | 5.84 | 0.58 |
| Male | 0.65 | 0.52 | 0.13^{**} |
| Chewa Ethnicity | 0.60 | 0.48 | 0.12^{*} |

Statistical differences determined by a two-tailed t-test.

Table B.2 provides summary statistics for the 428 Malawian participants from whom we have all three sources of data. All four measures of national identification strength (composite, affective, behavioral, and cognitive) have a mean near 0 and standard deviation near 1 because of standardization (slight deviations result from the fact that the measures were standardized for all interviewed participants (n = 508)). All measures are negatively skewed. Roughly half of all participants were exposed to the flag prime due to random

^{*} p < 0.10 ** p < 0.05 *** p < 0.01

²⁸While not a main focus of the project, we also collected (as a by-product of the research design) trust game behavior for 341 Zambians (168 Chewa and 172 Tumbuka), although the Zambian participants were not selected randomly and a few Zambian villages were invited to send participants more than once.

assignment. The average level of education is almost 6 years of schooling, 52% of participants were male, 48% of participants were Chewa ethnicity, 46% of game sessions were conducted at Chisinga Market, and the average frequency of market attendance was 1-2 times per week.

Table B.3 reports summary statistics for all 1700 trust decisions made by the 428 participants. The average amount entrusted was 30 MWK, with 12%, 42%, 27%, and 19% entrusting 0 MWK, 20 MWK, 40 MWK, and 60 MWK, respectively. Decisions were evenly spread over the different game orderings, with 25% of decisions made first, second, third, or fourth.

Table B.2: Summary Statistics

| | Mean | Std. Dev. | Min. | Max. | N |
|-------------------------|-------|-----------|-------|-------|-----|
| National Identification | -0.01 | 1.00 | -3.45 | 1.33 | 428 |
| Affective NatId | 0.03 | 0.99 | -2.75 | 1.00 | 428 |
| Behavioral NatId | -0.01 | 1.01 | -2.55 | 1.10 | 428 |
| Cognitive NatId | -0.00 | 0.99 | -2.46 | 1.08 | 428 |
| Flag | 0.52 | 0.50 | 0.00 | 1.00 | 428 |
| Education Completed | 5.84 | 3.01 | 0.00 | 12.00 | 428 |
| Male | 0.52 | 0.50 | 0.00 | 1.00 | 428 |
| Chewa Ethnicity | 0.48 | 0.50 | 0.00 | 1.00 | 428 |
| Chisinga Market | 0.46 | 0.50 | 0.00 | 1.00 | 428 |
| Market Frequency | 1.46 | 1.12 | 0.00 | 6.00 | 428 |
| Observations | 428 | | | | |

Table B.3: Summary Statistics

| | Mean | Std. Dev. | Min | Max | N |
|------------------------|-------|-----------|------|------|------|
| Amount Entrusted (MWK) | 30.36 | 18.68 | 0.00 | | |
| Entrusted 0 MWK | 0.12 | 0.33 | 0.00 | | 1700 |
| Entrusted 20 MWK | 0.42 | 0.49 | 0.00 | 1.00 | 1700 |
| Entrusted 40 MWK | 0.27 | 0.44 | 0.00 | 1.00 | 1700 |
| Entrusted 60 MWK | 0.19 | 0.39 | 0.00 | 1.00 | 1700 |
| First Trust Decision | 0.25 | 0.43 | 0.00 | 1.00 | 1700 |
| Second Trust Decision | 0.25 | 0.43 | 0.00 | 1.00 | 1700 |
| Third Trust Decision | 0.25 | 0.43 | 0.00 | 1.00 | 1700 |
| Fourth Trust Decision | 0.25 | 0.43 | 0.00 | 1.00 | 1700 |
| Observations | 1700 | | | | |

By Ethnic Group

Table B.4 presents summary statistics by ethnic group for the composite measure of national identification, the three constituent measures of national identification, overall amount entrusted, and proportions of each amount entrusted. The only apparent difference is that Tumbuka participants expressed stronger national identification than Chewa participants, but the difference is only statistically significant for the aggregated measure of national identification. Stronger nationalism among the Tumbuka is somewhat surprising given the centrality of Chewa cultural traditions in Malawian national culture (Kaspin, 1995). However, these patterns are consistent with existing public opinion data from Malawi (Afrobarometer, 2012) that shows only 33 percent of Chewa identify more nationally than ethnically, while 42 of Tumbuka do so.

Table B.4: Differences by Ethnic Group

| | Tumbuka | Chewa | Difference |
|-------------------------|---------|-------|------------|
| National Identification | 0.08 | -0.10 | 0.19* |
| Affective NatId | 0.07 | -0.01 | 0.08 |
| Behavioral NatId | 0.05 | -0.08 | 0.13 |
| Cognitive NatId | 0.07 | -0.08 | 0.15 |
| Amount Entrusted (MWK) | 32.79 | 34.66 | -1.87 |
| Entrusted 0 MWK | 0.09 | 0.07 | 0.02 |
| Entrusted 20 MWK | 0.40 | 0.39 | 0.01 |
| Entrusted 40 MWK | 0.31 | 0.29 | 0.02 |
| Entrusted 60 MWK | 0.21 | 0.26 | -0.05 |

Statistical differences determined by a two-tailed t-test.

Experimental Balance

Consistent with random assignment to experimental treatment, there were no statistically significant differences in observables between the control and treatment groups.

^{*} p < 0.10 ** p < 0.05 *** p < 0.01

Table B.5: Covariate Balance by Experimental Assignment

| | Control Group | Treatment Group | Difference |
|-------------------------|---------------|-----------------|------------|
| National Identification | 0.05 | -0.06 | 0.10 |
| Affective NatId | 0.11 | -0.04 | 0.15 |
| Behavioral NatId | 0.01 | -0.03 | 0.04 |
| Cognitive NatId | 0.04 | -0.04 | 0.07 |
| Education Completed | 5.71 | 5.95 | -0.24 |
| Male | 0.49 | 0.55 | -0.06 |
| Chewa Ethnicity | 0.47 | 0.49 | -0.02 |
| Chisinga Market | 0.45 | 0.47 | -0.01 |
| Market Frequency | 1.48 | 1.43 | 0.05 |

Statistical differences determined by a two-tailed *t*-test.

^{*} p < 0.10 ** p < 0.05 *** p < 0.01

Table B.6: Descriptive Statistics from Trust Games Across Africa

| | Full Sam- SNSE | SNSE | | | | | | | | |
|--------------------|-----------------------|-------------|------------|----------------|-----------|------------|-----------|----------|------------|---------|
| | ple | Only | | | | | | | | |
| Country | Malawi | Malawi | Kenya | Zimbabwe Ghana | Ghana | Uganda | S. Africa | Tanzania | | Kenya |
| Study Population | 16 Villages 16 Villag | 16 Villages | 5 Villages | 24 Villages | 22 Firms | 2 Villages | Students | Church | 2 Villages | Nairobi |
| Trust Game Pairs | 1671 | 421 | 20 | 141 | 212 | 29 | 64 | 63 | 25* | 134 |
| Discrete Choices | 4 | 4 | 11 | 5 | 5 | 5 | 11 | 11 | 11 | 9 |
| Avg. Entrusted | 0.51 | 0.56 | 0.44 | | 0.45 | 0.49 | 0.45 | 0.56 | 0.35 | 0.30 |
| % Trusting Nothing | 0.12 | 0.08 | 0.00 | 0.09 | 0.15 | 0.07 | 0.11 | 0.00 | 0.04 | 0.13 |
| % Trusting All | 0.19 | 0.23 | 0.00 | | 0.11 | I | 0.16 | 0.22 | 0.04 | ı |
| Avg. Returned | 0.79 | 0.83 | 1.54 | | 1.49 | 0.99 | I | 1.46 | 0.98 | 0.82 |

Note:*Only subjects in Cronk's (2007) unframed Trust Game are included here. Sources: Ensminger (2000), Barr (2003), Barr (2004), Mosley & Verschoor (2005), Ashraf et al. (2006), Danielson & Holm (2007), Cronk (2007), Greig & Bohnet (2008).

Appendix C Trust Game Instructions

The following scripts were developed using the game scripts provided by Schechter (2007).

I augmented the standard instructions by adding an explicit frame for understanding the game. In particular, during the general instructions to the entire group of participants, we framed the game as analogous to the decision about whether to sell one's surplus maize locally versus sending the maize with a virtual stranger to be sold in the capital for a much higher price (see below for the exact language used). The frame was included for three reasons. First, because of its abstract nature, the game can be difficult to understand. Focus group discussions during piloting suggested that the maize selling frame most closely resembled the logic of the trust game and made the instructions much easier for participants to understand. Second, the theoretical motivation for using the trust game to measure interpersonal trust at the micro-level is to help understand the impact of ethnic difference on economic interactions under different levels of national identification. By framing the trust game as an economic transaction that most participants had engaged in, the trust game became both more familiar and more connected to the theoretical motivation of the project. Third, existing scholarship has shown that the way in which a game is understood vis-a-vis different cultural or economic frames affects the way in which individuals behave within that game (Ensminger, 2000; Burnham et al., 2000; Cronk, 2007). Thus, explicitly providing a frame reduces the likelihood that different individuals used different frames in making behavioral decisions.

The general instructions for the entire group were given first in Chichewa and then repeated in Chitumbuka. Individual instructions were given to participants in their native language.

Instructions to Entire Group

Thank you all for taking the time to come today. Today's activities may take three to four hours. Before we begin I want to make some general comments about what we are doing here today and explain the rules that we must follow. We will ask each of you a few questions about yourself and your opinions, and then we will be doing some activities with money. Whatever money you earn during the activities will be yours to keep and take home. We will be supplying the money. This money was given to us by Stanford University to use for research.

Today you will be participating in this activity with people from four different villages, one of them your own. Fifteen residents from four different villages are here today. [Research supervisor lists the four participating villages in alphabetical order This means that there are both Malawians and Zambians, and both Chewas and Tumbukas.

Before we proceed any further, let me stress something that is very important. Many of you were invited here without understanding very much about what we are planning to do today. If at any time you find that this is something that you do not wish to participate in for any reason, you are of course free to leave whether we have started the activity or not.

We will be asking you to do an activity with other individuals in this room today. If you have heard anything about these types of activities, you should try to forget about that because each activity can be completely different. It is important that you listen as carefully

as possible, because only people who understand the way the activity works will actually be able to participate.

We will run through some examples of how the activity works here while we are all together. You cannot ask questions or talk while here in the group. This is very important. Please be sure that you obey this rule, because it is possible for one person to spoil the activity for everyone. If one person talks about the activity while sitting in the group, we would not be able to carry out the activity today. Do not worry if you do not completely understand the rules as we go through the examples here in the group. Each of you will have a chance to ask questions in private to be sure that you understand how the activity works.

After we have explained the activity, you will all go outside and wait while we call you in one at a time to participate. We will call you by the number on your ticket, so please listen carefully for your number. While you are outside you can talk about football, the market, or anything else you want other than the activities here today.

The activity we are going to do today is sort of like a game, but because you can earn money depending on the decisions you make, it is much more serious than a game just for fun. In fact, the activity is similar to real decisions you might make in your day to day life. For example, imagine that you want to sell a bag of maize. You know that a bag of maize is currently selling for 1500 MWK in this market (Chisinga/Chimaliro), but around 3000 MWK in Lilongwe (capital of Malawi). You've heard that someone is taking a load of maize down to Lilongwe for a small fee, but you do not know this person personally. If you decide to send your bag of maize to be sold by this stranger in Lilongwe, a number of things might happen. The trader may return the following week with your 3000 MWK, he may never bring you the money you are owed, or he may return some amount of money between 0 and 3000 MWK. So, if you do not trust this stranger, you should just sell your maize locally, but if you trust that he will return at least 1500 MWK to you, you should send your bag with him. The activity we are going to do today parallels this kind of decision.

Each activity is played by a pair of individuals. Each pair is made up of a Player 1 and a Player 2. Each of you will participate in this activity 8 times, four times as a Player 1 and four times as a Player 2.

You will be Player 1 four times. Each time you are Player 1, you will have a different partner. In one activity, your partner will be from your own village. In each of the other three times you are Player 1, your partner will be from each of the other three villages. We will tell you which village your partner is from, but we will not tell you which person from that village your partner is. It is important for you to remember that each time you play will be with a different person from a different village.

After everyone has been Player 1 four times, you will each have the chance to be Player 2 four times. As Player 2, you will also be paired with four different people one from each of four different villages represented here today. Again, we will tell you which village your Player 1 partner is from, but we will not tell you which particular person from each village you will be paired with. Remember that you will never be paired with the same person twice. Thus, you will do this activity 8 times total, always with a different partner from this room.

Heres how the activity works. Each activity will have two players: Player 1 and Player

2.

When you are Player 1, we will give you 60 MWK for each activity. Player 1 then has the opportunity to send a portion of his 60 MWK to Player 2. He could send 60, or 40, or 20, or nothing. We will triple whatever amount Player 1 decides to give to Player 2 and then Player 2 has the option of returning any portion of this tripled amount to Player 1. Then the activity is over.

After every player has decided how much, if any, to put into the four different envelopes it will be time to be Player 2. Each of you will come into the room one at a time, and you will see how much each of your Player 1 partners sent to you in your envelope, which will then be tripled. For each of the four envelopes sent to you, you will decide how much (if any) of the money in the envelope you want to keep and how much (if any) you want to leave in the envelope to be returned to the person who placed the money there for you.

After every player has decided what to do with the money in the envelopes given to them, we will call you one at a time one last time to open up your original envelopes and see how much, if any, money was returned to you by Player 2. Thus for each time as Player 1, the player will go home with whatever he kept from his original 60 MWK, plus anything returned to him by Player 2. For each time as Player 2, he goes home with whatever was given to him by Player 1 and then tripled by the research team, minus whatever he returned to Player 1. At the very end, you will go home with the amount you earned from four times as Player 1 and four times as Player 2.

Here are some examples.

[Research assistants acted out the following examples. When each hypothetical Player 1 makes their choice, money was put in an envelope. Then, research assistants visually showed Player 2 opening the envelope and visually showed the effect of tripling the money. Then, Player 2 made his decision by putting the returned amount in an envelope. The first two examples were acted out, and then the entire above instructions were given in Chitumbuka, followed by the last two examples.]

- 1. Imagine that Player 1 gives 60 MWK to Player 2. We triple this amount, so Player 2 gets 180 MWK (three times 60 equals 180). At this point, Player 1 has nothing and Player 2 has 180 MWK. Then Player 2 has to decide whether he wishes to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return 120 MWK to Player 1. At the end of the activity Player 1 will go home with 120 MWK and Player 2 will go home with 60 MWK.
- 2. Imagine that Player 1 does not send anything to Player 2. There is nothing for us to triple. Player 2 gets 0 MWK and so cannot return anything. At the end of the activity Player 1 will go home with 60 MWK and Player 2 will go home with nothing.
- 3. Imagine that Player 1 gives 40 MWK to Player 2. We triple this amount, so Player 2 gets 120 MWK (three times 40 equals 120). At this point, Player 1 has 20 MWK and Player 2 has 120 MWK. Then Player 2 has to decide whether he wishes to give anything back to Player 1, and if so, how much. Suppose Player 2 decides not to return any money to Player 1. At the end of the activity Player 1 will go home with 20 MWK and Player 2 will go home with 120 MWK.

4. Imagine that Player 1 gives 20 MWK to Player 2. We triple this amount, so Player 2 gets 60 MWK (three times 20 equals 60). At this point, Player 1 has 40 MWK and Player 2 has 60 MWK. Then Player 2 has to decide whether he wishes to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return 40 MWK to Player 1. At the end of the activity Player 1 will go home with 80 MWK and Player 2 will go home with 20 MWK.

Note that the larger the amount that Player 1 gives to Player 2, the greater the amount that can be earned by the two players combined. However, it is entirely up to Player 2 to decide what he should give back to Player 1. The first player could end up with more than 60 MWK or less than 60 MWK as a result.

We will go through more examples with each of you individually when you come in one at a time. In the meantime, do not talk to anyone about the activity. Even if you are not sure that you understand the activity, do not talk to anyone about it. This is important. If you talk to anyone about the activity while you are waiting to play, we must disqualify you from participating.

Now we will call in each person one by one to decide whether or not to send any money to each of your four different partners, and if so, how much. After all of you have played as Player 1, then each of you will come in a second time to play as Player 2.

Instructions to Player 1 Participant

[Participant is called in using his or her Game Identification Number, which he or she has on piece of paper received upon registration. Informed consent was obtained, and then the Market Survey was administered. After the market survey was completed, the research assistant gave the following instructions in the language of the participant:]

You will now do the activity as Player 1 four times. For each activity, you will have a different Player 2 partner. In one activity, your Player 2 partner will be from your own village. In each of the other three times you are Player 1, your Player 2 partner will be from each of the other three villages. I will tell you which village your Player 2 partner is from, but we will not tell you which person from that village is your partner. It is important for you to remember that each time you play will be with a different person from a different village.

For each activity, I will give you 60 MWK and you can decide how much to send of that 60 MWK to Player 2. You can send 60, or 40, or 20, or nothing. We will triple whatever amount you decide to give to Player 2 before it is passed on to Player 2. Player 2 then has the option of returning any portion of this tripled amount to you. Then the activity is over.

Let me go through some examples:

[As research assistants went through these examples, the used real money and moved the money around to illustrate how much each hypothetical player possessed at each stage of the game.]

1. Imagine that Player 1 gives 40 MWK to Player 2. We triple this amount, so Player 2 gets 120 MWK (three times 40 equals 120). At this point, Player 1 has 20 MWK and Player 2 has 120 MWK. Then Player 2 has to decide whether he wishes to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return

- 40 MWK to Player 1. At the end of the activity Player 1 will go home with 60 MWK and Player 2 will go home with 80 MWK.
- 2. Imagine that Player 1 gives 20 MWK to Player 2. We triple this amount, so Player 2 is sent 60 MWK (three times 20 equals 60). At this point, Player 1 has 40 MWK and Player 2 has 60 MWK. Then Player 2 has to decide whether he wishes to give anything back to Player 1, and if so, how much. Suppose Player 2 decides to return 20 MWK to Player 1. At the end of the activity Player 1 will go home with 60 MWK and Player 2 will go home with 40 MWK.

Now I want to ask you some questions, to see if you understand the game:

- 1. Imagine that you give all 60 MWK to Player 2. How much will you have left? (0 MWK) How much will Player 2 receive? (180 MWK, three times 60 equals 180) If Player 2 returns 120 MWK to you, how much will you have total? (120 MWK) How much will Player 2 take home? (60 MWK)
- 2. Imagine that you give 20 MWK to Player 2. How much will you have left? (40 MWK) How much will Player 2 receive? (60 MWK, three times 20 equals 60) If Player 2 returns nothing to you, how much will you have total? (40 MWK) How much will Player 2 take home? (60 MWK)

[If the participant answered these questions correctly, the research assistant proceeded to administer the game. If the participant did not understand, the research assistant would explain the game again until the participant was able to correctly answer the questions above.]

Now you will play as Player 1 four times, with four different individuals here today.

First, you will play with a person from _____Village.

Here are your 60 MWK.

[At this point 60 MWK were handed to the participant.]

Here is the envelope. Whatever you want to send to this person from _____Village, you should put in the envelope. Whatever you want to keep, you put in your pocket.

You can send them nothing, 20, 40, or 60 MWK, it's up to you. Player 2 will receive this amount tripled by me. Remember the more you give to Player 2 the greater the amount of money at his or her disposal. While Player 2 is under no obligation to give anything back, we will pass on to you whatever he or she decides to return. I am going to turn my back, and I want you to put whatever money you want to send in the envelope [This was repeated for each of the three other partners from each of three other villages.]

[11613 was repeated for each of the three other partners from each of three other otherses.

Instructions to Player 2 Participant

Now you are playing as Player 2 four times, with four different individuals here today. Four different individuals from four different villages decided how much money to send to you. Remember, these are not the same individuals you were paired with when you were Player 1.

We will open each of your four envelopes. For each envelope, you will decide how much of the money in the envelope to return to the person that sent that money to you. Remember you can return nothing or keep nothing or anything in between.

| Here is the envelope that was sent to you by a person fromVillage . How much is in it? As you remember, I will now triple the amount sent to you. I will addMWK to make itMWK total. |
|--|
| [Research assistant recorded on the envelope how much money it contained. He then added two times that amount in order to produce a total equal to triple the amount sent by Player |
| 1.] I will turn my back while you decide how much of that money you want to keep for |
| yourself, and how much would you like to return to person from Village that sent you that money. Whatever you want to send back, put in the envelope, and put the rest in your |
| pocket. [This is repeated for each of the three other partners from each of three other villages.] |
| Instructions to Player 1 Participant in Final Round |
| Now we are going to open each of the four envelopes you sent to other players when you were Player 1. We are going to see how much they returned of the money that you sent them, and then we tripled. |
| Here is the first envelope. You sentMWK to your partner fromVillage. |
| We tripled that amount and made itMWK. How much did your partner return to you? |
| [Research assistant recorded the amount returned on the envelope and the participant put the |

money in his or her pocket. This was repeated for all four envelopes.]

Appendix D Robustness

Ordered Probit Estimates

Model 1 of Table D.1 reports the results of an ordered probit model of the impact of shared nationality and shared ethnicity on trust behavior. This model includes participant random-effects and round fixed-effects. Similar the main results, these models show that participants condition their trust in roughly equal measure on both shared nationality and shared ethnicity. Table D.2 reports the predicted probabilities of entrusting 0, 20, 40, and 60 MWK for each type of partner in the trust game.

Model 2 of Table D.1 reports the results of models estimating the impact of national identification strength, national identity salience, and their interaction on the size of the coethnic trust premium among conationals. The results are qualitatively similar to treating trust as continuous: there is a positive coethnic bias, but this bias is decreased by strong national identification or the presence of a national prime, especially among weak national identifiers.

Table D.1: Main results replicated using ordered probit.

| | Amount | Entrusted (MWK) |
|--|----------------|-----------------|
| | (1) | (2) |
| Conational | 0.23 (0.06) | |
| Coethnic | 0.26 (0.06) | 0.51 (0.12) |
| National Identification | | 0.18 (0.11) |
| Coethnic \times National Ident. | | -0.19 (0.11) |
| National Identity Prime | | 0.01 (0.17) |
| Coethnic \times Prime | | -0.27 (0.18) |
| Prime \times National Ident. | | -0.30 (0.18) |
| Coethnic \times Prime \times National Ident. | | 0.43 (0.15) |
| Cut 1 | -1.10 (0.19) | -1.42 (0.24) |
| Cut 2 | 0.73 (0.19) | 0.61 (0.24) |
| Cut 3 | 1.95 (0.19) | 1.86 (0.26) |
| Constant | 1.28 (0.17) | 1.44 (0.24) |
| Round Fixed Effects | Yes | Yes |
| Controls | Yes | Yes |
| Decisions (N_j) Participants (N_i) | 1700 428 | 855 428 |

Ordered probit regressions with participant random-effects and the following controls: gender, education, ethnicity, frequency of market interaction, and game session location. Participant-clustered standard errors in parentheses.

Table D.2: Predicted Probabilities by Partner Type

| | $_{ m MWK}^{ m 0}$ | 20 MWK | 40 MWK | 60 MWK |
|-----------------------------|--------------------|------------------|------------------|------------------|
| Non-Conational Non-Coethnic | 0.07 (0.01) | 0.57 (0.02) | 0.30 (0.02) | 0.06 (0.01) |
| Conational Non-Coethnic | 0.04 (0.01) | 0.51 (0.03) | 0.36 (0.02) | 0.09 (0.01) |
| Non-Conational Coethnic | 0.04 (0.01) | $0.50 \\ (0.03)$ | 0.37 (0.02) | $0.09 \\ (0.01)$ |
| Conational Coethnic | $0.02 \\ (0.01)$ | $0.42 \\ (0.03)$ | $0.42 \\ (0.02)$ | 0.14 (0.02) |

Alternative Measures of National Identification

In this appendix, I replicate the main results using two alternative measures of national identification, one based on a factor-based aggregation of the six questions measuring strength of national identification and one based on the standard Afrobarometer measure of national relative to ethnic identification.

PCA Measure of National Identification

For the main analyses, the strength of national identification measure was created for each participant by averaging across agreement with six statements (Table 1). In this section, I evaluate the robustness of this measure as a predictor of trust by evaluating a different aggregation approach. In particular, I utilize an unrotated principal component analysis (PCA). The six items in Table 1 load positively onto the first factor (eigenvalue = 1.4) and this first factor explains a significant component of the total variation (23%).

Table D.3 and Figure D.1 present the main results using this first factor (standardized) as the measure of national identification, which produces very similar results to the main specification using the average measure of national identification.

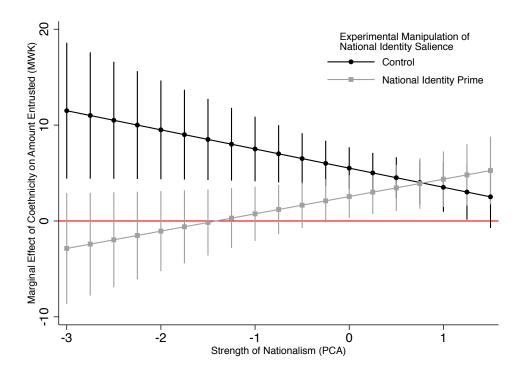


Figure D.1: The effect of shared ethnicity on amount entrusted to an anonymous partner as a function of national identification, measured using PCA, and the experimental priming of the national identity. Bands represent 90% confidence intervals.

Table D.3: Main results replicated using PCA measure of nationalism.

| | (1) Amount Entrusted (MWK) |
|--|---|
| Coethnic | 5.51 (1.32) |
| National Identification (PCA) | $ \begin{array}{c} 1.60 \\ (1.22) \end{array} $ |
| Coethnic \times National Ident. | -2.00 (1.25) |
| National Identity Prime | $0.39 \\ (1.86)$ |
| Coethnic \times Prime | -2.96 (2.01) |
| Prime \times National Ident. | -2.46 (1.90) |
| Coethnic \times Prime \times National Ident. | 3.80 (1.67) |
| Constant | 25.16 (2.61) |
| Round Fixed Effects | Yes |
| Controls | Yes |
| Decisions (N_j) Participants (N_i) | 855 428 |

GLS regressions with participant random-effects and the following controls: gender, education, ethnicity, frequency of market interaction, and game session location. Participant-clustered standard errors in parentheses.

Afrobarometer Measure of National Identification

In addition to my six questions designed to measure strength of national identification, participants were also asked the question designed by Afrobarometer: "Let us suppose that you had to choose between being a [Ghanaian/Kenyan/etc.] and being a [respondent's identity group]. Which of these two groups do you feel most strongly attached to?" with response categories being "I feel only [Ghanaian/Kenyan/etc.]," "I feel more [Ghanaian/Kenyan/etc.] than (r's groups)," "I feel equally [Ghanaian/Kenyan/etc.] and (r's groups)," "I feel more (r's group) than [Ghanaian/Kenyan/etc.]," and "I feel only (r's group)." Appendix A, above, shows that this measure is closely related to the aggregate index of national identification based on my novel six-item scale. In this section, I replicate the main results using the Afrobarometer measure of national relative to ethnic identification.

Table D.4 and Figure D.2 present the main results using the Afrobometer measure of national relative to ethnic identification, and the results are very similar to the main results reported in the paper. In particular, in the absence of the national identity prime, the size of the coethnic trust premium is decreasing with stronger national relative to ethnic identification, with the trust premium eliminated among respondents who identify with their national identity only. For those participants who were exposed to the national identity prime, coethnics and non-coethnics are trusted at the same rate (the coethnic trust premium is not distinguishable from zero) for all levels of national relative to ethnic identification. While the national identity prime treatment effects are not statistically significant for any level of national relative to ethnic identification, the largest treatment effect is estimated for participants who identify with their ethnic identity only (i.e., weak national identifiers).

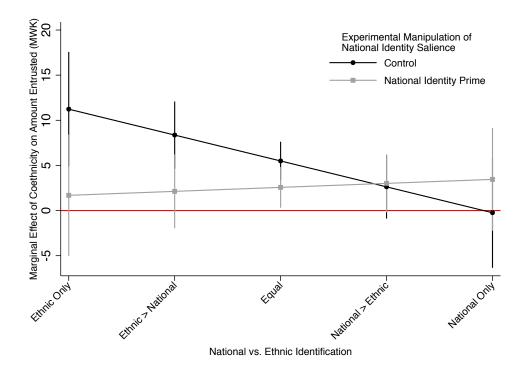


Figure D.2: The effect of shared ethnicity on amount entrusted to an anonymous partner as a function of national relative to ethnic identification, measured using the Afrobarometer question, and the experimental priming of the national identity. Bands represent 90% confidence intervals.

Table D.4: Main results replicated using Afrobarometer measure of nationalism.

| | (1) |
|---|------------------------|
| | Amount Entrusted (MWK) |
| Coethnic | -3.11 (5.41) |
| | (5.41) |
| National vs. Ethnic Identification | -0.75 (1.60) |
| Coethnic \times National vs. Ethnic Ident. | 2.87 (1.78) |
| National Identity Prime | -0.75 (7.25) |
| Coethnic \times Prime | 7.01 (7.58) |
| Prime \times National vs. Ethnic Ident. | 0.33 (2.43) |
| Coethnic \times Prime \times National vs. Ethnic Ident. | -3.31 (2.52) |
| Constant | 27.83 (5.20) |
| Round Fixed Effects | Yes |
| Controls | Yes |
| Decisions (N_j) | 855 |
| Participants (N_i) | 428 |

GLS regressions with participant random-effects and the following controls: gender, education, ethnicity, frequency of market interaction, and game session location. Participant-clustered standard errors in parentheses.

Appendix E Predicted Trust

Using the estimates presented in Model 1 of Table 3, I predict the amount entrusted by coethnicity, strength of nationalism, and national identity salience in Figure E.1. In the absence of the flag prime (black lines), participants give more to coethnics (triangles) than non-coethnics (squares), but this gap closes as strength of nationalism increases. When national identity is primed with the flag, participants with weak national identification reduce trust in coethnics (compare grey triangles to black triangles) and increase trust in non-coethnics (compare grey squares to black squares), while strong national identifiers trust both coethnics and non-coethnics at rates similar to those when national identity is not primed.

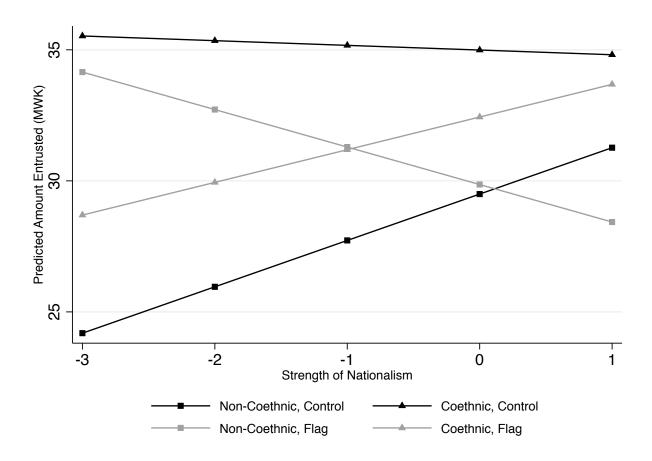


Figure E.1: Predicted amount entrusted to an anonymous partner as a function of shared ethnicity, strength of national identification, and the experimental priming of the national identity.

Appendix F Generalizability

Nationalism and Ethnic-Based Trust in 17 African Countries

The main results are based on a single field site in rural Malawi. It is thus important to consider the scope of their generalizability. In nationally-representative survey data from seventeen sub-Saharan African states (Afrobarometer, 2006), respondents were asked: "Let us suppose that you had to choose between being a [Ghanaian/Kenyan/etc.] and being a [respondent's identity group]. Which of these two groups do you feel most strongly attached to?" with response categories being "I feel only [Ghanaian/Kenyan/etc.]," "I Feel More [Ghanaian/Kenyan/etc.] than (r's groups)," "I Feel Equally [Ghanaian/Kenyan/etc.] and (r's groups)," "I Feel More (r's group) than [Ghanaian/Kenyan/etc.]," and "I Feel Only (r's group)."

In this cross-national sample, the average degree to which respondents prioritize their national identity vis-a-vis their ethnic identity is negatively associated with the average degree to which coethnics are trusted more than non-coethnics (Figure F.1). Further, national relative to ethnic identification is also negatively related to the size of the coethnic trust premium within countries (Figure F.2). While these data are observational rather than experimental, and attitudinal rather than behavioral, they suggest that the micro-level findings reported here are not unique to the specific location in which the data were collected.

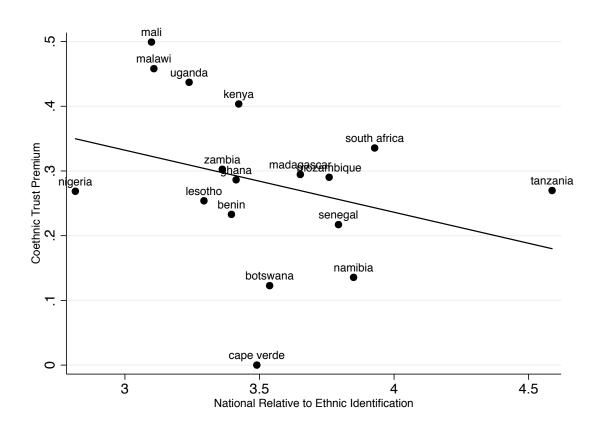


Figure F.1: The bivariate correlation between average national relative to ethnic identification and the average size of the coethnic trust premium for 17 African countries.

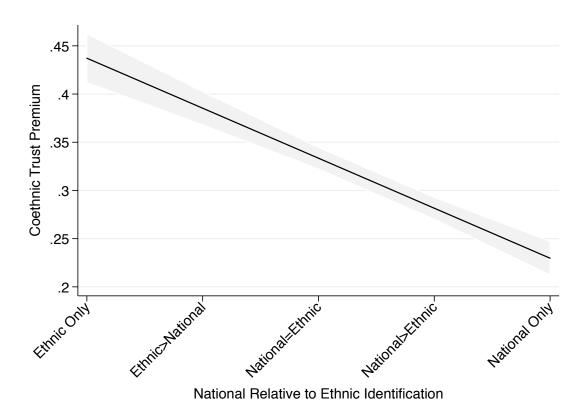


Figure F.2: The average within country relationship between individual-level national relative to ethnic identification and the size of the coethnic trust premium across 17 African countries. The relationship was estimated using a country fixed-effects regression.