Constructing Security: Explaining the Ethnic Composition of the Military

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March 20, 2013

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1   Introduction:

In this paper, I present a theory about an area of state policy where internal and external security demands collide: the ethnic composition of the military. The realist logic of internal balancing (Waltz 1979, 168) explains that external security threats require a large enough military to be able to balance against the threat. This need for military capabilities includes the need to raise a sufficiently large amount of manpower. If we ignored societal divisions within the country, we would expect to see that as the military capabilities of enemy states increase, the likelihood of recruitment increases equally for all military-age individuals within the country. In reality, recruitment rates vary widely between the various ethnic groups composing ethnically divided societies.

I integrate previous security-based explanations for ethnic military recruitment (Enloe 1980; Peled 1998), theorizing that rulers deliberately under-recruit from groups perceived as potentially disloyal due to grievances over political exclusion or because of having ethnic affinities toward the state's foreign enemies. In the absence of large-n, cross-national data on ethnic recruitment, I explore this theory's plausibility using a comparative case study of Iraq and South Africa. In general, the theory's predictions are strongly supported, although the analysis highlights several additional factors to take into account in future work on the subject. I conclude by highlighting other research areas where having a greater understanding of the logic of ethnic military recruitment, as well as cross-national data on recruitment rates, could help us better understand the outcomes studied.

2   Previous Explanations:

There is no single, well-defined literature on the subject of ethnic military recruitment. One cross-section of work focuses on ethnic recruitment as an independent variable, such as early modernization theorists (e.g., Gutteridge 1962) who lauded the military as a means for national integration due to its ability to help recruits transcend ethnic identity; citizenship scholars (e.g., Jacobs and Hayes 1981; Krebs 2006; Wong 2007) who analyze the effect of military service on the ability

of minority groups to achieve full citizenship status; and security sector reform analysts, who highlight the ability of integrating ethnic-based armed factions into a national military to avoid relapsing into civil war (e.g., Gaub 2011*a*; Ghosn and Sciabara n.d.; Glassmyer and Sambanis 2008). Notably, the vast majority of studies that deal with the subject of ethnic recruitment are a-theoretical case studies found in region-specific or country-specific journals.[1]

For the purposes of this study, I focus on works that deal with ethnic recruitment as a dependent variable. The subject of ethnicity in the military is only beginning to be taken into account by security scholars in the field-wide push to open up the "black box of domestic politics" (Kapstein 1995, 755). Studies are increasingly taking note of regime vulnerability as an important explanatory variable, but attention to social divisions like ethnic cleavages has lagged. Wendt and Barnett (1993) address the trade-off between creating labor-intensive (reliant on a large level of manpower) militaries versus capital-intensive (reliant on technologically sophisticated weaponry) militaries, pointing to regime vulnerability as a factor that may induce state leaders to shift to the latter so as to avoid revolution by not arming the masses. Maoz (2003) juxtaposes the traditional, foreign-threat-centric realist and liberal approaches to explaining the process by which states seek national security with a "revisionist" approach that emphasizes the need to protect against domestic threat, particularly in authoritarian regimes. Regime vulnerability is also considered by Schweller (2006), who addresses the phenomenon of "underbalancing" – failing to balance against external threats, despite having the material resources to do so. However, Schweller also considers the role of social divisions in producing underbalancing, theorizing that in states where ethnicity is both salient and polarizing, the state's ability to balance internally decreases, because the state is forced to consider the degree of loyalty of each of its ethnic groups in determining whether to recruit from that group (see also Hoyt 2007).

To date, there are three main studies that theorize specifically about the causes of ethnic military recruitment (Enloe 1980; Krebs 2005; Peled 1998). The most recent of these, Krebs 2005, provides an identity-based explanation for military recruitment. This explanation is billed as a

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[1]The bulk of these deal with five of the most famous examples of ethnically divided societies: Lebanon, Israel, South Africa, India, and the US.

competitor to earlier, security-based explanations; hence, I do not address it in the present study.

In a book considered the pioneering work on ethnic recruitment, Enloe 1980 introduces the concept of ethnic security maps. This study provides several foundational assumptions: that state leaders design the military to deal with both internal and external threat, that these elites decide on the level of access to permit other ethnic groups to the state's institutions, and that they make this decision on both the overall need for manpower and the perceived reliability of each group. Leaders allow the most reliable ethnic groups into power, and the level of access decreases as the leaders' perception of the group's reliability decreases. As one of the most important pillars of support for the social order, Enloe examines the military as the state institution where the theorized process is be most likely to be seen at work. The context of external threat determines how much manpower is necessary overall; as threat rises, the state taps more reliable groups first, then the next-most reliable, etc., until it obtains the manpower it needs to balance against the threat. Enloe's study provides the basic foundation for a security-based theory. However, like most pioneering work, her theory stands in need of some refinement, such as operationalizing its concepts, before it can be made suitable for eventual statistical testing.

The third theory of ethnic recruitment is found in Peled 1998. Peled partially operationalizes the security-based explanation provided by Enloe (1980) and then weighs the influence of security fears against a second factor, military professionalism. Peled's contribution to Enloe's security explanation is in identifying a specific cause of unreliability perceptions: trans-border ethnic ties, which create divided loyalty. This mindset he calls the Trojan horse dilemma: state leaders need all the manpower they can get to protect against foreign enemies, but if they let groups having ethnic affinities toward those enemies into the military – and particularly into positions of command – they may use their position to betray the state. His study's other contribution, which I do not address in the present study, is in assuming that that while civil leaders care more about political reliability, military leaders care more about efficiency and battlefield effectiveness, and as a result military professionalism can offset the influence of civil leader's fears about reliability. In the theory presented below, I incorporate Peled's insight that ethnic affinities may be one source of

loyalty concerns. However, Peled's theory leaves out the equally important internal-security aspect of Enloe's theory: grievances, which stem from political exclusion. The theory to which I now turn integrates both of these factors, grievance and affinity.

3 Integrated Explanation:

The scope of this theory is limited to ethnically divided societies. I conceptualize ethnically divided societies using Wimmer et al.'s (2009) criteria of ethnicity being politically salient at the national level and ethnic groups being mobilized as such within the political sphere, adding also the criterion that the second-largest ethnic group must be sufficiently large to have to take into account in designing state institutions. All actors are assumed to have an ethnic affiliation, which is assumed to be public information. I treat ethnicity and ethnic affinities as exogenous and static.

The theory starts with the assumption of a single state leader, who comes from a ruling ethnic group, and whose main priority is to stay in power. I assume that the leader faces three potential threats to his or her power, each requiring a loyal military to protect against. These threats include foreign invasion, revolution, and military *coup d'etat*, and each results in deposition for the leader if successful. Ethnicity is assumed to influence how the leader perceives the reliability of potential military recruits through two separate but closely related factors: the leader's perception of each recruit's level of grievance regarding how well the political system represents his or her ethnic group, and the leader's perception of the recruit's affinity toward the state's enemies he or she may be required to fight against. I explain each of these factors in turn.

In an ethnically divided society, when there is a change of rulership from one ethnic group to another, and a new leader comes into power, the leader must decide which of the other ethnic groups in the state to allow to share in power. This decision is made so as to minimize the level of internal threat that the leader will face thereafter, and it involves something of a dilemma. On the one hand, following Enloe (1980), leaders understand that allowing an ethnic group to share in power provides that group with greater *ability* to challenge the leader's rule, should it desire to

do so, because it provides that group with access to the state's institutions to be able to use them against the leader. Therefore, leaders would want to allow only ethnic groups perceived as reliable to share power. Additionally – and this is a point that Enloe (1980) does not take into account – excluding an ethnic group from power should increase its *desire* to challenge the leader's rule, because exclusion means that the ethnic group is not able to compete for spoils within the political system. Therefore, the excluded group should be more likely to rebel (Wimmer, Cederman, and Min 2009).

For now, I treat the decision of which ethnic groups to allow to share in power as exogenous to the process of deciding which groups to recruit into the military.[2] Groups that were not allowed representation in the government can be presumed to carry a grievance against the regime, either as the basis for their exclusion or as a result of their exclusion. Consequently, I assume that the state leader views excluded groups as having a grievance against the regime and all members of the excluded ethnic group as having internalized their group's anti-regime grievance individually. Leaders anticipate the possibility of *coups d'etat* by potential recruits having such grievances, because these recruits are seen as willing to use a position within the military to overthrow the leader in order to re-design the social order.

The second factor, affinities toward the state's enemies, is based on ethnic ties. I assume that leaders view individuals from an ethnic group as identifying with other members of that ethnic group: the potential recruit views them as part of his or her in-group (Tajfel and Turner 1986). This becomes a problem for the leader if those co-ethnics are found in enemy states, due to the Trojan horse dilemma it creates for the leader (Peled 1998). When soldiers' ethnic loyalties to the state's enemies outweigh loyalty to the state, leaders expect to see either disobedience or defection.

Disobedience implies refusing to carry out orders to fight against these enemies. This is less harmful to the state than defection, although it is a real fear. Disobedience is more likely to take place than defection. Soldiers who are loyal to the state under most conditions are expected to be unwilling to carry out orders to harm people with whom they identify.[3] If the state's soldiers refuse

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[2]In future versions of this model, this assumption will be among the most important to relax.

[3]Psychological research on obedience supports this assumption. For instance, experimental follow-ups to Mil-

to defend the state against invading soldiers, the leader's strongest defense is made impotent. Applying this logic to an intra-state setting, Nepstad (2011*b*,*a*) provides examples of regime collapse as a result of soldiers refusing to repress nonviolent opposition movements, specifically because they identified with the protestors.

Defection implies switching sides to join the enemy and actively fight against the leader. This is less common, although examples are easy to find, largely due to the publicity that surrounds the event. Khalidi (2001/02, 533) provides an example of defection to the state's enemies with the case of the Indian officer Muhammad Anis Ahmad Khan, who having "advanced to positions of responsibility [he became a Major-General] and access to secret information, in 1955 voluntarily retired and at once settled down in Pakistan, accepting a Pakistan government post" (internal quotes omitted). Another, more recent example of defection to foreign enemies is provided by Major Nidal Hassan's massacre of fellow US soldiers at Fort Hood, Texas. The subsequent Senate investigation attributed his loyalty shift to his fears about being deployed to Afghanistan and having to fight against fellow Muslims, making him receptive to propaganda from anti-American clerics in foreign countries (Senate. Committee on Homeland Security & Governmental Affairs. 2011).[4] Disobedience and defection both result in the loss of military capabilities needed to defend the state and the regime. The possibility of either of these outcomes makes recruiting soldiers who have ethnic ties to the state's enemies appear to leaders to be a risky prospect.[5]

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gram's (1963; 1974) obedience studies have shown that shared ethnicity between the subject and the presumed victim tends to reduce the subject's willingness to carry out the experimentor's orders to harm the victim (Dambrun and Vatiné 2010; Youssef 1968).

[4]The Senate investigation properly pointed out that despite this individual act of treason, there are many loyal Muslims in the US military.

[5]This is expected to be the case even when soldiers who have ethnic ties to the state's enemies are from ethnic groups that are *not* excluded politically, for two reasons. First, the relationship of enmity between the state and members of the soldier's ethnic group – that to the soldier, the state is waging war against "my people" – may provide grievance enough to convince the soldier to become disloyal. The necessity of being required to harm in-group members personally may also provide the necessary grievance. Therefore, leaders fear *coups d'etat* by groups with trans-border ethnic affinities, even if those groups are included politically in the home state, just as leaders fear *coups* from groups that are excluded politically. On the other hand, defection is only expected from recruits with ethnic ties to the state's enemies. The fear of defection is only present when recruits have an opposing side that they are motivated to defect *to*. Simple desertion, not to the other side but just away from the state's military, may be a real possibility for ethnic groups that have grievance based on political exclusion but no ties to the state's enemies. If the soldiers have no reason to fight for the leader other than fear of reprisal, they may abandon their posts *en masse* if they can get away with it (McLauchlin 2011). I do not address desertion *per se* in this analysis, since it falls under the larger concept of disobedience.

The last consideration I take up is Enloe's insight (1980) that the state may "tap out" its reliable groups and still not meet its manpower targets, because it faces extremely high external threat. As stated earlier, I assume that leaders' first preference is to have the manpower they need to balance against enemy capabilities. When threat is high enough, and the state's leaders are already employing to capacity groups perceived as loyal, they are expected to turn even to disloyal groups in order to secure the manpower they need. Then, as external threat decreases, such as at the end of a war, we expect groups perceived as disloyal to be "de-recruited" (the term is from Krebs 2005), following the pattern "last mobilized, first demobilized" (Enloe 1980, 53).

Because I allow for the leader's perception of each group's reliability and of the state's need for manpower to vary over time, this model is testable in terms of both cross-sectional and time-series variation. The exogenous inputs of political exclusion, threat, and interstate enmities are all allowed to vary over time. When they do vary, this produces changes in both the need for manpower and the perceived reliability of each group. For instance, if state A enters into a rivalry with state B, and state B is led by co-ethnics of an ethnic group in state A, members of that ethnic group would subsequently be considered less suitable for recruitment to state A's military than before this rivalry, due to Trojan horse fears. Similarly, if a state's leader had previously excluded a certain ethnic group but then decided it would be politically expedient to bring that group into the government, the group would subsequently be considered more suitable for recruitment into the military, due to the dissipating fear of grievance.

Table 1 summarizes how leader perceptions of grievance and affinity causes the leader to anticipate specific kinds of disloyalty. Table 2 summarizes the theorized assessment that leaders have of the loyalty of recruits who have zero, one, or both risk factors.[6]

(Tables 1 and 2 about here)

As a result of leader perceptions of how these factors operate to affect the loyalty of potential recruits, we can hypothesize that:

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[6]I do not consider in this study whether these risk factors are additive or interactive, since both specifications have the same impact: recruits with both risk factors are seen as more likely to be disloyal than recruits having only one risk factor.

H1: leaders avoid recruiting from ethnic groups that are excluded politically;

H2: leaders avoid recruiting from ethnic groups that have ethnic ties to enemy states;

H3: leaders recruit less from ethnic groups that have both risk factors (political exclusion and ties to the enemy) than from ethnic groups that have only one risk factor.

Table 3 displays these hypotheses.

(Table 3 about here)

Additionally, when high levels of external threat call for higher levels of manpower, we can expect that:

H4: recruitment rates of groups having one risk factor increase, although less than for groups with no risk factors; and

H5: recruitment rates of groups having both risk factors increase, although less than for groups with one risk factors.

4   Probing Plausibility:

4.1   Data Availability for Dependent Variable:

Subjecting this theory to statistical testing would require cross-national data on ethnic military recruitment. Such a dataset would, ideally, need to report ethnic representation using equivalent units, such as comparing ethnic groups' respective share in the officer corps or in the rank-and-file. Unfortunately, these data are not available cross-nationally. Previous scholarship on the subject of ethnicity in the military has universally relied on case studies. Countries do not usually publish data on the ethnic breakdown of their military, especially in cases where ethnicity is highly salient. For instance, see the following quotations from secondary sources attempting to analyze ethnic recruitment:

> "Since the end of the Biafran war, the Nigerian Army has aimed at keeping its
> distance regarding the issue of ethnicity. It initiated a total information blockage

concerning ethnicity and ordered abbreviation of first names on the uniform by initials, since forenames provide a clear indication of religion or ethnicity" (Gaub, 2011, 38).

"The scarcity of studies on this issue stems partly from its sensitive nature. Politicians avoid it for fear that public discourses will upset the delicate ethnic balance in their countries. Military officers impose secrecy on all decisions of ethnic manpower policy in order to avoid compromising the military's professional and ethnically neutral image; outsiders may question the rationale behind the establishment of ethnic units or ethnic officers' unusual promotion tracks" (Peled, 1998, xiii-xiv).

"Information about the religious and ethnic composition of the army is one of the most well-guarded secrets. Figures such as those available lack a comparative base or starting point making them virtually useless. Does the government in fact have such information? On the application forms published and issued from time to time in the Indian press, there certainly appears a column under 'Religion,' which implies that statistics are in fact kept or at any rate calculable should there be a need" (Khalidi, 2001/02, 542).

Countries tend to make public information on ethnic recruitment only when attempting to demonstrate a commitment to affirmative action or to their adherence to ethnic balancing agreements. In general, when information on ethnic recruitment is politically or militarily sensitive, because of one group's ratio being very high – e.g., when the ruling ethnic group staffs the military entirely with its own members – or having a very low representation – e.g., when a large minority group is being deliberately excluded – this information is not reported by government sources in order to avoid stirring up trouble. Going beyond government-published data is therefore necessary, since this missingness is non-ignorable, as the missingness for this variable is dependent on the actual values of the variable (see King et al. 2001). Consequently, case studies on ethnic military recruitment tend to rely on both government data and outside perspectives, such as information gleaned from scholarly historical accounts.

A brief survey that I conducted of academic sources dealing with the intersection of the topics of ethnicity and the military revealed over 60 separate articles, single-author book chapters, and chapters in multi-author collections that collectively analyze 28 different countries, although nearly half of these studies focused on the five most heavily-studied countries: Lebanon, Israel, South Africa, India, and the US.[7] This case-study collection provides at least qualitative information on recruitment rates, official policies, and sometimes the motivations for those policies, at least for the set of countries that has been studied. [8] As a result, this body of case studies provides a useful starting place for analysis, but any new analysis must tap into country-specific historical sources – which would not be written with ethnic recruitment as the subject of the work – to collect sufficient information for the theory being probed.

In the absence of cross-national data on ethnic recruitment, I resort to a plausibility probe of this theory using a comparative case study. This approach accomplishes two objectives (Maoz 2002*b*). First, it allows us to "test drive" the theory to see if further analysis using a larger sample of cases, and especially the time and expense required for that analysis, is warranted. Second, it allows us to see if the theorized process is actually the one at work in the cases used. I attempt to control to some extent for potentially confounding variables by making within-country comparisons, both over time and across ethnic groups. I use two country studies in order to help verify that any patterns that emerge from the analysis are not due to one country's idiosyncrasies.

4.2   Data Sources Used for Independent Variables:

For data on political inclusion and exclusion of ethnic groups, I rely on Wimmer, Cederman, and Min (2009),[9] who code each ethnic group in each country on an ordinal scale of political inclusion. Ethnic group power status ranges from discrimination on the low end to monopoly on the high

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[7]This survey of the literature excluded cases prior to 1945 (e.g., Ford 1997), those dealing with non-citizens in the military (e.g., Jacobs and Hayes 1981), and those dealing solely with internal security forces (e.g., Brewer 1991).

[8]Due to partially overlapping agendas – and sometimes non-overlapping agendas – the occasional quantitative information they provide are not directly comparable. For instance, the unit of analysis may range from the entire combined civilian and uniformed employment of a department of defense (Peled 1998, ch. 2) to only the upper echelons of the officer corps (Barak and Tsur 2012)

[9]I use version 2.0 of the EPR-ETH dataset.

end. For the present study, I operationalize political inclusion as senior-partner status, junior-partner status, or unilateral rule (dominance or monopoly). I code groups having status values of "monopoly" or "dominant," as well as the largest group having "senior partner" status (if no group has a higher status than "senior partner"), as representing the ethnicity of the state's leader.

Several different possibilities emerge for measuring enmity between states that would allow for the perception of ethnic groups as potential Trojan horses: measures of rivalry, measures of conflict history, and the concept of the strategic reference group (SRG). Although each of these are useful measures, strategic rivalry best captures what we are looking for here. While the SRG concept (Maoz 2011) captures the two essential explanatory components of opportunity and willingness (Most and Starr 1989), it still casts the net too wide, including all politically relevant dyads for newly independent states, as well as the allies of enemies for all states.[10] On the other hand, conflict history *per se* does not cast the net wide enough to take into account cases where states are acknowledged rivals, but they have not yet engaged in open conflict, which would also be true for operationalization of rivalry that is solely based on conflict history (Bennett 1996, 1997*b*,*a*, 1998; Diehl and Goertz 2001).[11] Therefore, I rely on the only measure of rivalry that directly captures both latent and manifest enmity, strategic rivalry, the data for which are; based directly on archival research to assess policymakers' perceptions of interstate enmity (Thompson 2001) .

Cederman et al. (forthcoming) have created a measure for trans-national ethnic affiliation, but their data is not yet publicly available at the time of this writing. I resort to measuring this variable on the basis of a comparison of ethnic group names across strategic rival dyads in the ETH-EPR dataset,[12] supplemented with my (admittedly limited) historical knowledge of transnational ethnic perceptions.

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[10]While friends of enemies certainly need monitoring by the state's intelligence and may require balancing efforts, states would not be expected to undermine their ability for internal balancing by excluding ethnic groups from their military based on ties to friends of enemies, especially when alliances shift more quickly than rivalries.

[11]I owe this observation to Thompson (2001).

[12]Although the ETH-EPR dataset is not designed with cross-national comparison in mind, it contains many instances of states that became newly independent in the 20th century in Africa and Asia, where departing colonial powers drew arbitrary territorial boundaries that split ethnic groups into multiple states. Because its listing of ethnic groups per state frequently do reflect these divisions by using the same or similar ethnic group names between neighboring states, it is amenable to careful cross-national comparison.

Since exploring Hypotheses 4 and 5 requires operationalizing external threat in a way that allows it to vary over time, I create a measure that attempts to capture policymakers' perceived need for military manpower to balance against their enemy's capabilities. This measure is a ratio of military manpower[13] at time t of the home state i to the sum of the manpower of the home state and the current set of rival states $j = 1, 2, \ldots J$:

$$\text{Perceived threat}_{it} = \frac{\text{manpower}_{it}}{\text{manpower}_{it} + \sum_{j=1}^{J} \text{manpower}_{jt}} \tag{1}$$

Values of (1) lower than 0.5 indicate that the state's rivals have a larger amount of military manpower than the home state, implying a capabilities imbalance that invokes a sense of threat. The assumption that leaders prioritize internal balancing implies that if the state's combined rivals amass more manpower than the home state, the leader is expected to respond by increasing the home state's manpower. Values higher than 0.5 indicate that the home state's military manpower is greater than all of its rivals combined, so it should feel increasingly secure as this measure approaches 1. This measure is an attempt to capture the level of urgency in the need to balance internally against rival state's military capabilities. For data on military manpower, I rely on the Correlates of War National Material Capabilities file, v. 4.0 (Singer, Bremer, and Stuckey 1972; Singer 1988).

4.3   Case Selection:

As stated earlier, the larger population to which I seek to generalize is divided societies, countries in which ethnicity is politically salient and where minority ethnic groups are large enough that policymakers must decide how to deal with them – whether to recruit them or not. In order to probe the theory's plausibility and analyze the hypotheses, we need cases that provide cross-sectional and/or time-series variation across the rows and across the columns of Table 3. This requires, for

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[13]Basing the measure specifically on manpower instead of military capabilities generally allows us to see the leader's need to counter enemy capability for waging land-based, intensive warfare.

instance, limiting the sample to countries having at least one ethnic group that was tied at some point during the time frame under analysis to an ethnic group in an enemy state. It also requires limiting the sample to countries that have at some point during that time frame had at least one ethnic group excluded from power. In addition, we need countries that have experienced varying levels of threat.

See the case selection procedure in Appendix A. I only note a few points briefly here. I attempt to account for policy lag by allowing sufficiently long periods – 10 years – of inclusion, exclusion, rivalry, and ties to rivals for threat perceptions to become well-established and for changes to recruitment policy to catch up with those perceptions. I discard periods of foreign military occupation in order to make sure that any recruitment policy being made is the decision of local policymakers and not imposed by the occupier.[14] Importantly, I also eliminate countries from the sample if they have groups who only fall diagonally into the cells of Table 3, meaning that they only provide simultaneous variation of both risk factors, since this would not allow us to see the consequence for leader perception of reliability due to having only grievances or only trans-national affinities.[15]

By requiring countries in the sample to have had an ethnic group that at some point experienced at least 10 years of both political exclusion and ties to a rival, I set a high bar that potentially excludes many cases where leader perceptions of the group's unreliability may have operated. Setting the bar high helps ensure that if any such perceptions existed in any cases, they would be seen in the countries included in the sample.

Following these selection procedures, the resulting sample contains four countries that each had an ethnic group that was both politically excluded and had ethnic ties to an enemy state.[16]

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[14]This rule eliminates at least two very interesting country-periods: Lebanon 1976-2005, when it was occupied by Syria, and Iraq after the 2003 US invasion.

[15]This requirement eliminates the heavily-studied case of Israel from the sample. Its only ethnic groups larger than 10% of the population are Jews and Arabs. For the entire period covered, Jews are coded as politically included and not having ties to rivals, while Arabs are politically excluded and tied to Israel's rivals.

[16]Two cases that have been characterized as Trojan-horse cases, Malaysians in Singapore (Peled 1998, ch. 3) and Muslims in India (Khalidi 2001/02), are excluded from this sample due to the coding rules. Singapore is entirely omitted from the ETH-EPR dataset, as well as from the original EPR dataset (Wimmer, Cederman, and Min 2009). Muslims in India are coded in the ETH-EPR dataset as having junior-partner status from 1947 onward, meaning that they would be considered politically included. In future studies, if we had enough cases to provide the degrees of

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Three are Arab states in the Middle East: Iraq, Saudi Arabia, and Syria. The remaining country is South Africa. Iraq, South Africa, and Syria all had groups meeting both risk factors that formed an outright majority of the population. The ETH-EPR data for Saudi Arabia show that its group meeting both risk factors, Shi'as, comprised only 15% of the population. South Africa maintained rivalries with four of its Black African-dominated neigbors: Angola 1975-88, Mozambique 1976-91, Zambia 1965-91, and Zimbabwe 1980-92. Regarding the other three, their rivalries with each other and with Iran are the main reason why the rest of the sample is made up of Middle-Eastern states with notable Sunni and Shi'a Muslim populations. Iraq and Saudi Arabia, both Sunni-dominated states, maintained a rivalry from 1932-57 and then again from 1968 onward. Iraq and Syria were rivals from 1946 onward. All three states were also rivals with Sunni-dominated Egypt,[17] and two of the three were rivals with Shi'a-dominated Iran.[18] In order to demonstrate generalizability, and to make sure that my results are not driven solely by inter-Arab feuds, I elect to use South Africa as one of my two country cases. For the second state, I opt to use Iraq.[19]

5   Ethnic Recruitment in Iraq and South Africa:

5.1   Expected Recruitment Patterns:

I set up the analysis in a way to allow it to follow a process similar to the logic of a χ^2 test, comparing the expected recruitment rates with the observed rates, although this will be done qualitatively, not quantitatively. The analysis especially focuses on looking for evidence of the theory's causal mechanism, leader perceptions of unreliability and of external threat. See Tables 4 and 5 for the the categorization of the ethnic groups within these two states over time.

For Iraq, based on the theory we would expect the Shi'a to be recruited fully during the

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freedom, it would be interesting to vary political inclusion/exclusion as an ordinal variable and find out if junior-partner groups were "moderately" at risk of exclusion from the military if they have ethnic ties to rival states.

[17]Iraq 1945 from onward, Saudi Arabia from 1957-70, and Syria from 1961-90.

[18]Iraq from 1932-39 and 1958 onward, Saudi Arabia from 1979 onward.

[19]Because the size of Saudi Arabia's group meeting both risk factors is so close to the 10% threshold, Shi'as in this country would be still be fairly easy to exclude from the military, so I exclude Saudi Arabia. The choice between Syria and Iraq is a toss-up and ultimately determined by having more sources available to provide data on Iraq.

period 1946-58 when they are included politically, then heavily under-recruited 1964-2002 as they become politically excluded and as their ethnic ties to Syria and Iran become a liability due to Iraq entering into rivalries with Syria and Iran. We would expect the Kurds to be always underrecruited, being politically excluded throughout the entire time frame. However, since the Kurds are not tied to any rival state during this time frame, we would expect them to be recruited at higher rates than the Shi'a from 1964 onward. We would expect the Sunnis to always be fully recruited, being the ethnic group of the leader throughout this time period. Last, we would expect both Shi'a and Kurdish recruitment rates to rise somewhat in response to high threat levels (discussed below), although with Shi'a recruitment still being lower than Kurdish recruitment during these times due to the Shi'a meeting both risk factors and the Kurds meeting only one, political exclusion.

(Tables 4 and 5 about here)

For South Africa, we would expect blacks to be under-recruited 1946-64 due to being politically excluded, then even more heavily under-recruited 1965-92 as the state enters into rivalries with the neighboring states of Zambia, Angola, Mozambique, and Zimbabwe in that order, each rival being ruled by black African leaders at the time the rivalry began. We would expect whites during 1946-93 and blacks during 1994-2009 to be fully recruited, being the ethnic group of the leader during those times. We would expect whites to be fully recruited 1994-2009, as they were included in the post-Apartheid regime and in a period where South Africa had ended all of its rivalries. Last, we would expect black recruitment rates to increase somewhat during times of high threat over the course of South Africa's rivalries, despite meeting both risk factors throughout that time.

I now illustrate external threat for Iraq and South Africa by comparing each state's military manpower with that of its rivals. Figure 1 graphs the measure of threat from Equation (1) for Iraq, with the dotted line showing the 50:50 mark in this ratio. For these graphs, I include the name of the side (the state or the rivals) that has the upper hand at the time, either above (if the home state) or below (if the rival/rivals) the dotted line. We see that Iraq's threat perception was always high, especially in the 1958-1978 period, although Iraq's huge manpower boost during the Iran-Iraq War

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of the 1980s brought it nearly to parity. As a result of the threat from Iraq's rivals, we would expect the Shi'a Arabs and the Kurds to be recruited into the military at a higher rate during this time than if Iraq had not faced such high threat.

(Figure 1 about here)

Figure 2 shows the measure of threat from Equation (1) for South Africa. We see in that figure that South Africa had the upper hand until about 1975, after which its rivals had the advantage until just prior to the end of Apartheid. From this capabilities comparison, we would expect blacks to be recruited at higher rates from 1975-1990 than they had been previously during the 1965-75 period.

(Figure 2 about here)

5.2 Iraq:

5.2.1 Shi'a Arabs in Iraq:

Only sparse data are available from historical accounts describing Shi'a recruitment and motivations for the policies used, but enough information is given to be able to piece together a reasonably clear account. Ethnic imbalance in the military existed in Iraq since the time of the Ottomans, who staffed the Iraqi military and officer corps with Sunnis, favoring their co-religionists. Shiites were excluded at that time. Kurds were actively included and occupied some key positions in the military command under the Ottomans (Marr 1975, 138-140). During the monarchy period, King Faisal had hoped that the army could be "the spinal column for nation-forming" for its ability to integrate the Kurds and Shi'as (Batatu 1978, 765), but a Shi'a rebellion against the British caused the British to favor the more politically reliable Sunnis (Hoyt 2007, 61). As a result, during this period, "the bulk of the officer corps was drawn from predominantly Sunni Arabs, mostly from the lower middle classes. By 1953 most of the Iraqi officers above the rank of brigadier were Sunnis" (Al-Marashi and Salama 2008, 69).

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Shi'a Arabs were invited to join the Free Officers' armed revolt that resulted in the 1958 overthrow of the monarchy (Khadduri 1969, 19), but following that event, Shi'a officers remained constant in number at their previously low rates from 1958-63. 20% of military academy graduates during this period were Shi'a (Al-Marashi and Salama 2008, 89), which amounts to about a third of their proportion in the population. The cause of this ongoing low recruitment rate appears to be a rather long policy lag from the previous period.

The Ba'thist coup of 1968 that brought Saddam Hussein to power resulted in outright discrimination politically and even lower Shi'a participation rates in the military. The new policies included heavy reliance on Sunni Arab tribes to provide the bulk of the new men for the officer corps throughout the 1970s and 1980s Hashim (2003, 31-32). For the Shi'a, discrimination was due to concerns about their political loyalty to the Ba'th Party and to Saddam. Saddam required that officers must be members of the Ba'th party. His greatest preoccupation was with preventing the kind of military coup that had brought him to power (Sassoon 2012, ch. 5). Shi'a and Kurdish rejection of Ba'thist ideology was the main reason for their military exclusion (Al-Marashi and Salama 2008, 108).

After the Iranian Revolution, the Iraqi state saw the Shi'a as a potential Trojan horse group because of their anticipated ties to Iran. Shi'a dissident groups increased their opposition to Saddam at that time, including through violent means (Hoyt 2007, 60). Iran worked together with Shi'a rebel organizations like the Dawa Party and the Supreme Council for the Islamic Revolution in Iraq to broadcast exhortations to the Shi'a of Iraq to defect (Al-Marashi and Salama 2008, 152). This perception of Iran as a Shi'a state and the activity of these local rebel groups produced in the Iraqi elite a natural "aversion to fighting a protracted war with the Iranians, as the Army [would be] predominately Shia fighting against another Shia army" (Al-Marashi and Salama 2008, 133-34).

During the Iran-Iraq War, the majority of Shi'a civilians in Iraq remained loyal, and those in the military fought well, but they were still seen as a "fifth column" because of their ties to Iran (Gaub 2011*b*, 3-4). Despite this perception, the need for manpower to help win the war did lead to greater use of this suspect group. The Iraqi military "eventually quadrupl[ed] its active duty

manpower. This meant that large numbers of Shi'ite recruits had to be inducted into the armed forces and provided with military training that might, in the future, be used against the regime" (Hoyt 2007, 60), a fact that Saddam was acutely aware of. Saddam reacted to this perceived Trojan-horse threat from the Shi'a using three methods that this theory does not account for, and which may serve as useful factors to take into account in future versions of the model. These methods included identity manipulation (Hoyt 2007, 63; Al-Marashi and Salama 2008, 151-52), token accommodations (Al-Marashi and Salama 2008, 152), and the use of internal security forces as counterweights (Hoyt 2007, 60). Ultimately, military necessity forced Saddam to shift to a merit-based recruitment policy in order to boost the country's terrible battlefield performance up to that point (Hoyt 2007, 67). Consequently, during the Iran-Iraq War, the Shi'a community could boast of having a number of prominent, high-ranking officers(Al-Marashi and Salama 2008, 145). Thus, as predicted, the state avoided recruiting Shi'as into the rank-and-file and especially into the officer corps and only did so in response to the perception of high external threat.

Interestingly, Saddam's greatest fear was always military *coups*, and the object of this fear was not just the politically excluded. When he feared an Iranian-inspired coup, he not only purged Shia generals but Sunni generals as well (Al-Marashi and Salama 2008, 118-19). Despite this preoccupation, the potential for Shi'a defection was also present in Saddam's mind, as evidenced by how the wartime increase in the Shi'a proportion of officers did not go so far as allowing any Shi'a to reach the rank of top commander of any branch (Al-Marashi and Salama 2008, 168).

After the conflict, as predicted, merit-based recruitment ended as quickly as it began. Saddam returned to ethnic-based recruitment (Hoyt 2007, 67), so that as a result, just prior to the US invasion of Iraq, the Shi'a share in the officer corps was only 13% (Ma'oz 2002*a*, 184). Note that Shi'a continued to be conscripted into the rank-and-file (Hoyt 2007, 64) during the post-war time period, indicating a greater willingness of the state to risk defection by enlisted men than by officers.

5.2.2 Kurds in Iraq:

Data on Kurdish recruitment is more sparse than data for Shi'a recruitment, and there is not enough information to compare recruitment rates across the two groups, other than comparing the percentage of military academy graduates belonging to each group in the 1958-63 period (Al-Marashi and Salama 2008, 89). There are enough data, though, for at least minimal exploration of the hypotheses.

Political exclusion without perceived ethnic ties to enemy states in the case of the Kurds produced a fear of disobedience, as predicted for groups like the Kurds in Iraq that fall into the top-right cell of Table 1. Iraq's leaders perceived Kurds as not having ethnic ties to any neighboring or rival state, as well as being distinct from Arabs. Consequently, the main fear that the state had regarding them during the Iran-Iraq War was that they would abandon "their posts in a war that took on ethnic proportions of the population in defending the 'Arabness' of Iraq" (Al-Marashi and Salama 2008, 149). As opposed to the fear of defection that Iraq's leaders thought they would experience from the Shi'a, they only feared disobedience from the Kurds.

Hashim (2003, 38) points out that "there was a significant minority of Kurdish officers whom Saddam purged or killed over the years because of his increasing suspicion of the Kurdish minority" (p. 38). The Kurds had taken up arms against the new Iraqi state even prior to independence. Afterward, Mustafa Barzani, a Kurdish nationalist, had led a rebellion in the 1940s. High-ranking Kurdish officers declined from 1958-63. The number of Kurdish military academy graduates during the 1958-63 period was less than 10% (Al-Marashi and Salama 2008, 89).[20] Another Kurdish rebellion raged nearly constantly from 1960-75, and "one of Iraq's five infantry divisions – made up largely of ethnic Kurds – eventually defected to the rebels (Hoyt 2007, 59-62). As a result, "fewer and fewer Kurds had been admitted into the Staff College" (Batatu 1978, 765). The under-recruitment during this period fits the theory's predictions about the effects of perceptions of grievance, but the main reason for that under-recruitment appears to have been active, not latent,

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[20]The population proportion for Kurds was 17%, indicating that Kurds had a higher participation rate relative to their population proportion than Shi'a Arabs did in this period. This is the only period for which we have directly comparable statistics between the two groups.

rebellions by Kurds in Iraq, an important distinction to take into account.

I again note a difference between the state's willingness to risk recruitment of excluded groups into the rank-and-file versus into the officer corps. At the same time that Iraq was reducing its use of Kurdish officers, it sought to increase its use of rank-and-file soldiers. When Barzani rebelled, the state sought out Kurdish recruits to send as cannon fodder against the Kurdish rebels, recruiting from tribes opposed to the Barzanis (Al-Marashi and Salama 2008, 89). Despite the Kurdish rebellion that broke out again during the Iran-Iraq War, the state again targeted Kurds for recruitment in order to meet manpower needs, this time through conscription (Al-Marashi and Salama 2008, 142, 150-51).

As predicted, Kurdish recruitment rates rose during the Iran-Iraq War, during which time Kurds comprised a large share of the rank-and-file and also had a number of prominent officers, including Husayn Rashid Wandawi Al-Takriti, "who commanded the Republican Guard that was responsible for protecting the President" (Al-Marashi and Salama 2008, 145). Still, the Kurdish "revolt in the north [during the war] led to a crackdown on Kurds in the military who were systematically weeded out" (Al-Marashi and Salama 2008, 168), suggesting that the effect of manifested disloyalty may outweigh the strong pull of the need for manpower.

5.2.3 Observed versus Expected in Iraq:

What we observe for Iraq fits the theory's predictions fairly well but with a few notable errors. In this section, as well as for South Africa in the following section, I attempt to highlight the cause of each instance of the theory's predictions not being met in order to reveal alternative explanations that need to be controlled for in future analyses.

On the basis of the information presented about Shi'a recruitment, we can assertain the following. The Shi'a were under-recruited 1946-63 instead of being recruited fully during this time as predicted, apparently due to longer policy lag than expected from colonial recruitment patterns that favored Sunnis. They were under-recruited as predicted from 1963-80. During the 1960s and 1970s, this under-recruitment was mainly due to their political exclusion and rejection of Ba'thist

ideology, and less so because of ethnic ties to enemy states. Shi'a recruitment rates did rise as predicted in response to a greater perceived need for military manpower. The basis for the perception of needing greater manpower was the intensity of the Iran-Iraq War, not direct comparison of manpower levels between Iraq and its rivals, a finding that recommends severity of current conflict as an alternative way to measure a felt need for greater military capabilities. After that war, the Shi'a were again under-recruited due to loyalty concerns, as predicted.

The Kurdish data, which are unfortunately quite sparse, do at least show that the Kurds were under-recruited prior to the Iran-Iraq War, as predicted, and that this policy came in response to loyalty concerns. These concerns had two sources. Concerns over Kurdish loyalty were partly due to the group's political exclusion, which was based on its rejection of Ba'thist ideology. They were also and perhaps even more the result of the fact that Kurdish factions were in near-constant rebellion against the state throughout most of this time period, which suggests the need to extend the Trojan-horse concept to include ethnic ties to not only foreign enemies but domestic enemies as well. Last, Kurdish rates did appear to rise somewhat during times of high external threat as predicted, at least until another rebellion occurred in Kurdistan, suggesting as expected that the state's leaders prioritized meeting the need for manpower.

5.3 South Africa:

5.3.1 Blacks in South Africa:

In World War I, blacks in South Africa were recruited heavily as non-combatants, and the South African government did its best to keep the British from using any of its blacks as soldiers (Grundy 1983, ch. 2). These black participants in the military were demobilized along with most of the rest of the military after the war's end (Grundy 1983, 63). The state turned to recruiting blacks again only after exhausting the white labor supply during World War II (Grundy 1983, 66). Eventually 37% of the South African force during that war was black, though mostly in non-combatant service (Grundy 1983, 75-76). In the post-WWII demobilization wave, the only black soldier units were disbanded in 1949, and blacks were only allowed to serve in the Auxiliary Force in non-combatant

roles (Heinecken 1999, 189), such as "cooks, drivers, and other menial workers" (Peled 1998, 38).

South Africa's leaders perceived both the neighboring states and the native population in their own land as ethnically black long before independence (Grundy 1983, 65). The white ethnic narrative, for both Afrikaaners and English, told of Europeans having come to dwell amid a large native African population, which could be exploited economically but must also be defended against. In 1957, in the state legislature's debate, the ruling Nationalist Party asserted that it would never allow blacks to be armed, because

> "in case of conflict with a Coloured race, South Africa's blacks would likely side with their black brothers. Whenever these people have had the opportunity of establishing friendly relations with other Coloured races they have consistently made it clear that they do not stand on the side of their good friends, the Europeans, but rather on the side of the Coloured races" (Grundy 1983, 97; internal quotes omitted).

The perception of ethnic ties and the fear of defection were real, but the main reason for disarming blacks was to prevent them from challenging the Apartheid social order domestically (Grundy 1983). The Afrikaaner party declared in 1948, "Africans should not be in a position, by virtue of military training and the possession of modern arms, to challenge effectively the asymmetrical balance of power between Africans and whites" (Peled 1998, 37-38).

When the state began to recruit Blacks for the first time since WWII, they were recruited only after the White manpower pool was completely tapped out. South African leaders relied on the white labor pool almost exclusively for the first 30 years after the WWII. When white recruits were nearly tapped out using traditional methods, the government went out of its way to find new sources of white labor to recruit in order to avoid recruiting blacks. In the Defense Act of 1957, "the government's only policy concession to the manpower constraints of a small white population was that for the first time *foreigners* who were white would be permitted to volunteer for service in the Permanent Force" (Grundy 1983, 96, emphasis added) The government eventually turned to conscripting whites to raise the manpower it needed. In the 1960s, white young men were

drafted by lottery to do 9 months' military training (Grundy 1983, 106). A universal Whites-only conscription bill passed the legislature in 1967, which also extended the nine-month service to one year. Then, in response to rising threat, South African leaders increased the burden on whites still further: in 1977 the service obligation for Whites was extended by an additional year to two years (Grundy 1983, 106; Peled 1998, 32). These policies stretched the supply of white labor almost to the breaking point: "had a full-scale war broken out, total mobilization of the entire white population would have resulted in economic disaster" (Peled 1998, 34-35).

Manpower needs sharply increased as South Africa's rivals collectively surpassed its manpower levels beginning in the mid-1970s. In response to this rising threat, the state finally began taking timid steps toward recruiting blacks. The first 36 Black servicemen finished their basic training in 1975 and joined the rank-and-file (Peled 1998, 50). The proportion of Blacks in the rank-and-file of the South African Defense Force went from nearly 0% in 1977 to about 9% the next year, and then into the 20-35% range in the 1980s (Peled 1998, 64). As high as this proportion was compared to the very low recruitment rates of previous years, it still comprised only about one-third of the black population proportion of South Africa, suggesting that the effect of external threat was hardly enough to compensate for loyalty concerns produced by a heavy dose of both political exclusion and ethnic affinities to the state's foreign enemies.

It was not until nearly 10 years after the first black servicemen joined the rank-and-file that the state sent the first blacks to officer's school, which took place in 1984. As in the case of Shi'a and Kurdish recruitment in Iraq, this difference in recruitment between the rank-and-file and the officer corps suggests the need to take into account the even greater weight that the state appears to place on keeping the officer corps loyal. Over the course of the next six years, the number of officers "and between 1984 and 1990, it [the state] commissioned only a small number of black officers" (Peled 1998, 67).

As in the case of Shi'a and especially Kurdish dissident groups, analyzing the case of South Africa reveals the need to apply Trojan horse perceptions to the context of ethnic affinity toward domestic rebel groups. Black nationalist organizations like the African National Congress and the

Pan Africanist Congress began waging an armed insurgency in 1961 (Peled 1998, 40), and it appears that the ethnic ties between these insurgent groups and potential black recruits weighed on South African leaders' minds. Recruiting from the black populace could have paved the way for mass defection to these black nationalist organizations, providing them with the military capabilities they would have needed to overturn Apartheid by strength of arms.

5.3.2 Whites in South Africa

Since the recruitment pattern toward whites after 1994 appear to be a clear case of full inclusion, this section will be kept short. Blacks came into power only fairly recently in South Africa, and the military continues to over-rely on white recruits, including officers. The forgiving treatment that the white populace has received at the hands of the new black leadership, thanks largely to the legacy of Nelson Mandela, is clearly apparent in the military policies established after the end of Apartheid. The new constitution that was drafted in 1996 prohibits racial discrimination and explicitly allows for affirmative-action laws to overcome past discrimination (Heinecken 1999, 190). Affirmative action sponsored within the South African National Defence Force (SANDF) has only gradually reduced the white share within the military as a whole and particularly in the officer corps. The latest employment equity target in the military is set at 64.7% for blacks and 24.4% for whites.[21] These groups currently constitute about 79.3% and 9.1% of the population, respectively.[22] Although the SANDF has succeeded in bringing black representation in the military higher than the affirmative action quota according to the most recent report, with the actual employment rates in the military being 69.5% for blacks and 16.7% for whites,[23] whites still have nearly double their population share.

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[21] South Africa Institute of Race Relations. 2009/2010. *South Africa Survey*, p. 705.

[22] South Africa Institute of Race Relations. 2010. *South Africa Survey*, p. 4.

[23] South Africa Institute of Race Relations. 2010. *South Africa Survey*, p. 702.

5.3.3 Observed versus Expected in South Africa:

As predicted, actual recruitment of blacks in South Africa was low during the period when blacks were coded as meeting only one risk factor, political exclusion, between WWII and the onset of rivalries. What the theory does not predict is just how low that recruitment was: following the post-war demobiliation in 1945, the black share of the South African military essentially dropped to zero. This extreme under-recruitment may have been due to perceptions of ties to enemy states operating earlier than the strategic rivalry indicator would suggest. The white national narrative in South Africa portrayed the European immigrants as a tiny, besieged group in a sea of black Africans, and they viewed the blacks within the state's boundaries as identifying with the blacks on the rest of the continent. Consequently, white leaders feared defection by blacks in the case of any future interstate conflict. This fear can be seen at work at least a decade before any of South Africa's rivalries actually began, based on the speech from the 1957 legislative debate quoted above, but it was probably operating much earlier. On the basis of this perception, it is possible to consider blacks in South Africa as meeting both risk factors from the start of the time frame until the end of Apartheid. If that is the case, the extreme under-recruitment would fit the theory's predictions well.

A second explanation for the extreme under-recruitment prior to the onset of the first rivalry is that blacks met only one risk factor, political exclusion, but to such a high degree that whites expected blacks' grievance to be very great. The Apartheid system was one of the most exclusionary and institutionalized social orders in the world during the 20th century, so whites had good reason to expect that blacks would gladly attempt to overthrow this social order – with especially unfortunate consequences for the white minority – given the means. If this is the main factor at work during this period, and not a combination of both risk factors, then it would provide evidence for the need to operationalize political exclusion as an ordinal variable, with higher degrees of exclusion expected to result in greater perceptions of grievance and, hence, a greater degree of under-recruitment.

As predicted, the white-led government reacted to a perceived need for manpower, which

it apparently felt about a decade before the first rivalry started, based on the laws it passed to allow white foreigners to serve and to draft white citizens. The state's leaders certainly went to great lengths to tap out the entire supply of whites before considering recruiting blacks. When manpower needs intensified during the rivalry period, the state finally started recruiting blacks. Even then, the intake mainly took place at the level of the rank-and-file. Very few black officers were commissioned prior to the end of Apartheid.

Finally, after the national transition in power from whites to blacks, both groups were recruited fully into the newly reorganized South African National Defence Force (SANDF), as would be predicted from the lack of interstate rivalry or political exclusion. The state explicitly adopted affirmative-action policies that attempted to bring both groups' share in the military closer to their population proportions, although whites continue to this day to have nearly double their population-based share, again suggesting the need to allow for a longer policy lag than anticipated.

6 Conclusions:

As recent studies point out (Hoyt 2007; Schweller 2006), social divisions may hinder leaders from being able to build the military capabilities they need in order to balance against foreign threats. This analysis has taken on the under-studied subject of ethnicity in the military in an attempt to increase our understanding of exactly how leaders take into account perceptions of the loyalty of potential recruits and how they balance between competing needs: the need to maintain military loyalty and the need to raise manpower. The comparative case studies of ethnic group recruitment in Iraq and South Africa generally confirmed the predictions of the integrated security-based explanation. The evidence presented strongly supports the need to take both risk factors into account, since leaders tended to avoid recruiting from ethnic groups that meet either risk factor, political exclusion or ethnic ties to enemy states, or both together. We therefore have support for Hypotheses 1 and 2. There was not enough data available for either country to be able to really compare between groups that met only one risk factor and groups that met both, so Hypotheses 3 and 5 must await

future exploration. In times of high external threat, where manpower needs were acute, leaders did tend to increase recruitment of groups meeting either or both risk factors, although they showed considerable reluctance to do so and still tended to under-recruit compared to groups perceived as loyal, so we have strong support for Hypothesis 4 as well.

The case studies highlighted the need to take additional factors not already included in the model into account, either by extending the model to include them or by controlling for them in future analysis. For instance, the Trojan horse dilemma appears to apply to cases where ethnic groups have ethnic affinities to domestic enemies of the state like rebel groups, not just to cases of trans-border ethnic ties. Colonial recruitment policy appeared to have a very strong influence on ethnic recruitment patterns, with a policy lag of several decades, suggesting that leaders may be more constrained than supposed as to how quickly they can alter the composition of the military. Actual interstate conflict (and its severity) appeared, at least in the case of Iraq, to be a better predictor for the state's need for military manpower than the capabilities of strategic rivals, although the latter measure performed as expected in the case of South Africa.

Finally, this paper is meant to make the case for the need to gather systematic, cross-national data on its dependent variable, ethnic recruitment rates. Only after such data are collected will we be able to adjudicate between a security-based explanation such as this and competing explanations like military professionalism (Peled 1998) or the politics of national identity (Krebs 2005). Furthermore, large-*n* data on ethnic military recruitment would be of even greater use to serve as an independent variable to take into account in explaining well-studied outcomes like the duration of post-civil war peace agreements (e.g., Gaub 2011*a*; Ghosn and Sciabara n.d.), the differential ability of different regime types to win wars (e.g., Lake 1992), and the ability of the state to use its security forces for domestic repression (e.g., Davenport 1995; Davenport, Soule, and Armstrong 2011). Deliberate under-recruiting from certain ethnic groups may have a great impact on each of these areas.

Tables:

Table 1: Anticipated Manifestations of Military Disloyalty:

	Ethnic Ties to Enemies	No Ethnic Ties to Enemies
Ethnic Group Excluded Politically	*Coup d'etat*, disobedience, defection	*Coup d'etat*, disobedience
Ethnic Group Included Politically	*Coup d'etat*, disobedience, defection	No ethnically-based fear

Table 2: Leader Assessment of Potential Recruits' Loyalty

	Ethnic Ties to Enemies	No Ethnic Ties to Enemies
Ethnic Group Excluded Politically	Very likely disloyal	Possibly disloyal
Ethnic Group Included Politically	Possibly disloyal	Loyal

Table 3: Expected Recruitment Patterns:

	Ethnic Ties to Enemies	No Ethnic Ties to Enemies
Ethnic Group Excluded Politically	Heavily under-recruited	Under-recruited
Ethnic Group Included Politically	Under-recruited	Recruited fully

Table 4: Iraq

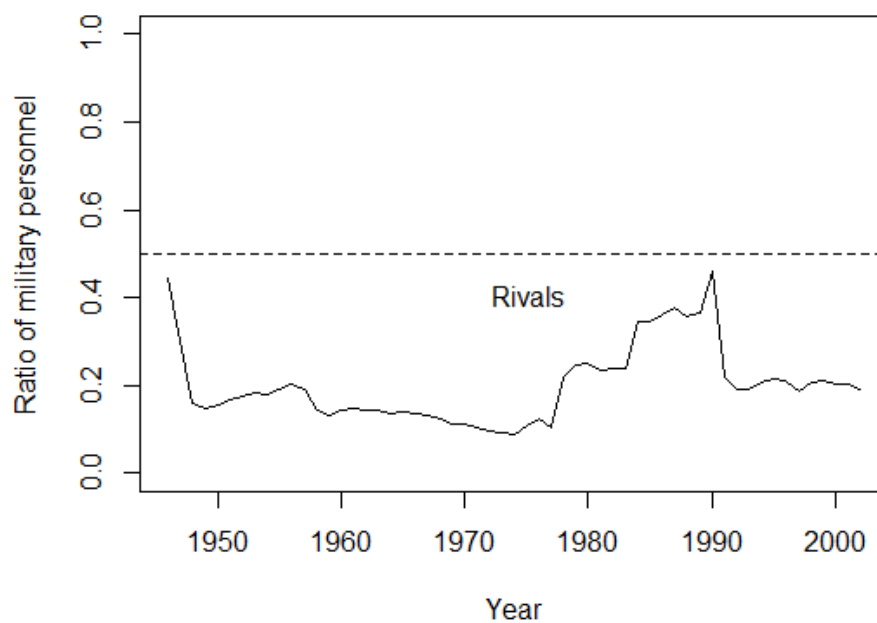|	Ties to Enemy State	No Ties to Enemy State
Excluded Politically	Shi'a Arabs 1964-2002	Kurds 1946-2002
Included Politically	Sunni Arabs 1946-2002*	Shi'a Arabs 1946-58

*Ruling ethnic group.

Figure 1: Threat perception: Iraq, 1946-2002

Table 5: South Africa

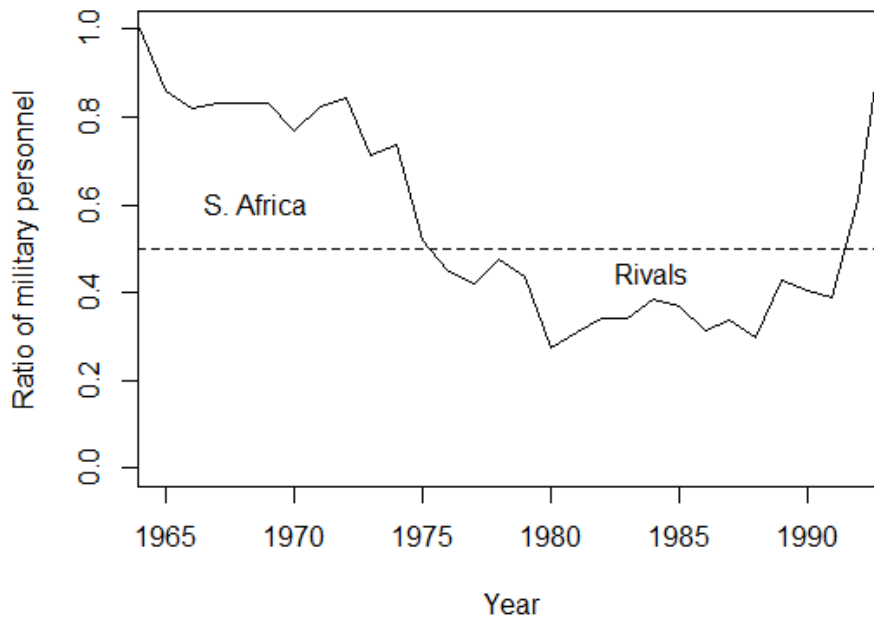|	**Ties to Enemy State**	**No Ties to Enemy State**
Excluded Politically	Blacks 1965-92	Blacks 1946-64
Included Politically		Whites 1946-1993*, 1994-2009
		Blacks 1994-2009*

*Ruling ethnic groups.

Figure 2: Threat perception: South Africa, 1965-92

Appendix A: Rules for case selection:

I arrive at the population of divided societies by starting with the list of countries contained in the ETH-EPR dataset and excluding time periods where ethnicity was not salient in the country and groups for whom ethnicity was not salient. I also exclude countries and time periods when one ethnic group was overwhelmingly large (90% or more of the population), since it would be easy to recruit only from that group, and I exclude ethnic groups that were trivially small (less than 10% of the population), since it would be easy to avoid recruiting from those groups. To ensure variation on the ethnic-affinities variable, I only include cases where the country experienced a strategic rivalry with another state at some time, where the rivalry either began, ended, or both during the time frame under analysis. I only count ethnic ties to the state's enemy as matches between a local ethnic group and the ruling ethnic group[24] in the rival state. To ensure variation on the political-exclusion variable, I limit the sample to countries where either one group was included in power

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[24]This includes every status counted as "politically included" except for junior-partner status.

and another excluded, or where one group's status changed to either become included or excluded.

This is the algorithm used:

1. Ethnicity: finding divided societies:

   (a) Discard countries not contained in the ETH-EPR dataset.
   (b) Discard time periods where ethnicity was not relevant for at least two groups.
   (c) Count only groups for whom ethnicity is relevant.
   (d) Discard time periods where a single ethnic group comprises 90% or more of the population.
   (e) Include groups only if they comprise at least 10% of the population for at least 10 consecutive years, but include smaller groups if they are a ruler or have been a ruler for at least 10 years.

2. Political inclusion/exclusion:

   (a) Count politically excluded groups as those having any one or more of these statuses for at least 10 consecutive years: discriminated, separatist-autonomy, powerless, or regional-autonomy status.
   (b) Count politically included groups as those having any one or more of these statuses for at least 10 consecutive years: junior-partner, senior-partner, dominant, or monopoly status.

3. Rivalries:

   (a) Count only rivalries that last at least 10 consecutive years after 1946;
   (b) Count only ties to ethnic groups in the rival that have senior-partner, dominant, or monopoly status.
   (c) Count only ties to ruling groups that last at least 10 consecutive years.
   (d) Discard countries whose strategic rivals are not also contained in the ETH-EPR dataset (e.g., Bahrain).
   (e) Discard countries all of whose ethnic groups are named geographically instead of by names that could be matched across international borders (e.g., Benin).

4. Independent policymaking ability:

    (a) Discard periods of state collapse.
    (b) Discard periods of foreign military occupation.

5. Variation on independent variables:

    (a) Discard countries whose groups only fall diagonally into Table 3's cells, implying vary-
        ing both risk factors simultaneously (e.g., Israel).

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