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# Does Combat Experience Foster Organizational Skill? Evidence from Ethnic Cleansing during the Partition of South Asia

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an combat experience foster organizational skills that engender political collective action? We use the arbitrary assignment of troops to combat in World War II to identify the effect of combat experience on two channels that change local ethnic composition and future political control: ethnic cleansing and co-ethnic immigration. During the Partition of South Asia, we find that ethnically mixed districts whose veterans were exposed to greater combat exhibited greater co-ethnic immigration and minority ethnic cleansing, with minority out-migration achieved with lower loss-of-life. Further, where ethnic groups had been in complementary economic roles or the minority received greater combat experience, there was less ethnic cleansing. We interpret these results as reflecting the strategic role of ethnic cleansing and co-ethnic immigration by groups seeking political control and the role of combat experience in enhancing organizational skills at credibly threatening violence and engaging in collective action.

hocks that enable non-elite groups to organize and credibly threaten violence drive fundamental institutional change in many of the most influential theories of politics and development. The role of shocks to the organizational abilities of disenfranchised groups has long featured prominently in theories of democratization in Europe (Acemoglu and Robinson 2000; Boix 2003; North, Wallis, and Weingast 2009), theories of broader political revolutions (Acemoglu and Robinson 2005; Engels and Marx 1848), as well as as well as explanations of progressive taxation and changes in the identity of those in power. However, measuring the effects of providing organizational skills in mobilization and violence to large numbers of de facto disenfranchised people has hitherto proven difficult.

A related puzzle is to understand the long-term effects of warfare on institutional development. Looking across countries, a range of important political and institutional changes, including democratization and progressive taxation, appear to have followed war and violent external threats (Besley and Persson 2010; Przeworski 2007; Scheve and Stasavage 2010). However, while the broad cross-country patterns suggest an important connection between war and institutional

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change, much less evidence is available to evaluate the mechanisms through which this may occur, whether through a change in the norms of fairness (Scheve and Stasavage 2010), a rise in common interests (Besley and Persson 2010) or by the development of organizational skills gained in combat by non-elite groups (this article).

We argue that wars provide a common environment where previously disenfranchised groups have historically gained and continue to be likely to gain the organizational skills to engage in collective action to alter political institutions, particularly when external threats provide elites with little option but to allow such organizational skills to develop among non-elite groups. We exploit a natural experiment—the arbitrary assignment of infantry battalions to different exposure to combat in World War II-to measure the effect of skills gained in combat among non-elite groups on subsequent collective action. We focus on an environment where numerical dominance by one's own ethnic group could secure superior control of local politics and access to future public goods allocations, a common characteristic of ethnically-diverse societies (Banerjee, Iyer, and Somanathan 2008). This article analyzes a key example of this environment: the ethnically-based partition and integration of different regions and partially autonomous native states within the South Asian subcontinent into the countries that would later become India, Pakistan, and Bangladesh. We use an intuitive framework to interpret the effect of combat experience on two forms of collective action that can secure an ethnic group's regional numerical dominance: ethnic cleansing of competing groups, and the fostering of co-ethnic immigration. We then exploit the arbitrary nature of assignment of army battalions to different campaigns and lengths of combat in World War II to examine the effects of organizational skills developed in combat on subsequent ethnic homogenization, cleansing, and co-ethnic immigration in the home districts of combat units.

During World War II, the colonial Indian army mustered 2.5 million troops to fight the Axis in Africa,

Europe, and Southeast Asia. At the time, this was the largest volunteer army in the history of the world, constituting close to three percent of the entire adult male population of the region. Recruitment into the army was not random; however, recruits were selected locally from specific ethnic groups following longstanding colonial policies. At the same time, the colonial Indian army, like the United States, Great Britain, Germany, Japan and Russia, placed an emphasis on creating infantry battalions that could be interchangeably replaced at the frontline according to the logistical needs of the moment and in response to enemy action.<sup>1</sup> This emphasis on interchangeability of infantry battalions meant that local differences in the geographic origins of particular companies within those battalions tended to be ignored in deployment. We exploit the resultant arbitrary nature of combat deployment in interaction with long-standing racial recruitment policies to estimate both the average effect of skills gained in combat on subsequent political collective action in soldiers' home districts and heterogeneous effects depending on whether ethnic minorities were the likely beneficiaries of these skills.

Consistent with substantial qualitative evidence of quasi-random World War II combat assignments by British staff officers who took pride in the combatreadiness and interchangeability of their battalions, we show that, conditional on being deployed at the same time, there was no relation between the number of months army battalions raised from a district spent in combat roles and other district characteristics that have been considered relevant for determining migration and ethnic cleansing during the Partition. However, districts that raised army units that happened to experience one additional month of average combat experience in World War II saw a 0.77 percentage point reduction in the ratio of religious minorities in 1951—a large effect. Furthermore, additional combat experience appears to have facilitated both ethnic cleansing and coethnic immigration. An additional month of combat experience was associated with a 1.1 percentage point greater reduction in the minority population due to killing, conversion, or migration (equivalent to 17,000 people per district), and a 0.54 percentage point greater inflow of majority co-ethnic refugees (or 8,150 people per district). The effect of raising units with increased combat experience was particularly pronounced in districts where the target minority population approached the majority, and thus the potential gains to ethnic cleansing, both in terms of expropriation and in terms of enhanced future political control, were likely to be greatest. In fact, there appears to be a threshold of around a 35% initial minority population above which ethnic cleansing appears to be a favored strategy over encouraging co-ethnic immigration.

Our results are robust to comparing districts both within and across provinces and native states of

India, matching along a battery of different measures of military recruitment, and controlling for a wide range of other factors that have been plausibly associated with Partition-era migration and violence. The results also survive a series of placebo tests. Districts that raised units with greater combat wartime experience do not reveal greater levels of *prewar* violence or private organization as measured by religious rioting, violent crime, murder rates, or increased recruitment into police and private security services. This provides evidence against a key potential threat to identification: that the presence of some unobserved "martial" district characteristic might have led both to greater ethnic cleansing in a district and encouraged units raised there to be assigned to more combat.

We argue that our results reflect the role of combat experience in enhancing organizational skills at credibly threatening violence and engaging in collective action aimed at altering ethnic composition to seize future political control. As is common in labor economics, we interpret experience as providing human capital. The importance of at least a few combat veterans in improving battlefield effectiveness has long been a central military doctrine, even though measuring the effects of such experience has thus far proven difficult (Muir 2000). While combat experience parallels extended military training in some respects, such as in greater practice in weaponry and drills, it also differs in two crucial ways: the actual experience of engaging in violence, and the need to improvise in rapidly changing circumstances.

The experience of engaging in violence may provide a form of human capital that reduces the psychological costs of engaging in future violence. In fact, Vietnam veterans more exposed to wartime killing appear also more likely to engage in subsequent levels of violent behavior (Beckham, Moore, and Reynolds 2000; Maguen et al. 2009). This capital, while prized in wartime and crisis, may become a liability in peace.

But, if combat experience's only effect was to reduce the costs of violence, a number of our results would remain unexplained. Combat experience appears to encourage the provision of public goods, such as providing safe havens and investing in infrastructure for welcoming co-ethnic immigrants, that are not likely to benefit from purely reducing the costs of violence for some individuals. In the absence of the ability to organize such individuals, the increased risks posed by individuals with lower costs to engaging in violence would arguably deter, not enhance, co-ethnic immigration. Further, we show that combat experience appears to reduce ethnic cleansing in environments such as medieval ports, where communities gain economically from having both groups present, due to a history of complementary business relationships (Jha 2008). In fact, while combat experience increases certain types of ethnic cleansing—the forced migration and conversion of minorities—we will show that in Punjab, combat experience appears to actually reduce the violent death toll relative to these other forms of ethnic cleansing.

<sup>&</sup>lt;sup>1</sup> The rapid change of unit organizational charts and plans on the fly has been commonplace in wartime armies, particularly in World War II (we thank Barry Posen for this observation). See also MacDonald (1997).

The missing, but complementary, piece may be found in the second crucial difference between combat experience and military training—the ability to improvise and organize people in rapidly changing circumstances. Military accounts point to the ability of experienced combat units to quickly introduce new routines that improve upon existing drills and to impart such skills to new recruits. A key aspect of combat experience is to learn to rapidly divide complex battle objectives into smaller discrete tasks. Each task is then assigned to improvised, small quasi-formal hierarchical organizational structures that are often more effective (Muir 2000; Powell 2010). The development of these organizational skills in combat appears more consistent with our evidence. First, combat experience appears to have encouraged private provision of pure public goods, such as providing safe havens and other infrastructure that favors co-ethnic immigration, consistent with enhanced organizational capacities in private collective action aimed at political control. Further, enhanced organizational skill gained in combat appears ironically to have made population exchanges more peaceful in two ways. When the majority received the organizational skill, the threat of violent ethnic cleansing appears to have been more credible, and the actual cleansing more organized and less wasteful of life and property when it did occur. When the minority received the organizational skill, it also appears to have made them better able to leave in anticipation of violence. Thus, while minority ethnic cleansing was higher in districts with more experienced combat veterans, the population transfer was relatively more peaceful.

This article builds upon and contributes to research on the role of war and collective action in institutional change, on the security dilemma, conflict, and public goods provision in ethnically diverse societies, on the role of veterans and war-time experiences in post conflict recovery, and on the role of partitions as a means for solving some of the most pressing conflicts around the world.

Our results suggest that exposure to combat in external wars helps veterans, often from minority or nonelite groups, to develop skills at private organization and violence. However, the ability of those non-elites to organize collective action and to credibly threaten violence are likely to diminish over time as veterans age or disperse, reducing future bargaining power. These falls in bargaining power, however, are central to a range of prominent contemporary theories of democratization and institutional change (Acemoglu and Robinson 2005), rational war (Fearon 1995; Powell 2006) and the security dilemma in ethnically- diverse societies (Fearon 1998; Kaufmann 1996; Posen 1993). The inability of elite groups or ethnic majorities to commit not to exploit a future fall in the bargaining power of disenfranchised or non-elite groups may induce preemptive violence by those non-elites.

Where the differences between groups stem from wealth, this temporary threat of revolutionary violence may encourage democratization by elites as a means to commit to redistribution (Acemoglu and Robinson 2005). Thus the shock to organizational skill that com-

bat experience brings to non-elites can explain the empirical regularity, noted by Przeworski (2007) and Boix (2003, 13), that democratization often follows external wars.

Where the differences between groups are ethnic, however, by temporarily changing the ability to organize violence and thus the bargaining power of different ethnic groups, our interpretation suggests that *external* wars may have the unintended consequence of facilitating future *civil* conflict and encouraging processes of ethnic cleansing and homogenization in ethnically diverse societies. In this way, combat experience can exacerbate the security dilemma.

However, our results suggest a further nuance to the security dilemma as it applies in ethnically diverse societies (Fearon 1998; Kaufmann 1996; Posen 1993): the processes of ethnic homogenization are not inevitable and need not be violent. In environments where there is inter-ethnic complementarity, where the minority is large and where minority groups are the beneficiaries, enhanced organizational skills can actually favor the formation of safe havens or peaceful population flows.

This article also builds upon an important series of studies on post-conflict reconstruction. Studies of those exposed to conflict in Sierra Leone and Uganda reveal remarkably benign effects on their subsequent behavior, including increases in the propensity to vote and increased participation in community organizations (Bellows and Miguel 2008; Blattman 2009; Humphreys and Weinstein 2007). These benign effects resonate with Angrist's (1990) study of life-time income among Vietnam conscripts, where he finds that income losses among conscripted veterans were small enough to be explained by the lost human capital that veterans would have received had they gone to school rather than to war.<sup>2</sup>

This study complements these works in a number of ways. First, while the works above focus on estimating the effect of recruitment into the army on subsequent behavior, we focus instead on identifying the effect of combat experience on collective action in the home districts of those recruited. Second, it is important to note that surveys of veterans of conflicts, by their nature, tend to focus upon an extremely important but still select set of environments—those where conflicts have ceased and reconstruction has begun, and thus benign effects are more likely. Instead, we examine the role of combat experiences in a time of crisis. It is our contention that while war-time experiences may displace human capital that enable soldiers to compete in peacetime labor markets, such experiences do provide skills at private organization of defense, offense, and mobility that are particularly valuable in periods of crisis. It is these organizational skills that can also engender collective action that fosters broad institutional change.3

<sup>&</sup>lt;sup>2</sup> Galiani, Rossi, and Schargrodsky (2010) find that combat veterans and conscripts do resort to crime, though these effects too tend to be small

<sup>&</sup>lt;sup>3</sup> Our argument also resonates with case evidence provided by Mueller (2000) that ethnic cleansing in environments like Yugoslavia

Finally, our article also builds upon important works that find that societies riven by economic inequalities or social and ethnic divisions provide fewer public goods, are often more prone to conflict, and suffer diminished growth trajectories (e.g., Baldwin and Huber 2010; Fearon and Laitin 2003; Miguel, Satyanath, and Sergenti 2004), by providing evidence for a new mechanism for how societies become homogeneous or retain their diversity. In fact, partitioning ethnically diverse regions into homogeneous homelands has been often mooted as a solution to the most insuperable conflicts around the world, including in Iraq, the Holy Land, and in the Balkans (Downes 2001; Kaufmann 1996; O'Hanlon and Joseph 2007). The appealing logic of fostering peace by separating contentious ethnic groups continues to be actively debated to both policymakers and academics (Alesina, Spolaore, and Wacziarg 2005; Chapman and Roeder 2007; Kasara 2010; Sambanis and Schulhofer-Wohl 2009).

Yet, little is known about the conditions under which what appears to be a viable political compromise devolves into a human disaster. The Partition of South Asia on religious grounds in August 1947 looms large as a cautionary tale to advocates of partition as a means for peace. Seen as an effective political solution to ethnic tension, few anticipated the scale of the violence that followed (Copland 2002; Talbot and Singh 2009). Instead, the partition of the Indian subcontinent led to one of the largest forced migrations in world history, with an estimated 17.9 million people leaving their homes (Aiyar 1998; Bharadwaj, Khwaja, and Mian 2008a), and estimates of those killed between March 1947 and January 1948 ranging from 180,000 to one million. There were 3.4 million "missing" in the 1951 census (Bharadwaj et al. 2008a). Marshalling a new dataset on the political and economic determinants of ethnic cleansing and migration during the Partition, this article sheds new light on this important episode.

The next section provides relevant background on the Partition. We will then provide an intuitive theoretical framework, and present the empirical strategy and the main results. Following further tests and robustness checks, we will compare the effect of combat experience on ethnic cleansing and explicit violence in a single area: the Punjab. The penultimate section draws on qualitative historical evidence to highlight the mechanisms through which combat experience may have played a role in the Partition of South Asia, while we will conclude by discussing the broader implications.

and Rwanda was less of an ethnic war of all against all, but depended on the skills of specialists in violence. However, while Mueller (2000) emphasizes the role played in ethnic violence by small groups of gangsters, criminals, the jobless, and people on the margins, we focus on retired military specialists and the specific organizational skills they possess to organize at large scale. These individuals may be particularly important not only in environments where state coercive power had been weakened (like Yugoslavia) but also in environments like in South Asia where the army was still intact and might otherwise have contained the massacres.

#### BACKGROUND

Even before the Partition of South Asia, British rule had divided the subcontinent. The British directly administered 13 provinces, comprising two-thirds of the subcontinent's population. The remainder consisted of numerous "Native States," ruled by Indian princes. By 1951, these 488 districts and territories would be consolidated into the 284 comparable districts that constitute our sample.<sup>4</sup>

On August 17, 1947, two days after the official independence of India from British rule, British lawyer Sir Cyril Radcliffe declared the final boundaries of the new nations of South Asia. Prior to this, the rulers of the Native States declared their intent to join one nation or another, or their desire to remain independent. While it was believed that religious demography would play an important role in shaping both the Radcliffe borders and the secession of the Native States, many perceived that changes in the "facts on the ground" might yet determine South Asia's ultimate national borders (Copland 2002).

The boundaries of post-Partition South Asia were largely determined by the proportion of Muslims in a territory (Figure 1(a)). Muslims, Hindus, and Sikhs caught on the wrong side of the border found themselves "target" minorities, even in the six districts where they had previously enjoyed a slight numerical advantage. Large-scale violence and population flows resulted in a remarkable religious homogenization of the districts of South Asia by 1951 (Figure 1(b)). While target minorities constituted an average of 13.8% of a district's population in 1931, this proportion declined by 34.8%, with minorities constituting only 9.0% overall, by 1951.

Both the unprecedented scale of the violence and population flows during the Partition and their location took policymakers by surprise (Talbot and Singh 2009). Field Marshal Claude Auchinleck, the Commander-in-Chief of the Indian Army, predicted in November 1945 that, "The principal danger areas are likely to lie in the United Provinces, Bihar and Bengal..." (Mansergh 1976; Vol. 5, 576–78). Despite the long record of religious conflict in these provinces before 1947 (Figure 2(a)), these areas escaped the worst of the ethnic cleansing at Partition (Figure 3).

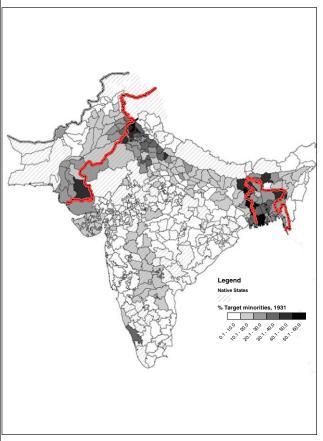
Despite its importance, both in terms of human cost and its subsequent impact on three countries with more

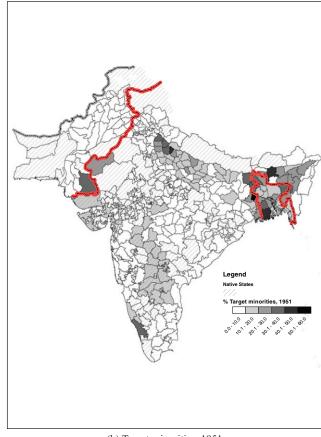
<sup>&</sup>lt;sup>4</sup> Note that some otherwise unrepresentative districts, such as Dera Ghazi Khan in Baluchistan, the tribal (non-British) areas of NWFP, and all of Kashmir, were omitted from our sample due to lack of data in either the 1931 or 1951 census. Please see Figure 3 and Bharadwaj, Khwaja, and Mian (2008b).

<sup>&</sup>lt;sup>5</sup> For example, the states of Hyderabad, Kalat, and Kashmir sought to remain independent, while Muslim ruled, Hindu majority Junagadh sought to join Pakistan.

<sup>&</sup>lt;sup>6</sup> Hindus, Muslims, and Sikhs together made up 92% of India's population in 1931. Other religious groups individually constituted insignificant proportions of the population (outside some northeastern tribal districts) and were largely excluded from the population transfer. For example, the correlation between the number of Christians (who made up around 2% of the population) in a district in 1951 and 1931 was 0.992. For completeness, we explicitly control for the initial share of nontargeted minorities in all regressions.

FIGURE 1. Partition and the Religious Homogenization of the Indian Subcontinent, 1931–1951





(a) Target minorities, 1931

(b) Target minorities, 1951

Source: 1931, 1951 censuses of India and Pakistan and Bharadwaj, Khwaja, and Mian (2008a). Target minorities include Hindus and Sikhs in independent Pakistan and Bangladesh, and Muslims in independent India.

than a fifth of the world's population, almost all the work on ethnic cleansing during the Partition has been qualitative, and almost exclusively regional in scope. There has hitherto been little quantitative evidence about the political and economic determinants of the patterns of ethnic cleansing around the country that led a political compromise to devolve into a human disaster (Brass 2003). An important new contribution is a set of works exploiting the censuses of India and Pakistan before and after Partition to document the patterns of minority outflows and majority inflows (Bharadwaj,

Khwaja, and Mian 2008a; 2008b), which we will build upon explicitly.

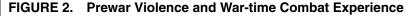
### **EMPIRICAL STRATEGY**

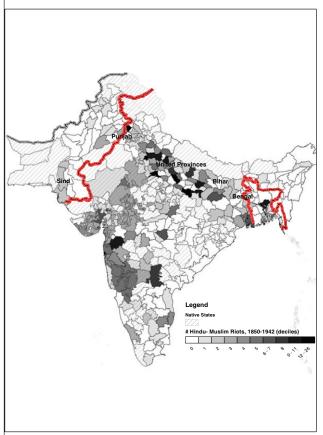
We will begin by informally sketching a model to clarify how the potential relationship between our outcomes—ethnic cleansing, co-ethnic immigration, and violence—changes with the minority share when there are shocks to organizational skill. We will then describe how we aim to identify one such shock to organizational skill—through the combat experience of World War II veterans.

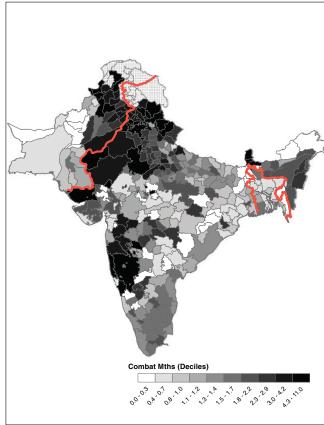
### **Theoretical Framework**

Consider a district with two ethnic groups, with one a minority. Both possess immoveable assets, such as land. Suppose, as seems plausible, that the total immoveable assets of a group, the probability that a group controls future public goods allocations, the relative strength in a violent confrontation, as well as the costs of organizing a group to undertake collective action, are increasing in the group's size. Further, suppose

<sup>&</sup>lt;sup>7</sup> Most authors generate theories by looking at the Punjab, where the violence was the worst. Some emphasize a general state breakdown of the colonial state in 1946–47, which reduced the state's coercive capacity and manpower at just the moment it was needed (Kamtekar 1988). Others point to the security dilemma that existed in border areas in 1947, when religious groups, particularly the Sikhs, acted preemptively to defend themselves (Copland 2002). Kamtekar (1988, 146) has highlighted the influence of the large numbers of veterans in the Punjab as a contributing factor in the violence there. Still others point to local incentives, for example, in Bihar and Bharatpur, where politicians and landlords exploited the partition crisis to eradicate troublesome tenants and subjects (Copland 1988; Damodaran 1992).







(a) Hindu-Muslim Riots, 1850-1942 population

(b) Average Combat Experience, 1940-45

Source: (1) Based upon Wilkinson (2005) and the Times of London, 1850–1942. (2) Own calculations derived from Commonwealth War Graves Commission fatality data and the official histories of the Indian Army.

organizational skill reduces the costs of organizing groups to act collectively and such organizational skills are more beneficial for larger groups.

Suppose that first the minority leadership decides whether to stay or to leave, where leaving implies abandoning the group's immoveable assets. If the minority group stays, the majority leadership decides to do nothing or to alter the local ethnic composition in its favor by either "cleansing" the minority through violence, or investing in infrastructure to welcome co-ethnic immigration.

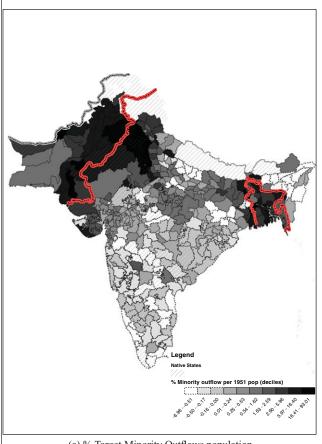
Both approaches at altering local ethnic composition improve the chances that future public goods will be controlled by one's own group. However, there are differences. First, violent ethnic cleansing of a politically competitive ethnic group is destructive, and success depends on the relative abilities of the majority and the minority to engage in violence, but violent ethnic cleansing also promises potential short-term private gains through the ability to seize the immovable property of the minority group. In contrast, encouraging the immigration of co-ethnics is peaceful, does not increase short term spoils, and thus approximates a "pure public good" as it raises a group's probability of control

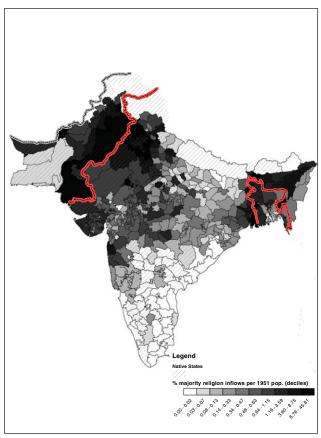
over future political public goods allocations without providing the prospect of individual gain.

In this simple set up, ethnic cleansing will occur through two means in equilibrium. First, ethnic cleansing may be "peaceful"—anticipating violence, the minority chooses to leave, and the majority engages in violent cleansing if they stay. Second, ethnic cleansing may be "violent"—the minority stays and the majority chooses to engage in ethnic cleansing. Note that the latter will only occur in equilibrium if the minority finds it too costly to move.

We can explore how behavior changes with changes in three key parameters—the minority share, and the degree of organization of either group. First, as the minority share rises, the threat that minority poses to control over future public goods also rises, and thus while the majority may prefer to do nothing if the minority is small, the majority has more incentive to engage in both ethnic cleansing and co-ethnic immigration as the minority share rises. Further, the benefits from ethnic cleansing increase relative to co-ethnic immigration as the minority share rises, for two reasons. First, the aggregate immoveable assets of a larger minority are also larger, providing more spoils. Second, for a larger initial

FIGURE 3. Population Transfers and Ethnic Cleansing: Target Minority Outflows and Majority Inflows





(a) % Target Minority Outflows population

(b) % Majority Inflows population

Source: Own calculations and Bharadwaj, Khwaja, and Mian (2008a), based upon 1931 and 1951 censuses of India and Pakistan

minority share, it naturally requires even greater numbers of co-ethnic immigrants to alter the overall ethnic composition by the same proportion. Thus if there are increasing costs of attracting immigrants, then violent ethnic cleansing will become favored as a strategy as the minority share rises.

If, as we assume, organizational skill reduces the costs of acting collectively, then if the majority is organized, then the costs of organizing both co-ethnic immigration and ethnic cleansing fall, favoring these strategies over doing nothing. If the minority is organized, however, the costs of both mobilizing that minority to leave and to defend itself from violent ethnic cleansing also fall. Smaller organized minorities will provide little in terms of both spoils or political benefits from violent cleansing, and will do so at greater cost, and thus will face relatively less ethnic cleansing. Thus, co-ethnic immigration will be favored in the presence of smaller minorities.

However, since as we have discussed, large minority groups will be more likely targets of violent ethnic cleansing if they stay, and large *unorganized* minority groups will find it more costly to leave in anticipation of such violence, districts with unorganized minorities

should experience more violent ethnic cleansing. In contrast, while large organized minorities can stay and enjoy better chances if targeted with violence, they also find it less costly to leave and thus may be more likely to do so.

To summarize, districts with very small minorities or with unorganized majorities are likely to experience little ethnic cleansing or co-ethnic immigration, those with smaller organized minority groups are more likely to exhibit co-ethnic immigration, those with larger *organized* minority groups are more likely to exhibit *peaceful ethnic cleansing*, and those with larger *unorganized* minority groups are more likely to exhibit *violent ethnic cleansing*. We will first assess these predictions using data on co-ethnic immigration and ethnic cleansing (confounding both violent and nonviolent cleansing) across South Asia, before using data on violence from the Punjab that separates the two.

### **Identifying the Effects of Combat Experience**

In order to assess these predictions, we also need to identify the effects of our proposed shock to organizational skill—that arising from World War II combat

experience. The ideal comparison would compare two districts with the same initial ethnic mixes and propensity for recruitment, the recruits from one district of which happened to be assigned to more front-line combat during World War II.

To approximate this comparison, we estimate crosssectional regressions of the following form at the district level *i*:

$$\Delta\% T.Minority_{31-51i} = \beta \cdot CombatMths_{40-45i}$$

$$+ \delta \cdot f (DeployDate)_{39-45i}$$

$$+ \mu \cdot \% T.Minority_{31i} + X_iB + \varepsilon_i.$$
 (1)

where the benchmark outcome measure,  $\Delta\% T.Minority_{31-51i}$ , is the change in the percentage of target religious minorities  $\% T.Minority_i$  in each subcontinental district i in 1951 compared to 1931.  $CombatMths_{40-45i}$ , our variable of interest, is the average number of months recruits raised in the district were exposed to combat in World War II. We will discuss the construction of this measure in detail below.

We control for  $f(DeployDate)_{39-45i}$ , a nonlinear function of their average date of first campaign deployment. We thus aim to compare districts whose troops were deployed around the same time (and thus had initial similar propensities for deployment), but the troops from one district happened to be assigned to greater combat. We also include an extensive set of prewar controls for factors,  $X_i$ , that might influence ethnic homogenization through increasing the propensity for economic migration, military recruitment, predemobilization violence, and private organization. We also provide separate intercepts for each native state and province, and within each province, a different intercept for the timing of British annexation, which led to different land tenure regimes and thus patterns of inequality (Banerjee and Iyer 2005). We are conservative in allowing for arbitrary correlation of  $\varepsilon_i$  within those regions.

We further decompose the change in the target ethnic minority share into the change that comes from the outflows of target minorities or from inflows of majority co-ethnics. To do so requires a counterfactual estimate of the numbers of each group that would have existed in a district in the absence of partition. We exploit the preferred method of Bharadwaj, Khwaja, and Mian (2008a) to calculate the counterfactual target minority population in 1951 had Partition not occurred  $(\mathbb{E}(m_{51i}))$ :

$$\mathbb{E}(m_{51i}) = [m_{31i} \times g_{21-31i}^{min/maj} \times g_{31-51i}^{maj}]$$
 (2)

where  $m_{31i}$ , the population of the target minority group in the district in 1931, is scaled up by the relative

minority growth rate in the previous period,  $g_{21-31i}^{min/maj}$ , to account for different fertility rates across religions (Muslims tended to be higher), and by the contemporaneous growth rate of those members of the majority who did not move during Partition,  $g_{31-51}^{maj}$ .

The % Minority Outflow variable is simply the percentage difference between the actual target minority population and the counterfactual population in the post-Partition census. This measure is arguably a good measure of ethnic cleansing, as it gauges how many members of the target ethnic minority departed, were removed, were forcibly converted, as well as were killed during the Partition period. Note however, that, as discussed above, the minority outflows measure includes both "peaceful" and "violent" ethnic cleansing, a distinction we will subsequently unpack using direct measures on Partition deaths in the Punjab.

CombatMths<sub>39–45i</sub> is our main gauge of average district combat experience. We use two novel data sources that allow us to first construct a battalion-level measure of war-time combat experience, and then use war-time data on battalion level fatalities in every district to construct this district average. We will now discuss the construction of this measure in some detail.

The operational unit of deployment in the Indian infantry was the battalion (of 667 men), which was organized into component companies (of 102–167 men each). There were 268 infantry battalions at war's end. To create a combat experience measure for each battalion, we exploit the *Official History of the Indian Armed Forces in the Second World War* (Prasad 1954). The nine campaign volumes exploit original unit war diaries as well as government operational files (still under seal) to provide complete Orders of Battle and a daily description of the fighting in all campaigns.

We record all the battalions that participated in each campaign and then construct a variable for whether that battalion was involved in an exchange of fire with the enemy in each month. By summing up over the war, we can obtain each battalion's combat experience.<sup>11</sup>

On 10th March [1942] the 7th Battalion Burma Rifles established a bridgehead at Waing, and at 0300 hours the next morning the 5th Battalion 1st Punjab Regiment crossed the river on rafts constructed by the divisional Engineers. The Battalion then marched five miles across rough country to the Shwegyin-Papun Road where it was joined by FF3....

The Japanese were in position astride the road outside Shwegyin. The 5th Battalion 1st Punjab Regiment attacked with one company on each side of the road and drove the Japanese before it into the town. Strong resistance was encountered there, and two mortar detachments went into action to support the advance. At the same time the officer commanding the Battalion ordered one column of FF3 to work round the right flank. The advance soon continued, the troops keeping excellent communication during

<sup>&</sup>lt;sup>8</sup> The estimates of Bharadwaj, Khwaja, and Mian (2008a), using the 1931 and 1951 censuses, are broadly consistent with work by Hill et al. (2008) using the more controversial war-time 1942 census.

<sup>&</sup>lt;sup>9</sup> By using the nonimmigrant majority growth rate as a scale factor in calculating the expected minority population, this estimate automatically adjusts the expected population of minorities for district-wide shocks to population growth that occurred between 1931 and 1951, such as the Bengal Famine (Bharadwaj, Khwaja, and Mian 2008b).

<sup>10</sup> These battalions belonged to 26 regiments, which provided training and other common infrastructure at home, though the battalions within a regiment deployed separately.

<sup>&</sup>lt;sup>11</sup> A raw account illustrates the coding strategy (Prasad 1954, 228):

Further, to get within-district differences in combat experience by ethnicity, we exploit the fact that though the component companies within a battalion were *deployed together* as a single fighting unit, these component companies were mostly *recruited separately*, with each company recruited from particular martial ethnic grounds often in different districts. Thus multiple battalions with very different combat experience levels often recruited in the same district, and similarly, the component martial ethnic groups of each district usually formed companies that were part of different battalions. This gave rise to within-district variation in the extent of combat experience of troops by ethnicity. <sup>13</sup>

To create an average experience measure for a district, we use the fact that the component companies of each Indian battalion were recruited in a localized manner and exploit a unique dataset from the Commonwealth War Graves Commission (CWGC), an quasi-governmental organization responsible for military burials and cemeteries for soldiers from the former British Empire. These data provide the home village, town, district and battalion of Indian war fatalities. We use these data to calculate average district combat experience as follows:

$$CombatMths_{i} = \sum_{b} \left( CombatMths_{b} \times \frac{\chi_{bi}}{\sum_{b} \chi_{bi}} \right),$$
(3)

the street fighting by their cries of "Sat Sri Akal" and "Ya Ali." Finally, the hostile force fled across the Shwegyin Chaung at the south end of the town, many being killed in the stream by light machine-gun fire. By 1000 hours the town was free.... The casualties on this side were four killed and seventeen wounded.

Based on this, we code the 5/1 Punjab Regt and the 3rd Frontier Force (FF3) as gaining "1" combat month in March 1942 by being involved in an exchange of fire with the enemy.

<sup>12</sup> There was day-by-day variation in which companies were rotated to the reserve within each battalion, but typically combat experience was shared across the battalion over time. On the recruitment side, however, battalions were explicitly designed to be made up of companies from different martial races. According to the Joint Secretary to the Defense Department, Philip Mason (1974, 24), "The new army (after 1857) was built on the caste or class *company* .... Uniformity in the company made for convenience in administration and recruiting; diversity in the battalion sprang from mistrust after the Mutiny."

<sup>13</sup> For example, the 7th Rajput was evenly split between Muslims and Hindu Rajputs, but the Muslims were drawn from Rawalpindi (30%), Lahore (30%), and Jullundur (26%), with few from UP and Bihar (6%) or eastern Punjab (8%). In contrast, the Hindus came chiefly from UP (73%) and eastern Punjab (20%) (IOR, L/MIL/14/236 (1942)).

14 The CWGC claims to possess records on 87,032 dead Indian soldiers from World War II. We wrote a PERL script to extract all fatalities in the fields of operation of Indian forces, resulting in 174,476 fatalities of which 76,953 were assigned "Indian" nationality by the CWGC. Of these, we threw out troops domiciled outside undivided India. We matched the addresses of all but 1051 of the remaining 59,106 fatalities to their home districts by two separate computer algorithms, and that remainder (those that had been transcribed without a district or with egregious transcription or spelling errors) were matched by hand. We were able to match with certainty 99.7% of the addresses to districts. The remaining 0.03% were listed without a district and had spelling errors that rendered their home-towns unrecognizable or had common district names (e.g., Rampur) that made it impossible to match them with certainty. These transcription errors are likely to yield pure measurement error and thus attenuate our estimates.

where *b* indexes battalions,  $\chi_{bi}$  is the number of CWGC fatalities from each battalion with home towns in each district, and thus  $\sum_{b} \chi_{bi}$  is the total fatalities from each district. Insofar as fatalities closely reflect recruitment to combat units, this measure can be interpreted as combat experience per recruit, and thus, unlike a cumulative combat experience measure, is not mechanically correlated with the number of recruits. The measure also would explicitly account for the relative recruitment intensities of each battalion in each district. It is therefore reassuring to note that the district proportions of war-time fatalities in our data are almost perfectly correlated ( $\rho = 0.94$ ) with the proportion of war-time military recruits for those 68 districts for which we know peak (1944) army recruitment (Table 1).15

Our identification of the effect of combat experience is based on the arbitrary assignment of Indian battalions, conditional on recruitment, to different fronts and to different periods of time at the front during World War II. Once recruited, we will show that the length of assignment to the front line was unrelated to the home district characteristics of soldiers. Going through the official histories of every battalion during the Second World War allows us to assess this assumption, using both qualitative and quantitative evidence.

Recruitment into the Indian army was based upon the doctrine of the "martial races." Precolonial India did indeed have a tradition of warrior castes. However, a major determinant of whether the British considered an ethnic group "martial"—which indicates the relatively weak basis for this designation—was that members of the group had been defeated by the sepoys of the Bengal Army in the 1840s and had not joined that force in rebeling against the British in 1857 (Streets 2004; Wilkinson 2010).<sup>16</sup> Within districts and ethnicities, the reasons for designating one group "martial" and the others "nonmartial" are catalogued in the Caste Recruiting Handbooks of the Indian Army that guided recruiting officers. Many of the rules of thumb seem offensive and unscientific to the modern observer, with phrenology, "spurious origin," and "vegetarianism" all discussed as reasons for inclusion or exclusion. For each martial religious or ethnic group in each district, officers also proffered opinions on whether each group was potentially of "good" quality for recruitment. The recruitment of units from traditional regions and particular groups within those areas appears to have become stable and entrenched over time.

While these martial districts are clearly not randomly assigned, they can be considered predetermined for the purpose of our analysis. We combine information on

<sup>&</sup>lt;sup>15</sup> Although the original wartime district recruitment records are now lost, a few provincial records remain (for Punjab, NWFP, and parts of Madras) which provide district recruitment totals in 1944. See J. G. Acheson, "Post-War Employment on the North-West Frontier", (Peshawar: NWFP Govt Press, 1944); Table 1 in Subhasish Ray, "The Sikhs of Punjab and the Tragedy of 1947," drawing on Punjab State Archives, File 14446/175/259.

 $<sup>^{16}</sup>$  Indeed, we find a weak correlation ( $\rho=0.16$ ) in the share of men claiming traditional warrior castes ancestry in each district and those designated "martial" by the British in 1931.

Pairwise correlations	% Rec. 1944	% Cas. 1939–45	% Rec. 1942	% Rec. 1931	% Mart Race	% Age 20–35
% Recruits 1944	1.000					
% Casualties 1939–45	0.943**	1.000				
% Recruits 1942	0.868**	0.734**	1.000			
% Soldiers 1931	0.547**	0.201**	0.168**	1.000		
% Martial Race, 1931	0.700**	0.665**	0.520**	0.104	1.000	
% Age 20–35, 1941 (1921 proj.)	0.289*	0.218**	0.135*	-0.076	0.137*	1.000
Observations	68	284	284	284	284	284

"good" martial castes from the Caste Recruiting Handbooks with caste data from the 1931 census volumes to construct a district level measure of the proportion of males belonging to a good martial race in a district. As Table 1 shows, the share of a district's males from martial races in 1931 is highly correlated with both the share of war-time fatalities ( $\rho = 0.665$ ) and peak (1944) recruitment ( $\rho = 0.70$ ).

Further, we can separate out the proportion of minority and majority martial races. We can thus infer whether target minority or majority recruits were the likely recipients of additional combat experience in World War II.

Regardless of where a soldier came from, the assignment of his battalion to front-line combat appears to have been arbitrary. It is useful to take the example of the component battalions of the 1st Punjab regiment, during World War II. The third battalion (3/1) was deployed to Africa in 1940, helping to restore Haile Selassie to the throne of Abyssinia. It then fought with the "Desert Rats" in North Africa and assaulted Kesselring's winter line in Italy, spending a remarkable 21 cumulative months at the front line. In contrast, the 2/1, 5/1, and 6/1, also on the verge of deployment to Africa, were re-directed to Southeast Asia due to an exogenous shock—Japan's abrupt entry into the war in December 1941. The 2/1 and 5/1 spent eight months fighting in Burma, while the 6/1 was instead dispatched to Singapore, being compelled to surrender one month later as part of the largest mass capitulation of Britishled troops in history. In fact, there was considerable variation in the combat experience even of troops raised from neighboring districts (Figure 2(b)).

Table 3 shows determinants of our average combat months measure, controlling flexibly for the average initial overseas deployment date of battalions from a district to mimic these patterns of exogenous assignment.<sup>17</sup> Columns 1–3 examine the relationship between combat experience and a range of factors that have been emphasized as being related to economic migration during the Partition (e.g., Bharadwaj, Khwaja, and Mian 2008a; Jha 2008; Wilkinson 2004). Each column provides a different means to control for

the timing of initial deployment, including Yatchew's (2003) nonparametric differencing estimator (Col 1), a quadratic (Col 2), and a quartic polynomial (Col 3). Note that comparing districts across states and controlling for deployment, the extent of combat experience does not appear to show any relationship with arguably the most important political, economic, and demographic factors associated with migration during this period, such as distance to the border, literacy rates, agricultural wealth (as measured by land revenue), or male poverty as measured by the share of landless agricultural labourers or Depression-era men considered "unproductive" (i.e., beggars, vagrants, prostitutes, and the unemployed). Combat experience also appears to show no robust relationship with historical factors that might influence Hindu-Muslim relations, such as the presence of a medieval port (an indicator of interethnic economic complementarity) or a patronage center (of inter-ethnic competition) (Jha 2008) (Cols 1– 6). 18 Columns 4–6 compare districts within the same province or native state, sequentially adding further controls for prewar military recruitment and proximate prewar and demobilization indicators of conflict and private organization. A consistent picture emerges. Conditional on the timing of deployment, combat experience does not appear to be related to the propensity for recruitment, the share of prime age males (age 20–35) in 1941 (as predicted from the 1921 census), the share of army recruits in 1931, the share of martial races, nor the share of martial race males that were of targeted minorities. Combat experience also does not appear related to proximate indicators of conflict, private organizational skill, or crime such as the number of predemobilization Hindu-Muslim Riots, the share of police, or of gunmakers in the population.

One concern might be that, rather than combat experience fostering organizational skill, combat experience raises the share of war-time fatalities from a district that might have independent effects on the propensity to migrate during the Partition (such as

 $<sup>\</sup>overline{\mbox{\sc 17}}$  We construct the average deployment date analogously to combat experience.

<sup>&</sup>lt;sup>18</sup> Due to the Hajj, which coordinated much of Indian Ocean trade well into the seventeenth century, Muslims performed complementary roles in shipping that were particularly pronounced in medieval ports. This inter ethnic specialization in complementary roles appears to have persisted over time.

Variable	N	Mean (/%)	SD	Median	Sample
variable	IN	Mean (/%)		Median	Sample
Population (100,000s), 1951	284	15.093	12.858	11.356	Subcontinent
Partition Outcome Variables (% of 1951 pop)					
Change in % Targeted Minority, 1931–51	284	-4.773	9.622	-0.591	Subcontinent
% Targeted Minority Outflows	284	5.000	11.890	0.475	Subcontinent
% Majority Inflows	284	3.799	8.037	0.445	Subcontinent
% (T. Minority Outflows - Majority Inflows)	284	1.201	7.695	-0.014	Subcontinent
% Partition Deaths	28	0.297	0.357	0.107	Punjab
Combat Experience					
Average Combat Months, 1940–45	284	1.795	1.483	1.392	Subcontinent
Average 1st Deployment Date	284	1944.044	1.057	1943.954	Subcontinent
Economic Migration Controls					
Border District	284	14.437			Subcontinent
Border State	284	39.437			Subcontinent
Log. Distance to Border (km)	284	4.964	2.301	5.870	Subcontinent
% Targeted Minority, 1931	284	13.808	12.118	10.364	Subcontinent
% Males Nontargeted Religions 1931	284	5.633	13.081	1.483	Subcontinent
% Majority Literate 1931	284	6.203	4.838	4.924	Subcontinent
% Targeted Minority Literate 1931	284	10.745	7.302	9.248	Subcontinent
Big City	284	8.099			Subcontinent
Population (100,000s) 1931	284	11.708	9.967	9.178	Subcontinent
Land Revenue (Rs 100,000s) 1901	284	1.052	1.170	0.855	Subcontinent
% Males Nonproductive 1931	284	0.668	1.001	0.397	Subcontinent
% Males Landless Laborers 1931	284	12.706	34.062	6.232	Subcontinent
Med. Muslim Patronage Center	284	73.592			Subcontinent
Medieval Port	284	10.211			Subcontinent
Prewar Military Recruitment Controls					
% Males 20–35 in 1941 (Predicted from 1921)	284	30.180	15.883	34.490	Subcontinent
% Males of Martial Race 1931	284	3.970	10.016	0.000	Subcontinent
% Males Soldiers 1931	284	0.309	1.220	0.013	Subcontinent
% Martial Males of T. Minority 1931	284	5.188	20.328	0.000	Subcontinent
Prewar Civil Conflict and Crime Controls/Place					
# Hindu-Muslim Riots, 1850–1942	284	1.743	3.557	0.000	Subcontinent
% Males Police or Watchmen 1931	284	0.542	1.278	0.261	Subcontinent
% Males Gunmakers 1931	284	0.004	0.041	0.000	Subcontinent
Prewar Crime Placebos	400		4 00=		<b>5</b> 2 1 2
Murders per 100,000 1938	102	1.271	1.337	0.959	Brit. India
Cognizable Crimes per 100,000 1938	224	160.665	152.277	125.181	BI+Big NS
Contemporaneous & Intermediating Factors	004	0.044	0.400	0.044	0 1 11 1
% Males Casualties 1939–45	284	0.044	0.108	0.011	Subcontinent
% Males Soldiers 1942	284	1.027	2.167	0.321	Subcontinent
Units Recruiting in District 1942	284	31.926	46.805	15.500	Subcontinent
% Casualties 1st Deployed to E. Asia	284	0.905	0.215	0.987	Subcontinent
Regimental Herfindahl Index	284	0.243	0.226	0.158	Subcontinent
Log. Gandhi Days in District, 1946–48	284	0.192	0.752	0.000	Subcontinent

through poverty). Though war-time fatalities are endogenous to assignment to combat, we can examine the residual correlation between combat experience and the proportion of fatalities to assess whether this may be a major part of the mechanism. However, there are appears to be little relation between the two (Col 6).<sup>19</sup>

In fact, only one variable we examined that might explain increased outflows of minorities—minority literacy rates—happens to robustly correlate with combat experience. However, combat experience correlates with *lower* minority literacy rates, which, as we can show, predicts *less* minority out-migration, not more (Table 4).

Instead, taken together, the results in Table 2 appear consistent with our identifying assumption that soldiers deployed at the same time appear to have been assigned to combat roles in a manner unrelated to the relevant characteristics of their home districts.

In fact, the broader lack of a relationship between combat assignment and district characteristics in Table 2 also appears consistent with the qualitative historical

<sup>&</sup>lt;sup>19</sup> Another endogenous factor that we can explore is whether ethnic cleansing induced by combat experience might lead Congress leaders, particularly Mahatma Gandhi, to respond differentially. Indeed, several India scholars assert that Gandhi exercised a powerful effect in suppressing violence in areas he visited (e.g., Brown 1991). However, combat experience does not seem correlated with the days Gandhi spent in a district during the Partition violence (Col 6).

record. The nine campaign volumes of the Official History make no mention of different Indian units being specifically deployed during the war based upon their ethnic composition (Prasad 1954).<sup>20</sup> Surviving brigade records also indicate that commanders paid no attention to unit origin and ethnicity in making decisions in combat deployments.<sup>21</sup> The transfer patterns of units from one theater from another also suggest that particular group or regional identities were not a factor. As we have seen, particularly with the sudden entry of Japan into the war, units designated for Africa were rapidly redeployed, either to East Asia, or to serve in the defense of India itself, which faced the threat of amphibious invasion and the reality of Japanese spearheads penetrating the Northeast. Groups of one community were often replaced by very different groups, sometimes at very short notice, without this being mentioned as in any way remarkable in secret contemporary army correspondence of or in postwar memoirs.<sup>22</sup>

Instead, internal army correspondence appears to place particular emphasis on the need for and reality of the interchangeability of battalions, brigades, and divisions, and the fact that units from many different groups were fighting alongside each other within those units. All regular Army battalions were "armed and equipped to the same scale and standard" (Indian Army Reorganization Committee 1945, 404). In war time, recruits were reallocated to different battalions of a regiment on the basis of the casualties incurred. In fact, within each regiment, all battalions aimed at the same ethnic mix of companies, because it was argued in secret army correspondence that since each unit had similar chances of sustaining high casualties, it was the best way to assure that particular ethnicities were not relatively harder hit (Indian Army Reorganization Committee 1945). These were the considerations also highlighted in the 1923 Indianization Committee Report, which concluded, "No risks must be taken and every unit [of the Indian army] must be interchangeable and fit for war."23

#### RESULTS

We exploit the arbitrary combat experiences of units due to unit interchangeability and enemy action to estimate the effects of war-time combat experience on collective action during the crisis of the Partition two years later. Table 2 provides summary statistics, grouped by outcomes and four sets of control variables, related to migration, military recruitment, conflict, and contemporaneous factors that we will sequentially add in our analysis. On average, South Asian districts lost 4.8% of their 1951 populations to outflows of targeted minorities in this period, relative to the proportion "expected". This is equivalent to 72,000 people in each district. However, this number masks a range of experiences of ethnic cleansing, even among neighboring districts and those of equivalent distance to the new border (Figure 3(a)). Furthermore, as Figure 3(b) documents, there was not a clear one-to-one transfer of minority populations across that border. Rather, there were important differences in the extent to which neighboring districts welcomed refugees.<sup>24</sup>

Table 4 (Cols 1–3) examines the determinants of the change in the proportion of religious minorities in 1951. Districts that raised units with an extra month of average combat experience in World War II reduced the proportion of religious minorities in their population in 1951 by around 1.38 percentage points, comparing districts across provinces (Col 1), and close to 0.72 percentage points on average, comparing districts within the same province (Cols 2 and 3). Given that the average minority population in 1951 was around nine percentage points, these are considerable effects. These results are robust to sequentially adding the control sets for migration, recruitment and predemobilization conflict and comparing districts within the same native state or province (Cols 2 and 3). In fact, and consistent with the theoretical framework, the interaction between combat experience and the initial targeted minority population is also negative, suggesting that the effect of combat experience leads to greater decreases in the minority population in districts that had an ex ante more mixed population and thus the current spoils and future political benefits from cleansing were also higher, inducing both "peaceful" and "violent" cleansing. The F statistics from joint tests of significance of the combat months variables are robust at conventional levels.25

<sup>&</sup>lt;sup>20</sup> We did find two cases in which generals requested particular "racial" units. Both, however, were for Gurkhas from Nepal, so outside our sample, and the rationale for the request was based upon the past experiences of those generals with these particular units rather than their ethnicity *per se*. Orde Wingate requested Gurkhas to join his "Chindit" commando force in 1943, and Francis Tuker asked for Gurkhas from his former regiment to join the 5th Division in Africa in 1942.

<sup>&</sup>lt;sup>21</sup> Slim Papers, 2/2, 6/6, Churchill Archives, Cambridge. Army leaders did occasionally consider the ethnic composition of troops when deploying them within India. In World War I, some Muslim troops were also redeployed to avoid fighting the Ottomans, due to fear of mutiny arising from the declaration of *jihad* by the Caliph. However, these distinctions were not applied to the belligerents in World War II (Menezes 1993).

<sup>&</sup>lt;sup>22</sup> For example, the Central Indian Horse, usually part of the 4th Indian Division was lent to another division in mid-1944 before returning after a few months. Similarly, the 4/11 Sikhs were transferred from the 25th Brigade to the 10th Brigade on 17 December 1944. Dharm Pal, *The Campaign in Italy 1943–54* (Orient 1960, 344, 555). <sup>23</sup> Our italics. *Committee . . . on the Progress of the Indianization of the Indian Army (June 1923)* (IOL Mil. Dept Temp. No. 309); *Reorganization of the Army and Air Forces in India*, Vol. 1 (Secret, Copy No. 67), 1945, NAI, Group XXII S. Nos. 1–161, Part 1.

<sup>&</sup>lt;sup>24</sup> The Indian and Pakistani governments both attempted to channel refugees to camps and then settle them in "evacuee property." However, like the ethnic cleansing, the overwhelming majority of the in-migration was beyond the control of the state (Khan 2007). By the end of 1947, only 25% of the then 12 million refugees were "officially" counted in the 176 refugee camps or had been resettled in evacuee property (Khan 2007, 228). Even refugees that were registered as "officially" settled often benefited from the rubber stamping of the facts on the ground.

<sup>&</sup>lt;sup>25</sup> Following the war, it could have been the case that soldiers did not return to their home districts, but having become more mobile, went to other districts instead. However, since most soldiers were recruited from rural areas with geographically concentrated networks and assets, such as land, this is less likely to be an issue in this context. Indeed, contemporary bureaucrats from recruitment districts were

OLS: Observations = 284	Migration (1)	Migration (2)	Migration (3)	Military (4)	Conflict (5)	Contemporaneous (6)
Border State	0.232	-0.019	0.022			
Border District	[0.614] -0.731 [0.749]	[0.344] -1.080 [0.816]	[0.313] -1.071 [0.825]	-0.367 [0.687]	-0.337 [0.685]	-0.139 [0.698]
Log. Distance to Border (km)	-0.131 [0.138]	-0.258 [0.165]	-0.254 [0.163]	-0.147 [0.138]	-0.135 [0.143]	-0.096 [0.139]
% Targeted Minorities 1931	-0.014 [0.010]	-0.018* [0.010]	-0.019* [0.010]	-0.014 [0.009]	-0.014 [0.009]	-0.013 [0.010]
% Males Nontargeted Religions	-0.003 [0.006]	0.001 [0.003]	0.000	0.000 [0.003]	0.003 [0.003]	0.000 [0.003]
% Majority Literate 1931	0.022 [0.016]	-0.003 [0.017]	-0.001 [0.017]	0.012 [0.010]	0.015 [0.010]	0.019 [0.013]
% Targeted Minority Literate 1931	-0.018	-0.020	-0.020	-0.036***	-0.037***	-0.039***
Big City	[0.016] -0.265	[0.013] -0.155	[0.013] -0.192	[0.013] -0.125 [0.130]	[0.013] -0.056	[0.014] -0.017
Population (100,000s), 1931	[0.255] -0.007	[0.188] -0.006	[0.184] -0.005	-0.003	[0.165] -0.002	[0.169] -0.002
Land Revenue, Rs 100,000s	[0.011] -0.085	[0.010] -0.025	[0.010] -0.028	[0.007] -0.005	[0.008] -0.002	[0.008] 0.005
% Males Nonproductive 1931	[0.132] 0.399	[0.087]	[0.088]	[0.053] -0.040	[0.054] 0.002	[0.050] 0.023
% Males Landless Laborers 1931	[0.326] -0.010	[0.302] -0.015*	[0.303] -0.014	[0.242] 0.002	[0.241]	[0.246] 0.000
Med. Muslim Patronage Center	[0.010] -0.026	[0.009] 0.048	[0.009] 0.030	[0.007] -0.064	[0.006] -0.035	[0.006] -0.050
Medieval Port	[0.208] 0.118	[0.148]	[0.156] 0.288	[0.231] -0.247	[0.243] -0.265	[0.245] -0.268*
% Males 20–35 (Predicted from 1921)	[0.379]	[0.233]	[0.220]	[0.152] -0.003	[0.163] -0.004	[0.141] -0.004
% Males of Martial Race 1931				[0.012] 0.016	[0.012] 0.016	[0.012] 0.009
% Males Soldiers 1931				[0.011]	[0.011]	[0.008] 0.048
% Martial Males of T. Minority				[0.037] -0.003	[0.045] -0.003	[0.055] -0.003
# Hindu-Muslim Riots, 1850-1942				[0.003]	[0.003] -0.019	[0.003] -0.018
% Males Police or Watchmen					[0.023] -0.013	[0.025] -0.011
% Males Gunmakers 1931					[0.055] -0.991	[0.058] -0.850
Log. Gandhi Days 1946–48					[1.112]	[1.092] -0.088
% Males Casualties 1939–45						[0.143] 1.373 [1.242]
1st Deployment Date Control	Non-	Quadratic	Quartic	Quadratic	Quadratic	Quadratic
Province/Native State x Annex FE R-squared	parametric No 0.09	No 0.44	No 0.44	Yes 0.66	Yes 0.66	Yes 0.67

Notes: Robust standard errors in brackets, clustered at province/native state level. Significant at \*10%, \*\*5%, \*\*\*1%; separate intercepts provided within provinces based upon date of British annexation. (1) uses Yatchew's (2003) differencing estimator, with bootstrapped clustered standard errors.

OLS, Observations = 284	Δ%T. Minority (1931–51)			% T.	% T. Minority Outflows			% Majority Inflows			%(Min Outflows-Maj Inflows)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
Average Combat Months,	-1.375***	-0.721**	-0.772***	2.103***	1.115**	1.197***	0.833**	0.538**	0.563**	1.270***	0.576	0.634***	
1940–45	[0.445]	[0.350]	[0.220]	[0.509]	[0.514]	[0.327]	[0.349]	[0.221]	[0.238]	[0.254]	[0.424]	[0.226]	
Combat Mths x % T. Minority			-0.153*** [0.036]			0.245*** [0.066]			0.074*** [0.020]			0.171*** [0.055]	
% Targeted Minority, 1931	-0.456***	-0.438***	-0.070	0.596***	0.629**	0.042	0.274***	0.206**	0.029	0.322**	0.423**	0.012	
, a rangetea rimierity, ree r	[0.131]	[0.161]	[0.082]	[0.193]	[0.261]	[0.135]	[0.081]	[0.086]	[0.058]	[0.124]	[0.180]	[0.126]	
% Males Nontargeted	-0.003	-0.078*	-0.039	0.029	0.106*	0.044	0.010	0.041	0.022	0.019	0.065	0.022	
Religions	[0.031]	[0.041]	[0.025]	[0.041]	[0.062]	[0.039]	[0.026]	[0.026]	[0.020]	[0.029]	[0.052]	[0.044]	
% Targeted Minority		_0.109	-0.102	0.294***	0.144	0.133	0.147*	0.009	0.006	0.146**	0.135	0.127	
Literate 1931	[0.063]	[0.099]	[0.071]	[0.079]	[0.159]	[0.112]	[0.075]	[0.082]	[0.067]	[0.069]	[0.146]	[0.134]	
% Males Nonproductive 1931	-5.477**	-0.568	0.306	6.384**	0.834	_0.561	4.950*	1.477	1.058	1.434	-0.643	-1.619	
75 Maios Honproductive 1001	[2.621]	[1.930]	[1.554]	[2.916]	[2.391]	[1.790]	[2.531]	[1.823]	[1.640]	[0.910]	[1.462]	[1.535]	
% Males Landless Labourers	0.134*	0.021	-0.014	-0.153*	-0.035	0.022	_0.121*	-0.036	-0.019	-0.032	0.002	0.041	
75 Maios Earlaises Eassarsis	[0.070]	[0.056]	[0.041]	[0.078]	[0.070]	[0.046]	[0.068]	[0.055]	[0.048]	[0.028]	[0.041]	[0.044]	
% Males 20-35 (Predicted	[0.070]	-0.055	-0.073	[0.070]	0.043	0.072*	[0.000]	0.055	0.064	[0.020]	-0.013	0.008	
from 1921)		[0.057]	[0.058]		[0.041]	[0.040]		[0.087]	[0.088]		[0.071]	[0.072]	
% Males of Martial Race		0.034	0.012		-0.013	0.023		-0.103*	$-0.093^*$		0.090***	0.115***	
70 Maios of Martial Flace		[0.041]	[0.038]		[0.044]	[0.038]		[0.052]	[0.052]		[0.031]	[0.033]	
% Males Soldiers 1931		_0.107	_0.306		0.031	0.350		0.139	0.234		_0.107	0.115	
70 Maios Colaisio 1001		[0.238]	[0.242]		[0.313]	[0.322]		[0.361]	[0.345]		[0.329]	[0.396]	
% Martial Males of T. Minority		_0.200j	0.005		-0.010	_0.019		0.009	0.006		_0.019	-0.025	
70 Martial Males of 1. Millerty		[0.018]	[0.015]		[0.023]	[0.019]		[0.020]	[0.018]		[0.014]	[0.017]	
# Hindu-Muslim Riots,		0.029	-0.005		-0.015	0.039		0.002	0.019		_0.018	0.021	
1850–1942		[0.104]	[0.085]		[0.149]	[0.129]		[0.098]	[0.091]		[0.154]	[0.156]	
% Males Police or Watchmen		-0.596	-0.201		0.756	0.126		0.127	-0.062		0.629	0.188	
75 Maios I Gilos di Tratorimori		[0.489]	[0.354]		[0.618]	[0.399]		[0.448]	[0.389]		[0.432]	[0.353]	
% Males Gunmakers		-2.958	-7.562		3.832	11.180		-0.111	2.098		3.944	9.082	
70 Maioo Garinianoro		[4.010]	[7.703]		[5.242]	[11.536]		[5.261]	[5.037]		[7.591]	[11.508]	
Control Set	Migration	Conflict	Conflict	Migration	Conflict	Conflict	Migration	Conflict	Conflict	Migration	Conflict	Conflict	
Province / NS x Annex FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes	
Joint F-Test Combat Variables			9.42			8.70			6.99			9.09	
Prob>F			0.00			0.00			0.00			0.00	
<b>D</b> 1	0.00	0.00	0.00	0.50	0.74	0.04	0.50	0.75	0 77	0.04	0.07		

Notes: Robust standard errors in brackets, clustered at province/native state level. Significant at \*10%, \*\*5%, \*\*\*1%; all regressions include quadratic controls for deployment date, and controls for border district, log. distance to border, big city, population, land revenue, medieval port, and patronage center. (1, 4, 7, 10) contain a control for border state. Interactions are presented as deviations from the mean. Separate intercepts provided within provinces based upon date of British annexation.

0.84

0.53

0.75

0.74

0.58

0.77

0.24

0.37

0.50

0.62

0.82

0.88

R-squared

Columns 4–9 decompose the changes in the minority share into outflows of the target minority and the influx of members of the religious majority into a district. Notice that an additional month of combat experience increases target minority outflows—our measure of ethnic cleansing—by around 1.1 percentage points of a district's 1951 population (or close to 17,000 people), comparing districts within the same province (Cols 2 and 3). This effect is once more largest in areas that were ex ante more ethnically mixed.

However, it does not appear that it is either the potential private spoils from ethnic cleansing or the reduced costs of engaging in violence due to combat experience that entirely explain our results. Districts that raised soldiers with an additional one month of combat experience also gained 0.54 percentage points greater inflows of co-ethnics (or 8,150 people) (Cols 7–9). Once again, the effects of combat experience were greater in districts that ex ante had a more mixed population

Notice, however, that the relative effect of combat experience on fostering co-ethnic immigration is smaller than on minority outflows. Columns 10–12 examine this asymmetry between ethnic cleansing and co-ethnic immigration further, providing results that examine the determinants of the *difference* between the proportion of minority outflows and majority inflows in a district. Note that combat experience also encourages target minority outflows relatively more than co-ethnic immigration as the ex ante proportion of the minority in the district increases. This is consistent with the theoretical framework—the relative gains from ethnic cleansing over co-ethnic immigration rise with the relative size of the minority population.

Table 5 further unpacks the differential effects of combat experience in two environments where one would expect that a positive organizational shock might actually lead to lowered ethnic cleansing on average: in districts with medieval ports, which enjoyed a historical legacy of inter ethnic complementarities in trade between Hindus and Muslims, and in the districts where the share of target minority males considered to be of "good martial race" exceeded that of the majority, and thus where the minority was relatively more likely to gain the combat experience. Observe that in both these environments, a positive combat experience shock leads to fewer minority outflows (Cols 3 and 4) leading to a preservation of the minority community (Cols 1 and 2), but have roughly similar levels of majority inflows (Cols 5 and 6). Thus in these environments, co-ethnic immigration is favored over minority outflows on average (Cols 7 and 8).<sup>26</sup>

convinced that most soldiers would return to their native villages. However, to the extent that such mobility did occur, our estimates should be attenuated, and thus can be considered a lower bound on the effect of combat experience.

The theoretical framework suggests that as the minority share rises, the benefits to ethnic cleansing rise. Further, though organized minorities can defend themselves and are less likely to be cleansed while small, the costs of leaving also fall with organization and large organized minorities may actually be more likely to leave in anticipation of violence. Figure 4 provides a pictorial look at combat experience and the threshold at which minority outflows are favored over inflows as the initial minority population rises, plotting the residuals of a regression with all noncontemporaneous controls except combat experience against the initial target minority share. Curve fits from separate local polynomial regressions show the relationship in districts that contain martial races assigned to above median combat experience. Consistent with the theoretical framework, combat experience raises ethnic cleansing relative to co-ethnic immigration, and does so when the minority population exceeds  $\sim 35\%$ , below which co-ethnic immigration is favored. Furthermore, even though net outflows fall and co-ethnic immigration is favored when the minority is the likely beneficiary of the combat experience, minority beneficiaries of combat experience are also more likely than unorganized groups to leave when the minority share becomes

The latter effect sheds light on the dilemma faced by larger organized minorities—to stay and fight, or leave in anticipation of the violence their relative size may attract. The increasing effect of a combat experience shock on net outflows in larger minority groups suggests that the choice to mobilize and evacuate appears to be more common in these data. The qualitative section provides examples of larger minorities with combat experience that initially mobilized for defense, but upon discovering themselves to be on the wrong side of the border, chose ultimately to evacuate. In both strategic decisions, military organizational skills appear to have been important.

# PLACEBOS, POST-TREATMENT SELECTION, AND ROBUSTNESS

Despite the lack of a relationship between average combat experience and observable home district characteristics, a lingering concern may be that average combat experience is capturing some unobserved feature of martiality or criminal organization of the home district that is also correlated with religious tension and violence. Note that such an unobserved martial characteristic would not explain the increased effect of combat experience on majority immigration. Further, if such an unobserved feature did exist, it would suggest that our wartime combat experience variable should also predict the incidence of *prewar* religious violence or other indicators of martiality. In contrast, if, as we argue, combat experience is a war-time phenomenon, it naturally should have no effect prior to the war.

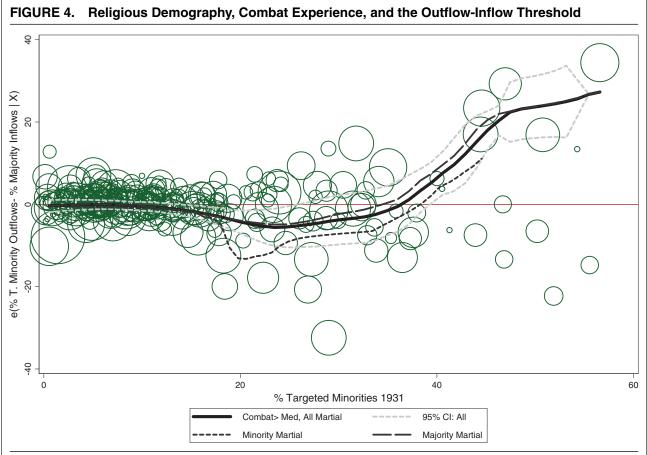
units to be assigned to greater combat or by the correlation between combat experience and minority literacy rates.

<sup>&</sup>lt;sup>26</sup> We also include interactions between combat experience and the share of martial males as well as with the minority literacy rate. Neither interaction is significant and the average effects are robust to their inclusion. Thus our results do not appear to be driven by some ex ante "martiality" in the district that might also lead some

TABLE 5. Regression: Ethnic Homogenization—Interactive Effects

	∆%T. Minority (1931–51)		% T. Minor	ity Outflows	% Major	ity Inflows	%(Min Outflows-Maj Inflows)	
OLS, Observations = 284	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Average Combat Months,	-0.590***	-0.595***	1.021***	1.025***	0.531**	0.536**	0.490*	0.488*
1940–45	[0.212]	[0.218]	[0.334]	[0.336]	[0.213]	[0.210]	[0.244]	[0.245]
Combat x Martial (T.Min> Maj)	1.586*	1.671**	-2.502**	-2.566***	-0.283	-0.367	-2.219***	-2.199**
, , , , , , , , , , , , , , , , , , , ,	[0.851]	[0.753]	[1.009]	[0.893]	[0.694]	[0.738]	[0.772]	[0.847]
Combat x Medieval Port	0.261***	0.259***	-0.350***	-0.348***	-0.111	-0.109	-0.239***	-0.240**
	[0.067]	[0.067]	[0.090]	[0.091]	[0.075]	[0.076]	[0.055]	[0.055]
Combat x % T. Minority	-0.136***	-0.134***	0.230***	0.229***	0.060***	0.058***	0.170***	0.171**
	[0.037]	[0.037]	[0.068]	[0.067]	[0.020]	[0.019]	[0.060]	[0.058]
Combat x Martial (T.Min>Maj)	[0.007]	0.082	[0.000]	-0.062	[0.020]	-0.082*	[0.000]	0.020
x % T. Min		[0.061]		[0.114]		[0.046]		[0.075]
Combat x % Martial Males	0.003	0.003	-0.011	_0.011	0.023	0.023	-0.034	-0.034
Combat x 70 Martial Males	[0.037]	[0.037]	[0.044]	[0.044]	[0.015]	[0.015]	[0.032]	[0.032]
Combat x % T. Minority Literate	0.003	0.003	0.006	0.007	0.023	0.023	_0.017	_0.00 <u>2</u> j
Combat x /o 1. Willonly Eliciate	[0.035]	[0.035]	[0.055]	[0.055]	[0.016]	[0.016]	[0.049]	[0.049]
Martial (T. Minority> Majority)	-2.339	0.094	1.554	_0.287	3.132	0.697	_1.578	-0.984
Martial (1. Millority > Majority)	[4.372]	[3.965]	[4.705]	[4.551]	[2.540]	[3.211]	[3.637]	[2.587]
Martial (T.Min> Maj) x % T. Minority	_0.293***	_0.604***	0.228	0.463	0.335***	0.646***	_0.107	-0.183
ivial tial (1.1viii1> iviaj) x /6 1. iviii1011ty								
9/ Targeted Minority 1001	[0.102] -0.128	[0.174]	[0.161]	[0.328]	[0.053] 0.069	[0.153] 0.079	[0.116] 0.036	[0.209] 0.034
% Targeted Minority, 1931		-0.138	0.105	0.113				
O/ Tayantad Missayity Litayata 1001	[0.096]	[0.096]	[0.159]	[0.157]	[0.063]	[0.061]	[0.144]	[0.140]
% Targeted Minority Literate 1931	-0.106	-0.110	0.127	0.130	-0.038	-0.034	0.165	0.164
M " ID I	[0.080]	[0.082]	[0.128]	[0.131]	[0.079]	[0.081]	[0.124]	[0.124]
Medieval Port	1.671**	1.663**	-1.955***	-1.949***	-0.185	-0.177	-1.769	-1.771
	[0.648]	[0.649]	[0.576]	[0.574]	[1.598]	[1.606]	[1.338]	[1.340]
% Males of Martial Race	0.009	0.006	0.043	0.045	-0.181**	-0.178**	0.224*	0.224*
	[0.166]	[0.166]	[0.190]	[0.191]	[0.087]	[0.086]	[0.122]	[0.123]
% Martial Males of T. Minority	0.001	-0.009	0.027	0.034	-0.042	-0.032	0.069	0.066
	[0.033]	[0.030]	[0.047]	[0.041]	[0.031]	[0.028]	[0.044]	[0.040]
Controls	Conflict	Conflict	Conflict	Conflict	Conflict	Conflict	Conflict	Conflict
Province/NS x Annex FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Joint F-Test Combat Variables	8.77	13.09	9.05	15.13	9.56	7.71	4.63	9.48
Prob>F	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
R-squared	0.90	0.90	0.85	0.85	0.79	0.79	0.52	0.52

Notes: Robust standard errors in brackets, clustered at province/native state level. Significant at \*10%, \*\*5%, \*\*\*1%; all regressions include all noncontemporaneous controls, province fixed effects, as well as a quadratic control for deployment date. Separate intercepts provided within provinces based upon date of British annexation.



Notes: This graph show the residuals of a regression of % Minority Outflows % Majority Inflows on the full set of noncontemporaneous controls, excluding Average Combat Mths, plotted against % T. Minorities 1931. Marker sizes proportional to combat experience. Local polynomial (Fan) regressions provided separately for martial districts with above median combat experience, as well as where targeted minority (majority) martial races exceed the majority.

Table 6 presents the results from a battery of such placebo tests. Columns 1 and 2 predict the number of Hindu-Muslim riots reported in government records and newspaper reports in towns within a district from 1850 to 1942, looking between and within native states and provinces. Notice first that World War II combat experience has no predictive power on the number of Hindu-Muslim riots prior to demobilization. However, other factors that shape historical patterns of interreligious economic complementarity and competition such as the presence of medieval Muslim patronage centers and medieval ports in a district, which, as Table 2 demonstrated, were uncorrelated with combat experience, do have a significant and robust effect on religious violence prior to demobilization, consistent with Jha (2008).

Columns 3–8 provide further placebo tests based on prewar data on the extent of police or security recruitment prior to the war (Cols 3 and 4), the murder rate (Cols 5 and 6), or the number of "cognizable crimes" (serious violent crimes) for which we have disaggregated information from provincial police reports for a 1938 sub-sample of native states and British provinces. Once again, in none of these do we find any consistent

effect of combat experience. Thus our measure of wartime combat experience does not appear to be related to some unobserved prewar martial characteristic of a district.

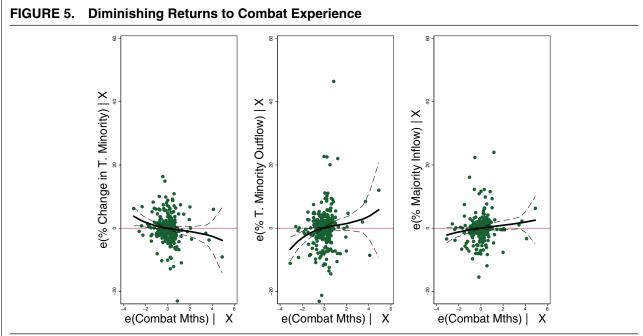
A separate concern may be that, even if the initial combat deployment appears to be as good as random, we may be concerned that the army "learns" about the martiality of certain units, and thus sends the successful units into even more combat. If it was the case that some "unobserved martial" characteristic of a district is contaminating the effects after the first deployment then we would expect to see an increasing effect of combat experience across the distribution.

Figure 5 plots the residuals of a regression of the 1951 minority ratio, outflows, and inflows on the residuals of combat experience, holding constant the full set of noncontemporaneous controls. A cubic fit is applied to the relationship to assess whether the effect of combat experience does in fact increase nonlinearly.

Notice first that the slopes are in the expected directions: a lowered minority share with combat experience, and higher outflows and inflows. The fits do not appear to be driven by outliers, and we fail to reject a linear relationship. Further, the curvature on the effect

OLS Sample	# Hindu-Muslim Riots, 1850–1942 ————————————————————————————————————		% Police, 1931  All Sub-Continent		Murders per	100,000, 1938	Murder, Unrest, Arson, Banditry etc per 100,000, 1938		
					British su	ıb-sample	British & Large NS		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Average Combat Mths, 1940–45	-0.192	-0.174	-0.016	0.069	-0.041	0.045	1.457	3.621	
	[0.167]	[0.209]	[0.071]	[0.097]	[0.114]	[880.0]	[9.984]	[9.784]	
% Targeted Minority, 1931	0.046**	0.025	-0.020**	-0.019*	-0.001	-0.007	0.894	1.035	
	[0.022]	[0.025]	[0.009]	[0.011]	[0.010]	[0.009]	[1.095]	[1.563]	
% Males Nontargeted Religions	0.015	0.020**	-0.003	-0.005	0.005	0.001	-1.025	-2.234*	
	[0.009]	[0.008]	[0.012]	[0.012]	[0.007]	[0.006]	[0.925]	[0.977]	
% Majority Literate 1931	0.085	0.134	0.035	0.084	0.042*	-0.003	3.080	3.073	
	[0.091]	[0.119]	[0.032]	[0.050]	[0.023]	[0.016]	[3.199]	[2.510]	
% Targeted Minority Literate 1931	-0.034*	-0.034	0.058**	0.072*	-0.029	0.015	2.810	4.296*	
	[0.018]	[0.027]	[0.027]	[0.041]	[0.020]	[0.018]	[2.651]	[2.147]	
% Males Nonproductive 1931	0.542	1.623	1.962***	1.436**	-0.264	0.092	48.925	4.281	
	[0.815]	[1.114]	[0.397]	[0.672]	[0.213]	[0.424]	[39.317]	[38.157]	
% Males Landless Laborers	-0.018	-0.045	0.039***	0.056**	-0.034*	-0.002	-1.846*	-0.596	
	[0.022]	[0.029]	[0.011]	[0.022]	[0.020]	[0.017]	[1.086]	[1.311]	
Med. Muslim Patronage Center	1.353***	1.118***	0.180	0.152	0.485***	0.517***	41.725**	39.696	
	[0.359]	[0.380]	[0.236]	[0.199]	[0.136]	[0.166]	[20.232]	[28.793]	
Medieval Port	-1.371***	-0.944*	0.120	-0.318	-0.303	-0.247**	-89.705**	-20.083	
	[0.451]	[0.542]	[0.611]	[0.634]	[0.224]	[0.114]	[33.375]	[17.925]	
Observations	284	284	284	284	102	102	224	224	
Native State/Province × Annex FE	N	Υ	N	Υ	N	Υ	N	Υ	
Controls	Migration	Military	Migration	Military	Migration	Military	Migration	Military	
R-squared	0.36	0.5	0.75	0.83	0.27	0.65	0.21	0.56	

Notes: Robust standard errors in brackets, clustered at province/native state level. Significant at \*10%, \*\*5%, \*\*\*1%; all regressions include quadratic controls for deployment date and controls for big city, land revenue, population, border district, and log. distance to the new border; (1), (3), (5), and (7) includes a control for border state; (2), (4), (6), and (8) include controls for prime age male share, martial race share, minority share of martial males, and army recruits 1931. Separate intercepts provided within provinces based upon date of British annexation.



Notes: This graph plots the residuals of average combat experience on the residuals of % Targeted Minority, Targeted Minority Outflows, and Majority Inflows, using all controls and provincial FE. A cubic fit and prediction errors are also provided.

is, if anything, in the opposite direction to the first order effect. The consistent picture that emerges is that rather than a "selection" effect, there appears to be slightly diminishing returns to the "capital" gained through combat experience. The presence of diminishing returns to combat experience as "combat fatigue" or "burnout" sets in mirrors findings from other twentieth-century wars (e.g., Muir 2000).

Table 7 examines alternative mechanisms and interactions and their effects on minority outflows. The combat experience effect does not appear to be driven by border states or districts (Col 1). Column 2 adds variables that capture co-determined factors: the proportion of war fatalities and the extent of Gandhi's stay in a district. Note that the effect of combat experience on minority outflows does not appear to change when we control for the fatality rate, which itself does not appear to have an independent effect (Col 2). The effect also does not appear to be coming through Gandhi's involvement, though the days spent by Gandhi in a district does appear to have an insignificant negative relation with minority outflows.<sup>27</sup> Columns (3–5) shows that the effect of combat is also robust to further controls, including an alternative measure of the 1942 recruitment rate and the units recruiting in the district.<sup>28</sup>

A second control assesses the extent to which different patterns of deployment to East Asia versus Africa or Europe might have engendered a separate ideological or horizon-broadening effect (Costa and Kahn 2005). However, the effect does not appear to be coming from the theater of war.<sup>29</sup>

We can also unpack whether the enhanced organizational abilities of combat veterans come from the importation of existing military organization or through the development of individual organizational skills. In particular, small unit cohesion is believed to be valuable in terms of battlefield effectiveness.<sup>30</sup> It might be the case that these pre-existing company or battalion social networks are facilitating collective action when soldiers return home, consistent with Petersen (2001), rather than individual human capital. Our data allow us to test this by constructing a battalion-level Herfindahl measure for each Indian district. This is a measure of the likelihood that fatalities in any individual district came from the same battalion. We find that neither

 $<sup>^{27}</sup>$  We are naturally not asserting that this is a causal effect. It is likely that Gandhi stayed longer in the worst hit districts.

 $<sup>^{28}</sup>$  L/MIL/14/236 Annual Return showing the Class Composition of the Indian Army provides the size of each infantry battalion in January 1942. Instead of assuming that war fatalities reflect recruitment intensity, we assign the strength of each battalion equally to each district that has at least one fatality from that battalion. This measure also correlates strongly with the population share of 1944 recruits  $(\rho=0.88),$  fatalities  $(\rho=0.73),$  and martial males 1931  $(\rho=0.52)$  (Table 1).

<sup>&</sup>lt;sup>29</sup> A related possibility is that rather than human capital at organization, individuals were more likely to gain souvenir enemy weapons from increased time in combat and it is the supply of weaponry that explains our results. Like an individual "eye-opening" effect, the acquisition of such a private form of weaponry would not explain the effect of combat experience on the increase in refugee inflows nor the asymmetric effects of experience on increasing inflows when it is minority groups that receive combat experience. Furthermore, the number of gunmakers in a district appears to have had no effect on any of our outcome measures, suggesting that supply of weaponry per se was not an important factor.

<sup>&</sup>lt;sup>30</sup> Martin Van Creveld, Fighting Power: German and U.S. Army Performance, 1939–1945 (Westport, CT: Greenwood Press, 1982; Edward A. Shils and Morris Janowitz, "Cohesion and Disintegration in the Wehrmacht in World War II," Public Opinion Quarterly, Vol. 12, No. 2 (Summer, 1948), 280–315.

Observations = 284	(1)	(2)	(3)	(4)	(5)
Average Combat Months, 1940–45	2.501*** [0.361]	1.178*** [0.330]	1.434*** [0.395]		
Combat Mths x % T. Minority	0.304*** [0.062]	0.244*** [0.066]	0.249*** [0.060]		
Cumulative Combat Yrs	[]	[]	[]	0.956*** [0.245]	0.154 [0.215]
Cumulative Combat Yrs x %T. Minority					0.045** [0.006]
Combat months x Border District	-3.232* [1.682]				
Combat months x Border State	0.906 [0.812]	0.407	0.400	0.500	0.004
Log. Gandhi Days, 1946–48  % Males Casualties 1939–45		-0.467 [0.336] 0.063	-0.408 [0.313] -5.470	-0.560 [0.469] -5.521	-0.331 [0.457] 15.134
% Males Casuallies 1939–45  % Males Soldiers 1942		[5.160]	-5.470 [10.400] 0.121	-5.521 [16.208] -0.104	[11.824] 0.053
Units Recruiting in District, 1942			[0.239] 0.013	[0.318] -0.103**	[0.152] -0.062
Battalion Herfindahl Index			[0.021] -3.675	[0.045] -0.132	[0.044] -1.175
% Casualties 1st Deployed to E. Asia			[3.310] 7.262* [4.204]	[2.525] -0.217 [3.417]	[2.080] -0.152 [1.788]
Province/NS × Annex FE Controls	No Migration	Yes Contemp.	Yes Contemp.	Yes Contemp.	Yes Contemp
Joint F-Test Combat Variables Prob>F	24.8 0.00	8.06 0.00	9.83 0.00	15.23 0.00	34.43 0.00
R-squared	0.77	0.84	0.85	0.75	0.87

*Notes:* Robust s.e. in brackets, clustered at province/native state level. Significant at \*10%, \*\*5%, \*\*\*1%; all regressions include quadratic controls for deployment date and controls for big city, population (1931), and log. distance to the new border, land revenue, % majority and minority literate, big city, population (1931), medieval port, patronage centre. (2)–(5) include all noncontemporaneous controls. Separate intercepts provided within Provinces based upon date of British annexation.

the Herfindahl measure nor the number of battalions recruiting in a district appear to be a major driver of the combat experience effect, suggesting that it is more likely that it is the individual skills that soldiers bring back rather than the importation of unit organization and ties that are responsible for the patterns of political collective action that we observe. Finally, in Columns 4 and 5 we provide an alternative measure of combat experience that does not weight by fatalities to account for differential recruitment intensity: the cumulative combat experience in the district. The results also appear robust to this alternative measure.

# UNPACKING PEACEFUL AND VIOLENT ETHNIC CLEANSING

A natural question that remains is whether the patterns of ethnic cleansing also reflect the actual violence that took place during the Partition, or whether the cleansing was conducted "peacefully," in anticipation of violence. Unfortunately, official government records become increasingly unreliable in mid-1947 because of the breakdown of local administration in the worst-

affected areas, as well as strong pressures on officials not to record crimes propagated by individuals likely to be in charge after Independence (Punjab Governor's Reports 1947). Media and telegraph reports about the massacres were also highly censored.<sup>31</sup>

There were, however, three attempts soon after the Partition to document the extent of violence, collected by an Indian civil servant, Khosla (1951), Talib (1950) of the Sikh Shiromani Gurudwara Prabandhak Committee (SGPC), and by the Government of West Punjab, (Pakistan). But each of these efforts is arguably partisan and geographically concentrated around the Punjab. However, there is a reasonably high positive correlation between minority outflows,

<sup>&</sup>lt;sup>31</sup> Local telegraph officials were also forbidden from forwarding messages that would cause "alarm" without clearance. Accurate information was virtually impossible to obtain for most Indians concerned for their safety, and thus most information about the massacres came from those who wished to organize violence, from refugees, from eye-witnesses, and from letters and phone calls between friends and relatives. See *National Archives of India*, Home (Poll.) (I) 33/31/46 "Press-Responsibility for Safeguarding Communal Harmony in the Country; Publication of Riot News–Establishment of a Convention."

Khosla's arguably less biased measure ( $\rho = 0.64$ ), and that of the Government of West Punjab ( $\rho = 0.43$ ). In contrast, the SGPC measure shows no correlation ( $\rho = -0.02$ ).

Table 8 assesses this relationship further, examining the effect of combat experience on the average of the three deaths measures compared to that of target minority outflows for the subsample of Punjab-area districts (including the local Native States). We also include the actual 1944 recruitment share as a control. Notice first that even confining the analysis to districts within the Punjab, we continue to find consistent and significant increases in the minority outflows and majority inflows in districts whose veterans received more combat experience (Cols 1-4), and increases in net outflows when the minority population is large (Cols 5 and 6). Once again, we find that when the minority is more likely to receive the combat experience, there are fewer minority outflows, and greater majority inflows, leading to lower net outflows. Once again, the minority receiving the shock to their organizational skill appears to be encouraging peaceful population transfers.

It is intriguing that in the Punjab, combat experience, despite fostering population transfers, appears to also reduce the rate of Partition deaths (Cols 7 and 8). In fact, an additional month of combat experience appears to reduce the percentage ratio of deaths to target minority outflows by close to one percentage point (Cols 9 and 10). These relationships appear to be strengthened when the minority is the likely beneficiary of the combat experience shock. These results appear consistent with the role of combat experience in enhancing skills at *credibly threatening* violence and in organizing "peaceful" ethnic cleansing, while reducing the need for wider-spread destructive violence in orchestrating population transfers.

### **QUALITATIVE EVIDENCE**

One strength of our empirical approach is that, unlike most of the existing qualitative literature, we not only compare areas were violence was pervasive during Partition, but also areas that were relatively peaceful, despite being in disputed districts. Naturally those areas where the "dog did not bark" tend to lack qualitative evidence on why peace persisted. However, as the theoretical framework suggests, among areas experiencing population transfers, those where the majority gained combat experience would tend to be more likely to face ethnic cleansing, while those where the minority gained combat experience are likely to see less. Furthermore, if minority emigration ultimately occurs in areas where minorities gain combat experience, it is likely to be organized and large scale, and conducted in anticipation of violence. These effects, while being confirmed by the empirical work, also find substantiation in the qualitative record.

The district of Lyallpur, in modern-day Pakistan, provides a useful illustration. The role of a minority benefiting from combat experience, this time the Sikhs with 4.14 months of war combat, is evident both in

the lack of disturbances they faced locally, and their rapid ability to ultimately mobilize. Prior to Independence, Lyallpur, despite possessing a Muslim majority of 62.9% in 1942, had been claimed for India in proposals by Congress and the SGPC. In May 1947, an intelligence report for the Punjab Police found,

Important Akali leaders have recently been touring to ensure that all preparations possible are complete for the waging of defensive warfare...Giani Kartar Singh...had been touring villages by car in the Lyallpur area...To comply with his instructions, each village must have a *Jathabandi* [local militia group]. *Jathas* must be reinforced by mounted men and ex-military and INA men equipped with firearms.<sup>32</sup>

Following the determination of the Radcliffe boundary, however, the local Sikh leader, Giani Kartar Singh, told a government official that he "intended marching the Sikhs out of [Lyallpur], though it was quiet, and there had been practically no disturbances in it."<sup>33</sup> Again, the minority group's ability to mobilize provides evidence of remarkable military organizational skills. Ian Morrison of the London Times, one of the few journalists actually reporting from the conflict zones during Partition, describes how the movement of Sikhs out of Lyallpur:

... orderly and well organized. The Sikhs moved in blocks of 40,000 to 60,000 and cover about 20 miles a day. It is an unforgettable sight to see one of these columns on the move. The organization is mainly entrusted to exservicemen and soldiers on leave who have been caught by the disturbances. Men on horseback, armed with spears or swords, provide guards in front, behind, and on the flanks. There is a regular system of bugle calls. At night a halt is called near some village where water is available, watch fires are lit, and pickets are posted. "200,000 on the move," *The Times* Sept 19, 1947

Immigration of these Sikh columns was focused into a particular area: the Sikh princely states and the districts of Gurdaspur, Amritsar, Jalandhar, Hoshiarpur, Ludhiana, and Ferozepore. For the first time in history, Sikhs came to represent more than half of the total population of a contiguous area (Grewal 1999). Giani Kartar Singh of Lyallpur played a key role in the later secession of these districts, first as PEPSU, a state whose administration was dominated by Sikhs, and ultimately as part of a new Punjabi-speaking state (Grewal 1999). Thus, privately organized flows of co-ethnics was used to forge superior control over future politics.

Among the districts receiving these flows were Sikhruled princely states like Kapurthala, which actually had a slight pre-Partition Muslim majority (of 56.5% of the 1942 population). Kapurthala had in fact been claimed by the Muslim League for Pakistan and lay

<sup>&</sup>lt;sup>32</sup> Punjab Police Abstract of Intelligence Extract for the week ending 24 May 1947, *Disturbances in the Punjab: 1947 A Compilation of Official Documents* (Islamabad: National Documentation Centre, 1995) 197

<sup>&</sup>lt;sup>33</sup> Govt House Lahore, 17th September 1947 letter from Mudie to Chandulal Trivedi (Governor of East Punjab) MSS.Eur.F.164/16-17 Mudie Collection.

OLS, Observations = 28	% T. Minority Outflows		% Majority Inflows		%(Min Outflows-Maj Inflows)		% Partition Deaths		% Deaths-Outflow Ratio	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Average Combat Mths,	2.083***	2.093***	2.409***	2.028***	-0.326	0.065	-0.094***	-0.078***	-0.936***	-0.898***
1940–45	[0.043]	[0.026]	[0.123]	[0.081]	[0.166]	[0.107]	[0.009]	[0.005]	[0.058]	[0.029]
Combat Mths x % T. Minority	0.418***	0.486***	-0.120*	-0.905***	0.538***	1.390***	-0.001	0.006	0.038***	0.074**
	[0.009]	[0.012]	[0.029]	[0.031]	[0.038]	[0.042]	[0.001]	[0.003]	[0.003]	[0.017]
Combat Mths x Martial		-3.385**		38.462***		-41.846***		-0.250*		-1.699
(T.Min> Maj)		[0.548]		[1.353]		[1.901]		[0.082]		[0.587]
Martial (T. Minority> Majority)		6.956***		-68.702***		75.658***		-0.105*		2.172**
		[0.218]		[0.542]		[0.760]		[0.031]		[0.223]
% Targeted Minorities 1931,	-0.049	-0.315**	0.487**	3.629***	-0.536**	-3.943***	-0.013*	-0.040*	-0.259***	-0.408**
1931	[0.021]	[0.064]	[0.069]	[0.155]	[0.090]	[0.219]	[0.004]	[0.013]	[0.021]	[0.085]
% Martial Males of T. Minority	-0.086**	-0.019	0.009	-0.859**	-0.095	0.841**	-0.001	0.01	0.005	0.052
	[0.014]	[0.039]	[0.039]	[0.096]	[0.052]	[0.136]	[0.002]	[0.006]	[0.015]	[0.043]
% Males of Martial Race	0.102**	0.094**	-0.194**	-0.094	0.296**	0.189*	0.002	0.001	0.008	0.003
	[0.015]	[0.018]	[0.042]	[0.046]	[0.057]	[0.064]	[0.002]	[0.003]	[0.014]	[0.019]
% Soldiers 1944	0.320*	0.356*	-1.072*	-1.482**	1.392*	1.838**	-0.077**	-0.074**	-0.379**	-0.361*
	[0.092]	[0.094]	[0.265]	[0.238]	[0.357]	[0.331]	[0.011]	[0.012]	[0.084]	[0.089]
R-squared	0.98	0.98	0.81	0.87	0.82	0.86	0.46	0.48	0.66	0.67

Notes: All outcomes are expressed as % of the 1951 population. Sample includes Punjab Province and local Native States. Robust standard errors in brackets, clustered at NS/Province level. Significant at \*10%, \*\*5%, \*\*\*1%; all regressions include controls for Deployment Date (linear and quadratic), % prime age males, land revenue, log. distance to border, big city, population, % minority and majority literate, % males nonproductive 1931, direct British rule.

within 30 kilometers of the ultimate borderline. By 1951, however, Muslims constituted only 28% of the population. Here, Sikhs were heavily favoured as a martial race and soldiers raised in the district spent an average of 5 months in combat, above the 95th percentile of all districts. With Sikhs organized, though, with Hindus, locally in a slight minority, the encouragement of co-ethnic immigration appears to have supplemented extensive ethnic cleansing. The ruler was reported to have "given money and shelter to Sikh refugees..." Despite its initial Muslim majority, Kapurthala ultimately was awarded to independent India. Kapurthala was not alone in encouraging co-religionist immigration. 35

In other districts, where it was mainly the majority population that gained combat experience, a body of qualitative evidence again suggests that military organizational skills played an important role in the resultant patterns of ethnic cleansing. Recruits from Rawalpindi district received 4 months of combat experience (close to the 85th percentile), with Muslims the only martial race. The 15% minority population of local Hindus and Sikhs were attacked and more than 140,000 were killed, converted, or expelled. A Congress party report alleged that military-style organization played a vital role in the initial destruction and arson which then persuaded minorities that they should leave *en masse*, which they did in the few days that followed.<sup>36</sup>

Qualitative accounts also describe the role of combat experience in disputed districts outside Punjab. In

These were not riots but deliberately organized military campaigns... The armed crowd which attacked... were led by exmilitary men on horseback, armed with tommy guns, pistols, rifles, hand grenades, hatchets, petrol tins and some even carried field glasses...First of all minorities were disarmed with the help of local police and by giving assurances by oaths on [the] Holy Quran of peaceful intentions. After this had been done, the helpless and unarmed minorities were attacked. On their resistance having collapsed, lock breakers and looters came into action with their transport corps of mules, donkeys and camels. Then came the Mujahadins with tins of petrol and kerosene oil and set fire to the looted shops and houses. Then there were maulvis with barbers to convert people who somehow or other escaped slaughter and rape. The barbers shaved the hair and beards and circumcised the victims. Maulvis recited kalamas and performed forcible marriage ceremonies. After this came the looters, including women and

See also the account of the role of the attack and arson on the highly defensible Shahalmi Gate area of Lahore in persuading Hindu and Sikh inhabitants of the city that they should quit the city. A.N. Bali, *Now it Can be Told* (Jullundur: Aakashvani Prakashan, 1949, pp. 28–32

South Indian, Hindu majority, Hyderabad, where the Muslim Nizam sought to maintain his political independence, ex-soldiers from the Indian National Army trained Hindu groups to fight against the Nizam's Razakar supporters.<sup>37</sup> Similarly, Meerut in western UP was claimed for Pakistan by the Muslim League in 1946 on the grounds that Hindus were divided on caste lines so no one group constituted a majority. Meerut was also a major recruiting region where the recruits, mainly Hindu Jats, received above-median combat exposure (2.05 combat months). The sizeable, mainly urban Muslim minority (24%) of Meerut found itself a target of mass pogroms in the fall of 1946. Reports make it clear that the attackers were well-organized groups led by ex-soldiers from the majority community on horseback. These groups also deployed local information to reduce collateral property damage. Investigators noted that "in the case of shops belonging to Hindu landlords but tenanted by Muslim shop-keepers, the buildings were not burnt. Only the contents of the shops were looted."38

### DISCUSSION

In this article, we provide evidence that in South Asia, the capacity of different ethnic groups to resist political change and take collective action to ethnically cleanse communities that seemed to threaten their security was augmented substantially by organizational and military skills previously acquired in combat in World War II. Ironically, our evidence suggests that military organizational skills, by making violence more credible and facilitating the mobilization of large groups, may have also rendered wider-spread violence less necessary for engendering such ethnic homogenization. In fact, military organizational skills appeared to have also fostered the creation of "safe havens" in environments where minorities were the beneficiaries or where economic inter-dependence made cleansing costly for both communities. Demonstrating how drivers of local private organizational capacities interact with local economic and political incentives for ethnic cleansing can not only shed new light on partition as a strategy for mitigating conflict, but our findings also yield broader implications for understanding risks in postconflict environments and radical institutional change.

First, our results highlight the importance of organizational skills in understanding the potential for mass violence and conflict, and the crucial importance of military service as an environment where these skills are obtained. We provide a useful counterpoint to important works on the role of veterans in postconflict environments that have found benign effects on civic

<sup>&</sup>lt;sup>34</sup> Mr Abbott [ICS, Sec. to Gov] to Captain Brockman, May 1947: Lahore, marked Secret, 21 May 1947, Disturbances in the Punjab: 1947 A Compilation of Official Documents (Islamabad: National Documentation Centre, 1995), p. 192.

<sup>&</sup>lt;sup>35</sup> In the heavily-disputed district of Lahore, where both minority Sikhs and majority Muslims gained combat experience, the Mayor boasted that the city inhabitants "baked naan bread for the displaced and gave a right royal reception to the newcomers. Cauldrons of rice could be seen cooking all over the place for distribution of the refugees." The Maharaja of Patiala went even further, setting aside land for the resettlement of refugees. *The Daily Telegraph*, September 23, 1947, 5.

<sup>&</sup>lt;sup>36</sup> As the AICC Report on the Disturbances in Punjab, March–April 1947 (cited in Talbot and Singh 2009, 85), relates:

 $<sup>^{37}</sup>$  Parvathi Menon (1998), "Falsifying History,"  $\it Frontline, October 10–23, Vol. 15, No. 21.$ 

<sup>&</sup>lt;sup>38</sup> (Talbot and Singh 2009, 74), Francis Tuker (1950) *While Memory Serves*, London: Cassell and Company (pp. 195–202). Ghazanfar Ali Khan, "Report on the Massacres at Garmukhteswar, U.P." in *Report on the Disturbances in Bihar and the United Provinces* (October–November 1946) (London: Muslim India Information Centre 1946, 19).

engagement in environments that are undergoing reconstruction, by instead examining the role of veterans in a setting where the problem of order and security was acute, and a community's economic and political security seemed existentially threatened. In such an environment, our results suggest that the patterns of ethnic cleansing and violence may strongly correlate not just with grievance, demographic balance and threat, but also with the distribution of veterans' organizational and military skills. The contemporary relevance of these factors was arguably brought home in Iraq in 2003, where the Iraqi army was abruptly disbanded without sufficient provision for the soldiers' livelihoods and political futures, sending thousands of well-trained men into the arms of the Sunni insurgencies.<sup>39</sup>

More generally, if, as we have argued, combat experiences forged in war can provide a temporary shock to the skills of non-elites at violence and private organization, then a clear link can be made between theoretical studies that emphasize the role of temporary shocks to non-elites' ability to threaten violence and institutional change and empirical studies that find an increase in democratization following war (Acemoglu and Robinson 2000; Boix 2003; Przeworski 2007; Scheve and Stasavage 2010). For example, our work suggests that the temporary "threat of revolution" that Acemoglu and Robinson (2000) credit with leading elites to accede to Britain's first major franchise expansion in 1832 may have its genesis in the organizational abilities of the 332,000 soldiers demobilized after the end of the Napoleonic wars in 1815 (Jha and Wilkinson n.d.). Indeed these soldiers created substantial public order problems over the next decade, being heavily involved in organizing the East Anglian riots of 1816 and the Pentridge rising of 1817 (Gash 1977).40 The role of veterans in engaging in private drilling and training prompted the government to impose a ban on these in 1819 and precipitated the famous "Peterloo massacre," when dragoons charged a crowd of weavers, one third of whom were veterans (Gash 1977). Similarly, a potential increase in costs to elites of repressing veterans that acquired organizational skills during the First World War dovetails as an explanation with Boix's (2003) account of "the sweeping and peaceful democratization of Western Europe after the First World War...[p. 2]"

Naturally, not all private organizational capacity, democratization or institutional change can be attributed to skills acquired by non-elites in war time. But external military threats do provide a common set of environments where elites, who might otherwise have preferred to stifle non-elite organizational capacity, may have little choice but to allow such skills to develop. As such, an intriguing possibility, currently under research, is that organizational skills acquired in war may play a more crucial role in early enfranchisements when coercive power is most concentrated among elites.

The identification approach we have used here can be applied to a range of settings where militaries train soldiers to be inter changeable—serial numbers rather than names—but temporary exigencies provide differential experiences. This may be particularly useful since the human capital both to credibly threaten violence and to organize groups also may lend itself readily to engendering broad institutional change. From the role of French veterans of America's Revolution in engendering Revolution at home (Donald 1951) to Civil War veterans demanding rights in the postbellum South and English soldiers agitating for enfranchisement, combat veterans may have played an important role in the institutional development of nations (Jha and Wilkinson n.d.). Understanding the value of veterans and how best to mobilize the distribution of skills they acquired in war, even if these are not as valued in times of peace, may be vital for policies aimed at both maintaining political stability and engendering institutional change.

### REFERENCES

Acemoglu, Daron, and James A. Robinson. 2000. "Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective." *Quarterly Journal of Economics* 67: 585–608.

Acemoglu, Daron, and James A. Robinson. 2005. *Economic Origins of Dictatorship and Democracy*. Cambridge, UK: Cambridge University Press.

Aiyar, Swarna. 1998. "'August Anarchy': The Partition Massacres in Punjab, 1947." In *Freedom, Trauma, Continuities: Northern India* and Independence, eds. D. A. Low and Howard Brested. Walnut Creek, CA: Altamira Press, 15–38.

Alesina, Alberto, Enrico Spolaore, and Romain Wacziarg. 2005. Trade, Growth and the Size of Countries. In *Handbook of Economic Growth*, eds. Phillippe Aghion and Steven Durlauf. Amsterdam: North-Holland.

Angrist, Joshua. 1990. "Lifetime Earnings and the Vietnam Era Draft Lottery: Evidence from Social Security Administrative Records." American Economic Review 80 (3): 313–36.

Baldwin, Kate, and John Huber. 2010. "Economic versus Cultural Differences: Forms of Ethnic Diversity and Public Goods Provision." *American Political Science Review* 104 (4): 644–62.

Banerjee, Abhijit, and Lakshmi Iyer. 2005 "History, Institutions and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." *American Economic Review* 95 (4): 1190–1213.

Banerjee, Abhijit, Lakshmi Iyer, and Rohini Somanathan. 2008 "Public Action for Public Goods." In *Handbook of Development Economics*, Vol. 4, eds. T. Paul Schultz and John Strauss. Amsterdam: Elsevier.

Beckham, J.C., S.D. Moore, and V. Reynolds. 2000 "Interpersonal Hostility and Violence in Vietnam Combat Veterans with Post-Traumatic Stress Disorder: A Review of Theoretical Models and Empirical Evidence." *Aggression and Violent Behavior* 5, 451–66.

Bellows, John, and Edward Miguel. 2008. "War and Local Collective Action in Sierra Leone." December 2008. University of California, Berkeley: Mimeo.

Besley, Timothy, and Torsten Persson. 2010. "State Capacity, Conflict and Development." *Econometrica* 78 (1): 1–34.

Bharadwaj, Prashant, Asim Khwaja, and Atif Mian. 2008a. "The Big March: Migratory Flows after the Partition of India." *Economic and Political Weekly* 43 (35): 39–49.

<sup>&</sup>lt;sup>39</sup> Jon Lee Anderson, "Letter from Iraq: Out on the Street," The New Yorker, November 15, 2004. There was some perception of the gravity of these decisions at the time. As Lt General David McKiernan, Commander of the Ground Forces in Iraq, cautioned just after the decision to disband the Iraqi Army by the Coalition Provisional Authority in 2003, "There are a large number of Iraqi soldiers now unemployed. That is a huge concern." (Chandrasekaran 2006, 87)

<sup>&</sup>lt;sup>40</sup> One Welsh Chartist reported that his lodge "is 1,600 strong; 1,200 of them are old soldiers... the remaining 400 have never handled arms, but we can turn them into fighting men in no time." (Gash 1977).

- Bharadwaj, Prashant, Asim Khwaja, and Atif Mian. 2008b. "The Partition of India: Demographic Consequences." Harvard Kennedy School, Unpublished manuscript.
- Blattman, Christopher. 2009. "From Violence to Voting: War and Political Participation in Uganda." *American Political Science Review* 103 (2): 231–47.
- Boix, Carles. 2003. *Democracy and Redistribution*. Cambridge: Cambridge University Press.
- Brass, Paul. 2003. "The Partition of India and Redistributive Genocide in the Punjab 1946–47." *Journal of Genocide Research* 5 (1): 71–101
- Brown, Judith. 1991. *Gandhi: Prisoner of Hope*. New Haven, CT: Yale University Press.
- Chandrasekaran, Rajiv. 2006. Imperial Life in the Emerald City: Inside Iraq's Green Zone. New York: Vintage Books.
- Chapman, Thomas, and Philip G. Roeder. 2007. "Partition as a Solution to Wars of Nationalism: The Importance of Institutions." American Political Science Review 101 (4): 677–91.
- Copland, Ian. 1988. "The Further Shores of Partition: Ethnic Cleansing in Rajasthan 1947." Past and Present 19 (160): 657–704.
- Copland, Ian. 2002 "The Master and the Maharajas: The Sikh Princes and the East Punjab Massacres of 1947." *Modern Asian Studies* 36 (3): 657–704.
- Costa, Dora, and Matthew Kahn. 2005. "Forging a New Identity: The Costs and Benefits of Diversity in Civil War for Black Slaves and Freemen." Massachusetts Institute of Technology. Mimeo.
- Damodaran, Vinita. 1992. Broken Promises: Popular Protest, Indian Nationalism and the Congress Party in Bihar 1935–1946. Delhi: Oxford University Press.
- Downes, Alexander B. 2001. "The Holy Land Divided: Defending Partition as a Solution to Ethnic Wars." *Security Studies* 10 (4): 58–116.
- Engels, Friedrich, and Karl Marx. 1848. The Communist Manifesto.Fearon, James D. 1995. "Rationalist Explanations for War," International Organization 49 (3): 379–414.
- Fearon, James D. 1998. "Commitment Problems and the Spread of Ethnic Conflict." In *The International Spread of Ethnic Conflict*, eds. David Lake and Donald Rothschild. Princeton, NJ: Princeton University Press 107–26.
- Fearon, James D., and David D. Laitin. 2003. "Ethnicity, Insurgency and Civil War." *American Political Science Review* 97 (1): 75–90.
- Galiani, Sebastian, Martin Rossi, and Ernesto Schargrodsky. 2010.
  "Conscription and Crime: Evidence from the Argentive Draft Lottery," Technical Report. Fondazione Eni Enrico Mattei.
- Gash, Norman. 1977. "After Waterloo: British Society and the Legacy of the Napoleonic Wars." Transactions of the Royal Historical Society 28: 145–77.
- Grewal, J.S. 1999. *The Sikhs of the Punjab*. Cambridge: Cambridge University Press.
- Hill, K., W. Seltzer, J. Leaning, S.J. Malik, and S.S. Russell. 2008. "The Demographic Impact of Partition in the Punjab in 1947." Population Studies 62 (2): 155–70.
- Humphreys, Macartan, and Jeremy M. Weinstein. 2007. "Demobilization and Reintegration." *Journal of Conflict Resolution* 51: 531–67.
- Indian Army Reorganization Committee. 1945. "Reorganization of the Army and Air Forces in India: Report of a Committee Set Up by His Excellency the Commander in Chief in India." Cariappa Articles V24. New Delhi: National Archives of India.
- Jha, Saumitra. 2008. "Trade, Institutions and Religious Tolerance: Evidence from India." GSB Research Article 2004. Stanford, CA: Stanford Graduate School of Business.
- Jha, Saumitra, and Steven Wilkinson. N.d. "The Aftermath of War: Veterans and Revolutionary Institutional Change." Forthcoming.
- Kamtekar, Indivar, 1988. "The End of the Colonial State in India 1942–47." Ph.D. diss., Cambridge University.
- Kasara, Kimuli. 2010. "Using a Colonial Legacy to Estimate the Effect of Ethnic Segregation on Violence." Columbia University. Mimeo.

- Kaufmann, Chaim. 1996. "Possible and Impossible Solutions to Ethnic Conflict." *International Security* 20 (4): 136–75.
- Khan, Yasmin. 2007. The Great Partition: The Making of India and Pakistan. New Haven, CT: Yale University Press.
- Khosla, G.D. [1951] 1991. Stern Reckoning: A Survey of the Events Leading up to and Following the Partition of India. New Delhi: Voice of India.
- MacDonald, Charles B. 1997. A Time for Trumpets: The Untold Story of the Battle of the Bulge. New York: Harper Perennial.
- Maguen, Shira, Thomas J. Metzler, Brett T. Litz, Karen H. Seal, Sara J. Knight, and Charles R. Marmar. 2009. "The Impact of Killing in War on Mental Health Symptoms and Related Functioning." Journal of Traumatic Stress 22 (5): 435–43.
- Mansergh, Nicholas. 1976. *The Transfer of Power 1942–47*. London: Her Majesty's Stationery Office.
- Mason, Philip. 1974. A Matter of Honour: An Account of the Indian Army, Its Officers and Its Men. London: Jonathan Cape.
- McDonald, Forrest. 1951. "The Relation of the French Peasant Veterans of the American Revolution to the Fall of Feudalism in France." *Agricultural History* 25 (4): 151–61.
- Menezes, S.L. 1993. Fidelity and Honour: The Indian Army from the Seventeenth to the Twenty-first Century. New Delhi: Viking.
- Miguel, Edward, Shanker Satyanath, and Ernest Sergenti. 2004. "Economic Shocks and Civil Conflict: An Instrumental Variables Approach." *Journal of Political Economy* 112 (4): 725–54.
- Mueller, John. 2000. "The Banality of 'Ethnic War'." *International Security* 25 (1): 42–70.
- Muir, Rory. 2000. Tactics and the Experiences of Battle in the Age of Napoleon. New Haven, CT. Yale University Press.
- North, Douglass, John Wallis, and Barry Weingast. 2009. Violence and Social Orders: A Conceptual Framework for Interpreting Recorded Human History. Cambridge: Cambridge University Press.
- O'Hanlon, Michael E., and Edward P. Joseph. 2007. "The Case for Soft Partition in Iraq." Brookings Analysis Article 12.
- Petersen, Roger. 2001. Resistance and Rebellion: Lessons from Eastern Europe. Cambridge: Cambridge University Press.
- Posen, Barry. 1993. "The Security Dilemma and Ethnic Conflict." Survival (1): 27–47.
- Powell, James S. 2010. Learning under Fire: The 112th Cavalry Regiment in World War II. College Station, TX: Texas A&M Press.
- Powell, Robert. 2006. "War as a Commitment Problem." *International Organization* 60: 169–203.
- Prasad, Bisheshwar, ed. 1954. Official History of the Indian Armed Forces in the Second World War, 1939–45, Vols. I–XVII. Delhi: Combined Inter-services Historical Section (India and Pakistan).
- Przeworski, Adam. 2007. "Conquered or Granted? A History of Suffrage Extensions." New York University: Mimeo.
- Sambanis, Nicholas, and Jonah Schulhofer-Wohl. 2009. "What's in a Line? Is Partition a Solution to Civil War?" *International Security* 34 (2): 82–118.
- Scheve, Ken and David Stasavage. 2010 "The Conscription of Wealth: Mass Warfare and the Demand for Progressive Taxation," *International Organization* 64 (4): 528–61.
- Streets, Heather. 2004. Martial Races: The Military, Race and Masculinity in British Imperial Culture. Manchester, UK: Manchester University Press.
- Talbot, Ian, and Gurharpal Singh. 2009. *The Partition of India*. Cambridge, UK: Cambridge University Press.
- Talib, S. Gurcharan Singh. [1950] 1991. Muslim League Attack on Sikhs and Hindus in the Punjab 1947. New Delhi: Voice of India.
- Wilkinson, Steven. 2010. "Making India's Military Modern: The Indian Army and 'Martial Races' before and after Independence." Yale University. Mimeo.
- Wilkinson, Steven I. 2004. *Votes and Violence: Electoral Competition and Ethnic Riots in India*. Cambridge Studies in Comparative Politics. Cambridge: Cambridge University Press.
- Yatchew, Adonis. 2003. Semiparametric Regression for the Applied Econometrician. Cambridge: Cambridge University Press.