

Who Will Fight? The All-Volunteer Army after 9/11[†]

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Since its founding, America has wrestled with the question of who would bear the burden of the nation's wars. Two centuries ago, Benjamin Franklin wondered, "... whether it be just in a community, that the richer part should compel the poorer to fight in defen[s]e of them and their properties, for such wages as they think fit to allow, and punish them if they refuse?" (Franklin and Stueber 1849). Americans expressed a similar sentiment during the Vietnam War, when college draft deferments sparked protests, declaring the conflict a "rich man's war and a poor man's fight." This inequality of burden contributed to America's transition to an all-volunteer force (AVF) in 1973 (Rostker 2006). While the AVF fundamentally altered the way in which America fills its military's ranks, it is not immediately apparent that a voluntary force better distributes the burden of war or addresses public perceptions of inequality. We use detailed administrative data on enlisted soldiers in the US Army during the conflicts in Iraq and Afghanistan to examine who now fights America's wars. While our focus is restricted to the Army, the Army represents more than one-third of the US Armed forces, and its soldiers represent nearly 60 percent of all military deaths from the wars in Iraq and Afghanistan.¹

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¹ https://www.dmdc.osd.mil/dcas/pages/report_sum_comp.xhtml.

The burden of combat falls primarily on the eligible individuals that choose to enlist and, after enlisting, choose occupations that involve deployment to combat zones.² An individual is only eligible to enlist if she has obtained a high school degree and passed a cognitive test, a criminal background check, and a medical exam. Blacks, Hispanics, and individuals from lower-income neighborhoods are less likely than whites and individuals from higher-income backgrounds to have a high school degree, suggesting that the Army's eligibility criteria are more likely to prevent enlistment for these groups. However, these populations also have fewer civilian labor market options, on average, leaving the military as a relatively attractive ladder of economic advancement: according to Bureau of Labor Statistics data, in 2005 the unemployment rate for white teenagers was 14.2 percent, while it was 33.3 percent and 18.4 percent for black and Hispanic teenagers, respectively.

Before enlisting in the Army, a recruit chooses a military occupation from a set of options determined by aptitude test scores and the current needs of the Army. To serve in a specific occupation, an enlistee must meet the relevant score threshold, be offered the occupation, and then choose it. This process of qualification and selection allows soldiers some, but not full, control over their level of exposure to combat. For example, recruits with similar scores may select jobs with dramatically different combat risks—such as infantryman and mechanic. Recruits with lower aptitude scores may have fewer choices and hence less opportunity to reduce combat risk. However, their lower scores could also make them ineligible for riskier occupations, as these jobs often come with higher qualification requirements.

We find that as the wars in Iraq and Afghanistan intensified, there was an increase in

² Online Appendix Figure 1 depicts the Army enlistment process.

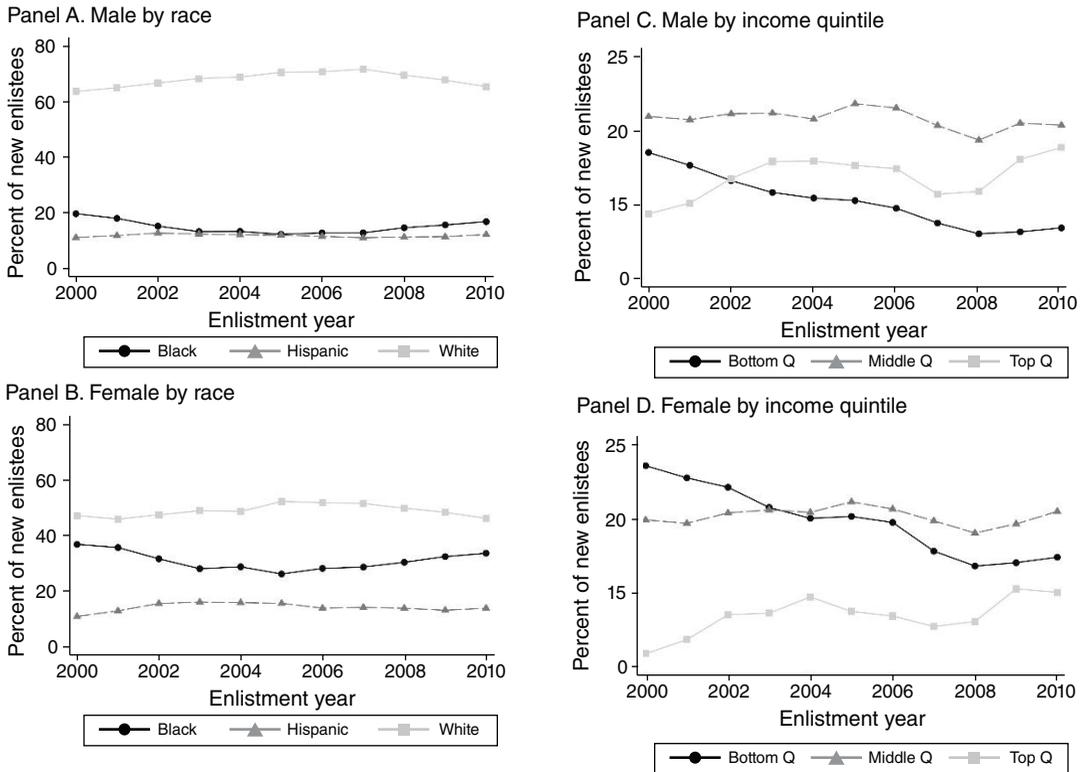


FIGURE 1

Note: Neighborhood income quintile is defined for the enlistees' home zip code using the population-weighted distribution of zip code median family income from the 2000 census.

the fraction of active-duty Army enlistees who were white or from high-income neighborhoods and a decrease in the fraction who were black or from low-income neighborhoods. Among men, deployment and combat injury rates increased for white and Hispanic soldiers relative to black soldiers and increased for soldiers from high-income neighborhoods relative to those from low-income neighborhoods. Furthermore, controlling for the test scores that largely determine occupation eligibility, white and higher-income recruits were more likely to select combat occupations. This finding suggests that black and low-income men did not bear a disproportionate burden in the last decade of war.

I. Enlistment

We use military data with administrative and demographic information for all active-duty

enlisted soldiers entering the US Army between 2000 and 2010. We analyze a restricted sample of roughly 695,000 new enlistees who served for at least a year (i.e., soldiers that did not fail basic training). Soldiers in this sample are predominantly male (84 percent) and most enter the Army with a high school diploma or equivalent and no experience in college (73 percent high school diploma only, 15 percent GED only, and 10 percent some college). The racial breakdown of the sample varies by sex, with a much higher proportion of blacks and Hispanics among female enlistees (31 percent black and 14 percent Hispanic) than among male enlistees (15 percent black and 11 percent Hispanic).³

³Comparable results to Watkins and Sherk (2008) using a different method and population.

Figure 1, panels A and B, show how the proportion of new enlistees of each race varied over time for men and women, respectively. As combat risk increased (peaking in 2007), the percentage of white enlistees increased, the percentage of black enlistees decreased, and the percentage of Hispanics remained largely flat.⁴ Black men were over-represented among new enlistees in 2000 relative to the national comparison population, but by the peak of the conflicts this was no longer the case. Black women remained over-represented throughout this period.⁵

Figure 1, panels C and D, illustrate how the proportion of new enlistees by neighborhood income quintile varies over time. We define a soldier's neighborhood income percentile by where her zip code at enlistment fell in the population-weighted distribution of zip code median family income from the 2000 US census. We find that the proportion of new enlistees coming from the bottom quintile of neighborhood income decreased dramatically from 2000 to 2007, while the proportion of new enlistees from the top quintile increased (though not consistently).⁶ The proportion of enlistees coming from the middle quintile of neighborhood income remained relatively stable around 20 percent. We observe these trends despite the lowering of Army standards and increases in waivers during this period to fill recruiting goals.⁷

II. Job Choice

While enlistment characteristics are an important component of the distribution of the burden of war, enlistment does not necessarily imply risk of exposure to combat. Recruits entering the Army select a specific branch (e.g., Infantry or Quartermaster) and occupation (e.g., infantryman or culinary specialist). From 2000–2010, black and Hispanic men were less

likely to enter a Combat Arms branch (Infantry, Armor, Aviation, Field Artillery, Engineers, Special Forces, or Air Defense) than white men (24 percent and 42 percent versus 50 percent, respectively), and men in the bottom quintile of neighborhood income were less likely than men in the top quintile (39 percent versus 48 percent) to select these jobs.⁸ Different occupations have different test score minimum thresholds and are subject to availability; thus, not all occupations will be offered to every individual.

We evaluate the role of selection versus eligibility in enlistees' differential occupational combat risk by race and income using a descriptive OLS regression. We regress an indicator for joining a Combat Arms branch on indicators for income decile and race and control for eligibility by including interactions between the Combat Arms test score subcategories and enlistment year fixed effects. We find that white men are the most likely to choose a Combat Arms branch, while black men are the least likely (26 pp less than whites). Relative to the highest income decile, those from the lowest income decile neighborhood are 7 pp less likely to select a Combat Arms branch. We then run a similar regression where the dependent variable is a measure of deployment risk by specific occupation, constructed as the fraction of soldiers in that occupation who deployed in the prior year. Here we find that white men choose occupations with slightly higher deployment risk than black and Hispanic men (0.8 and 0.9 pp or 3.3 percent and 3.7 percent, respectively). Income plays little role. These regression results are presented in columns 1 and 2 of online Appendix Table 1.

III. Deployment and Injury

Moving beyond occupation choice, we next examine how the burden of deployment is distributed across groups. In Figure 2, panels A and B, we show the likelihood of deployment within five years of enlistment by enlistment year, race, and income. In both graphs, there is a sharp rise in likelihood of deployment for those enlisting starting in 2002, which corresponds with the start of the Iraq War in 2003. Hispanics and the

⁴Online Appendix Figure 2 depicts the casualty rates from 2001 to 2010.

⁵Online Appendix Figure 3 shows the proportion of new enlistees relative to the proportion of 18–24-year-olds in the United States with at least a high school diploma.

⁶Interestingly, a higher proportion of new female enlistees come from the bottom quintile of neighborhood income (24 percent in 2000) than new male enlistees (19 percent in 2000).

⁷We document the resulting change in the Armed Forces Qualification Test (AFQT) distribution in online Appendix Figure 4.

⁸Women were restricted from serving in direct combat roles during the relevant time period.

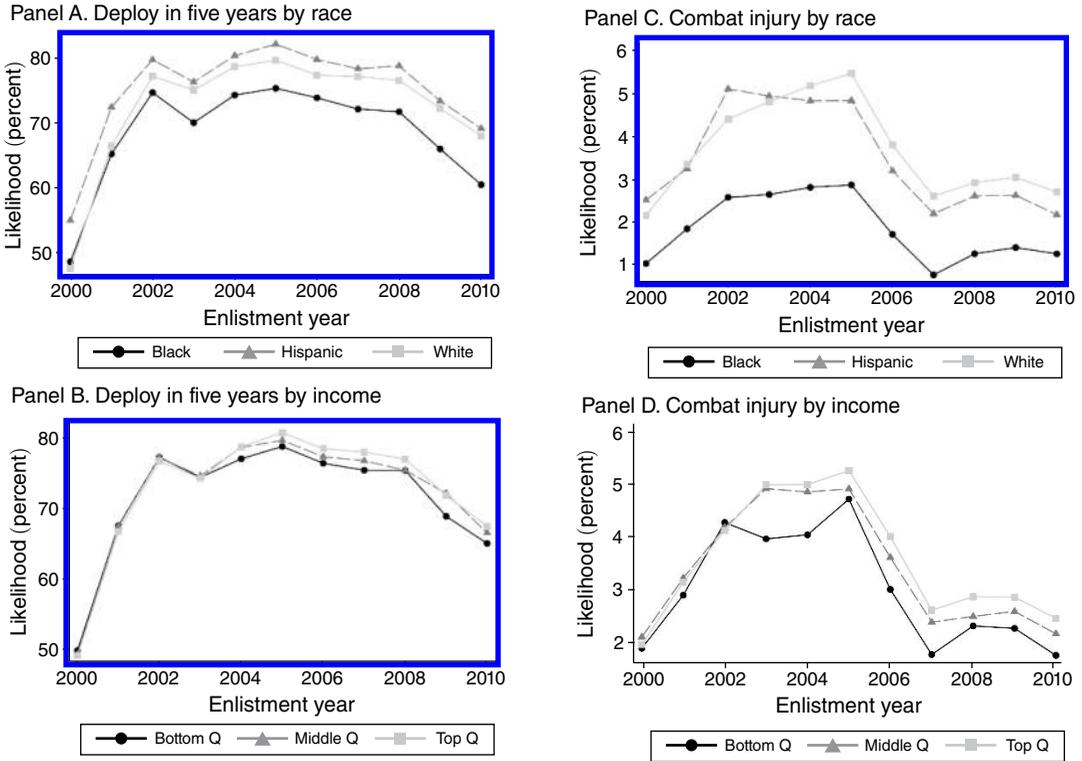


FIGURE 2

Notes: Neighborhood income quintile is defined for the enlistees' home zip code using the population-weighted distribution of zip code median family income from the 2000 census. Deploy in first five years is an indicator equal to one if a soldier received combat hazard pay within five years of enlistment. Only men are included in these figures.

top neighborhood income quintile are the most likely to deploy, while blacks and those in the bottom quintile are the least likely.

We test whether these results hold when controlling for individual characteristics by regressing an indicator for deployment during the first five years of service on race, income quintile, AFQT score, and year of entry. Conditional on enlistment and controlling for these other characteristics, black men are 3.9 pp (5.4 percent relative to the overall mean of 72 percent) less likely to deploy than white men, and Hispanic men are 2.6 pp (3.6 percent) more likely to deploy than white men. Men from the lowest income areas are 1.6 pp (2.2 percent) less likely to deploy. We then run the same regression while including controls for tenure in the Army and occupation by year of entry fixed effects. We find that the racial differences are diminished, but do not

entirely disappear. These results are in online Appendix Table 1, columns 3 and 4, respectively.

Finally, we examine the distribution of the heaviest burden of war, combat injuries. Figure 2, panels C and D, show that white and Hispanic men had a higher rate of combat injury than black men, and men from the top income quintile had a higher rate than men from the bottom quintile. We repeat our previous regressions but with hostile injury as the dependent variable. We find that black and Hispanic men are less likely than white men to sustain a hostile injury by 1.9 pp (58 percent) and 0.3 pp (9 percent), respectively. Including controls for tenure and occupation by year fixed effects eliminates most of these differences, but black men remain slightly less likely to sustain a hostile injury than white men (0.4 pp). Across income deciles we find a small, but significant, decrease in

hostile injury for the lowest income, which disappears when we control for tenure and occupation by year fixed effects. These results are in online Appendix Table 1, columns 5 and 6, respectively. In summary, we find that there are differences in deployment and hostile injury likelihoods by race and income, but these differences are driven primarily by which job an individual enters rather than differential risk within occupations.

IV. Discussion

Today's all-volunteer force represents a diverse group of individuals serving for both patriotic and economic reasons. For those with fewer economic opportunities, a steady job may be the deciding factor in their enlistment decision; while for those with more outside options, wartime service may shape their decision. Concerns over equity could arise under the all-volunteer system if these enlistment motivations are differentially distributed across demographic groups. While we cannot uncover the distribution of these motivations, we can observe which groups bear the burden of war.

Were the first sustained conflicts of the AVF—Iraq and Afghanistan—"poor man's fights"? To the contrary, during this time period it does not appear that there was an undue burden placed on blacks or individuals from

low-income neighborhoods. The percentages of black and low-income enlistees decreased as fighting intensified, with these trends stopping when outside labor market opportunities diminished during the Great Recession and combat risk decreased. These trends were the same for men and women, although black women continued to be over-represented in the Army relative to the general population. Furthermore, black and low-income enlisted men were less likely than their white and high-income peers to be deployed or injured in combat. These differences are driven primarily by the military occupation an individual enters: black and low-income men were less likely to choose combat-intensive occupations than their white and high-income peers with the same eligibility.

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