

Army Service in the All-Volunteer Era

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At a time when upward social mobility is stagnating and economic opportunities continue to be starkly different by race, the U.S. Army has recruited millions of young Americans to serve with promises of individual opportunity. General Colin Powell said that “the military [has] given African-Americans more equal opportunity than any other institution in American society.” Indeed, enlistment could increase opportunity and reduce racial inequality by providing a stable source of income with generous education, tax, and health benefits as well as opportunities to develop new skills, build networks, and migrate to other parts of the country. Yet volunteer service also includes significant risks. The army separates young people from their communities when many of their peers are attending school or developing professional skills; exposes enlistees to violence, injury, and trauma; and is associated with high rates of disability receipt.

Despite the role the modern army might play in generating economic opportunity and reducing racial inequality for service members, there is little causal evidence of the effects

of service in the current all-volunteer era. We use data on active-duty army applicants from 1990 to 2011 and exploit two score cutoffs for the Armed Forces Qualification Test (AFQT), those being the 31st and 50th percentiles of math and verbal ability. The army rarely accepts applicants with AFQT scores below 31, often requires applicants to score 50 or higher to receive enlistment bonuses, and sometimes requires recipients of general equivalency diplomas to achieve a score of 50 or higher. Consequently, using applicants’ first AFQT scores on file, we find that crossing the 31 and 50 AFQT cutoffs increases the probability of enlistment by 10 and 6 percentage points, respectively.

We leverage these AFQT cutoffs to estimate the effect of enlistment on earnings and related outcomes. We link army applicants to their earnings, employment, disability, education, and other administrative records from the Internal Revenue Service, National Student Clearinghouse, Social Security Administration, and Department of Veterans Affairs. We find that enlisting in the army increases average annual earnings by over \$4,000 at both cutoffs in the



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19 years after application. The effects of service vary over time, with the larger effects occurring in the first 4 years and smaller effects occurring 5–10 years after application. In the long term, 11–19 years after application, we estimate a \$2,200 increase in annual earnings at the lower AFQT cutoff (although we cannot rule out zero increase) and a \$4,100 increase at the higher cutoff. Short-run employment increases at both cutoffs, but enlistment has no long-run effect on employment at either cutoff. We also find that, consistent with generous veteran education benefits, the army considerably increases college attendance at both cutoffs. Although we find little effect of service on mortality, we do find large increases in disability compensation, which raise the monetary return to service but potentially reflect increased health risks.

Our overall earnings estimates mask substantial differences in effects by race. Enlisting in the army increases black applicants' annual earnings by \$5,500 at the 31 AFQT cutoff and by \$15,000 at the 50 AFQT cutoff 11–19 years after application. Meanwhile, white applicants experience earnings losses of approximately \$3,000 at the 31 cutoff and gains of around \$4,000 at the 50 cutoff (although we cannot rule out losses and gains of zero) 11–19 years after application. We find that army service closes nearly all the black-white earnings gap among army applicants in our study. Moreover, the benefits of service are reflected in outcomes beyond earnings—for example, we find that the army increases homeownership and marriage among black Americans. Black applicants tend to come from families with lower incomes and from counties with worse economic conditions than those of white applicants, which could help explain our findings. Indeed, we find some evidence that the army is more beneficial for those with limited economic opportunities, independent of race. Yet racial differences in the long-run effects of army service persist even after accounting for preapplication characteristics, suggesting that army service is distinctly beneficial for black applicants.

We explore potential mechanisms for the greater long-term benefits of army service for black service members relative to

white service members. We find that differences in exposure to combat, disability receipt, and post-service educational attainment explain only a small fraction of divergent returns to service by race. However, we find that black service members serve for longer and benefit disproportionately from access to a stable and well-paying military job. While the army tends to be a relatively well-paying job for all service members, black service members—who, we find, would have earned less than white service members in the absence of enlistment—particularly benefit from an army pay structure that pays black and white soldiers equally.

Nevertheless, generous back-of-the-envelope calculations accounting for differences in army retention and pay (along with combat deployments, disability receipt, and post-service education) still leave approximately \$6,000–\$12,000 of the black-white earnings gap to be explained. As a result, black service members necessarily experience larger increases in long-run post-service earnings. Indeed, among black applicants, army service increases the probability of employment in high-paying industries 19 years after enlisting. Service also increases black applicants' employment in the public sector. These patterns are less evident for white applicants. Although the precise elements of army service that are most beneficial relative to civilian jobs are unclear, potential explanations include increased human capital not captured by educational differences, access to networks, or credentialing effects that diminish racial discrimination. Overall, through both a stable and well-paying job and opening doors to higher-paid employment, army service offers many black Americans a path toward upward mobility.

All opinions expressed in this brief are those of the authors and do not represent the opinions of the U.S. Military Academy, Department of Defense, U.S. Army, or Department of the Treasury.

NOTE

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