

Population Representation in the Military Services: Fiscal Year 2011 Summary Report

Office of the Under Secretary of Defense, Personnel and Readiness

Population Representation in the Military Services

Fiscal Year 2011

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2011



Introduction

This is the 39th annual Department of Defense (DoD) report describing characteristics of U.S. military personnel. The goal of the *Population Representation in the Military Services* (Pop Rep) report is to provide the most up-to-date, reliable, and consistent data on military personnel for policy-makers, the media, and the general public.¹

Today's recruiting environment is excellent. For the last three years, the services have experienced extraordinary recruiting success. Probably the most prominent factor has been the persistently high unemployment rate, particularly for youth. The unemployment rate for 16- to-19-year-olds has been about 25 percent for the last three years, while the rate for young adults (20- to-24-year-olds) has been about 15 percent. Given the scarcity of civilian job opportunities and a somewhat reduced requirement for enlisted accessions, the quality of accessions (in terms of educational backgrounds and ability test scores) increased in each of the past three years. In fact, FY11 accessions reflect the highest quality of any year since the All-Volunteer Force began in 1973.

As the economy improves, however, it will be difficult to sustain this high quality. Youth influencers have not been as likely to recommend military service as they were in the 1980s and 1990s. Increasing numbers of bright young Americans are going to college immediately after completing high school. Some commentators expect budgetary problems to create pressures to stop increasing or even to reduce military pay. Even though the last troops are expected to leave Afghanistan in 2014, numerous international "hot spots" may well keep operational tempo high. Finally, the proportion of youth that is ineligible to serve because of weight, drug use, and so on, is both large and growing.

Although the military requires only a small proportion of the youth population, over one-third of youth (35 percent) have medical disqualifications; obesity is a large contributing factor. Drug or alcohol abuse removes 18 percent, and another 23 percent do not meet enlistment standards for such reasons as criminal misbehavior, low aptitude scores, or having a large number of dependents. This leaves only 25 percent who are eligible to serve.² If we subtract the estimated 10 percent who are qualified but attending college, we are left with only 15 percent of the youth population who are eligible and available to serve in the military.

¹ Summaries and appendixes (for FY97 through FY11) of the Pop Rep report are available online at <http://prhome.defense.gov/RFM/MPP/ACCESSION%20POLICY/poprep.aspx>.

² These percentages are based on calculations found in the following two reports from The Lewin Group: (1) Carol Moore et al., *Qualified Military Available: New Estimates of the Eligible Youth Population*, Apr. 2005; and (2) Rita Furst Seifert et al., *Estimating Qualified Military Available – Final Report*, Nov. 2007.

After a decade of war, the nation's troops are tired and much of the equipment is in need of repair. Demands on the military budget for operations and maintenance dollars compete against procurement requirements for new advanced weapon systems and the military's personnel accounts. These competing demands play out against a backdrop of other demands to reduce military spending, the federal deficit, and federal debt. Yet, military readiness is more important than ever, given the difficulties of our allies in Europe, the turmoil in the Middle East, and a resurgent China.

Although the recruiting environment today is strong, tough recruiting periods likely will return. If the military enters these difficult periods with insufficient resources, it risks returning to the "boom and bust" recruiting cycles that characterized some of the past. Contracting and expanding recruiting resources are not symmetric processes. Cuts can be achieved quickly; expansions take much more time, as recruiters must be selected and trained. And, newly trained recruiters are not immediately productive; with learning curves some estimate to be almost a year long. Thus, considerable care must be taken to ensure that recruiting resource cuts are not severe enough to cause recruiting failure and reduced military readiness when the economy recovers. Because there is no lateral entry in the military, new accessions today are tomorrow's career force. If the military accesses low-quality recruits today, it jeopardizes future readiness.

This summary report highlights recent and historical personnel trends in the DoD services (the Army, the Air Force, the Marine Corps, and the Navy) and the U.S. Coast Guard, which is part of the Department of Homeland Security. It examines both the active component (AC) and the reserve component (RC) in all services. It describes demographic characteristics of applicants, accessions, enlisted personnel, and officers, referencing data from the tables in the technical appendices, as well as from previous *Population Representation in the Military Services* reports. Finally, it includes information on the socioeconomic characteristics of the neighborhoods of FY11 accessions.

The remainder of this report is organized as follows: In section I, we present an overall summary of the armed services. Sections II and III cover the DoD's AC and RC, respectively. In section IV, we discuss the U.S. Coast Guard.

The FY11 technical appendixes (A through E), located on this website, provide current data on the demographics—including education and aptitude—of new recruits, enlisted personnel, and officers of the AC and RC, as well as historical data for selected demographic and service-related characteristics. Except where otherwise noted, data are provided by the Defense Manpower Data Center (DMDC). All data in this summary report are derived from these technical appendixes.

Section I: Summary statistics

Each year, Congress sets authorized endstrength—the number of servicemembers—for each service. However, actual endstrength may differ from authorized endstrength. Actual endstrength refers to the number of servicemembers as of the 30th of September in a given fiscal year. To meet authorized endstrength, each service balances retention with accessions (i.e., those entering the service). In this report, “endstrength” refers to *actual* endstrength. We show individual service total endstrength—the sum of enlisted members, commissioned officers, and warrant officers—for the last three fiscal years in table 1. Then, the table shows FY11 endstrength by personnel type.

Table 1. Actual endstrength by service and personnel type, FY09–FY11

Component	Endstrength			FY11 endstrength, by personnel type		
	FY09	FY10	FY11	Enlisted	Commissioned Officers	Warrant Officers
Active						
Army	549,015	561,979	561,437	463,886	81,698	15,853
Navy	324,239	323,139	320,141	266,932	51,592	1,617
Marine Corps	203,075	202,612	201,026	179,161	19,784	2,081
Air Force	328,847	329,640	328,821	263,343	65,478	0
DoD Total	1,405,176	1,417,370	1,411,425	1,173,322	218,552	19,551
Reserve						
ARNG	358,391	362,015	361,561	317,973	35,358	8,230
USAR	205,297	205,281	204,803	169,304	32,321	3,178
USNR	66,508	65,006	64,792	50,574	14,113	105
USMCR	38,510	39,222	39,772	35,959	3,507	306
ANG	109,196	107,676	105,685	91,267	14,418	0
USAFR	67,986	70,119	71,321	56,786	14,535	0
DoD Total	845,888	849,319	847,934	721,863	114,252	11,819
U.S. Coast Guard						
AC	42,426	41,327	42,011	33,586	6,740	1,685
RC	7,693	7,942	7,933	6,624	1,153	156
Total	50,119	49,269	49,944	40,210	7,893	1,841

Notes:

1. The RC consists of the Army National Guard (ARNG), the Army Reserve (USAR), the Navy Reserve (USNR), the Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the Air Force Reserve (USAFR).
2. Data come from appendix tables B-17, B-22, B-34, C-11, C-17, C-28, E-12, E-15, E-19, E-25, E-26, and E-29.
3. The Air Force does not have warrant officers.

Fiscal year (FY) 2011 DoD AC endstrength totaled 1.41 million servicemembers, with the Army’s endstrength about 75 percent larger than that of the Air Force or the Navy. Relative to the military services, the Coast Guard is very small—about one-fifth the size of the Marine Corps, the smallest active component. As can be seen in table 1, overall

changes in the AC endstrength since FY09 are minor; however, the increase of about 6,250 masks larger changes among the services' active components. Between FY09 and FY11, AC endstrength (values are rounded):

- Increased in the Army by 12,400, with officers increasing by 6,700³ and enlisted personnel increasing by 5,700.
- Decreased in the Navy by 4,100, with officers increasing by 1,200 and enlisted personnel falling by 5,300.
- Decreased in the Marine Corps by 2,100, with officers increasing by 1,100 and enlisted personnel decreasing by 3,200.
- Remained virtually unchanged in the Air Force.

Thus, while the Air Force stayed roughly the same size between FY09 and FY11, the Army grew and the Marine Corps and Navy shrank. What is surprising is that all services except the Air Force increased their AC officer endstrength (even if their overall AC endstrength was falling).

At almost 848,000 members, the RC is about 60 percent of the size of the AC. Both overall reserve endstrength and the distribution of endstrength among the services' reserve components stayed relatively constant over the FY09–FY11 period.

Table 2 shows enlisted accessions and officer gains by service and component.⁴ While overall AC endstrength changed little over the last three years, overall AC enlisted accessions and officer gains fell quite sharply between FY09 and FY11, from 189,200 to 174,700. There were similar drops in enlisted and officer gains to the RC. As suggested above, this drop of about 15,000 each in enlisted accessions and officer gains for both the AC and RC was not reflected in the endstrength numbers shown in table 1. Indeed, table 1 showed small gains in endstrength from FY09 to FY11 for both the AC and RC. This means that retention in both components increased substantially between FY09 and FY11. For example, the Army cut AC enlisted accessions and AC officer gains by about 7,000 between FY09 and FY11. In the same period, AC endstrength increased by 12,400. Adding those numbers together, we find that 19,400 additional AC soldiers were retained between FY09 and FY11.⁵

³ This includes 677 warrant officers.

⁴ We use the term “accessions” for AC enlisted personnel and the term “gains” for officers and reservists. Both officers and RC members can exit one component and enter another. Our data come from DMDC and follow the OSD definitions for accessions and gains:

- *Accessions*: Number associated with recruiters' productivity and used in reporting the achievements of the services' recruiting commands (and other accessioning agencies).
- *Gains*: Number associated with transactions in a database that reflects the addition of a Social Security Number (SSN) that was not in the previous file.

⁵ See <http://prhome.defense.gov/RFM/MPP/ACCESSION%20POLICY/poprep.aspx> for FY09 numbers.

Table 2. Number of enlisted accessions (PS and NPS) and officer gains by service and personnel type, FY09-FY11

Component	Total enlisted accessions and officer gains			FY11, by personnel type			
	FY09	FY10	FY11	Enlisted	% PS	Commissioned Officers	Warrant Officers
Active							
Army	79,383	83,608	72,413	64,019	3.2	7,215	1,320
Navy	39,733	38,562	37,528	33,442	0.3	3,910	175
Marine Corps	33,350	30,045	31,727	29,771	0.1	1,687	247
Air Force	36,694	33,062	33,017	28,526	0.9	4,491	0
DoD Total	189,160	185,277	174,685	155,758	1.6	17,303	1,622
Reserve							
ARNG	63,395	61,497	54,084	49,253	33.3	4,066	765
USAR	40,914	32,653	34,727	30,162	48.0	4,202	363
USNR	14,015	12,519	16,532	14,382	74.4	2,132	18
USMCR	10,360	10,595	10,141	9,269	38.2	835	37
ANG	11,204	8,007	8,194	7,072	34.4	1,122	0
USAFR	10,646	11,321	10,746	9,134	55.5	1,612	0
DoD Total	150,534	136,592	134,424	119,272	44.2	13,969	1,183
U.S. Coast Guard							
AC	4,619	2,953	4,006	3,451	3.4	396	159
RC	1,123	1,628	1,210	1,084	96.8	95	31
Total	5,742	4,581	5,090	4,535	25.8	491	190

Notes:

1. Enlisted accessions for all components include both non-prior-service (NPS) and prior-service (PS) accessions.
2. The RC consists of the Army National Guard (ARNG), the Army Reserve (USAR), the Navy Reserve (USNR), the Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the Air Force Reserve (USAFR).
3. Data come from appendix tables B-1, B-12, B-22, B-34, C-1, C-8, C-16, C-28, E-5, E-10, E-15, E-19, E-20, E-22, E-26, and E-29.
4. The Air Force has no warrant officers.

While the ARNG, the USAR, and the ANG cut their enlisted and officer gains substantially between FY09 and FY11, the USMCR and the USAFR kept accessions/gains roughly constant, and USNR's gains increased. The Coast Guard cut its AC accessions, but its RC gains increased a little between FY09 and FY11.

One interesting difference between AC and RC enlisted accessions/gains is the role of prior-service (PS) personnel. In FY11, less than 1 percent of enlisted accessions in the AC Navy, Air Force, and Marine Corps were PS, and the percentage in the Army was only 3.2. In contrast, almost 75 percent of USNR enlisted gains are PS. Virtually all of the gains to the Coast Guard's RC come from PS personnel.

Enlisted personnel make up the bulk of total endstrength and accessions/gains for all DoD services (AC and RC) and the U.S. Coast Guard. In FY11, enlisted personnel made up between 80 percent (Air Force) and 89 percent (Marine Corps) of AC endstrength, and between 80 percent (USAFR) and 90 percent (USMCR) of reserve endstrength. This follows the historical pattern of the Air Force having the richest mix of officers and the Marine Corps the leanest. Most officers are commissioned officers; warrant officers make up a small proportion of the officers, and there are no warrant officers in the Air Force.⁶

⁶ For the remainder of this report, we will focus almost exclusively on enlisted personnel and commissioned officers.

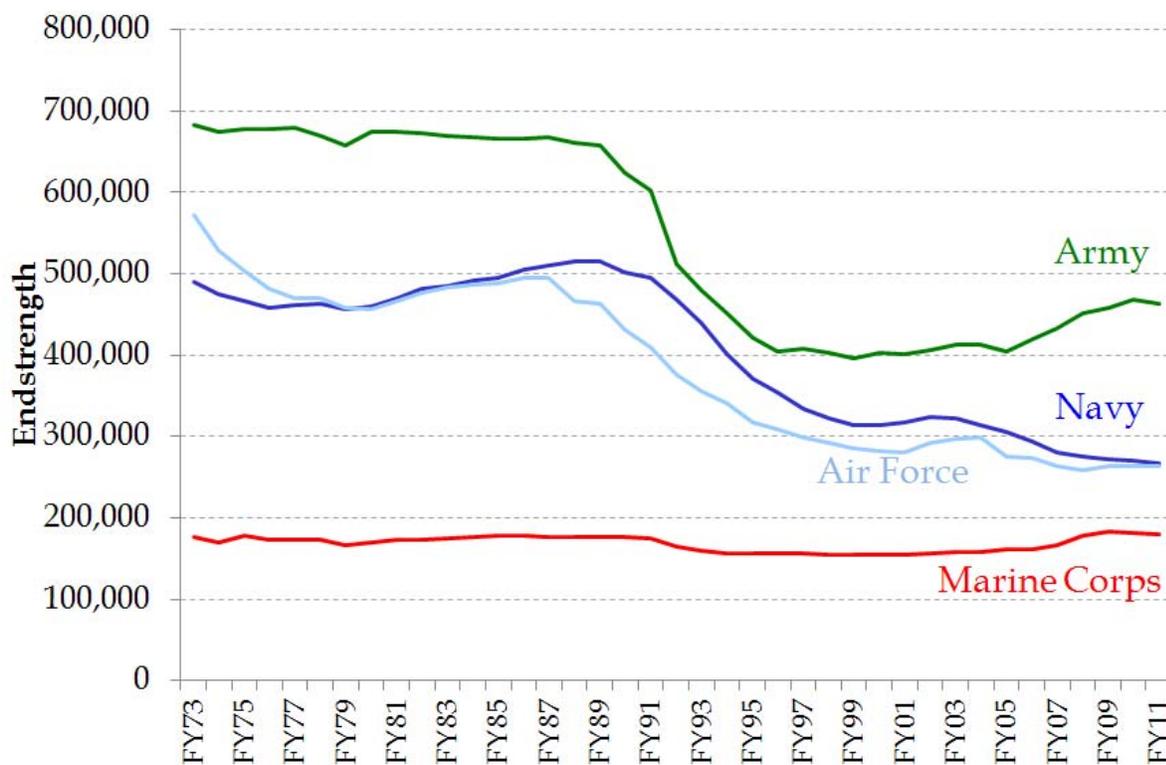
Section II: DoD active component (AC)

This section describes the applicant pool, accessions, and endstrength for both enlisted personnel and commissioned officers in the AC. After discussing trends for these groups, we provide descriptive statistics on age, quality, marital status, race/ethnicity, gender, and geographic representation.

Enlisted endstrength and accessions

The AC enlisted endstrength was 1,173,322 in FY11, making up 83 percent of the total AC endstrength for the year. Figure 1 shows the AC enlisted endstrength by service.

Figure 1. AC enlisted endstrength, by service, FY73–FY11



Note: Data are from appendix table D-11.

While the Army's enlisted endstrength is considerably lower than it was at the start of the All-Volunteer Force (AVF) in 1973, the wars in Iraq and Afghanistan necessitated an increase of about 60,000 soldiers over its size in the late 1990s and early 2000s. In FY11, Army enlisted personnel made up 39.5 percent of all DoD AC enlisted personnel – its

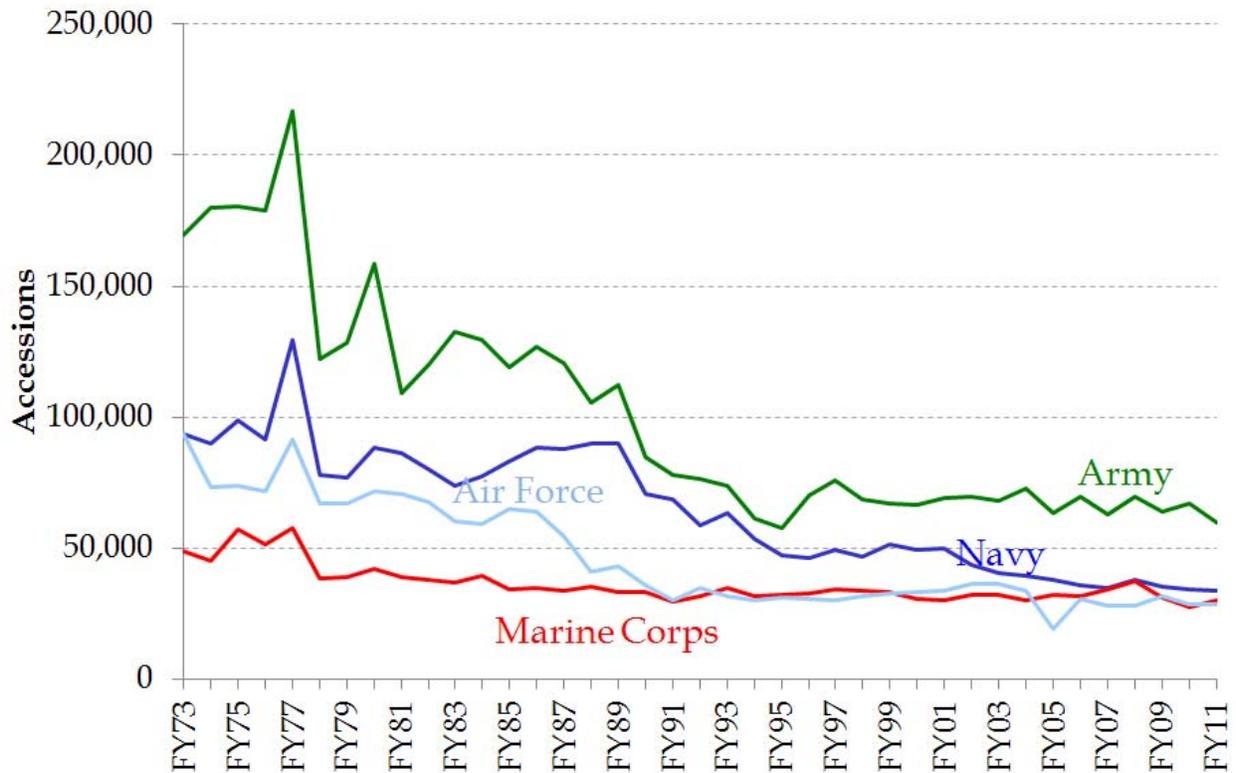
highest proportion in all the years of the AVF. The Marine Corps has been the smallest of the DoD services for the past 40 years, but, while all the services shrank during the 1990s, the Marine Corps shrank the least. By FY99, the Marine Corps stood at 88 percent of its FY73 enlisted endstrength, while the Air Force, Army, and Navy were 50, 58, and 64 percent of their respective FY73 totals. In fact, as a proportion of DoD enlisted endstrength, the Marine Corps grew from 9 to 15 percent between FY73 and FY11. The Marine Corps again increased its enlisted endstrength when Congress increased authorized endstrength for the Army and the Marine Corps in FY07, although in FY11, as the war in Iraq wound down, both Army and Marine Corps enlisted endstrength fell slightly.

Enlisted endstrength in the Navy and Air Force were approximately equal in size and experienced similar growth patterns between FY73 and FY11; each made up 23 percent of DoD enlisted personnel in FY11, down from their respective FY73 proportions of 26 and 30 percent. Thus, from FY01 to FY11, the Army and the Marine Corps grew, largely because of their wartime roles, while the Navy and Air Force contracted.

Figure 2 shows the number of non-prior-service (NPS) enlisted accessions from FY73 to FY11.⁷ Similar to enlisted endstrength, overall accessions declined between FY73 and FY11; however, unlike enlisted endstrength, which sharply declined during the 1990s, accessions fell more steadily between the late 1970s and early 1990s. In FY11, Army, Air Force, and Navy NPS accessions were less than half the size of their FY73 levels, while enlisted endstrengths for these three services were more than half of their FY73 levels. Fewer accessions for a given endstrength contribute to a more senior enlisted population. In contrast, the Marine Corps' accessions fell by a smaller percentage and in FY11 were approximately equal to those of the Navy and Air Force despite its smaller size. By design, the Marine Corps has opted for a more junior force. Since FY08, however, the Marine Corps' endstrength has stayed relatively constant while its accessions decreased; the difference is the result of increased retention.

⁷ Since prior-service (PS) enlisted accessions make up only a small fraction of total enlisted accessions—1.6 percent in FY11—we do not present PS accessions in our figures.

Figure 2. AC enlisted accessions, FY73–FY11



Note: Data are from appendix table D-4. Enlisted accessions include only NPS accessions. The data point for FY77 is unusually high because of an extra “transition quarter” when the end of the fiscal year was changed from Jun. 30 to Sep. 30.

AC officer gains, officer corps, and enlisted-to-officer ratio

In this subsection, we describe the historical trends in DoD AC commissioned officer gains and the commissioned officer corps, as well as the enlisted-to-officer ratio for each of the services.⁸ For simplicity, we refer to commissioned officers simply as “officers” for the remainder of this report.⁹

Starting from a high of 300,000 at the start of the AVF in FY73, the DoD officer corps fell to 260,000 by FY80, grew to 292,000 by FY86, fell to 201,000 by FY01, and grew back to 219,000 in FY11 (see appendix table D-17). Officer gains followed somewhat similar

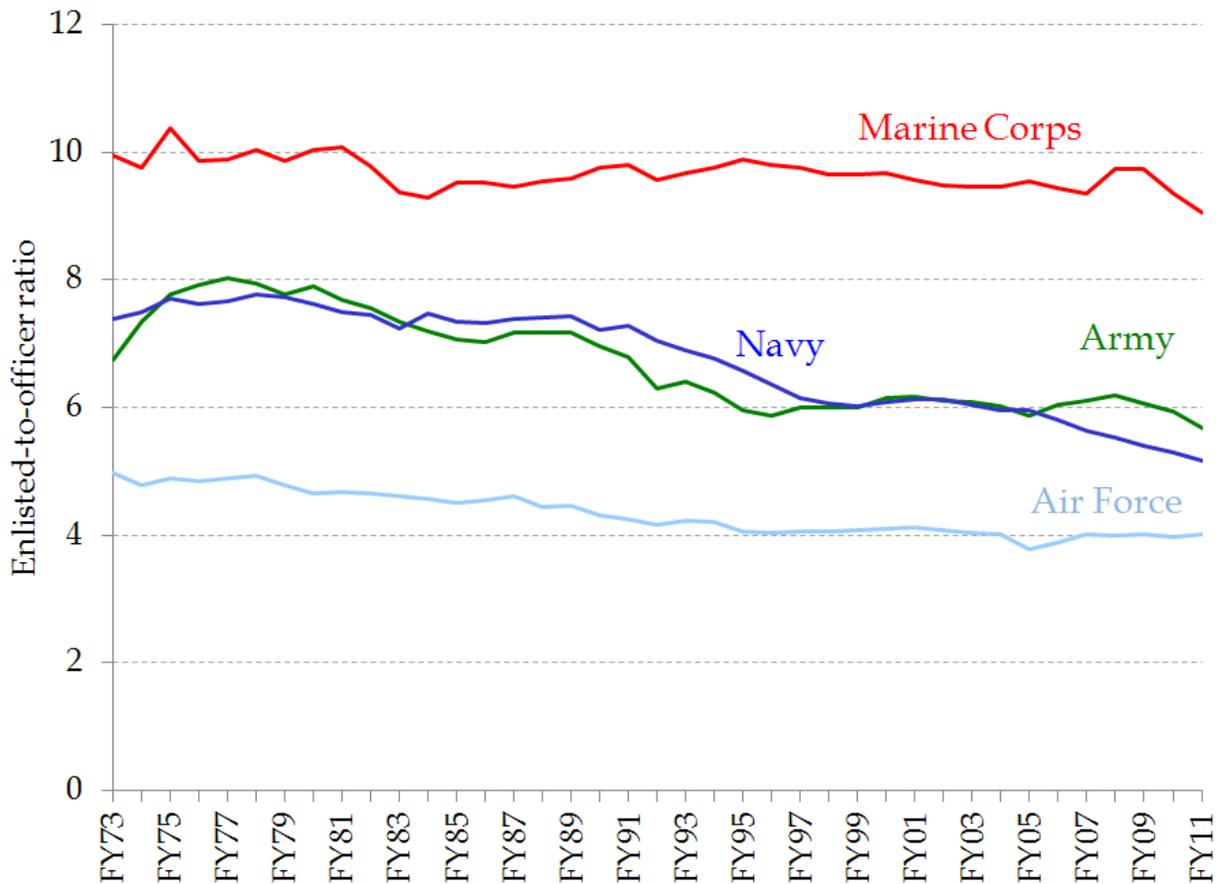
⁸ Officer gains are officers new to DMDC’s officer database, such as where the officer corps is officer endstrength. See footnote 3 in section I for a precise definition.

⁹ As previously noted, given their small number, we exclude warrant officers from our analysis.

patterns (see appendix table D-15).¹⁰ In percentage terms, officer gains have fallen by more than the officer corps since FY73.

Although Congress sets authorized endstrength, each service determines its own enlisted-to-officer ratio (see figure 3). The Marine Corps, notably, has the highest ratio of enlisted personnel to officers, ranging from 9.1 to 10.4 over nearly 40 years. The Air Force is at the other end of the spectrum; in FY73, there were only 5.0 enlisted personnel for every officer, and, in FY11, that ratio fell to 4.1. The Army and Navy have similar historical trends; both had highs of 8.0 enlisted personnel per officer in the late FY70s, but their ratios fell to 5.7 and 5.2, respectively, in FY11.

Figure 3. AC enlisted-to-officer ratio, by service, FY73–FY11



Note: Data are from appendix tables D-11 and D-17.

In summary, in the years of the AVF as endstrength fell, each military service has decreased officers in its service proportionally less than its enlisted members. To economists, this makes some sense as the relative price of enlisted personnel increased

¹⁰ See footnote 3 in section I for a formal definition of accessions and gains.

sharply with the advent of the AVF. As is discussed in detail later, the quality of the enlisted force also increased in the years of the AVF.

Whether the current mix of officers to enlisted personnel or the very different mixes across the services will be sustained under current budgetary pressures is an open question. Even with the increase in enlisted compensation associated with the AVF, officers are still considerably more expensive than enlisted personnel.

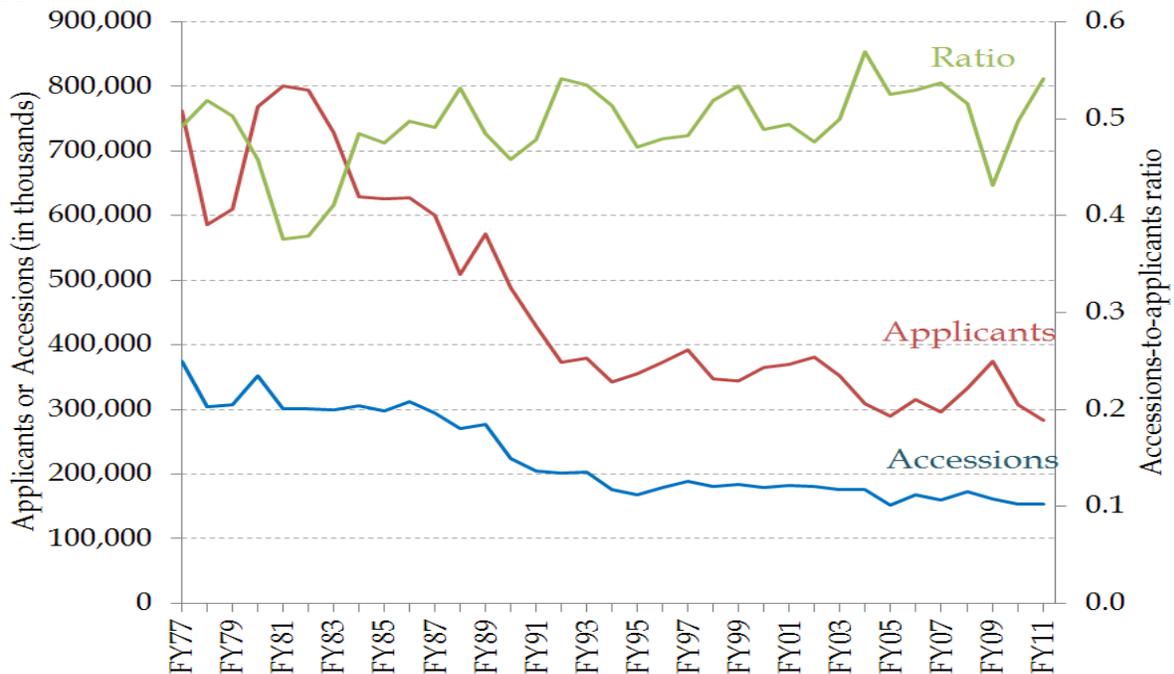
NPS enlisted applicants, NPS enlisted accessions, and enlisted endstrength

We now turn to enlisted applicants and NPS accessions across all DoD services for the FY77–FY11 period. In FY11, the military entrance processing stations (MEPS) processed over 283,000 applicants, while NPS accessions across the four services totaled 153,314 — half of the FY77 applicant and accession levels.

Because the number of applicants processed by the MEPS fell more rapidly than accessions, the enlisted accession-to-applicant ratio grew, albeit with much fluctuation, from 38 percent of applicants accessed in the early years of the AVF to one accession for every two applicants (54 percent) in FY11 (see figure 4).¹¹

¹¹ Applicants cannot go directly to the MEPS; they must be sent by recruiters. Given the paperwork associated with sending an applicant to the MEPS, not all individuals who want to enlist will be sent to the MEPS and counted as applicants. If the recruiter believes the applicant is unqualified, especially when recruiting is relatively easy, the recruiter will probably decide not to put together an applicant package. In tough recruiting environments, the recruiter, however, may be willing to put in the time, on the chance that the applicant will qualify for service.

Figure 4. AC enlisted applicants, NPS enlisted accessions, and the accessions-to-applicants ratio, FY77-FY11



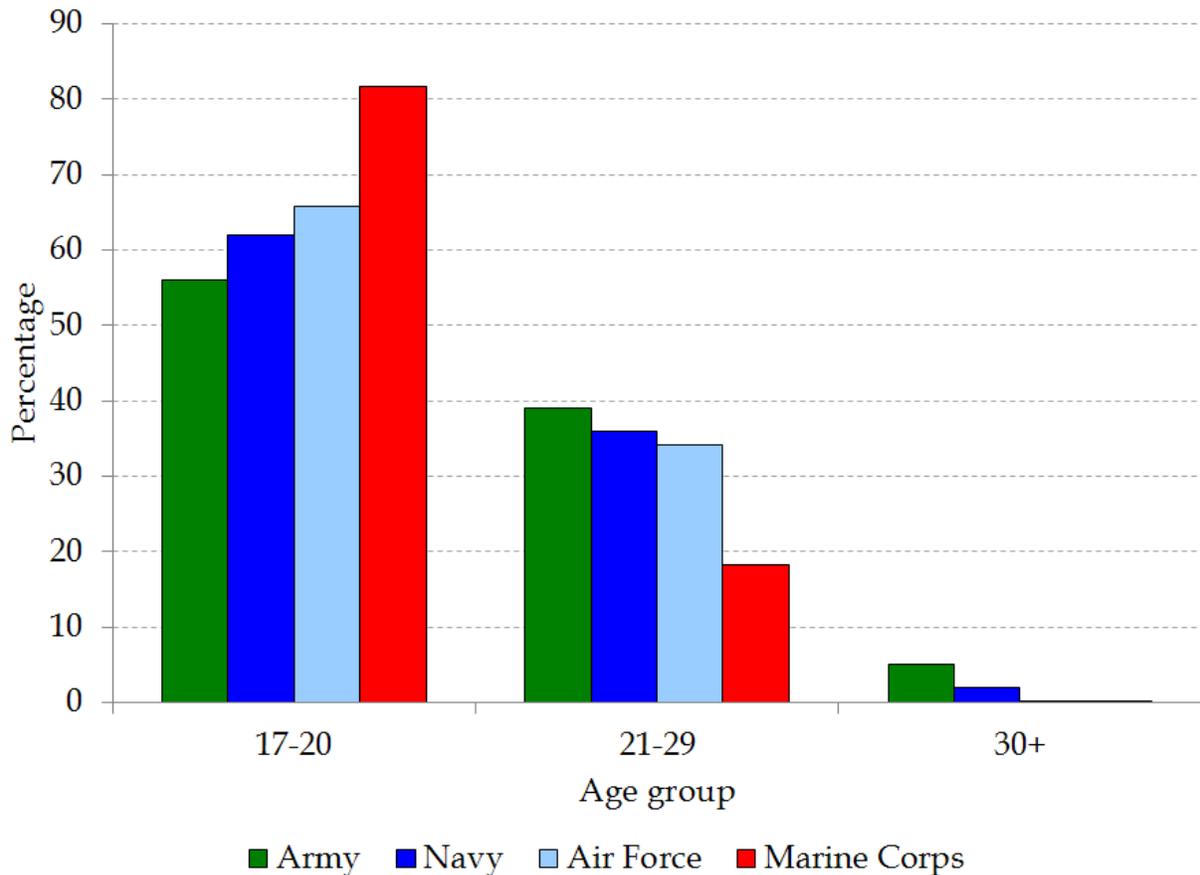
Note: Data are from appendix table D-3. Enlisted accessions include only NPS enlisted personnel. Applicant data are not available prior to FY76.

There are a number of reasons why an applicant for enlisted service may not be permitted to serve or may not end up serving in the U.S. military. An applicant will not be accessed if his or her Armed Services Vocational Aptitude Battery (ASVAB) score is too low or if he or she fails the physical examination. In addition, an applicant will not be accessed if he or she has disqualifying prior drug use or criminal activity, unless he or she is eligible for and is granted an enlistment waiver. Furthermore, many applicants simply change their minds and decide not to enter military service.

Figure 5 shows the age distribution of NPS accessions for the four services.¹² Marine Corps accessions, in particular, are much younger than those in the other services, with 82 percent under age 21. Other differences are smaller, although only the Army and Navy bring in NPS accessions in the oldest age group. In FY11, 5 percent of Army accessions were 30 or older.

¹² Accessions cannot be younger than 17. Even then, a 17-year-old accession requires parental consent to enter military service. In appendix table B-1, we see that 2.4 percent of accessions were 17-year-olds.

Figure 5. AC NPS enlisted accessions by age group, FY11



Note: Data are from appendix table B-1. Enlisted accessions include only NPS enlisted accessions.

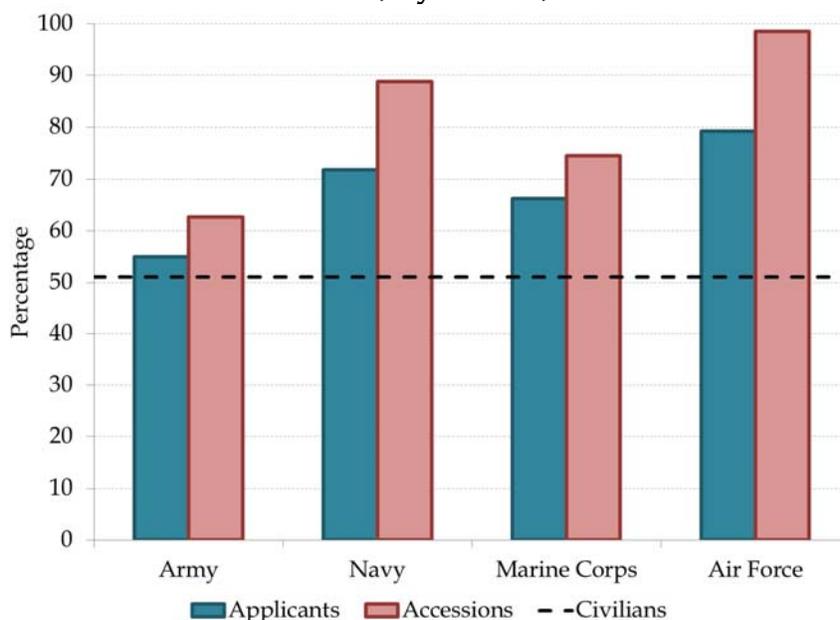
Quality of enlisted applicants and accessions

DoD sets quality standards for the aptitude and educational backgrounds of recruits. The Armed Forces Qualification Test (AFQT), a nationally normalized aptitude test of math and verbal skills, is used to predict training and job performance. DoD requires that 60 percent of accessions score in the 50th percentile or higher. In FY11, 72 percent of accessions did so.

In addition, DoD requires that at least 90 percent of recruits be classified as Tier 1. Tier 1 recruits are primarily high school *diploma* graduates, but they also include all individuals with educational backgrounds beyond high school as well as adult education diplomas and those with one semester of college. Other educational backgrounds include Tier 2 recruits (those with alternative high school degrees, primarily GEDs) and Tier 3 recruits (nongraduates of high school). Tier 1 recruits have been shown to be more likely to complete their first terms of service than recruits with alternate credentials.

In figure 6, we show the percentage of FY11 applicants and enlisted accessions who scored at or above the 50th percentile on the AFQT. In every service, a higher proportion of accessions than applicants scored above the 50th percentile. And, both applicants and accessions scored considerably higher on the AFQT than did the 18- to 23-year-old civilian population (represented by the horizontal line in figure 6).

Figure 6. Percentage at or above the 50th percentile on the AFQT, AC enlisted applicants and NPS accessions, by service, FY11



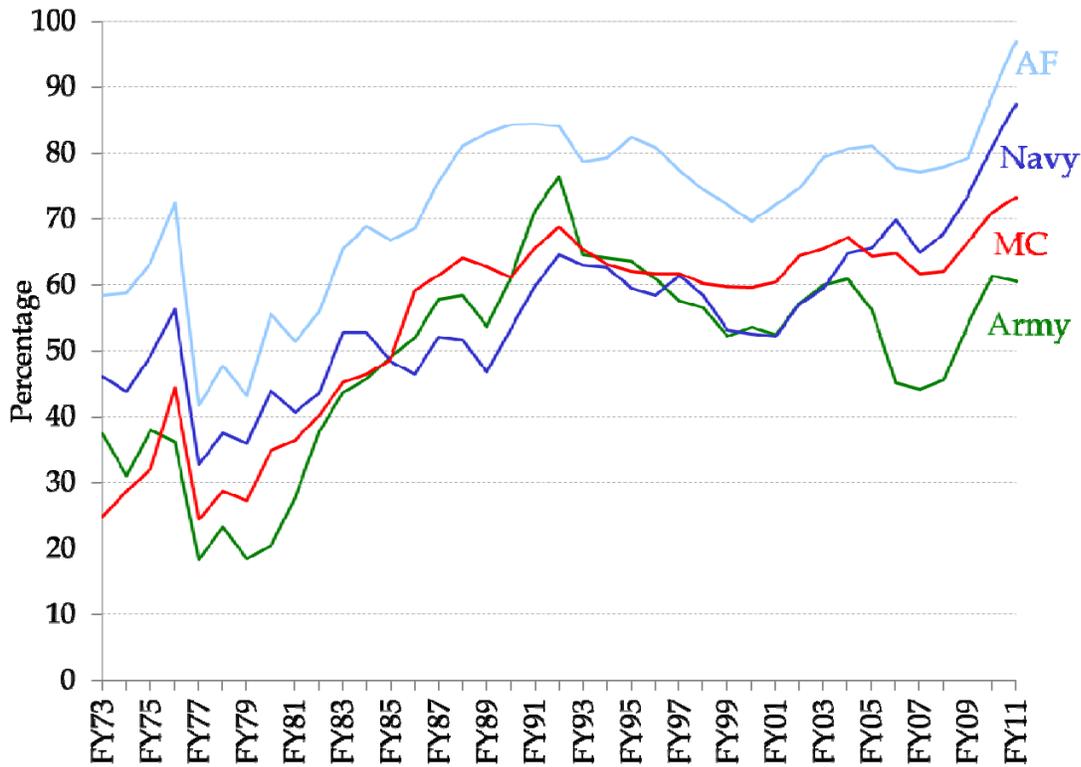
Note: Data are from appendix tables A-4 and B-4; 51.1 percent of civilians test above the 50th percentile.

The Air Force had the highest percentage of applicants/accessions scoring at the 50th percentile or above (79/99 percent), followed by the Navy (72/89 percent), the Marine Corps (66/74 percent), and the Army (55/63 percent). Overall, 77 percent of FY11 accessions have AFQT scores above the 50th percentile; this is the highest percentage ever recorded for the AVF and considerably above the 51 percent for the comparable civilian population. Across the DoD services, a higher proportion of male than female accessions scored in the AFQT's 50th percentile or above; overall, 73 percent of female accessions and 78 percent of male accessions scored in the top half of the distribution (see appendix table B-4).

A recruit is considered "high quality" if he or she has a Tier 1 education credential *and* scores above the 50th percentile on the AFQT. Since 98 percent of DoD accessions had Tier 1 educational credentials, the main delineation for becoming a high-quality applicant or accession is the AFQT score. When comparing the percentage of high-quality accessions over time, we find significant increases between FY73 and FY11 (figure 7). Between FY78 and FY85, each service gained 20 to 30 percentage points in high-quality accessions – driven by both an increase in high school graduation rates and

an increase in recruits' AFQT scores. Again, FY11 was a banner year for accession quality, with the highest proportion of high-quality recruits since the start of the AVF.

Figure 7. Percentage of high-quality, AC NPS enlisted accessions, by service, FY73–FY11



Note: Data are from appendix table D-9. Enlisted accessions include only NPS enlisted accessions.

Of all the services, the Air Force had the highest percentage of high-quality recruits from FY73 to FY11. From FY77 to FY11, the percentage of high-quality recruits increased in all services: the Army made the largest strides, more than tripling its share of high-quality accessions from 18.3 to 60.6 percent, followed by the Marine Corps, which almost tripled its percentage from 24.5 to 73.3 percent. The Navy and the Air Force more than doubled their high-quality accession shares; the Navy went from 32.8 percent of accessions being high quality in FY77 to 87.4 percent in FY11, and the Air Force went from 41.7 to 97.0 percent. In FY11, the AVF had extraordinary success recruiting high-quality personnel.

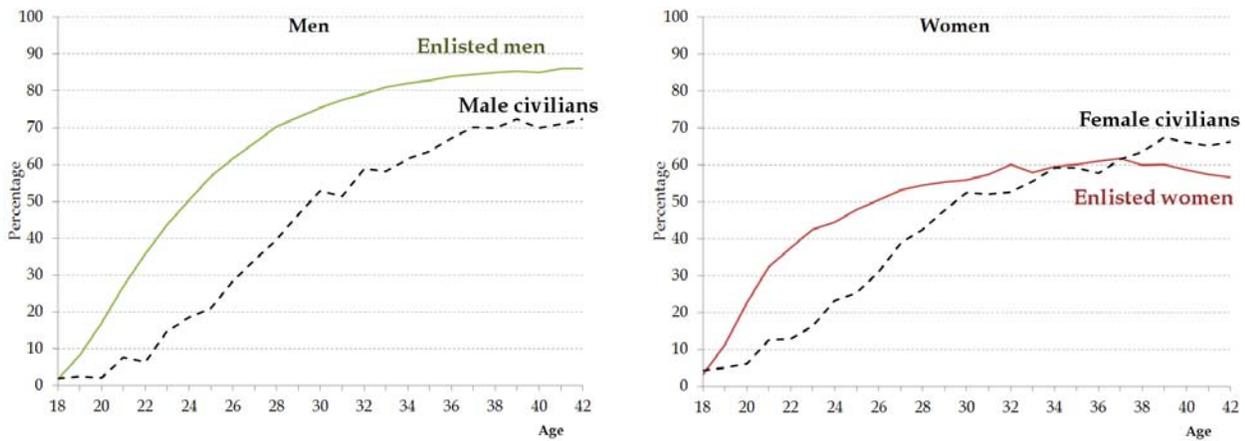
Marital status of AC personnel

Men in the enlisted force are considerably more likely than their civilian counterparts to be married. Although figure 8 shows data for FY11, these differences are long-standing. The differences in marriage rates occur while people are in the military, as both male

applicants and enlisted accessions closely approximate the age-specific marriage rates of their civilian counterparts (see appendix tables A-2 and B-2).

Enlisted women are more likely to be married than civilian women until about their mid-thirties. As with men, age-specific marriage rates for female applicants and accessions are similar to those of civilian women, so the differences in marriage rates occur after accession. Since marriage rates are higher among all enlisted servicemembers than among accessions, it follows that people are getting married while they are in the military.

Figure 8. Male and female marriage rates of AC enlisted personnel and civilian comparison groups, by age, FY11



Note: Data are from appendix table B-16. The civilian comparison group is made up of members of the civilian workforce age 17 and older, Sep. 2011.

Figure 9 shows the marriage rates for the AC officer corps. While male officers are considerably more likely to be married than their college-educated civilian counterparts, the same is not true for female officers, where the marriage rates are roughly similar. There is also an interesting difference in the marriage rates by age for enlisted personnel versus officers:

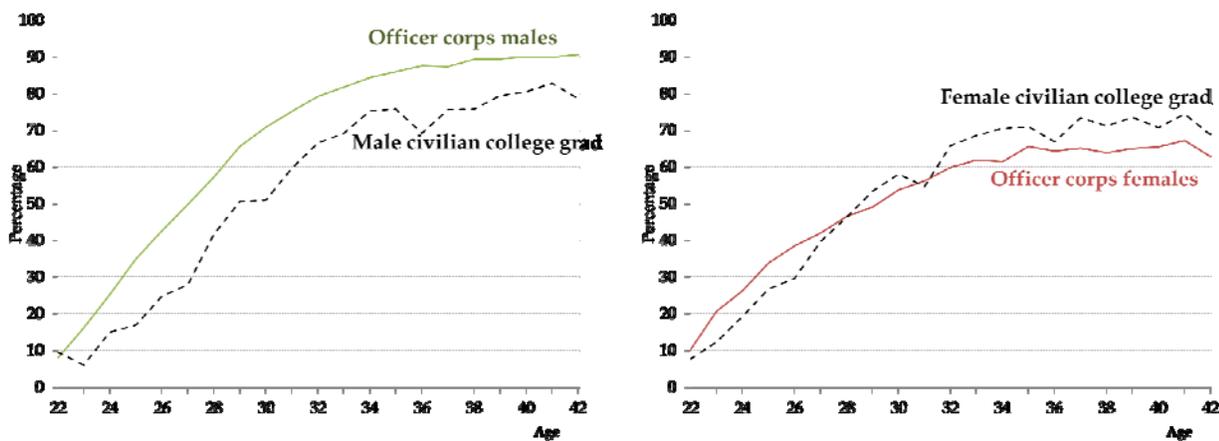
1. Since officers enter after completing college, they enter the military about 4 years older on average than enlisted personnel.
2. Both officers and enlisted personnel are predominately single when they enter military service, but officers who have completed college are about 4 years older at entrance into the military than are enlisted personnel who generally enter after completing high school.

If we compare the marriage rates by age for 25-, 30-, and 35-year-old men, we find:

- 65.8, 75.4, and 82.8 percent of enlisted men are married
- 34.4, 68.4, and 84.7 percent of male officers are married.

In short, until personnel are in their mid-30s when marriage rates converge for officers and enlisted personnel, enlisted personnel are more likely to be married than are officers.

Figure 9. Male and female marriage rates of AC officer corps and civilian comparison group, by age, FY11



Note: Data are from appendix table B-24. The civilian comparison group is college graduates in the civilian labor force (21- to 49-year-olds), Sep. 2011.

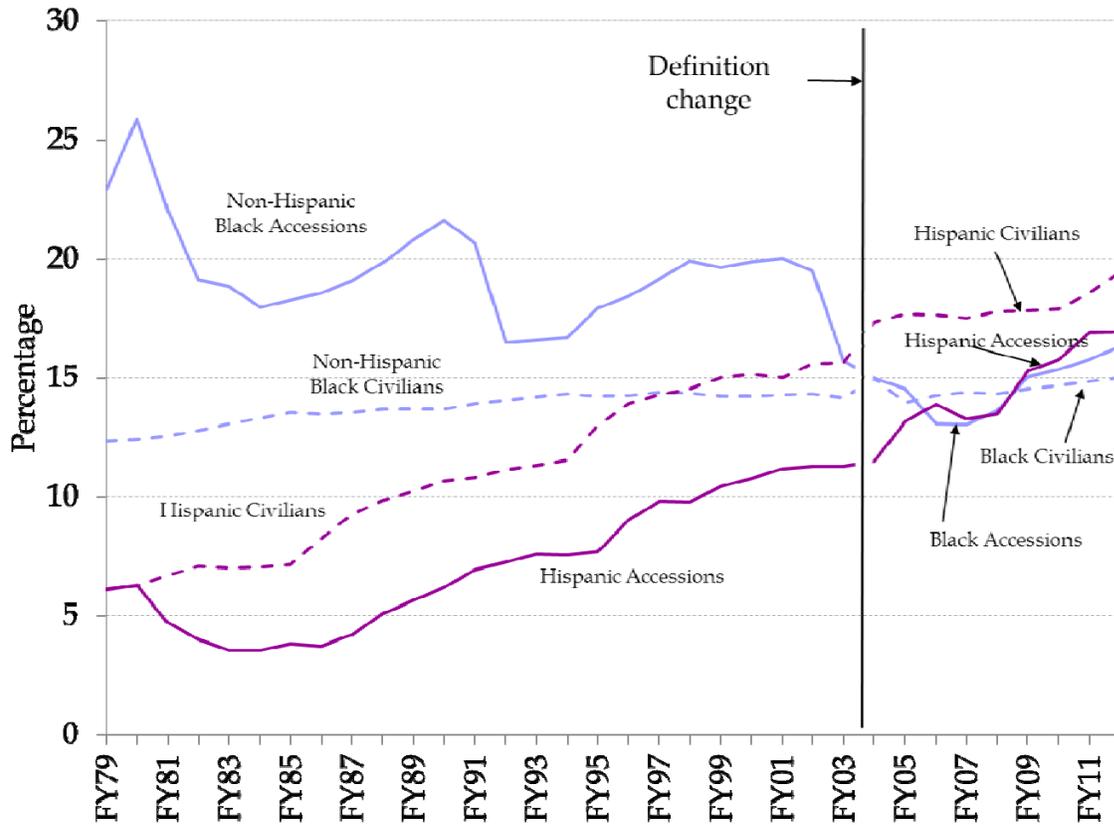
Race and ethnicity of AC accessions, enlisted force, and officer corps

Prior to FY03, self-identified race and ethnicity were reported in combined categories (e.g., non-Hispanic white or non-Hispanic black). Since FY03, race and ethnicity have been reported separately, and the ethnic category is either Hispanic or non-Hispanic. Although a Hispanic accession can be of any race, the vast majority identify themselves as white. In addition, in FY03 the DoD added a category for two or more races; 7.1 percent of FY11 Hispanic accessions and 4.3 percent of non-Hispanic accessions claimed two or more races (see appendix table B-10).

In figure 10, we compare the Hispanic and black proportions of DoD accessions with those of the 18- to 24-year-old civilian population, indicating the FY03 change in race and ethnicity definitions with a vertical line. The Hispanic population has grown rapidly. In FY78, Hispanics made up 6 percent of both accessions and comparatively aged civilians; in FY11, they made up 17 percent of accessions and 19 percent of

civilians. Although not shown, in FY11, Hispanic accessions in the Marine Corps, Navy, and Air Force reflected the population percentages, but Hispanics were underrepresented in Army accessions, at 13 percent (see appendix table D-31).

Figure 10. Percentage of black or Hispanic AC NPS enlisted accessions and 18- to 24-year-old civilians, FY79–FY11

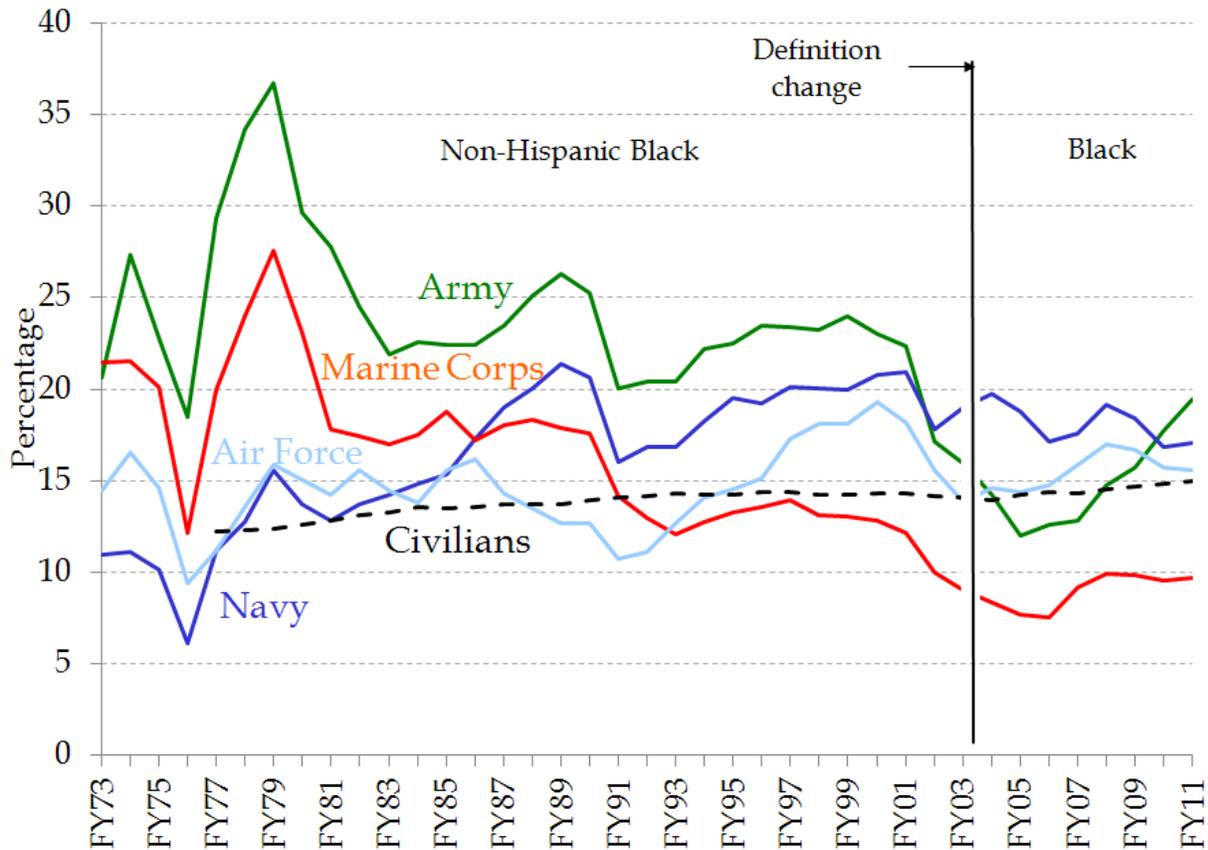


Note: NPS accession and civilian data are from appendix tables D-22, D-23, and D-26.

In the early years of the AVF and until the first Gulf War, the percentage of non-Hispanic blacks was considerably larger in DoD accessions than in the comparatively aged civilian population. There was a sharp decline in non-Hispanic black accessions after the first Gulf War, but the percentages of black accessions and black civilians have been more equal since FY03. In FY11, blacks represented 16 percent of accessions and 15 percent of the 18- to 24-year-old civilian population.

There are fairly substantial differences *by service* in the percentages of non-Hispanic black accessions, particularly in the early years of the AVF (see figure 11). At the start of the AVF, percentages in the Army and the Marine Corps considerably exceeded the civilian percentages but, in the mid-1980s, the percentages in the Navy began to rise, while the percentages in the Marine Corps began to fall. In FY11, all services except the Marine Corps exceeded the comparable civilian percentages, with the Navy having the highest percentage of black accessions and the Marine Corps the lowest.

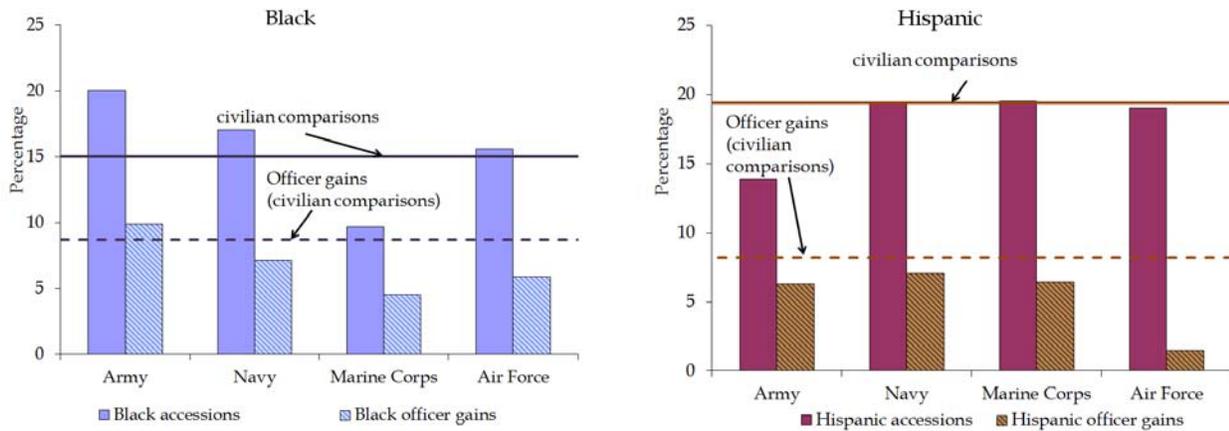
Figure 11. Percentage of black AC NPS enlisted accessions, by service, FY73–FY11



Note: Data for FY73 to FY02 for NPS non-Hispanic black accessions and 18- to 24-year-old non-Hispanic black civilians are from appendix table D-23. Data for FY03–FY11 NPS black accessions and 18- to 24-year-old black civilians are from appendix table D-26. With the definition change, a distinction is no longer made between Hispanic and non-Hispanic blacks.

Figure 12 compares black and Hispanic AC enlisted accessions with officer AC gains for the four services in FY11. Historically, enlisted accessions have been more diverse than officer gains, and the pattern continued for FY11. There is particular imbalance in the Air Force where Hispanics represented 19 percent of enlisted accessions but only 1.5 percent of officer gains. Figure 13 looks at endstrength diversity for black and Hispanic enlisted and officer strength. It is striking in the two figures how much more diverse the enlisted force is than the officer corps. But the increased diversity on the enlisted side is reflective of the increased diversity in the population. NPS enlisted accessions come from the young civilian population, and the enlisted population’s civilian counterparts are found in the civilian labor force, shown as solid horizontal lines in figures 12 and 13. Since a college degree is required for commissioned officers, the civilian comparisons for officers are restricted to those with college degrees (shown in figures 12 and 13 by the dotted line). The civilian college graduate population is less diverse in terms of race and ethnicity than the broader civilian labor force.

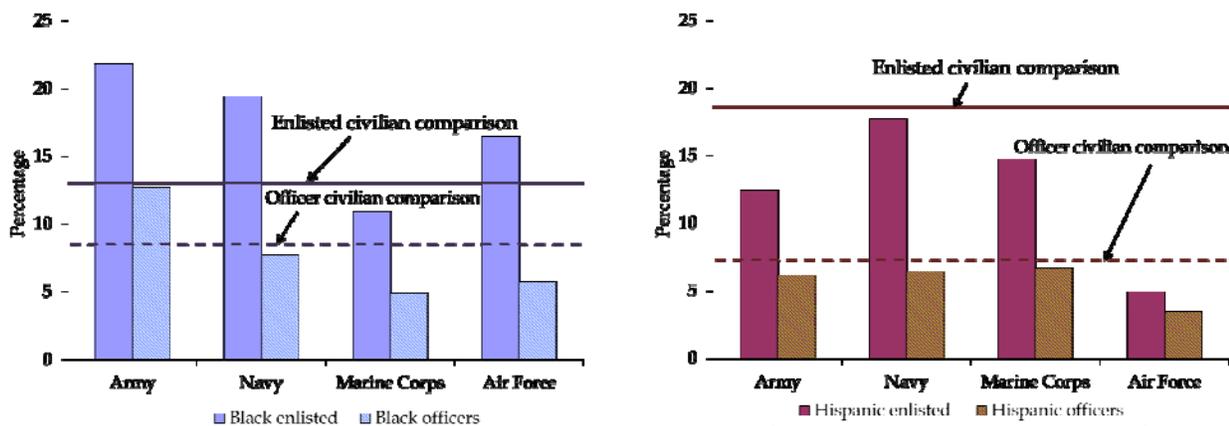
Figure 12. Percentage of black or Hispanic AC NPS enlisted accessions and AC officer gains, by service, FY11



Note: Data are from appendix tables B-3 and B-25. Civilian comparisons for enlisted NPS accessions are with the 18- to 24-year-old civilian population. Officer gains' civilian comparisons are with 21- to 35-year-old civilian college graduates.

With similar retention patterns, force diversity increases when the percentage of minority accessions for the enlisted force (gains for the officer corps) is larger than the group's percentage of endstrength. Comparing figures 12 and 13, on the enlisted side we see only small differences between black accessions/gains and endstrength. For Hispanics, accessions/gains are larger than endstrength, suggesting growing Hispanic representation for all services except the Air Force.

Figure 13. Percentage of black or Hispanic AC enlisted endstrength and officer corps, by service, FY11

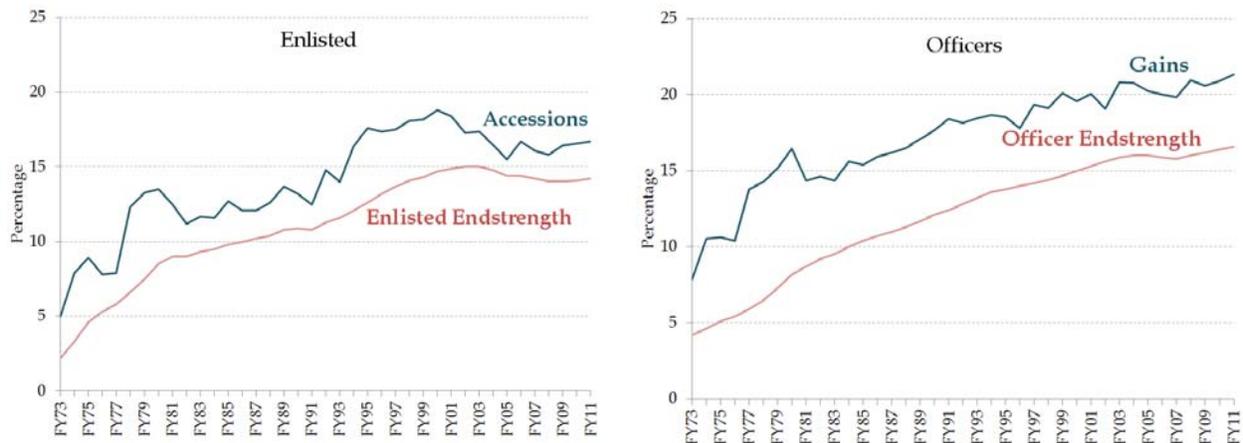


Note: Data are from appendix tables B-17 and B-25. Enlisted force comparisons are with the 18- to 44-year-old civilian labor force; officer civilian comparisons are with college graduates in the civilian workforce, ages 21 to 49.

AC women: Enlisted accessions, officer gains, enlisted endstrength, and the officer corps

Figure 14 displays the increases in the percentage of female DoD enlisted accessions or officer gains and their respective endstrengths over the last 38 years.

Figure 14. Female share of NPS enlisted accessions, officer gains, and endstrength, FY73–FY11



Note: Enlisted data are from appendix tables D-5 and D-13; enlisted accession data include only NPS accessions. Commissioned officer data are from appendix tables D-16 and D-19.

The percentage of women in the enlisted force has not been increasing over the last 10 years even though female accessions have consistently been greater than endstrength. Female officer endstrength is still increasing, but female retention is lower than male retention for both and officer and enlisted personnel. The Air Force leads the other service in both female officer and enlisted representation, but the Army and Navy are not far behind. In FY11, female representation in the force was as follows:

- Army (13 percent enlisted and 18 percent officer)
- Navy (16 percent enlisted and 16 percent officer)
- Marine Corps (7 percent enlisted and 6 percent officer)
- Air Force (19 percent enlisted and 19 percent officer).

As in the civilian sector, male and female servicemembers are not distributed equally across occupational groups. For enlisted personnel, the largest occupational area in the Army and Marine Corps is “Infantry, Gun Crews, and Seamanship.” Since women are not permitted to serve in most of these occupations, the occupational area is over 99 percent male. For the Navy and Air Force, the dominant enlisted occupational area is

“Electrical,” areas where – particularly in the Navy – women have been increasing their representation in recent years. In FY11, the representation in the Electrical area included:

- 30.1 percent of men and 22.8 percent of women in the Navy
- 29.2 percent of men and 7.8 percent of women in the Air Force.

The dominant female occupational area for enlisted women, however, is “Administrators.” The percentages of enlisted women who are Administrators are 34.4 percent (Army), 14.8 percent (Navy), 35.6 percent (Marine Corps), and 31.7 percent (Air Force). Enlisted women are also overrepresented in the “Medical” area, particularly in the Air Force (see appendix table B-20).¹³

Female officers are concentrated in “Health Care” occupations; over 40 percent of the female officers in the Army, Navy, and Air Force are in these occupations. However, the dominant officer occupational area is “Tactical Operations.” Although these occupations are still heavily male, female officers have made headway in the last decade (see appendix table B-28).

Table 3. Percentage of male and female officer in Tactical Occupations, FY11

Service	Percentage in Tactical Occupations	
	Men	Women
Army	37.1	5.0
Navy	43.5	19.3
Marine Corps	51.0	19.0
Air Force	42.3	14.1

Paygrade distribution of women and minorities

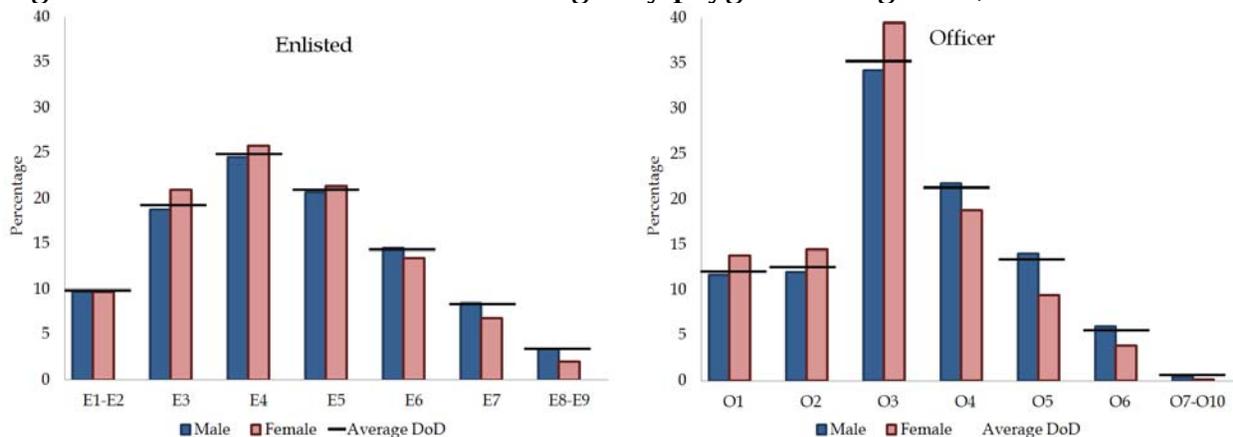
Figure 15 illustrates the FY11 paygrade distribution of enlisted members and officers for both men and women in the AC component. The horizontal line for each paygrade indicates the overall DoD representation in the paygrade. As the figure shows, women in the enlisted force are overrepresented in grades E1 to E5. For officers, the figure shows the same pattern, with overrepresentation in the O3 grade. Women are underrepresented in the more senior grades in both the enlisted and officer corps. The differences are largest in the most senior grades.

If we go back a decade to FY00, we see a similar picture for paygrade representation. In fact, as figure 14 illustrated, the percentage of women in either the enlisted force or the

¹³ The Marine Corps has no medical personnel because the Navy supplies medical personnel to it.

officer corps has not changed much in the last decade; the growth took place before FY00.

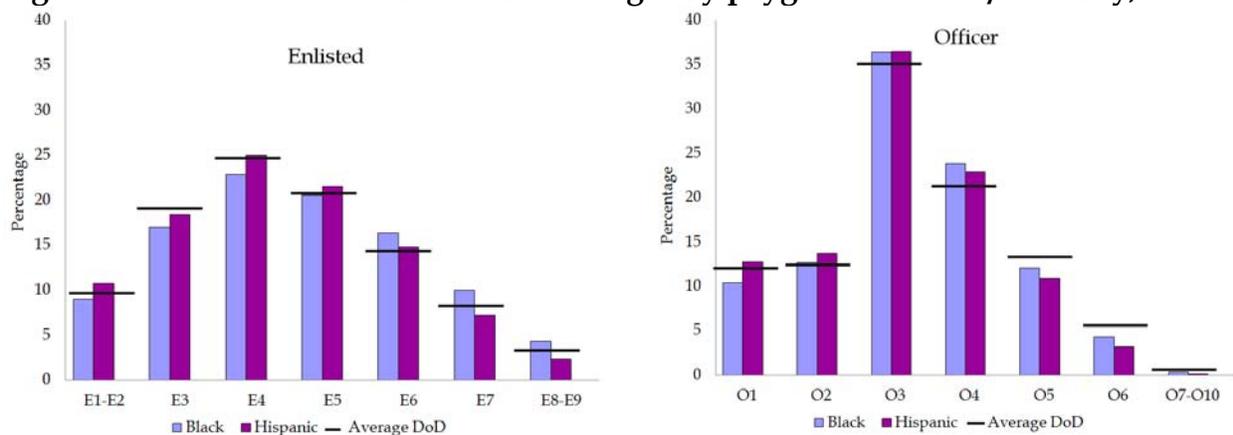
Figure 15. AC enlisted and officer strength by paygrade and gender, FY11



Note: Data are from appendix tables B-36 and B-38.

Figure 16 displays AC enlisted and officer paygrades for black and Hispanic members (blue and purple bars, respectively). The solid lines in the figure are the overall paygrade distributions across all the services. Blacks are underrepresented in the junior paygrades but overrepresented in the senior paygrades. This is particularly true for the top enlisted leadership positions (E8 and E9), which – by law – can represent no more than 3.75 percent of the force.¹⁴ In the enlisted force, blacks hold a disproportionate share of the top leadership positions. Hispanics are generally underrepresented in the enlisted military, although their underrepresentation has been decreasing in recent years.

Figure 16. AC enlisted and officer endstrength by paygrade and race/ethnicity, FY11



Note: Data are from appendix tables B-37 and B-39.

¹⁴See

<http://prhome.defense.gov/RFM/MPP/ACCESSION%20POLICY/poprep2001/contents/contents.htm>

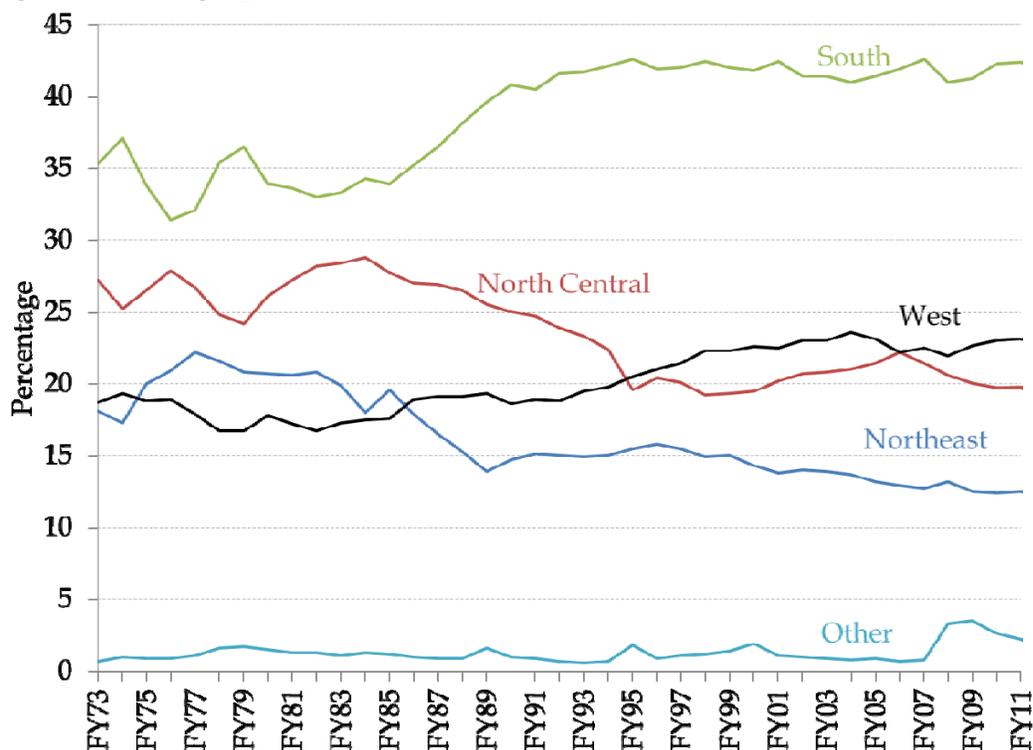
For officers, blacks and Hispanics are generally well represented relative to the average distribution through paygrade O4, but they are underrepresented in the more senior grades.

Geographic distribution of AC enlisted accessions

There are marked differences in the regional distribution of accessions before and after FY85 (see figure 17). The Census Bureau divides the country into four regions:

- Northeast – includes states in the New England and Middle Atlantic Census divisions
- North Central – includes states in the East North Central and West North Central divisions
- South – includes states in the South Atlantic, East South Central, and West South Central divisions
- West – includes states in the Mountain and Pacific divisions.¹⁵

Figure 17. Geographic distribution of NPS enlisted accessions, FY73–FY11



Note: Data are from appendix table D-10.

¹⁵ For completeness, accessions from U.S. territories, possessions, or “unknown” regions are grouped together in the “other” category.

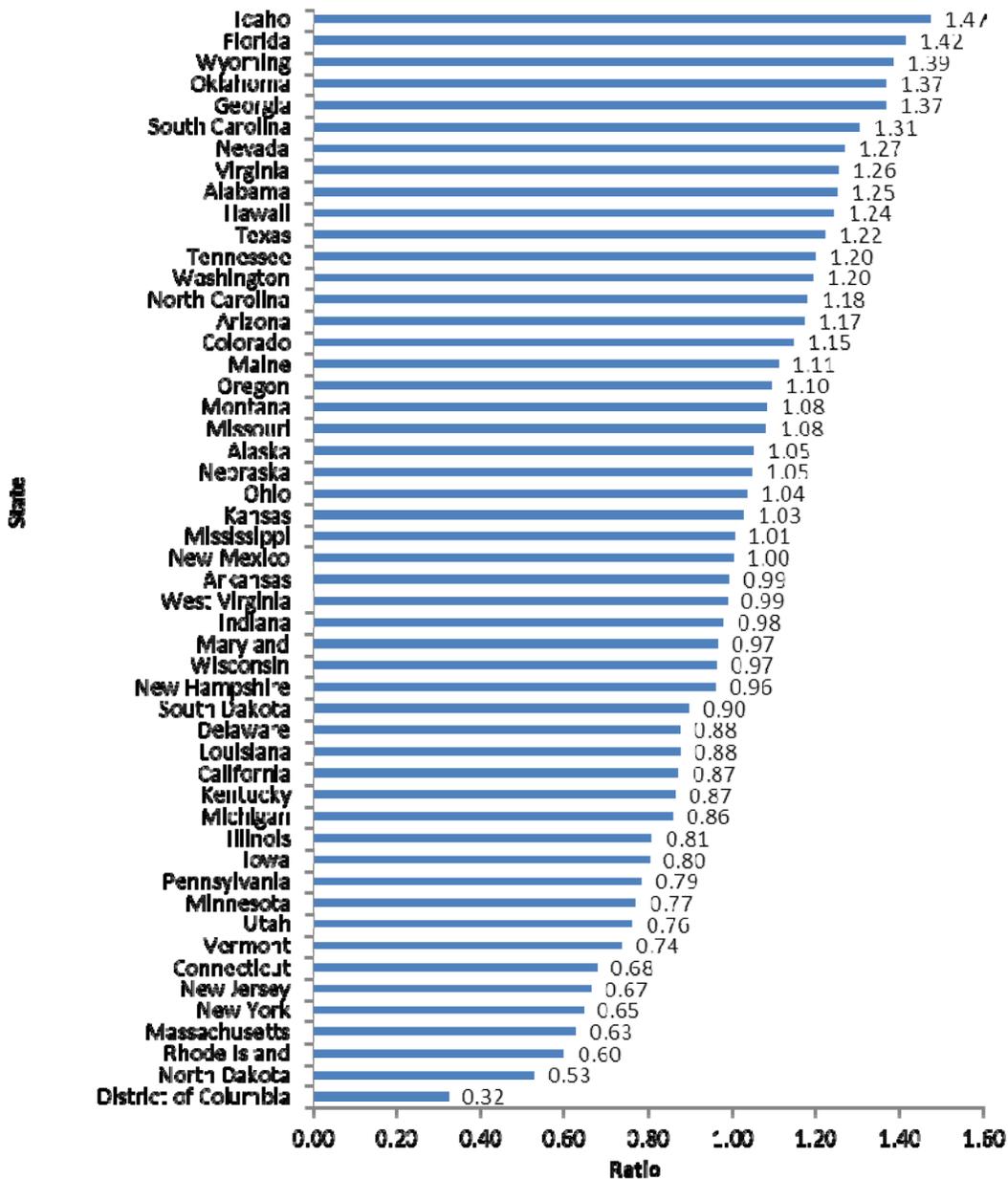
From FY73 to FY85, roughly 35 percent of enlisted accessions came from the South and 25 percent came from the North Central region, while the remaining 40 percent of accessions came from the West and the Northeast. After FY85, accessions were drawn more heavily from the South and the West and less so from the Northeast and North Central regions. This reflects general population trends, as the “Sunbelt” states in the South and West regions made up an increasingly larger share of the U.S. population in the 1980s and 1990s. As recruiting commands place recruiters across the country, they take into account geographic shifts in population, as well as the propensity to serve.

We do not include data on the geographic representation of officer gains. Officers are primarily recruited from colleges and universities; geographic location would reflect the location of these universities and not necessarily where the officers grew up.

In figure 18, we show the ratio of a state’s FY11 accession share to the state’s share of the U.S. 18- to 24-year-old population. A ratio of 1 implies that a state’s share of DoD accessions was equal to its share of 18- to 24-year-olds. A ratio greater than 1 implies that, relative to its proportion of the 18- to 24-year-old population, the state had a larger percentage of accessions. A ratio of less than 1 implies a smaller percentage of accessions relative to a state’s proportion of the 18- to 24-year-old population.

The FY11 ratios ranged from 0.32 to 1.47. New Mexico had a ratio of 1 – its share of accessions exactly matched its share of the 18- to 24-year-old population. Twenty-five states could be considered overrepresented in accessions (ratios greater than 1), and 24 states and the District of Columbia could be considered underrepresented (ratios less than 1). Idaho and Florida had the highest ratios, and D.C. contributed the fewest accessions relative to its population. These different ratios reflect differences in qualification rates, propensities, and geographic differences in recruiting resources.

Figure 18: Enlisted accession-share-to-civilian-share ratios, by state, FY11



Note: Data are from appendix table B-46. Enlisted accessions include only NPS enlisted accessions.

Socioeconomic characteristics of AC NPS enlisted accessions

We turn now to the characteristics of the home communities of NPS accessions. The panels in appendix table B-41 provide the following information on both NPS and PS accessions' home communities:

- Median household income
- Population density
- Age group
- Residences (renters/owners)
- Racial and ethnic mix

We will focus on neighborhood median incomes for NPS AC accessions.

Neighborhood median income of AC NPS enlisted accessions

There was considerable concern at the advent of the AVF about representation, particularly in terms of socioeconomic characteristics. But researchers found that AVF accessions in the early years were, for the most part, representative of the U.S. population in terms of their socioeconomic backgrounds.¹⁶ More recent research reports similar findings on socioeconomic characteristics, such as neighborhood income, for the 1990s and early years of this century.¹⁷

For FY11 AC NPS enlisted accessions, Lien et al. (2012) updated that research, using the median income of AC NPS enlisted accessions' census tracts as a proxy for neighborhood income. Figure 19 shows FY11 AC NPS enlisted accessions by the income quintile of their home of record census tracts at accession.¹⁸ The 20-percent line defines each income quintile. Relative to all households, FY11 NPS accessions are underrepresented in census tracts with the lowest and the highest median incomes, and those in the middle three quintiles are overrepresented. Lower representation in the lowest neighborhood income quintile may be explained by the educational standards in the military. In FY11, virtually all NPS accessions were high school diploma graduates, and high school dropout rates have been higher in low-income neighborhoods. For the highest neighborhood income quintile, the slightly lower representation is probably due to higher college attendance rates in those neighborhoods.¹⁹

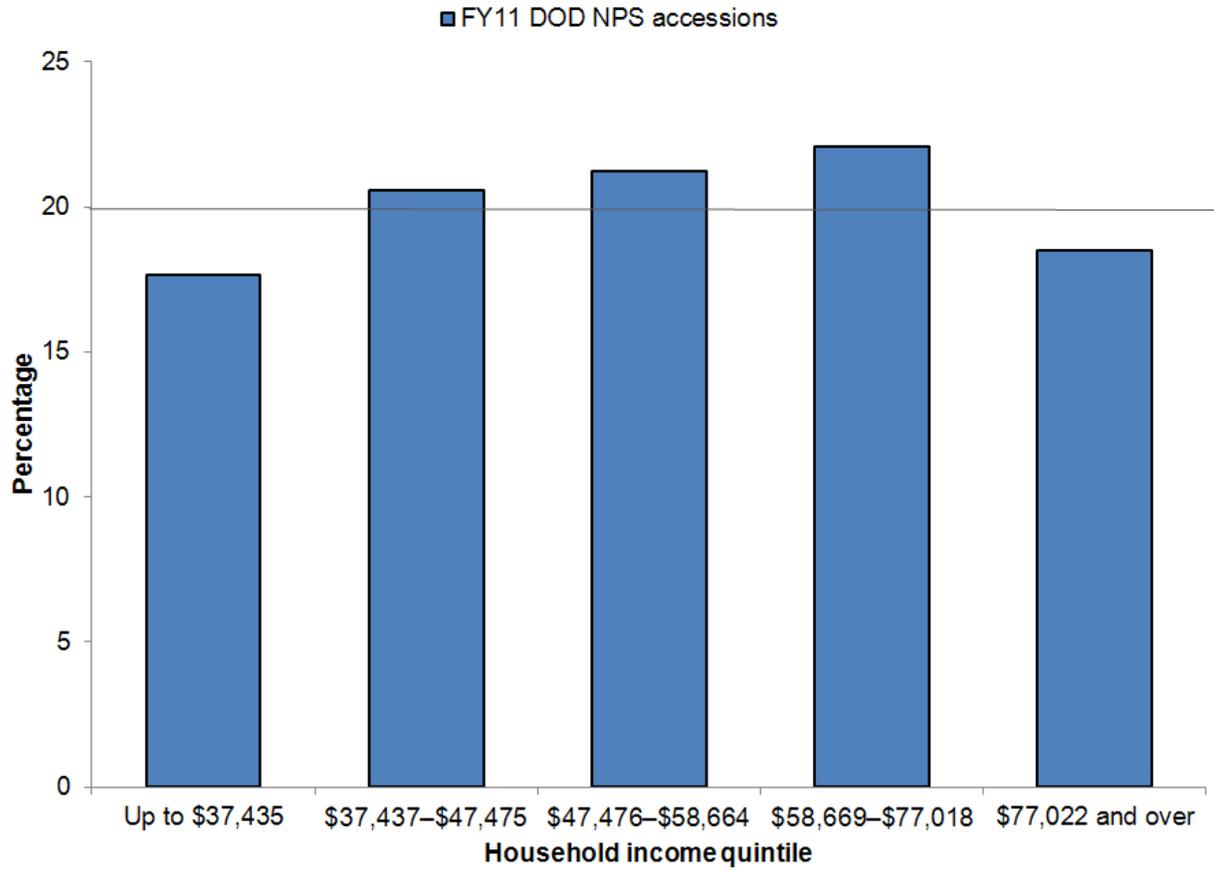
¹⁶ See, for example, Richard N. Cooper, *Military Manpower and the All-Volunteer Force*, RAND Publication, R-1450-ARPA, 1977.

¹⁷ See, for example, Shanea J. Watkins and James Sherk, *Who Serves in the U.S. Military? Demographic Characteristics of Enlisted Troops and Officers*, Heritage Foundation Center for Data Analysis Report CDA 08-05, Aug. 21, 2008. For further discussion of the literature, see Diana S. Lien, Kletus Lawler, and Robert Shuford, *An Investigation of FY10 and FY11 Enlisted Accessions' Socioeconomic Characteristics*, CNA Research Memorandum DRM 2012-U-001362-Final, Aug. 2012.

¹⁸ The income quintile ranges are based on all U.S. households in census tracts with non-missing median household income. FY11 AC NPS enlisted accession data were provided by DMDC and linked by census tract to median household income data from the Census' 2006-2011 American Community Survey.

¹⁹ See http://www.huffingtonpost.com/2011/10/04/children-low-income-neighborhoods-high-school_n_994580.html and <http://nces.ed.gov/fastfacts/display.asp?id=51>.

Figure 19. Quintiles for neighborhood median household income of FY11 AC NPS enlisted accessions



Note: Data are found in the first panel of table B-41.

Section III: DoD reserve component (RC)

The DoD RC consists of six elements: the Army National Guard (ARNG), the Army Reserve (USAR), the Navy Reserve (USNR), the Marine Corps Reserve (USMCR), the Air National Guard (ANG), and the Air Force Reserve (USAFR). In FY11, the RC was approximately 60 percent the size of the AC with 847,934 total endstrength:

- 721,863 enlisted (85 percent of endstrength)
- 114,252 commissioned officers (13 percent of endstrength)
- 11,819 warrant officers (2 percent of endstrength).

In FY11, the RC gained 119,272 enlisted personnel, 13,969 commissioned officers, and 1,183 warrant officer officers.²⁰ Although the AC has few prior-service (PS) accessions, many RC enlisted gains are from PS personnel. In FY11, PS percentages for gains in the RC varied from 74.4 percent in the USNR to 33.3 percent in the ARNG (see table 2).

Overview and comparisons of the RC and the AC

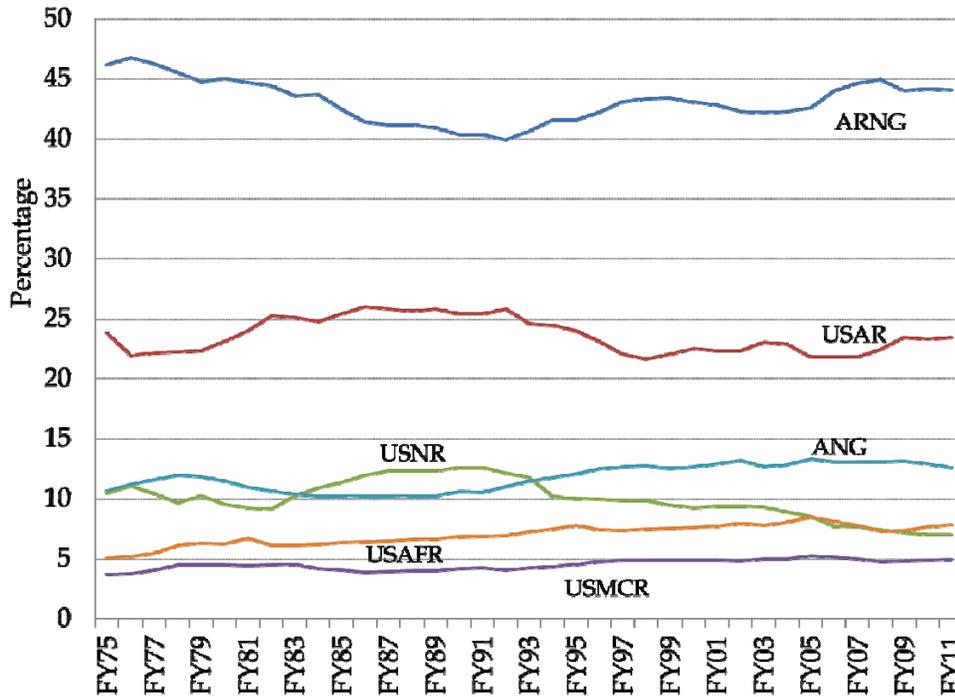
There are at least three major ways the reserves can be described:

- By relative size
- By service
- By guard or selected reserve component.

In terms of size, approximately two-thirds of reserve endstrength has been in the Army units (ARNG and USAR), with the other service elements making up much smaller shares. About 55 percent of reserve endstrength is in Army Guard or Air Force Guard units. The ARNG is by far the largest component, with over 40 percent of reserve personnel. The smallest reserve component is the USMCR, with less than 5 percent of all reserve personnel. Figure 20 shows the historical distribution of RC endstrength (enlisted plus commissioned officers) across the six service elements.

²⁰ RC data from DMDC are only available as gains. A gain is a transaction in the reserve database and reflects the addition of an SSN that was not in the previous file.

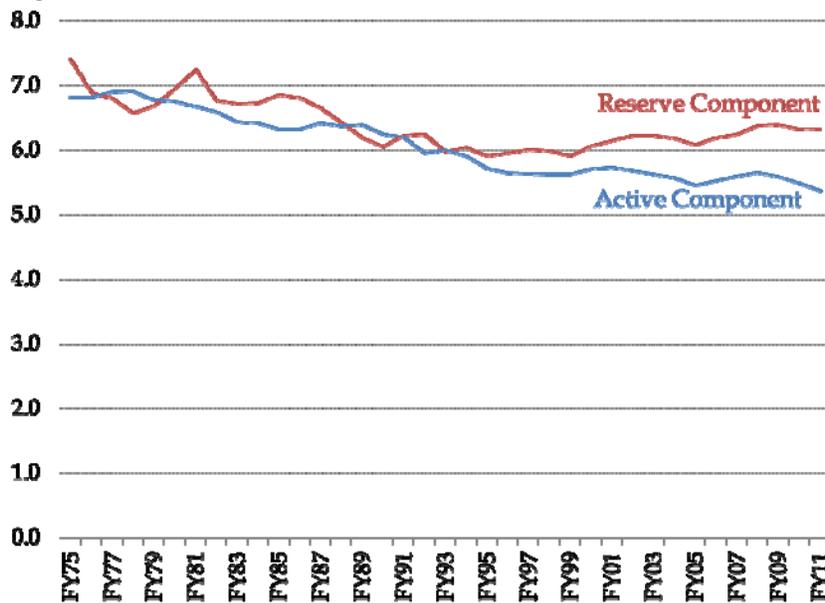
Figure 20. RC shares by service element, FY75–FY11



Note: Data are from appendix tables D-20 and D-21. These data omit the small number of warrant officers.

For most of the years since FY75 and consistently since FY93, the RC has had a higher enlisted-to-officer ratio than the AC (see figure 21). In FY11, the RC had 6.3 enlisted personnel for every commissioned officer (the comparable ratio in the AC was 5.4

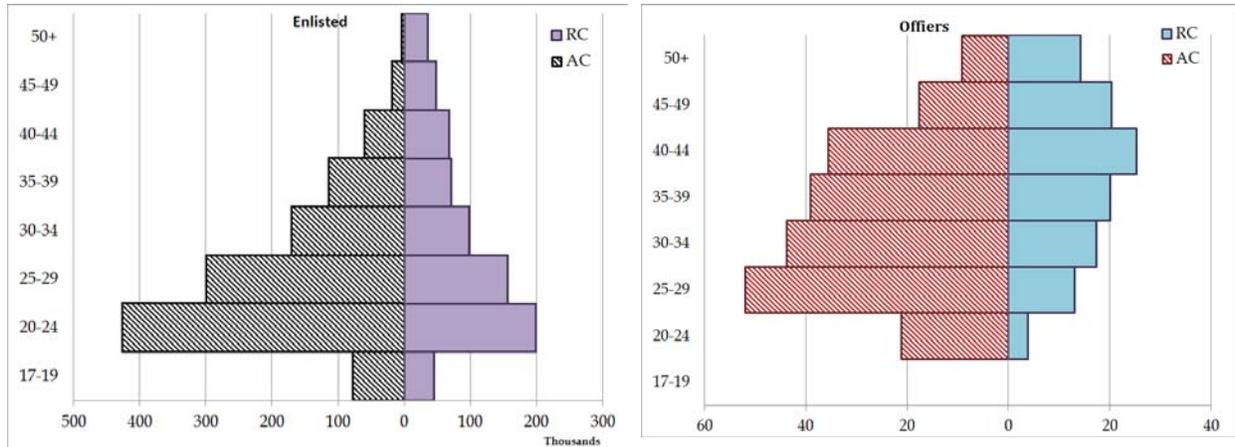
Figure 21. DoD AC and RC enlisted-to-officer ratios, FY75–FY11



Note: Data are from appendix tables D-11, D-17, D-20, and D-21. These ratios omit warrant officers

One sharp difference between the AC and the RC is the age distribution of their personnel. Figure 22 shows these distributions, first for enlisted personnel and then for commissioned officers. Five percent of RC enlisted personnel are 50 and older (12 percent are 45 and older); for AC enlisted, the percentages are 0.3 percent and 1 percent. The differences for officers are equally stark; while 30 percent of RC officers are 45 and older, the comparable percentage in the AC is 12 percent.

Figure 22. DoD AC and RC age distributions, FY11



Note: Data are from appendix tables B15, C11, B22, and C17.

Quality of RC NPS enlisted gains

Like the AC, the RC recruits mostly those with Tier 1 education credentials and AFQT scores at or above the 50th percentile.²¹ In FY11, the RC had a smaller proportion of Tier 1 enlisted gains than the AC; 88.5 percent of RC enlisted gains were Tier 1 (see appendix table C-6), compared with 98.1 percent of NPS AC accessions (see appendix table B-7). The USMCR and the USAFR had the highest percentages, with Tier 1 enlisted gains at 99 percent.

Slightly over 70 percent of all NPS RC enlisted gains had AFQT scores in the top half of the distribution in FY11, compared with slightly over 77 percent of NPS AC accessions (see appendix tables B-4 and C-4). For each service's guard and reserve elements, well over 60 percent of gains scored above the 50th percentile on the AFQT..

²¹ Virtually all Tier 1 recruits are high school diploma graduates. Tier 1 also includes adult education diplomas, those with one semester of college, and those with educational credentials beyond a high school diploma,

RC marriage rates, gender, and racial/ethnic representation

There are very sharp differences in marriage rates between AC personnel and reservists. Overall, even though RC personnel are generally older than their AC counterparts, RC personnel are less likely to be married and their age-specific marriage rates are closer to those of civilians than to AC personnel (see table 4).

Table 4. Percentages of married for enlisted AC and RC personnel, with civilian comparisons

Age	Enlisted men			Enlisted women		
	AC	RC	Civilian	AC	RC	Civilian
20	17.0	4.6	2.1	22.8	7.6	6.1
25	56.8	31.6	21.1	47.9	32.6	25.4
30	75.4	57.0	63.5	56.0	45.4	52.4
35	82.8	70.6	52.9	60.2	62.3	59.3
40	85.0	75.6	69.9	58.6	52.7	66.0
45	88.0	76.7	70.3	51.1	49.5	66.9

Note: See appendix tables B-16 and C-12. The civilian data are the civilian labor force age 17 and older and are from the Bureau of Labor Statistics' Current Population Survey, Sep. 2011.

The sharpest differences are at younger ages: for example, at 20 years of age, AC men and women are between 3 and 4 times more likely to be married than reservists. And, male AC personnel are over 7 times as likely to be married as are civilian males. Even at older ages, AC men are more likely to be married than RC men, and RC men are more likely to be married than are comparable civilians.

For women, marital patterns are a little different. At age 20, AC women are 3 times as likely to be married as RC women and just a bit more likely to be married than their civilian counterparts. However, the differences get smaller for older women and, by age 40, women in the RC are less likely to be married than either AC or civilian women.

Abstracting from patterns by age, AC enlisted personnel in FY11 overall were more likely to be married than RC enlisted component personnel (54.0 percent vice 43.7 percent). AC officers are also more likely to be married (51.3 percent in FY11) than RC officers (47.9 percent). This is true despite the fact that marriage rates increase by age and RC personnel are, in general, older than AC personnel.

Like the AC, the RC strives for a diverse force. In fact, both on the enlisted and officer sides, the RC has a higher percentage of female personnel. In FY11, while the enlisted RC force was 18.0 percent female, the AC enlisted force was 14.2 percent female. Within the RC's enlisted forces, the percentage of women varied from 25.3 percent for the USAFR to 4.3 percent for the USMCR. On the officer side, the AC was 16.6 percent

female, whereas the RC was 19.0 percent female. The percentages varied from 25.9 percent in the USAFR to 6.8 percent in the USMCR.²²

While the RC is more diverse than the AC in terms of gender, it is somewhat less diverse in terms of race or ethnic background. This statement, however, must be caveated because both AC and RC personnel data contain significant numbers of unknown race or ethnic classifications. Table 5 shows the data.

Table 5. RC and AC race and ethnicity percentage distributions, enlisted personnel and officers, FY11

	Enlisted Personnel			Officers		
	RC	AC	Civilians	RC	AC	Civilians
Race						
White	74.9	68.3	76.9	80.4	78.1	80.5
Black	16.1	18.4	13.0	9.8	8.7	8.5
Asian	3.0	3.8	5.1	3.4	4.1	9.2
Other	2.3	5.2	3.0	1.4	1.8	1.8
Unknown	3.7	4.3	NA	5.0	7.3	NA
Ethnicity						
Hispanic	10.5	12.3	18.6	5.6	5.5	7.3
Unknown	1.0	1.8	NA	1.7	3.7	NA

The racial category “other” includes American Indian/Alaska Native (AIAN), Native Hawaiian/Pacific Islander, and two or more races.

The civilian data are from appendix tables B-17 for enlisted personnel and include the 18- to 44-year-old civilian labor force and from appendix table B-25 for officers and include 21- to 49-year-old civilian college graduates. Note that the civilian age comparison group for RC enlisted personnel in table C-13 is for an older age group than the AC component comparison group. Civilian data do not include unknowns.

Data are from appendix tables C-13, C-20, B-17, and B-25.

On the enlisted side, both the RC and the AC are overrepresented in black servicemembers relative to comparable civilians, but they are underrepresented in terms of those with Asian backgrounds and, for ethnicity, relative to those with Hispanic backgrounds. Since Hispanics are the fastest growing ethnic group, the services are all working to increase Hispanic representation.

The civilian comparison group for commissioned officers includes only college graduates in which minority percentages, except for Asians, are smaller. Both the RC and the AC exceed the civilian percentages for blacks, but Asians are underrepresented

²² See appendix tables B-16 and C-11 for enlisted personnel and B-23 and C-18 for officers.

in officer populations. Enlisted personnel and officers in both components lag in Hispanic representation.

Section IV: U.S. Coast Guard

The U.S. Coast Guard is the smallest of the five armed services. Part of the Department of Homeland Security (DHS) in peacetime, the Coast Guard may be called in wartime to join the Navy and therefore falls under DoD jurisdiction.²³

In FY11, the Coast Guard's AC endstrength was 42,011:

- 33,586 enlisted personnel
- 6,740 commissioned and 1,685 warrant officers.

The RC endstrength was 7,933:

- 6,624 enlisted members
- 1,153 commissioned, and 156 warrant officers

The Coast Guard's AC has grown about 20 percent in the last decade, as AC endstrength was just 33,617 in FY01. All Coast Guard growth has been in the AC, as the RC's is the same in FY11 as it was in FY01. Reserves comprise a smaller proportion of Coast Guard strength than in the other services. In FY11, the RC/AC ratio for the Coast Guard was about one-third the size of the DOD ratio.

Quality of AC enlisted applicants and accessions

There was a sharp increase in number of AC Coast Guard applicants in FY11 (8,082 applicants vice 5,560 applicants in FY10), as well as a sharp increase in NPS enlisted accessions (from 2,155 in FY10 to 3,332 in FY11).

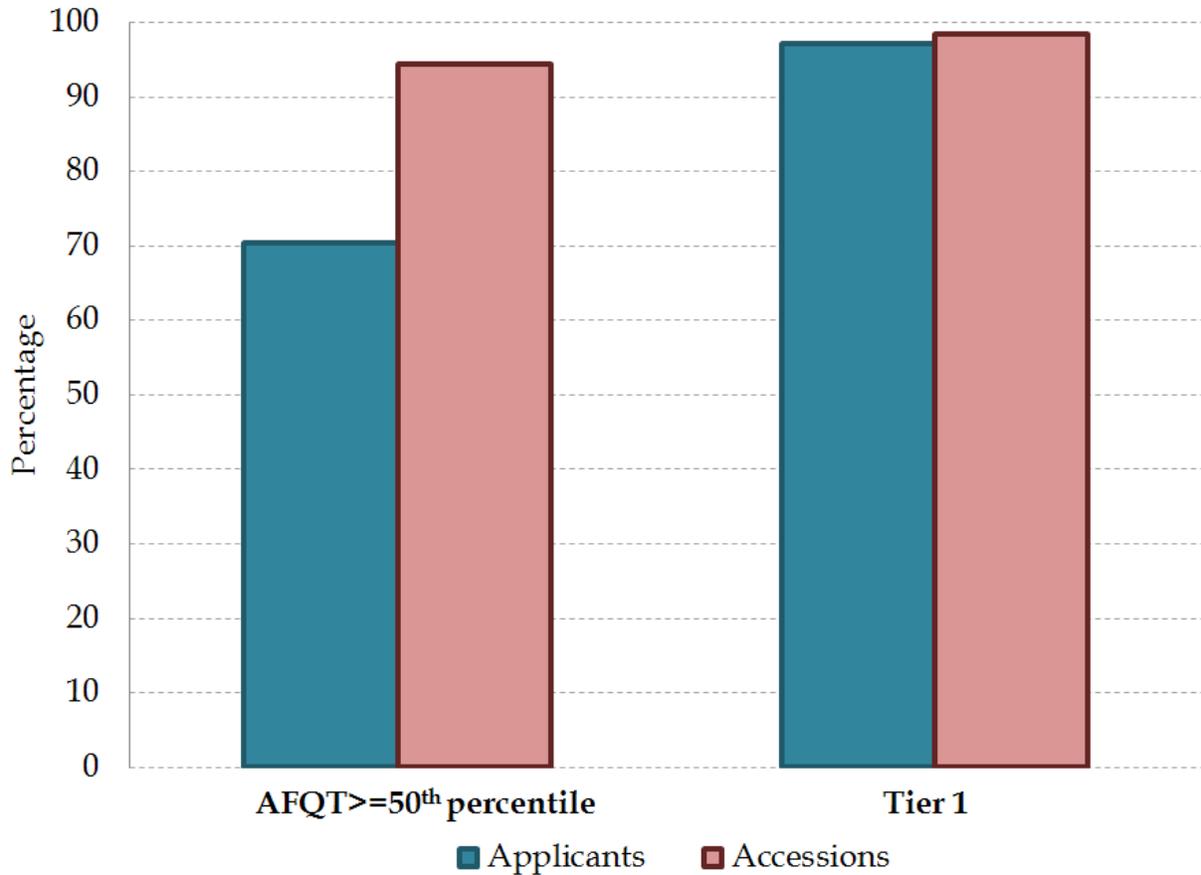
Like the DoD services, the Coast Guard seeks high-quality recruits – those with high AFQT scores (above the 50th percentile) and Tier 1 educational credentials.²⁴ Figure 23 illustrates the FY11 percentages of AC Coast Guard applicants and enlisted accessions with an AFQT score at or above the 50th percentile and the percentages with Tier 1 educational credentials. Slightly over 70 percent of U.S. Coast Guard applicants scored above the 50th percentile on the AFQT in FY11, and the Coast Guard selected those with

²³ Title 14 of the United States Code governs the process by which authority over the Coast Guard may be transferred to DoD in wartime.

²⁴ Virtually all Tier 1 recruits are high school diploma graduates. Tier 1 also includes adult education diplomas, those with one semester of college, and those with educational credentials beyond a high school diploma.

high test scores. Like the DoD services, the Coast Guard had a spectacular year, with 95 percent of NPS accessions scoring in the top half of the AFQT distribution. And, the percentage of both applicants and accessions with Tier 1 education credentials approached 100 percent (see figure 23).

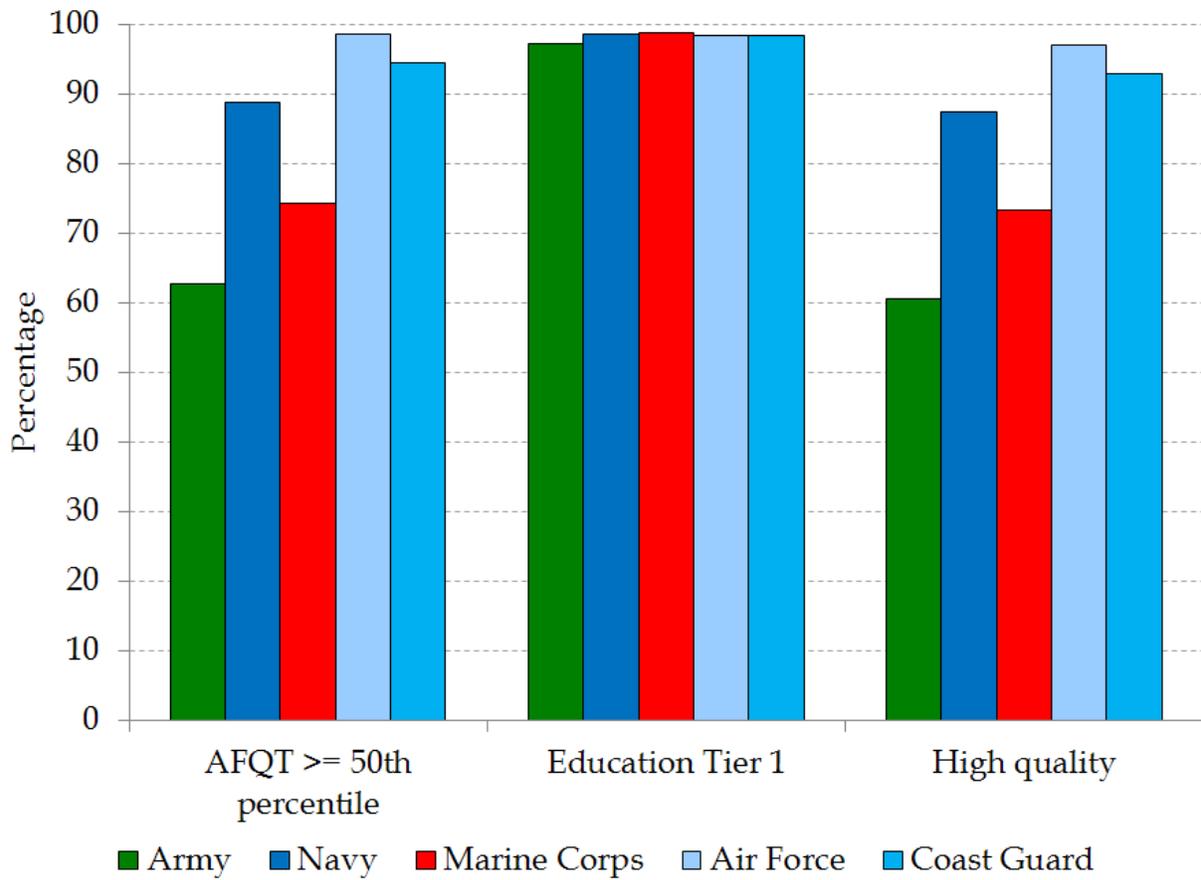
Figure 23. Quality of U.S. Coast Guard NPS AC enlisted applicants and accessions, FY11



Note: Applicant data are from appendix tables E-3 (AFQT score) and E-4 (education). Enlisted accession data are from appendix tables E-7 (AFQT score) and E-8 (education).

Figure 24 compares the quality of AC NPS enlisted accessions across the four armed and the Coast Guard. DoD sets standards for both the percentage of accessions scoring at or above the 50th percentile and for education Tier 1. As is clear from the figure, in FY11 all the services exceeded these standards.

Figure 24. Quality of AC enlisted accessions, by service, FY11

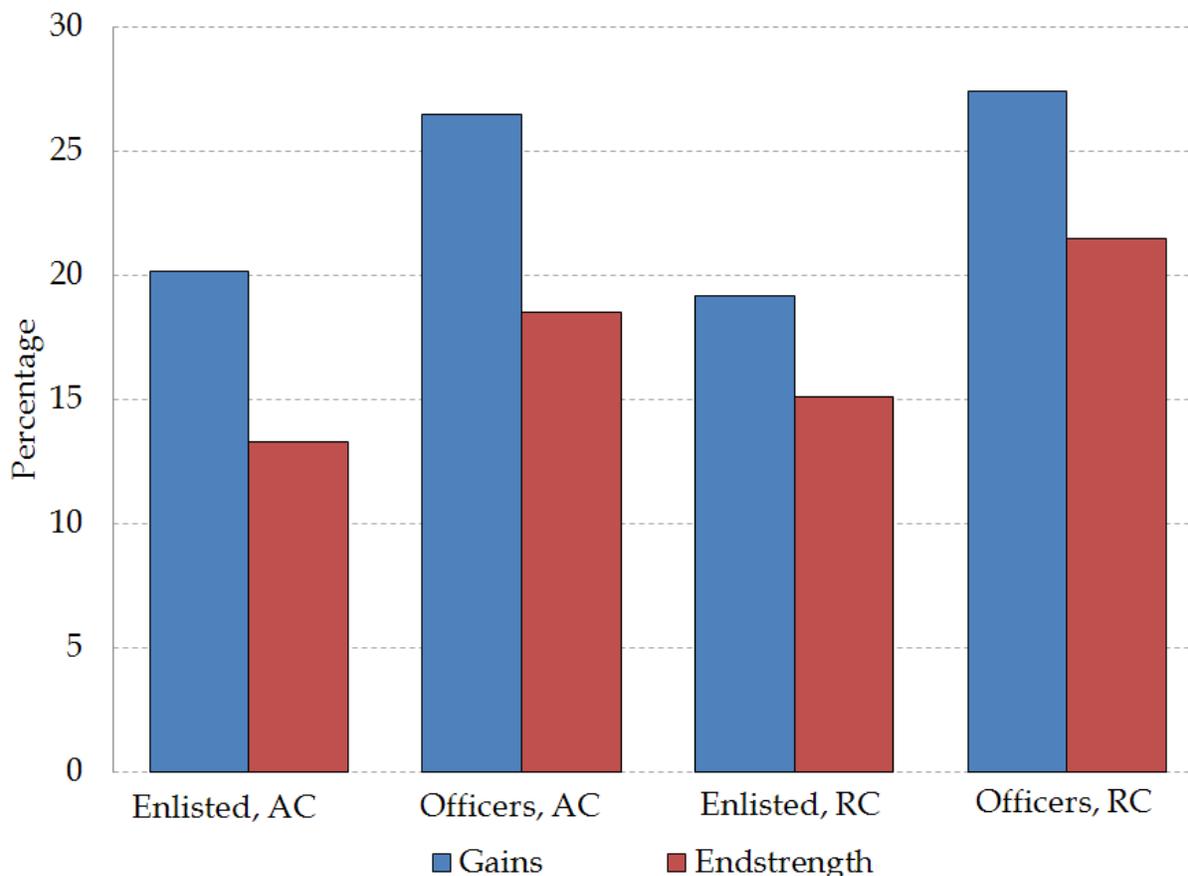


Note: DoD NPS accession data are from appendix tables B-4, B-6, and B-8. U.S. Coast Guard NPS accession data are from appendix tables E-7, E-8, and E-9.

Gender, race, and ethnicity in the U.S. Coast Guard

In FY11, Coast Guard enlisted female accession percentages in both the AC and the RC exceeded female endstrength proportions, as shown figure 25. The picture was similar for female commissioned officer gains and strength in both components. Women are more heavily represented in both officer gains and officer strength in both the AC and the RC.

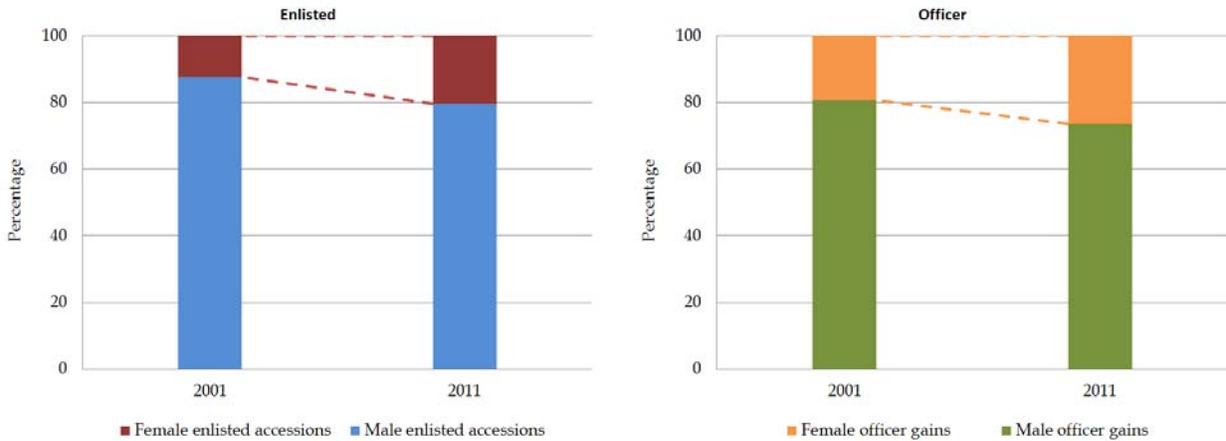
Figure 25. Female share of U.S. Coast Guard AC gains and endstrength, enlisted and officer, FY11



Note: Data are from appendix tables E-5, E-10, E-12, E-16, E-20, E-22, E-24, and E-27.

Figures 26 and 27 examine changes in the Coast Guard over the last decade. In particular, figure 26 compares the percentage of women in NPS enlisted accessions and officer gains between FY01 and FY11. Female shares of the U.S. Coast Guard’s enlisted accessions and officer gains have increased significantly since FY01. Note that the share of women in officer gains has been higher than their share in enlisted accession.

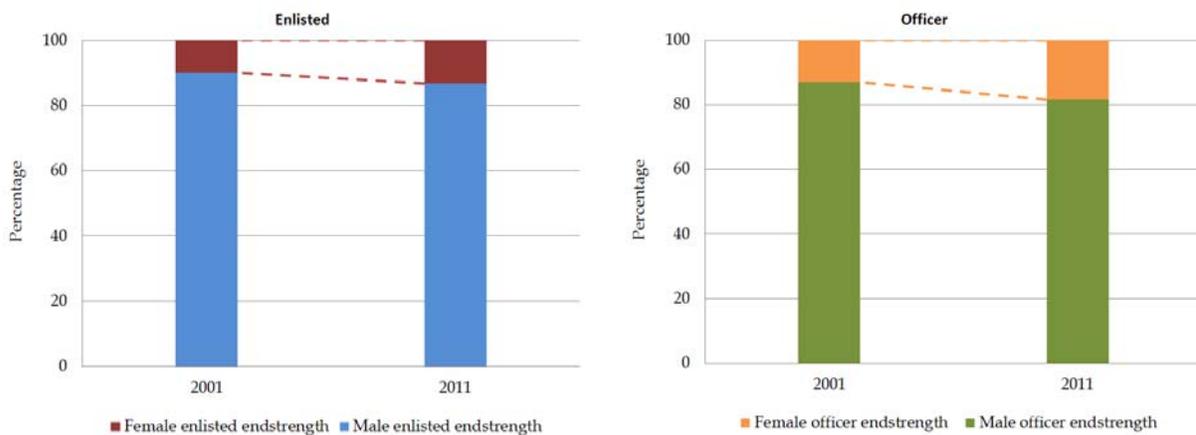
Figure 26. Male and female AC enlisted accessions and officer gains in the U.S. Coast Guard, FY01 and FY11



Note: Data are from appendix tables E-6 and E-16. Enlisted accessions include only NPS enlisted personnel.

Those increases in female accession shares in the last decade helped to increase female representation in the Coast Guard (see figure 27). Between FY01 and FY11, the female increase is somewhat larger in the officer corps than in the enlisted force.

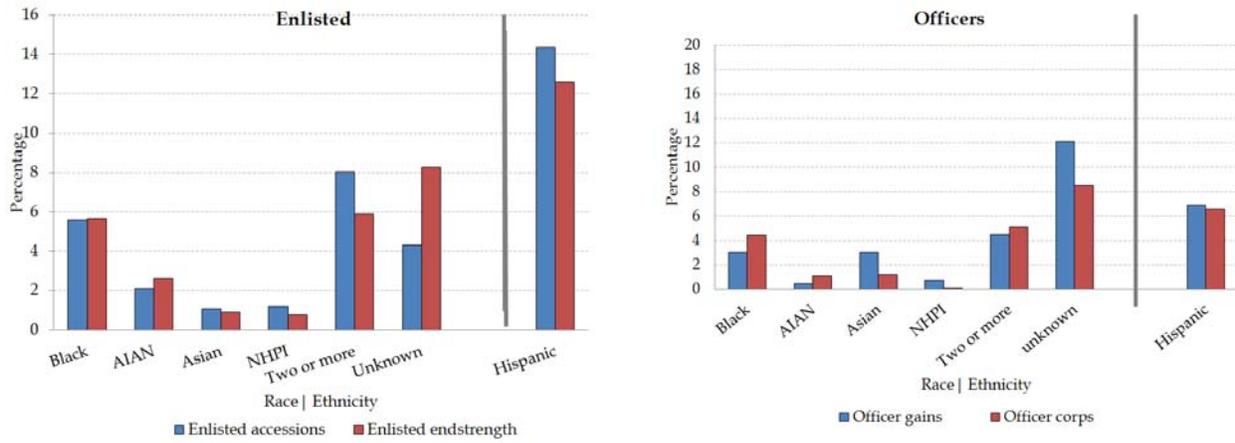
Figure 27. Male and female AC enlisted and officer endstrength in the U.S. Coast Guard, FY01 and FY11



Note: Data are from appendix tables E-13 and E-16.

Coast Guard race/ethnicity distributions are shown in figure 28 for both enlisted personnel and commissioned officers. Unfortunately, race and ethnic data for the Coast Guard have considerable numbers of unknowns. We assume that the unknown ethnic categorizations are non-Hispanics, but we show the unknown observations in the race data. The Coast Guard has increased minority representation in recent years, but it still lags behind the DoD military services.

Figure 28. Minority race and ethnicity distributions, U.S. Coast Guard enlisted and officer accessions and endstrength, FY11



Note: Enlisted data are from appendix tables E-6 and E-13. Officer data are from appendix table E-16. We count those with “unknown” ethnicity as non-Hispanics

The next section summarizes the highlights of the FY11 Population Representation report.

Concluding highlights

Since 1974, the DoD has provided an annual report on the demographic and service-related characteristics of U.S. military personnel. Since 1997, these reports have been available electronically, making them easily accessible to policy-makers, the media, and the public.

The U.S. military has a high-quality enlisted force. Compared with the civilian population, a higher proportion of enlisted servicemembers in the AVF have high school diplomas. Similarly, a greater proportion of them test in the top half of the ability distribution than in the civilian population. The socioeconomic backgrounds (as measured by neighborhoods) of these men and women generally reflect the U.S. population's distributions, although enlisted recruits are somewhat underrepresented in neighborhoods in the lowest and highest household income quintiles. Black representation in the enlisted force generally reflects that of the civilian labor force; Hispanic representation, while growing in the enlisted military, still lags somewhat behind overall population growth. Women make up 14.2 percent of the enlisted force and 16.4 percent of the officer corps.

Minorities are underrepresented in the officer corps relative to their representation in the civilian labor force. But commissioned officers are college graduates. If we restrict the comparison to college graduates in the civilian labor force, we see a slightly more nuanced picture. Commissioned officers are somewhat more likely to be black—8.7 percent versus 8.5 percent for 21- to 49-year-old college graduates in the civilian workforce. Hispanics, however, are underrepresented as officers, 5.5 percent versus 7.3 percent for 21- to 49-year-old college graduates in the civilian workforce. Finally, when we restrict the comparison to comparably aged college graduates in the civilian workplace, we find that Asians are the most underrepresented group, making up 9.2 percent of civilians and only 4.1 percent of commissioned officers.

In FY11, AC endstrength was 1.41 million; RC endstrength was .85 million. The AC has greater racial and ethnic diversity than the RC, but the RC has a larger percentage of women. RC personnel are older than AC personnel, but personnel in both components are considerably younger than the civilian population. By age, military personnel are more married than civilians, with AC personnel the most likely to be married. Finally, FY11 was a banner year, featuring the highest quality NPS accessions recorded for the AVF.