



### MLDC Research Areas

- Definition of Diversity
- Legal Implications
- Outreach & Recruiting
- Leadership & Training
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- Promotion
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- Implementation & Accountability
- Metrics
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This issue paper aims to aid in the deliberations of the MLDC. It does not contain the recommendations of the MLDC.

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## Gender and Racial/Ethnic Profiles of Active-Duty Officer Accessions, FY73–FY08

### Abstract

Underrepresentation of minorities and women in top military leadership can arise from underrepresentation of women and minorities in accessions, relatively low rates of career progression, or a combination of the two. This issue paper addresses the role accessions play in shaping the racial/ethnic and gender profiles of military officers by comparing the profiles of past accessions with the profiles of today's senior leaders, the immediate senior leadership pool, and future leaders. Data on the demographic profiles of the officer recruiting pool are also used to assess external representation. Based on data presented in this paper, the racial/ethnic mix of accessions appears to be the primary determinant of the racial/ethnic profiles of every level of leadership. Throughout the period for which we present data, the racial/ethnic profiles of accessions appear to be generally representative of the officer recruiting pool. Thus, it is likely that, as the recruiting pool becomes more racially and ethnically diverse, accessions will become more racially and ethnically diverse and, eventually, so will senior leadership. In contrast, gender differences in career progression appear to play an important role in determining the gender profiles of officers, indicating that women have lower retention or promotion rates (or both) than men. Female shares of accessions have increased substantially over time, but women have been and continue to be consistently underrepresented among accessions relative to their share of the officer recruiting pool.

**T**he charter for the MLDC directs the commission to “[e]valuate efforts to develop and maintain diverse leadership at all levels of the Armed Forces.” Lack of demographic

diversity in leadership can occur for many reasons. Personnel data can show proximate reasons in two main categories. First, in the military's closed personnel system, the demographic profiles of the force are largely dependent on the demographic profiles of accessions. In particular, the profiles of current leadership were initially determined by the profiles of accessions that occurred as long as 35 years ago. Second, demographic differences in promotion and retention rates determine the extent to which each level of current leadership reflects the diversity of successive past accession cohorts. If women and minorities have lower promotion or retention rates (or both), they will be underrepresented among current leadership relative to their representation among past accessions.

This issue paper (IP) addresses the role accessions play in shaping the racial/ethnic and gender profiles of today's military officers by (1) presenting demographic trends in officer accessions for the Department of Defense (DoD) and each military Service from fiscal year (FY) 1973 to FY08 and (2) comparing the profiles of past accessions with the profiles of today's senior leaders, the immediate senior leadership pool, and future leaders. The limited historical data available for Coast Guard accessions are presented in Figures A.1, A.2, and A.6 in the appendix.

### Data Sources

The accession data for this IP come from DoD's *Population Representation in the Military Services* (Office of the Under Secretary of Defense, Personnel and Readiness, FY02–FY08), also known as the Population Representation Report (PRR).<sup>1</sup> Because of changes in the way the PRR reports race/ethnicity (see below), it was necessary to use multiple releases of the report to construct the data for this analysis. Table 1 summarizes the different PRR data sources and their applications in this IP.

For comparison, we also include data on the demographic mix of the eligible officer recruiting pool. These data come from the March Current Population Survey (CPS) for 1973 through 2008 (U.S. Census Bureau, 1973–2008),<sup>2</sup> and the pool is defined as labor force participants (i.e., people who are either employed or actively seeking work) who hold at least a bachelor’s degree and are between the ages of 22 and 34.<sup>3</sup>

**Race/Ethnicity Groups**

Following guidance from the Office of Management and Budget, Military Leadership Diversity Commission (2009) defines the following race/ethnicity groups to be used for MLDC research:

- white non-Hispanic
- black non-Hispanic
- Asian non-Hispanic
- other non-Hispanic (includes American Indians, Pacific Islanders, Alaska natives, and those reporting more than one race)
- Hispanic.

Of these groups, the PRR reports historical data on officer accessions for Hispanics and non-Hispanic blacks only. Therefore, we are only able to present historical trends and analyze the impact of past accessions on the profiles of current and future leadership for these two groups. Furthermore, after FY02, the PRR ceased reporting historical data on officer accessions and began reporting race and ethnicity separately so that, without the underlying raw data, it is not possible to do tabulations based on the old definitions. Therefore our time series for non-Hispanic black accessions is incomplete. Specifically, we have the historical data from FY73 to FY02 and, because we have access to the raw data from the FY07 and FY08 PRRs, we are able to calculate non-Hispanic black accession shares for those years. However, because we do not have access to the raw data from the FY03–FY06 PRRs, our time series for non-Hispanic black accessions has a four-year gap between FY02 and FY07. Although this gap obscures the most-recent trends in non-Hispanic black accessions, it does not affect the main analysis of historical trends and their implications for racial/ethnic diversity among senior leadership. The PRR reports data on Hispanics consistently across all years.

For readability, for the remainder of this IP, we refer to non-Hispanic blacks as “blacks.”

**Leadership Cohorts**

To analyze the impact of past accessions on the demographic profiles of the current force, we define three leadership groups—today’s senior leaders, today’s senior leadership pool, and future leaders—and identify the relevant accession years for each group based on the promotion and separation timing defined in Title X of the U.S. Code and in DoD Instruction 1320.13.

Today’s senior leaders are today’s flag officers and general officers, or those who held the rank of O-7 or above in 2008 (the latest year for which we have data). Promotion to O-7 requires roughly 25 years of service, and those who reach O-10 can serve a total of 40 years. Thus, today’s senior leaders would have accessed 25–40 years before 2008, or between 1968 and 1983.

Today’s senior leadership pool comprises those who are next in line to promote to O-7, or those who held the rank of O-6 in 2008. Promotion to O-6 typically occurs between 21 and 23 years of service, and officers can serve a total of 30 years if they fail to promote to O-7. Thus, today’s O-6s would have accessed 21–30 years before 2008, or between 1978 and 1987.

Finally, today’s future leaders are officers who held the rank of O-5 or lower in 2008, or those who accessed after 1987.

Because the break between the accession cohorts for today’s senior leaders and senior leadership pool on one hand and the accession cohorts for future leaders on the other occurs in FY87, the figures that follow focus on how the demographic diversity profiles of accession cohorts differ before and after FY87. Specifically, the analytical story can be told by simply looking at accession profiles for three FYs: FY73 (the start of our sample), FY87, and FY08 (the end of our sample). Thus, the figures include only these FYs; data for the intervening years are presented in the appendix.

**Racial/Ethnic Profiles of Officer Accessions Since FY73**

Figure 1 shows black and Hispanic shares of officer accessions DoD-wide and by Service for FY73, FY87, and FY08. The complete time series (FY73–FY08) is shown in Figure A.1 (black accession shares) and Figure A.2 (Hispanic accession shares).

**Table 1. PRR Data Sources for Male/Female, non-Hispanic Black, and Hispanic Accessions**

Female/Male	Non-Hispanic Black	Hispanic
<ul style="list-style-type: none"> <li>● FY73–FY08 accessions from the FY08 PRR</li> </ul>	<ul style="list-style-type: none"> <li>● FY73–FY02 accessions from the FY02 PRR</li> <li>● FY03–FY06 accession data are unavailable</li> <li>● FY07–FY08 accessions from the raw data underlying the FY07 and FY08 PRRs</li> </ul>	<ul style="list-style-type: none"> <li>● FY73–FY02 accessions from the FY02 PRR</li> <li>● FY03–FY08 accessions from the PRR for each of these years</li> </ul>

### Black Shares of Officer Accessions

Figure 1 shows that blacks comprised an increasing share of officer accessions after FY73. For the DoD as a whole, the black share of officer accessions more than doubled between FY73 and FY87, rising from nearly 3 percent to 7 percent. After FY87, however, growth in the black share of officer accessions slowed substantially, with black officers' accession share increasing by only 25 percent during that period to a total of just under 9 percent in FY08.

Growth in the black share of officer accessions differed across the Services. Patterns in the Army and the Air Force were similar to those of the overall DoD: Growth was rapid prior to FY87 and then slowed. This was not true for the Navy and the Marine Corps. For the Navy, the pattern was reversed: The black share of Navy officer accessions rose marginally (from under 3 percent to just over 4 percent) between FY73 and FY87, but, by FY08, it had more than doubled (reaching nearly 9 percent). For the Marine Corps, the black share of officer accessions rose by 50 percent between FY73 and FY87 (from just over 4 percent to just under 6 percent) but then dropped below the FY73 level in FY08 (to 3.3 percent).

### Hispanic Shares of Officer Accessions

Figure 1 shows that the Hispanic share of officer accessions grew substantially after FY73. Unlike the black percentage, however, the Hispanic percentage of DoD-wide officer

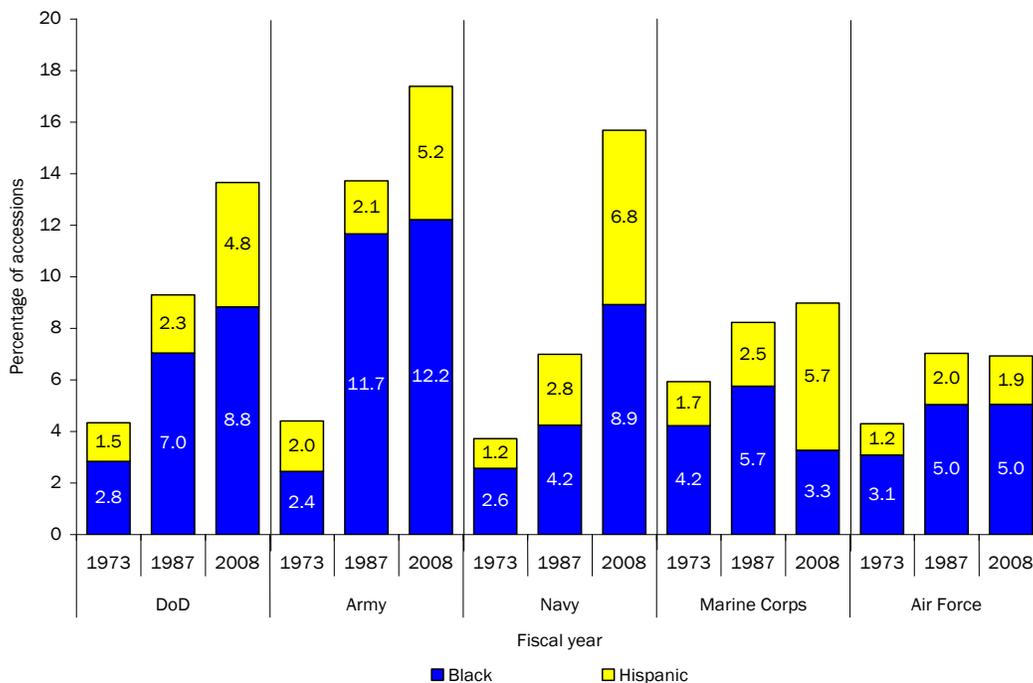
accessions grew more rapidly in the latter period, increasing by 50 percent between FY73 and FY87 and more than doubling between FY87 and FY08.

As was the case with black shares of officer accessions, the DoD-wide trends in Hispanic shares of officer accessions were largely consistent with the Service-specific trends. The Army, the Navy, and the Marine Corps saw more-rapid growth in the Hispanic percentage of officer accessions between FY87 and FY08 relative to the earlier period. The one exception was the Air Force, which saw nearly a doubling in the Hispanic percentage of officer accessions between FY73 and FY87; after FY87, growth leveled off.

### The Role of Accessions in Shaping the Racial/Ethnic Profiles of Military Leaders

To examine of the impact of accessions on the racial/ethnic diversity of military leadership, we compare the racial/ethnic profiles of today's senior leaders, the current senior leadership pool, and future leaders on one hand with the racial/ethnic profiles of accessions for the relevant years on the other. Recall that we define senior leaders in the officer corps to be those holding the rank of O-7 or above (i.e., who accessed between FY68 and FY83), today's senior leadership pool as those holding the rank of O-6 (i.e., who accessed between FY78 and FY87), and future leaders as those who hold

**Figure 1. Percentage of Blacks and Percentage of Hispanics in Officer Accessions, DoD-wide and by Service, FY73, FY87, and FY08**



**SOURCE:** Office of the Under Secretary of Defense, Personnel and Readiness, FY02–FY08; authors' calculations using FY08 PRR raw data.

the rank of O-5 or below (i.e., who accessed after FY87). Disconnects between the current profiles of the three leadership groups and the profiles of their associated accession cohorts can be, at least in part, attributed to racial/ethnic differences in career progression.<sup>4</sup> Conversely, a lack of difference means that accessions played the major role in shaping the diversity profiles of these leadership groups.

Figure 2 shows the percentage of blacks and percentage of Hispanics among the FY08 officer inventory and the corresponding accession cohorts across all four Services combined, broken out by the three leadership groups described above. There were only slight differences in the percentage of blacks in the inventory and in the accession cohorts for each of these three groups. For O-7s and above and for O-6s, the FY08 black shares were the same as the corresponding average accession shares. For O-5s and below, the FY08 black share was a half a percentage point greater than the relevant average accession share. Thus, these data suggest that the black presence among each of these groups was influenced more by the black share at accession than by differences in career progression for blacks versus nonblacks. In contrast, Hispanic shares of FY08 officer inventories were greater than the Hispanic shares of corresponding accession cohorts for all three leadership groups. This suggests that DoD-wide career progression

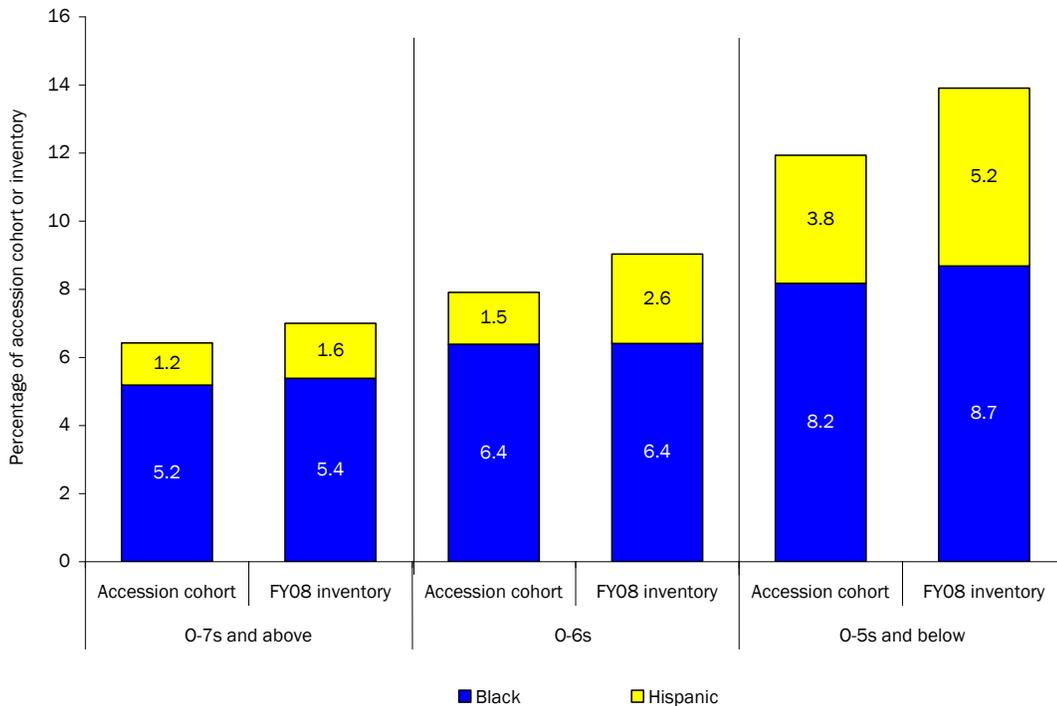
has been favorable for Hispanic officers.<sup>5</sup> (Figures A.3 and A.4 present Service-specific results, which were generally consistent with the DoD results, although there were a few differences.)

Figure 2 also shows that racial/ethnic diversity decreased with pay grade among the FY08 inventory such that FY08's senior leaders (O-7s and above) were a less diverse group (in terms of percentage black and percentage Hispanic) than FY08's senior leadership pool (O-6s), who were, in turn, a less diverse group than the future leaders (O-5s and below). Thus, all else equal, diversity among O-7s and above should increase over time as the more diverse group of O-5s and below promote. However, this transition will take time due to the closed nature of the personnel system.

#### Comparisons with the Racial/Ethnic Makeup of the Officer Recruiting Pool

For context, we compare the changes in the black and Hispanic shares of total DoD accessions with the changes in their shares of the officer recruiting pool. Figure 3 shows data on the racial/ethnic makeup of the officer recruiting pool. The left side of the figure addresses growth trends by comparing the black and Hispanic shares of the recruiting pool with the black and Hispanic shares of accessions in the three years

**Figure 2. Percentage of Blacks and Percentage of Hispanics in the FY08 Officer Inventory and the Corresponding Accession Cohorts, DoD-wide**



**SOURCE:** Authors' calculations from Office of the Under Secretary of Defense, Personnel and Readiness, FY02–FY08; author's calculations using FY07 and FY08 PRR raw data.

for which accession data were presented in Figure 1. (The complete time series for the recruiting pool is shown in Figure A.5.) The right side of the figure addresses representation by comparing the average recruiting pool shares with the average accession shares for the periods when members of each leadership group would have accessed. This gives a rough indication of the extent to which black and Hispanic shares of officer accessions were representative of their shares of the recruiting pool.

**Black Accession Trends and Representation Relative to the Recruiting Pool**

The left side of Figure 3 shows that the growth trend for black shares of the officer recruiting pool was reversed compared with the trend for black shares of officer accessions. Instead of increasing rapidly and then leveling off, the black share of the recruiting pool increased slowly between FY73 and FY87 by only 27 percent over the 14-year period. Then, between FY87 and FY08, the rate of increase accelerated to 75 percent over the 20-year period.<sup>6</sup> This means that increases in the black share of officer accessions outpaced the increases in the black share of the recruiting pool during the earlier period but then fell behind during the later period.<sup>7</sup>

The right side of Figure 3 shows that, for each current leadership group, blacks' shares of accessions during the periods when they were likely to have entered military service were slightly greater than blacks' shares of the recruiting pool. Thus, black accessions were generally representative of the available recruiting pool.

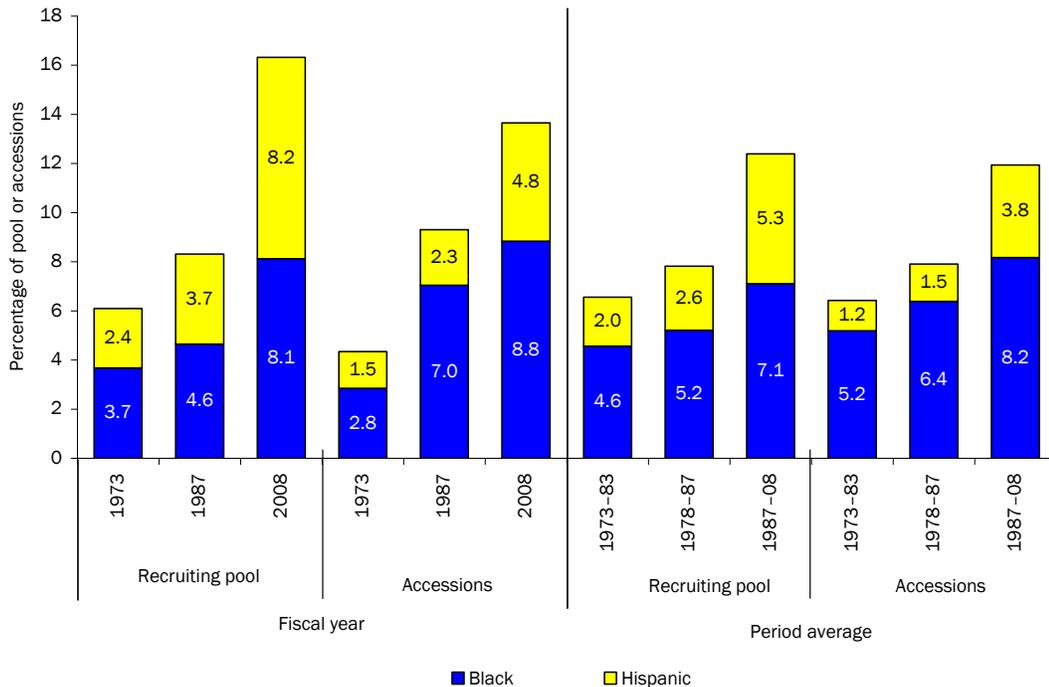
**Hispanic Accession Trends and Representation Relative to the Recruiting Pool**

Figure 3 shows that the trend in Hispanic representation in the officer recruiting pool roughly matched the trend in Hispanic representation in officer accessions. Hispanics' shares of both groups increased by about 50 percent between FY73 and FY87 and by more than 100 percent between FY87 and FY08. In terms of actual representation, however, Hispanics were consistently underrepresented among accessions for all three leadership cohorts.

**Gender Profiles of Accessions Since FY73**

Analogous to Figure 1, Figure 4 shows male and female shares of officers for FY73, FY87, and FY08. (The complete time series is shown in Figure A.6.) Like the racial/ethnic diversity trends, gender diversity among officer accessions

**Figure 3. Percentage of Blacks and Percentage of Hispanics in the Officer Recruiting Pool, FY73, FY87, and FY08, and Averages for Periods Corresponding to Accession Cohorts for Each Leadership Group**



**SOURCES:** Recruiting pool data are based on the authors' calculations using U.S. Census Bureau, 1973–2008; accession data are from Office of the Under Secretary of Defense, Personnel and Readiness, FY02–FY08, and authors' calculations using FY07 and FY08 PRR raw data.

(as measured by the percentage of women) increased after FY73. For the DoD as a whole, women made up just under 8 percent of officer accessions in FY73. By FY87, this number had doubled to just over 16 percent, and, by FY08, the female percentage had increased an additional 30 percent, reaching 21 percent. Over the whole period, female accessions increased by 165 percent.

The Service-specific trends in female accessions were similar to the DoD-wide trend. Women's shares of accessions in all four Services increased over the whole period, with the largest increases occurring among Air Force accessions and the smallest among Marine Corps accessions. Three of the four Services also experienced larger gains in female percentages before FY87. The exception was the Navy, whose female percentage fell slightly between FY73 and FY87 but then grew substantially after FY87.

### The Role of Accessions in Shaping the Gender Profiles of Military Leaders

Figure 5 shows the percentage of women among the FY08 officer inventory and the corresponding accession cohorts across all four Services, broken out by the three leadership groups described above. For each leadership group, the female share was lower in the FY08 inventory than among accessions. The difference was largest for FY08's senior leaders, among whom the female share was only 6.4 percent versus

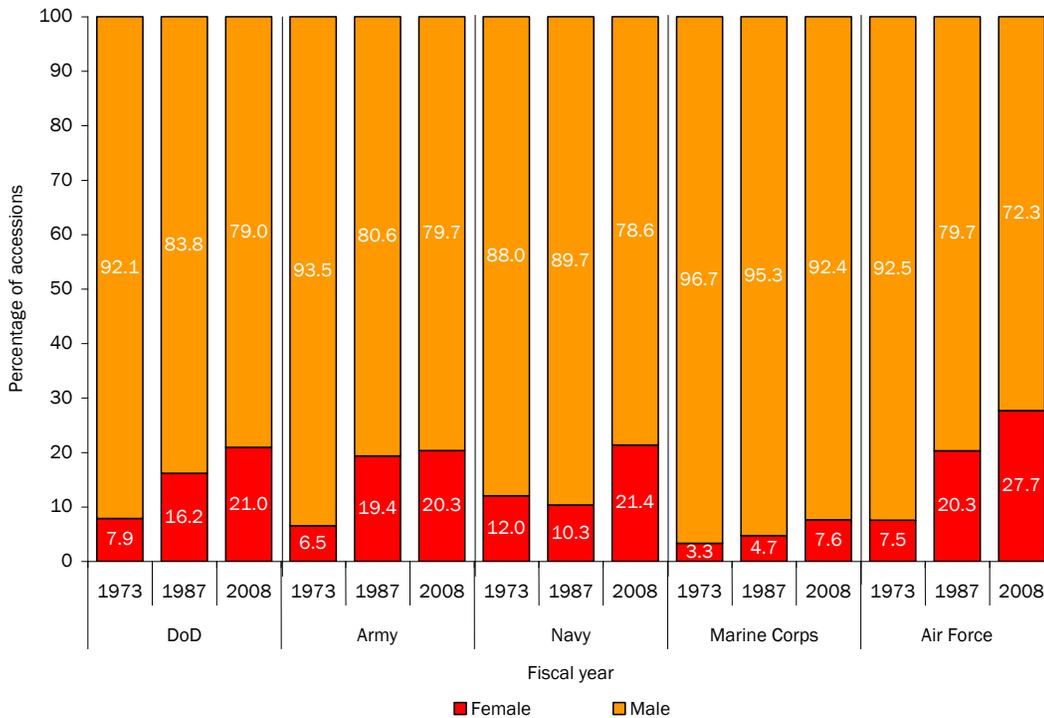
12.9 percent for the matching accession cohort. This pattern held for each of the four Services as well (see Figures A.7 and A.8). These results indicate that the career progression of women in the military exacerbates low representation of women at accession.<sup>8</sup>

However, Figure 5 also shows that gender diversity decreased by rank in the FY08 inventory such that FY08's senior leaders (O-7s and above) had a lower female percentage than FY08's senior leadership pool (O-6s), who had, in turn, a lower female percentage than the future leaders (O-5s and below). Thus, as was the case with racial/ethnic diversity, all else equal, gender diversity in senior leadership should increase over time as the current group of O-5s and below, who have a higher female percentage, advance. Again, this transition will take time due to the closed nature of the personnel system.

### Comparisons with the Gender Makeup of the Officer Recruiting Pool

Turning to external representation, Figure 6 compares data on the gender makeup of the officer recruiting pool with data on the gender makeup of officer accessions. Male and female shares of both groups in FY73, FY87, and FY08 are on the left, and average male and female shares of the pool and of accessions for the three leadership groups are on the right. (The complete time series for the recruiting pool is shown in Figure A.9.)

**Figure 4. Percentage of Women and Percentage of Men in Officer Accessions, DoD-wide and by Service, FY73, FY87, and FY08**



SOURCE: Office of the Under Secretary of Defense, Personnel and Readiness, FY08.

The left side of Figure 6 shows that the female share of the recruiting pool increased by 85 percent over the data period, rising from nearly 29 percent in FY73 to nearly 54 percent (more than parity) in FY08.<sup>9</sup> This increase was substantial, but it fell short of the 165-percent increase in the female share of accessions over the same period. This suggests that increases in the representation of women in the officer recruiting pool encouraged but were not the only driver of increases in the representation of women in accessions.<sup>10</sup> Nevertheless, the left side of Figure 6 shows that women have been and continue to be substantially underrepresented among accessions relative to their share of the recruiting pool. This is true DoD-wide, in each of the four Services, and in every accession cohort.

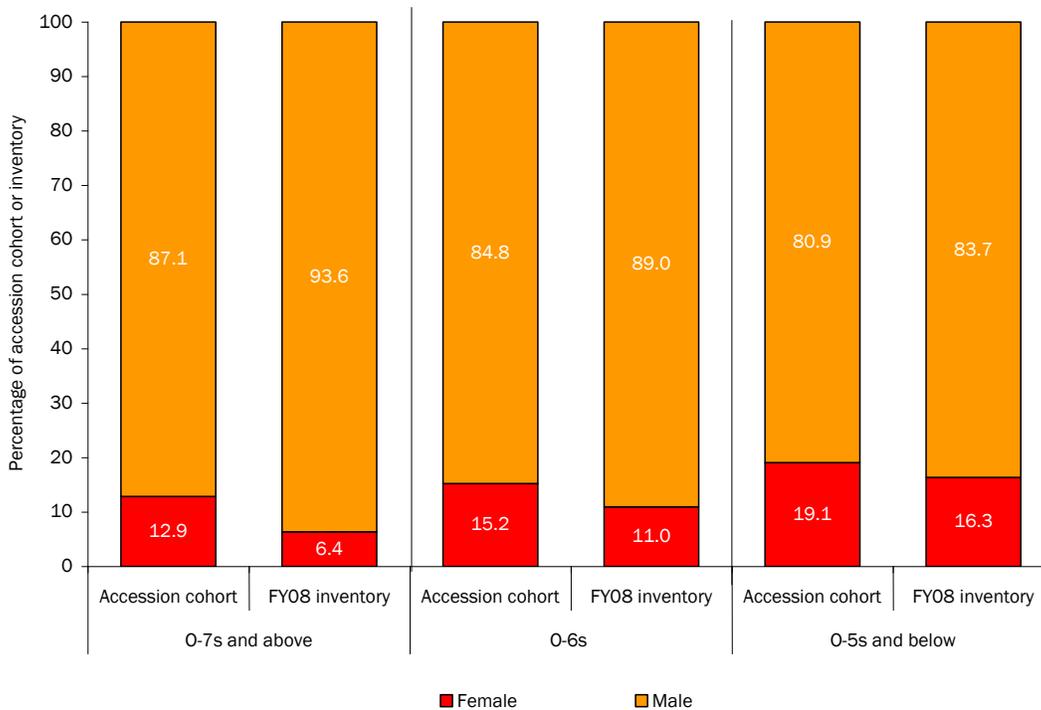
**Summary**

The results presented in this IP can be summarized as follows:

- Regarding black officer accessions,
  - Black accession shares increased over time, rising from 3 percent to 9 percent DoD-wide. The largest increases occurred before FY87.
  - The black shares of FY08’s senior leaders, the FY08 senior leadership pool, and future leaders generally matched the average black shares of accessions during the years when most of these officers accessed.
  - Between FY73 and FY08, black accessions were roughly representative of the recruiting pool.

- Regarding Hispanic officer accessions,
  - Hispanic accession shares increased over time, rising from 1 percent to 5 percent DoD-wide. The largest increases occurred after FY87.
  - The Hispanic shares of FY08’s senior leaders, the FY08 senior leadership pool, and future leaders were slightly greater than the average Hispanic shares of accessions during the years when most of these officers accessed.
  - Between FY73 and FY08, Hispanics were underrepresented relative to their presence in the recruiting pool.
- Regarding female officer accessions,
  - Female accession shares increased over time, rising from 8 percent to 21 percent DoD-wide. The largest increases occurred before FY87.
  - Among every leadership group, women were underrepresented relative to the average female shares of accessions during the years when most of these officers accessed.
  - Between FY73 and FY08, women were substantially underrepresented relative to their presence in the recruiting pool.

**Figure 5. Percentage of Women in the FY08 Officer Inventory and the Corresponding Accession Cohorts, DoD-wide**



**SOURCE: Authors’ calculations from Office of the Under Secretary of Defense, Personnel and Readiness, FY08.**

**Conclusion**

Based on data presented in this IP, the racial/ethnic mix of accessions appears to be the primary determinant of the racial/ethnic profiles of every level of leadership in the DoD active-duty officer corps. In particular, low representation of blacks and Hispanics among today’s flag and general officers appears to be the result of correspondingly low black and Hispanic accession shares during the years when these officers were initially commissioned. Throughout the period for which we present data, the racial/ethnic profiles of accessions were generally representative of the officer recruiting pool, and black and Hispanic shares of accessions and of the pool increased over time. Thus, it is likely that, as the recruiting pool becomes more racially and ethnically diverse, accessions will become more racially and ethnically diverse and, eventually, so will senior leadership.

In contrast, gender differences in career progression appear to play an important role in determining the gender profiles of active-duty officers. In particular, women are underrepresented among today’s flag and general officers relative to their shares of accessions during the years when these officers entered military service, indicating that women have lower retention or promotion rates (or both) than men. Female shares of accessions have increased substantially over time,

however, which indicates that, all else equal, female representation among senior leadership will also increase. Nevertheless, women have been and continue to be consistently underrepresented among accessions relative to their share of the officer recruiting pool.

**Notes**

<sup>1</sup>For more information, see <http://prhome.defense.gov/mpp.html>.

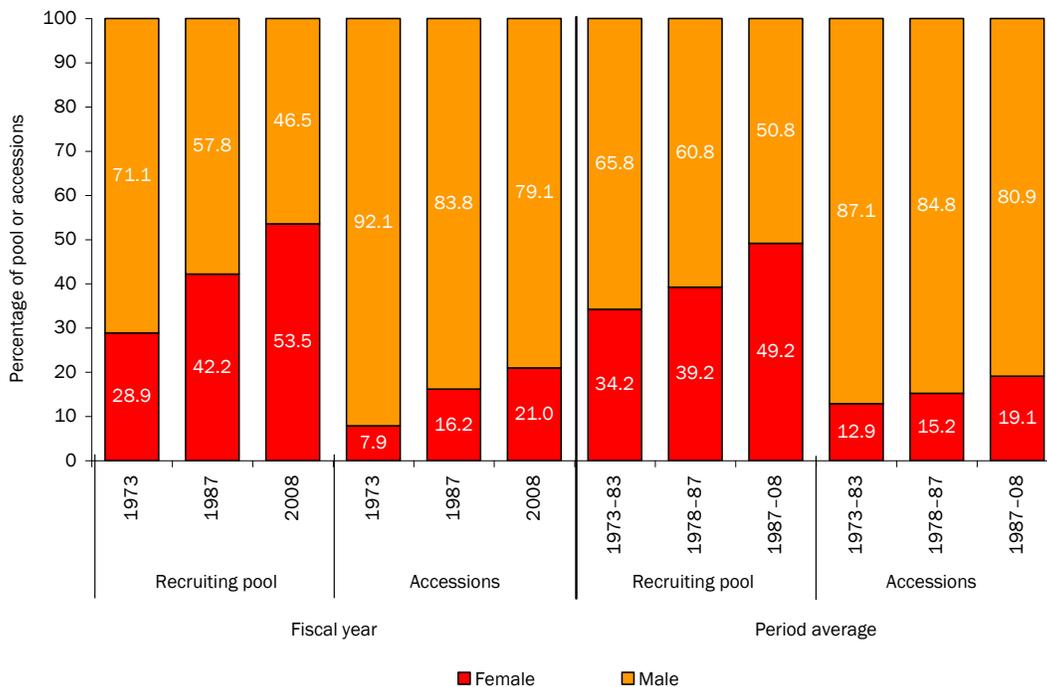
<sup>2</sup>These data were downloaded from the Integrated Public Microdata Series (IPUMS) website, which is sponsored by the Minnesota Population Center: <http://cps.ipums.org/cps/>.

<sup>3</sup>For more information on the impact of differences in educational attainment by race/ethnicity on the officer accession pool, see Military Leadership Diversity Commission (2010a).

<sup>4</sup>The difference might also reflect a degree of measurement error, since we are making inferences on the basis of synthetic accession cohorts in lieu of longitudinal data.

<sup>5</sup>Data presented in other IPs indicate that offsetting differences in promotion and retention make the career progression of black officers similar to that of white officers. Specifically, compared with white officers, black officers tend to have lower promotion but higher retention rates. For Hispanic officers, there is evidence that higher retention rates outweigh lower promotion rates to result in better career progression overall, especially relative to black officers. See Military Leadership Diversity Commission (2010c, 2010d, 2010e).

**Figure 6. Percentages of Women and Men in the Officer Recruiting Pool, FY73, FY87, and FY08, and Averages for Periods Corresponding to Accession Cohorts for Each Leadership Group**



**SOURCES:** Recruiting pool data are based on the authors’ calculations using U.S. Census Bureau, 1973–2008; accession data are from Office of the Under Secretary of Defense, Personnel and Readiness, FY08.

<sup>6</sup>The increase in the black share of the officer accession pool is primarily due to increases in educational attainment among blacks. Specifically, in 1973 only 2 percent of black men and 2 percent of black women age 22–34 held at least a bachelor’s degree. By 2008, these shares had risen to 18 percent and 20 percent, respectively. In contrast, change in the labor force participation of black men and black women in this age group was far less pronounced. For black men age 22–34, the labor force participation rate decreased somewhat, falling from 91 percent in 1973 to 79 percent in 2008. For black women age 22–34, the labor force participation rate increased, but by far less than their educational attainment, rising from 61 percent in 1973 to 76 percent in 2008.

<sup>7</sup>See Military Leadership Diversity Commission (2010b) for a discussion of changes in black propensity to serve during this period.

<sup>8</sup>Data presented in other IPs indicate that women have lower retention and promotion rates than men at various career points. See Military Leadership Diversity Commission (2010c, 2010d, 2010e).

<sup>9</sup>As was the case with the black share of the officer accession pool, the increase in the female share of the officer accession pool was primarily due to increases in educational attainment among women. Indeed, the share of women age 22–34 holding at least a bachelor’s degree or more rose from 4 percent in 1973 to 33 percent in 2008. In contrast, change in labor force participation among women in this age group changed much less noticeably, rising from 53 percent in 1973 to 75 percent in 2008.

<sup>10</sup>For more information on the impact of differences in educational attainment by gender on the officer accession pool, see Military Leadership Diversity Commission (2010a).

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