

Non-Citizens in the Enlisted U.S. Military

Molly F. McIntosh • Seema Sayala



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Photo credit line: Cpl Juan Gaytan takes the oath of allegiance during a naturalization ceremony in San Diego on June 24, 2009. Ten service members, including Gaytan, and 800 others became U.S. citizens during the ceremony. Some requirements for obtaining citizenship are having an understanding of U.S. history and government and good moral character. Collectively, the applicants represented over 80 countries. Gaytan works in the intelligence section of the 11th Marine Expeditionary Unit.

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Non-Citizens in the Enlisted U.S. Military

29 Dec 2011
Molly McIntosh
Seema Sayala



Earlier CNA work for the Office of Accession Policy in the Office of the Secretary of Defense (OSD-AP) showed that non-citizens do extremely well in the military.

In this briefing, we again substantiate several reasons why non-citizens are a potentially valuable enlisted recruiting resource. In addition, recent policy changes have streamlined naturalization for many non-citizen servicemembers, and we describe how programs put in place to naturalize non-citizen recruits are faring. Further, we investigate how time-to-citizenship has changed over the years, due to changes in Department of Defense (DOD) and service policies and procedures. This briefing is part of a longer paper sponsored by OSD-AP, which tasked CNA with examining today's non-citizens in the U.S. military—their characteristics and skills, their performance in the military, their ability to attain citizenship, and the recent changes in programs and policies supporting their ability to be naturalized.

Background

- The military is interested in non-citizens for many reasons
 - They are a growing source of military recruits
 - Immigrants account for an increasing share of the future growth in the military's target recruit population (18- to 24-year-olds)
 - They are also a racially and ethnically diverse group
 - They may possess unique skills
 - Language & cultural: Useful in theater
 - Medical & technical: High-demand, low-density occupations
 - They perform well in the military
 - Previous CNA work (2005) shows that non-citizens complete the first term at significantly higher rates than citizens
- Recent policy changes incentivize service among non-citizens
 - July 02 Executive Order: Expedited citizenship processing
 - Military Accessions Vital to National Interests (MAVNI)



The military is interested in non-citizens for several reasons. First, there is an ample supply of non-citizens in the United States who are eligible for military service. Non-citizens are a particularly attractive recruiting resource. Since fertility has begun to decline due to the current economic crisis, immigration is projected to be the only source of net growth in the U.S. population among 18- to 24-year-olds in the coming decades [1, 2]. Second, non-citizens who are eligible to enlist may possess language and cultural skills that are useful in theater, or medical and technical skills that can be used to fill high-demand, low-density occupations. Third, previous CNA analysis finds that non-citizen recruits have lower first-term attrition, even after controlling for demographic and service-related characteristics [3].

There are also recent policy changes that offer non-citizens an incentive to enlist, such as the signing of the July 2002 Executive Order (EO) 13269, Expedited Naturalization of Aliens and Noncitizen Nationals Serving in an Active-Duty Status During the War on Terrorism. This EO allows non-citizens who have served honorably for 1 day to apply for U.S. citizenship (relative to the previous requirement of 3 years of service before becoming eligible to apply for citizenship). In addition, in response to the increased interest in specific language and cultural skills, the U.S. military has instituted programs such as Military Accessions Vital to the National Interest (MAVNI) and the Army's O9L, to recruit non-citizens with skills of strategic interest to the U.S. military.

Analytical issues addressed in this study

OSD-AP asked CNA to answer the following questions:

- How large is the pool of recruitable non-citizens?
- How does first-term performance of non-citizen recruits compare with that of citizen recruits?
- How are the services assisting non-citizen recruits with naturalization?
- To what extent do non-citizen recruits naturalize while serving?

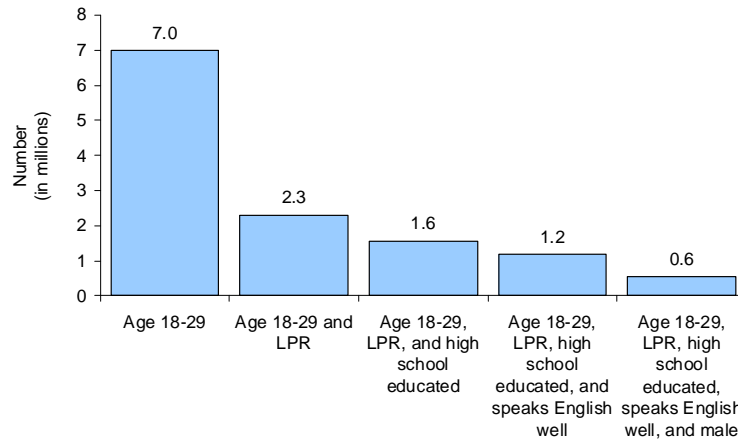


As discussed in [3], a 2005 CNA study found that non-citizens exhibited better first-term performance (in terms of lower attrition rates) than citizen recruits, even after controlling for relevant demographic and service-related characteristics. Also in [3] CNA reports on that study's analysis of data on citizenship attainment, designed to determine what drives non-citizen recruits to become citizens while serving. Because several years have passed since that report was written, OSD-AP has asked CNA to take a fresh look at the following:

- How large is the pool of recruitable non-citizens?
- How does first-term performance of non-citizen recruits compare with that of citizen recruits?
- How are the services assisting non-citizen recruits with naturalization?
- To what extent do non-citizen recruits naturalize while serving?

Recruitable non-citizens: Size of population

- We used Census Bureau data to estimate the size and characteristics of the recruitable non-citizen population
- We calculate the size of the recruitable non-citizen population based on age, residency status, education, and English-speaking ability

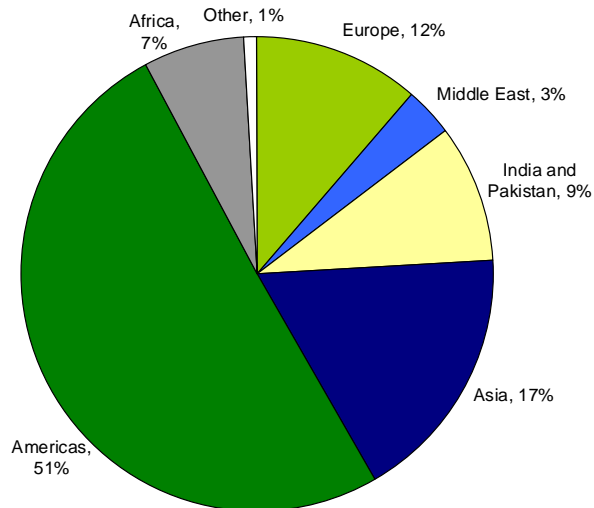


At the time of enlistment, most recruits are between the ages of 18 and 24 (though, at the extremes, recruits can be as young as 17 and as old as 42). For non-citizens, we expand the recruitable age window to include 25- to 29-year-olds, since (as we show in backup slide 28) a considerable share of non-citizen recruits are in this older age group. The military primarily recruits people who have at least a high school degree. Additionally, legal permanent resident (LPR) status—e.g., having a green card—and English proficiency are other enlistment standards that are particularly binding for non-citizen recruits. Therefore, in estimating the size of the recruitable non-citizen population, we focus on those who are age 18 to 29, are LPRs, have at least a high school degree, and can speak English well. Our estimates come from two Census Bureau data sets: the 2006-2009 American Community Survey (ACS), and the March 2010 Current Population Survey (CPS).

As the figure above shows, currently there are approximately 7 million non-citizens age 18 to 29 in the United States. When we limit our focus to those who are LPRs, the size of the population falls 67 percent, from 7.0 million to 2.3 million people. When we add the requirement to have a high school degree or more, the size of the population falls to just over 1.6 million (a drop of another 10 percent). This is compared to the overall U.S. population of high-school-educated 18- to 29-year-olds, which numbers around 42 million. When we add the requirement to be able to speak English well (as measured in the ACS), the size of the population falls to 1.2 million people (a drop of another 5 percent). In addition, since men are more likely than women to join the military, we also consider how the size of the population changes when we exclude women; the last bar in the figure shows that the male recruitable non-citizen population is just above half a million.

Recruitable non-citizens: Region of origin

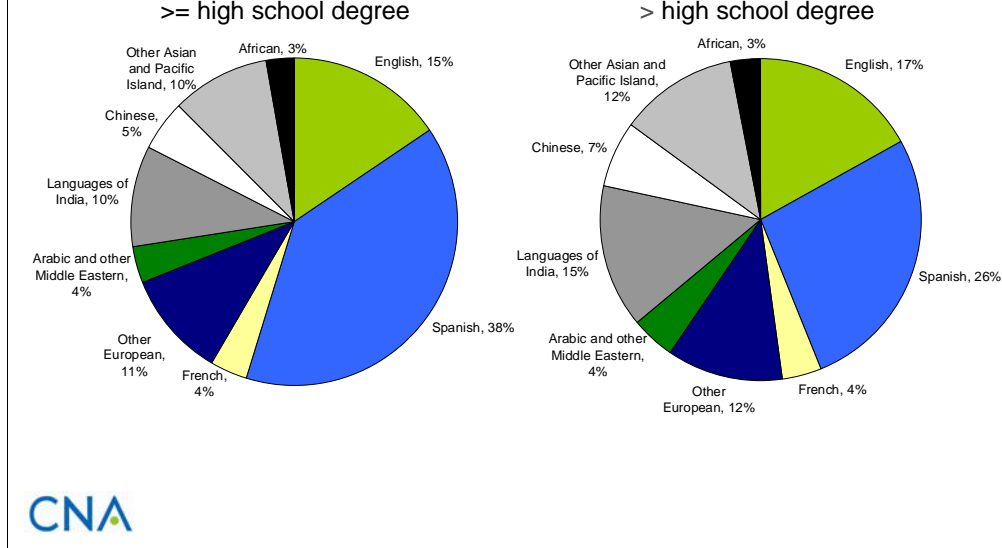
- Majority of recruitable non-citizens come from the Americas



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As we mentioned earlier, non-citizens may have skills that are of strategic interest to the U.S. military, such as language and cultural skills that are associated with their countries of origin. This figure shows the distribution of non-citizens, 18 to 29, with at least a high school degree who speak English well, by region of origin. Fully half of them come from the Americas. The next largest region of origin is Asia (17 percent), followed by Europe, India and Pakistan, Africa, and the Middle East (12, 9, 7, and 3 percent, respectively).

Recruitable non-citizens: Language spoken



In addition to region of origin, non-citizen recruits might possess foreign language skills that are of strategic interest to the military. The figure on the left shows the distribution of languages spoken at home among non-citizens age 18 to 29 who have at least a high school degree and speak English well. For 15 percent of this group, the language spoken at home is English, while the remaining 85 percent speak a foreign language at home. Spanish speakers make up the largest group of foreign-language speakers (just over a third of these non-citizens), followed by 11 percent who speak other European languages, 10 percent who speak the languages of India, 5 percent who speak Chinese, and 10 percent who speak other Asian and Pacific Island languages (not including Indian languages and Chinese). The remaining non-citizens in this group speak French (4 percent), Arabic and other Middle Eastern languages (4 percent), and African languages (3 percent).

As shown in the right-hand figure, the distribution of languages spoken at home changes remarkably when we focus on non-citizens age 18 to 29 who speak English well and have *more than* a high school degree. Between these two figures, the largest change is in the share that speaks Spanish at home: among those with more than a high school degree, only 26 percent speak Spanish at home (compared to 38 percent among those with a high school degree or more). In addition, the share of those who speak the languages of India increases from 10 percent to 15 percent.

Recruiting/retention policies for non-citizens

- Requirements for non-citizen enlisted recruits
 - Proof of Legal Permanent Resident status
 - I-551 (green card)
 - G-845 (formal request for resident status verification)
 - Background investigation
 - Verification of education credentials
 - English proficiency
 - Occupational standards: Security clearance (esp. Air Force)
- Reenlistment standards
 - Army, Navy, and Marine Corps: No restrictions on reenlistment of non-citizens, but security clearance might be a practical restriction
 - Prior to 2007, Army capped service at 8 years without citizenship
 - Air Force caps service at one term without citizenship



There are several requirements for enlisting non-citizens. We discuss three of them here. First, non-citizen recruits must provide proof of LPR status in the form of an I-551 (a green card) or a G-845 (a formal request for resident status verification). Second, non-citizen recruits who were educated in their home countries must have their educational credentials verified by a recruiter. Third, enlisted recruits must demonstrate that they understand English well enough to meet Military Entrance Processing Station (MEPS) requirements. Each service has its own process for gauging English proficiency. For example, in the Army, a recruit may be identified as non-English-speaking and referred for additional evaluation during any part of the enlistment process, including Armed Services Vocational Aptitude Battery (ASVAB) testing, enlistment qualification testing, medical processing, or MEPS pre-enlistment interviews.

In addition, though not an enlistment requirement, non-citizens can access only into certain occupations. This is because many jobs in the military require security clearances, which only can be obtained by U.S. citizens. These occupational restrictions for non-citizen recruits tend to be greater in the Air Force than in the other services.

Finally, some non-citizen recruits face limits on how long they can serve without becoming a citizen. Currently, the Army, Navy, and Marine Corps have no limits on the reenlistment of non-citizens (though before 2007, the Army capped service for non-citizens at 8 years). In contrast, non-citizens in the Air Force are restricted from reenlisting without attaining citizenship.

First-term performance: Data and methodology

- Data: FY99-08 accessions, DMDC quarterly snapshots through Jun 10
 - ~70,000 AD enlisted non-citizens accessions (4 percent of total accessions)
 - Demographic characteristics: Citizenship status, race, ethnicity, gender, education, marital status, dependents, age
 - Service-related characteristics: AFQT score, time in DEP, presence of enlistment waivers, service branch, and accession date
- Methodology: Model attrition behavior as a function of citizenship status at accession and other (demographic and service-related) characteristics



In our analysis of first-term performance among non-citizen and citizen recruits, we focus on attrition behavior at various points in the first term. We started by examining attrition within 3 months, which roughly coincides with the completion of basic training. Then we examine attrition by 36 and 48 months, which approximate completion of the first term.

The data we use for the attrition analysis come from the Defense Manpower Data Center (DMDC). The sample consists of fiscal year (FY) 1999–2008 enlisted accessions into the Air Force, Army, Navy, and Marine Corps. Using DMDC quarterly snapshots, we track these recruits through June 2010. The dataset includes information on the following:

- Demographic characteristics—citizenship status, race, ethnicity, gender, education, marital status, number of dependents, and age
- Service-related characteristics—Armed Forces Qualification Test (AFQT) score, time in the Delayed Entry Program (DEP), presence of enlistment waivers, service branch, and accession date.

For our analysis, we use a logit regression to model attrition behavior as a function of citizenship status at accession and as well as the demographic and service-related characteristics listed above.

Non-citizens attrite at lower rates



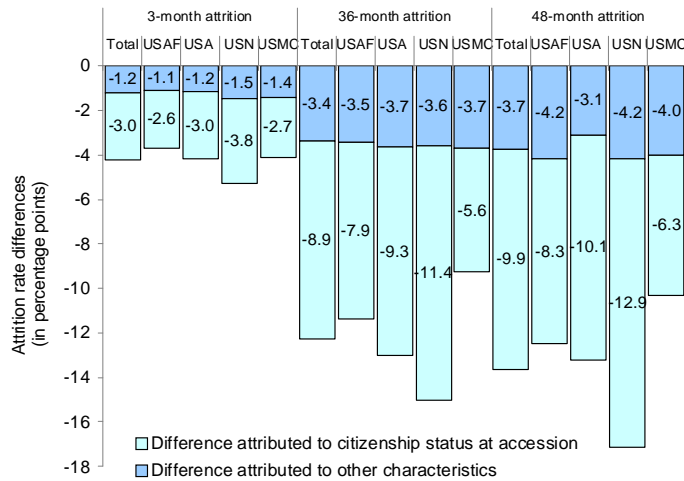
- Attrition rate gap exists in all services
 - Absolute difference, largest in Navy
 - Percentage difference, smallest in Army and Marine Corps



The figure above tabulates data on 3-, 36-, and 48-month attrition rates for non-citizen and citizen recruits across all four services. As this figure shows, non-citizen recruits attrite at substantially lower rates than citizen recruits. Across the entire sample of accessions, we find that 1 out of every 25 non-citizen recruits attrites within 3 months, compared with twice that rate among citizen recruits. By 36 and 48 months, attrition rates among non-citizen recruits increase to roughly 1 in 5 (16.1 percent) and 1 in 6 (18.2 percent), respectively. But, these rates are still considerably lower than the rates for citizen recruits—roughly 1 in 4 (28.4 percent) by 36 months and 1 in 3 (31.9) by 48 months.

As was the case across all services, non-citizen recruits in each service attrite at substantially lower rates than citizen recruits. However, there is a good deal of variation across services. As slide 27 (in the backup slides) shows, when comparing the *absolute* difference in attrition rates for non-citizen and citizen recruits, the difference is largest for the Navy. When we instead look at the *percentage* difference in attrition rates for non-citizen and citizen recruits, the difference is smallest for the Army and the Marine Corps.

Gap persists, controlling for other characteristics



- Controlling for demographic and service-related characteristics
- Largest difference for Navy, smallest for Air Force and Army



This figure shows the main results from the regression analysis; each stacked blue bar comes from a separate regression. The figure shows what share of the raw difference in attrition rates we observe between non-citizen and citizen recruits can be attributed to citizenship status at accession and what share can be attributed to “other” characteristics we control for in our regression model. In each instance, the difference that can be attributed to citizenship status at accession is statistically significantly different from zero at the 5 percent level.

For example, in the previous slide, we saw that non-citizen recruits are 4.2 percentage points less likely than citizen recruits to attrite by 3 months (8.2 percentage points for citizen recruits versus 4.0 percentage points for non-citizen recruits). This figure breaks down this 4.2-percentage-point difference into a 3.0-percentage-point difference that can be attributed to citizenship status at accession and a 1.2-percentage-point difference that can be attributed to differences in other characteristics. In other words, across all services, just under three-quarters of the attrition rate gap between non-citizen and citizen recruits that we observe in the raw data can be attributed to citizenship status at accession, while the remaining quarter results from differences in other characteristics.

Our findings here echo the results in [3]; even after considering the effect of other demographic and service-related characteristics in our regression model, citizenship status at accession is still systematically related to first-term attrition. Additionally, this figure shows that citizenship status has different effects across the four services: across all three measures of attrition, citizenship status has the greatest effect in the Navy.

Path to citizenship while serving

- Reduced waiting time for citizenship for servicemembers
 - Before Jul 02: 3 years of honorable service (5-year wait for civilians)
 - Jul 02: Executive order, no wait/application fees
- Naturalization programs at basic training
 - Army, since 2009; Navy, since 2010; Air Force, since Jun 2011
 - Learn about program from recruiter/basic training in-processing
 - On-site U.S. Citizenship & Immigration Services (USCIS) offices
 - Most are naturalized by graduation; rest are referred to USCIS office near schoolhouse
 - Conducted site visits at Fort Jackson, RTC Great Lakes, and Lackland AFB



As mentioned earlier, with the signing of the EO in July 2002, non-citizen servicemembers became eligible to apply for citizenship after only 1 day of honorable service. In contrast, civilian non-citizens have a 5-year waiting period, and prior to the signing of this 2002 EO, non-citizen servicemembers had to serve for 3 years before they were eligible to apply for citizenship.

Today, the services play a much larger role in assisting with the naturalization process compared to past years. Three of the four services have partnered with USCIS and started programs at basic training to naturalize non-citizen recruits. The Army's basic training naturalization program, which began in 2009, paved the way for these types of programs. In 2010 and 2011, the Navy and the Air Force, respectively, followed suit and created basic training naturalization programs. (The Marine Corps is still exploring the feasibility of starting a basic training naturalization program.)

In the Army, Navy, and Air Force basic training naturalization programs, non-citizen recruits who wish to be naturalized ideally learn about this opportunity from their recruiters, who give the recruits packets containing the forms they must fill out and information on the required supporting documentation. Additionally, USCIS provides onsite assistance to non-citizen recruits wishing to be naturalized, streamlining the process so that naturalization interviews, fingerprinting and exams all occur in a centralized location. The goal of each basic training naturalization program is to have all non-citizens who are seeking citizenship naturalized by basic training graduation.

To learn more about these programs and how they are faring, we visited basic training programs at Fort Jackson (Army), RTC Great Lakes (Navy), and Lackland AFB (Air Force). On the next slide, we summarize what we learned during these visits.

Lessons learned from basic training site visits

- By and large, basic training naturalization programs are running smoothly
- Programs cause minimal disruption in training time
- On-site USCIS office is crucial (forms, interviews, fingerprinting, etc.)
- Buy-in from recruiters is highly desirable
 - Contrary to the program design, most recruits do not arrive with completed naturalization packets. As a result:
 - Army, Navy: Committed to naturalizing all non-citizen recruits, so incomplete packets cause delays and stress
 - Air Force: Only promise naturalization to those with completed packets; the rest must finish applications after graduation
- Cooperation between service and USCIS is a must, service-to-USCIS liaison is ideal



From our visits we discovered that in general, the basic training naturalization programs are running smoothly. These naturalization programs have been streamlined such that they cause minimal disruption in basic training time. Having an on-site USCIS office is a crucial aspect of naturalizing recruits at basic training. Once non-citizen recruits submit their completed forms, the naturalization interviews, fingerprinting, and exams all take place at the onsite USCIS office. Although service personnel are important in ensuring that non-citizen recruits are in the right place at the right time, the USCIS officers do most of the work involved in getting the non-citizen recruits naturalized, in terms of assistance with paperwork and other administrative tasks.

Some lessons learned from these programs include the following. First, buy-in from recruiters is highly desirable. Non-citizen recruits are not uniformly told they can get naturalized at basic training; as a result, most do not arrive with completed naturalization packets, resulting in delays in the naturalization process. This is particularly detrimental for an Air Force non-citizen recruit: in the Air Force basic training naturalization program, a recruit with an incomplete packet cannot be naturalized by the end of basic training. Second, it is important to have a liaison to coordinate the uniformed and USCIS sides of the process. In particular, the liaison can gather input from the service personnel on when recruits might be available for their interviews and the naturalization exam; this can increase the likelihood that recruits will be present for their scheduled appointments.

Citizenship attainment: Data and methodology

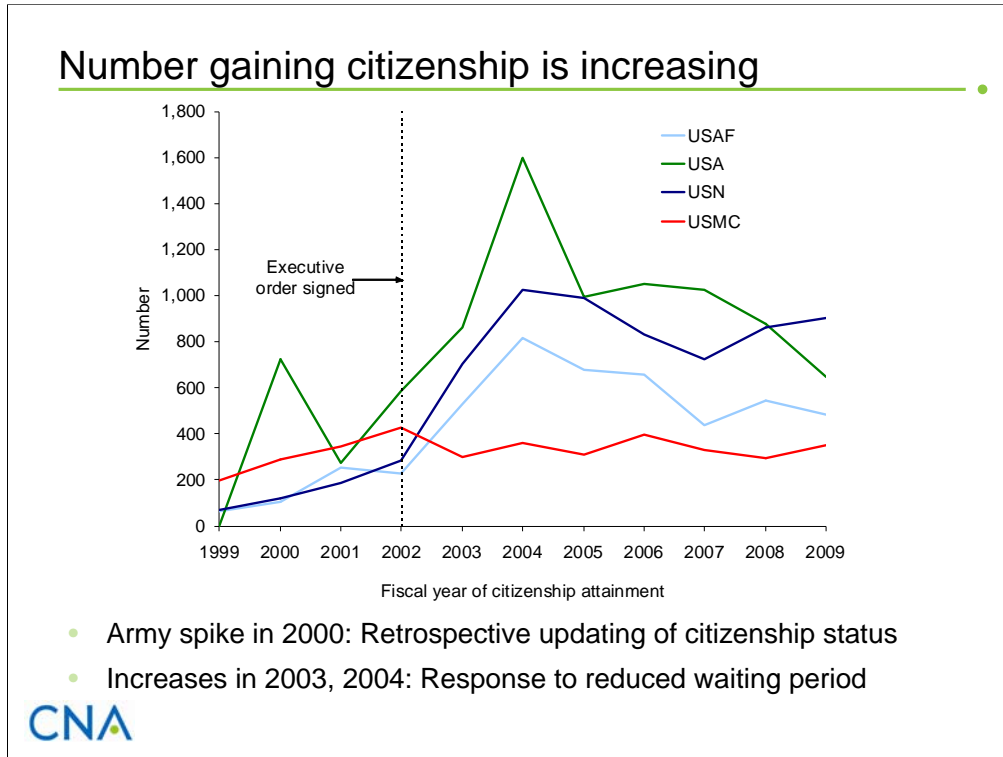
- Data: Same sample as for the attrition analysis, FY99-FY08 accessions followed quarterly through Jun 10
 - Citizenship attainment: Change in citizenship status from one quarter to another
 - Time-to-citizenship: Number of quarters from accession to change in citizenship status, among those who become citizens
- Methodology: Model citizenship attainment and time-to-citizenship as a function of demographic and service-related characteristics



Turning to our empirical analysis of citizenship attainment and time-to-citizenship, we use the same sample of FY99–FY08 enlisted accessions from DMDC that we used for the attrition analysis. As there is no DMDC data field that contains the date on which a non-citizen servicemember attained citizenship, we infer this from the dataset. We do this by observing in the data when an individual's citizenship status changed between quarters. In other words, we observe whether a person's citizenship status changed from "non-citizen" at the time of accession to "citizen" during our sample period (our proxy for citizenship attainment) and the number of quarters that passed between accession and the change in citizenship status (our proxy for time-to-citizenship).

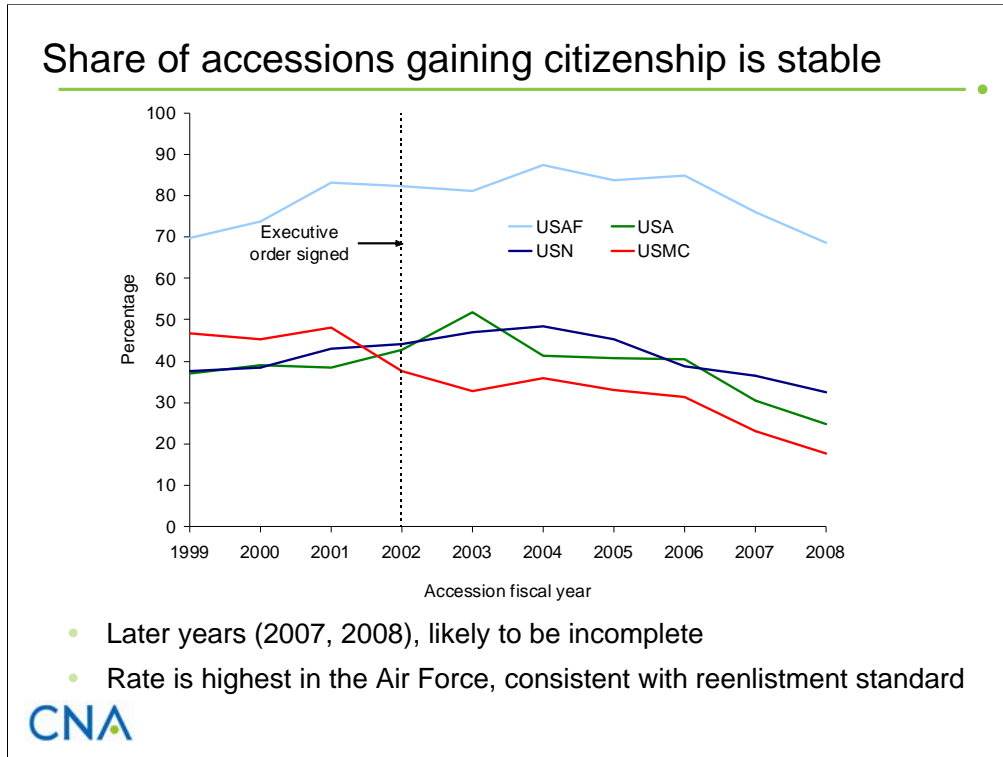
We recognize that our measures of citizenship attainment and time-to-citizenship are only approximations. Since personnel files are not automatically updated when servicemembers attain citizenship, there is likely to be measurement error in our estimate of the number of servicemembers who attain citizenship and their time-to-citizenship. If servicemembers fail to report that they have become citizens (which they have little incentive to do unless they want to move into an occupation that requires a security clearance) or do so with a lag, our data will *understate* the true number of servicemembers attaining citizenship and *overstate* how long it takes to get citizenship (among those who we see attaining citizenship).

For our citizenship attainment and time-to-citizenship analyses, we first present some descriptive statistics on these outcomes. We then run regressions to model citizenship attainment and time-to-citizenship as a function of demographic and service-related characteristics.



Across our entire sample of FY99-FY08 non-citizen accessions, we estimate that slightly fewer than half (43.8 percent) had become citizens by the end of our sample period (June 2010). This figure shows the number of servicemembers who became new citizens by fiscal year of citizenship attainment; we omit FY10 because only 9 months of data are available. The figure shows that, in general, the number attaining citizenship is increasing over time. The number of new citizens is highest in the Army (USA), followed by the Navy (USN), the Air Force (USAF), and finally the Marine Corps (USMC).

Two features of the data displayed in the figure warrant further explanation. The first is the sharp spike in the number of new citizens in the Army in FY00. This spike also was observed in [3], and the authors attributed it to retrospective updating of citizenship status in the year 2000. The second is the sharp increase in the number of new citizens in the Air Force, Army, and Navy from FY02 to FY04. We argue that this is likely a result of the Executive Order signed in FY02. Once the reduced waiting period took effect, a large number of servicemembers who would have had to wait a while longer to apply for citizenship immediately became eligible to apply. Indeed, when we examine accession dates among servicemembers getting naturalized, we find wider variation in accession dates among servicemembers getting citizenship immediately after the EO was signed than in the period before the order was signed. This is consistent with the notion that the signing of the EO eliminated the waiting period for some servicemembers who otherwise would have had to delay applying for citizenship.

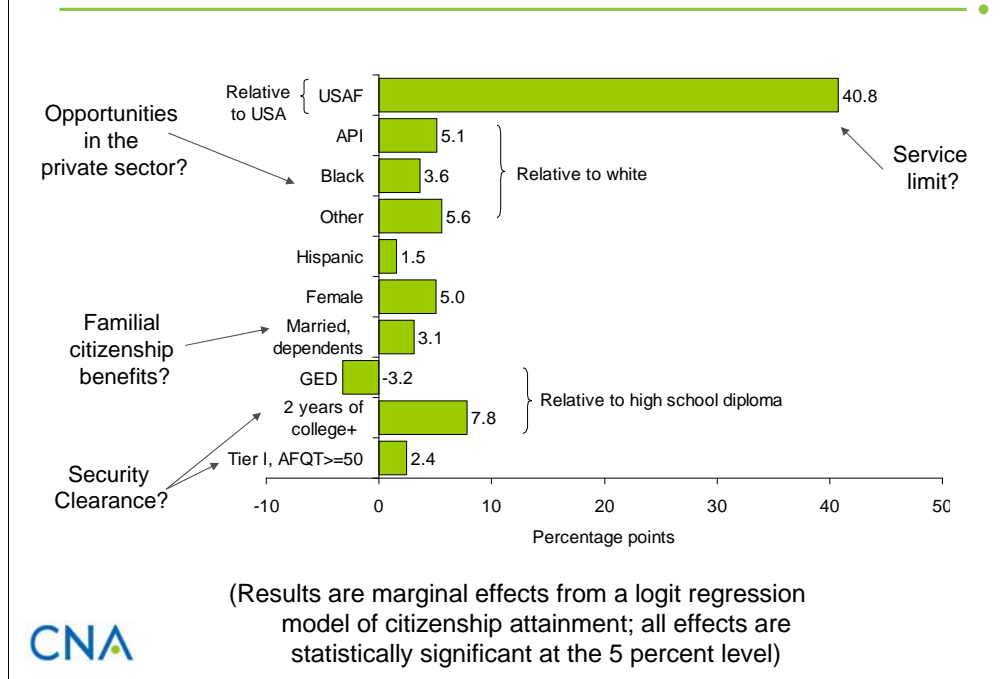


This figure shows the percentage of non-citizen accessions who had attained citizenship by the end of our sample (June 2010) by fiscal year of accession. We make three observations:

- The data on FY07 and FY08 accessions are likely to be incomplete. Given that our period of observation extends through only part of FY10, these cohorts had less time in which to attain citizenship; therefore, we should expect to see lower rates of citizenship attainment for these recent accessions.
- If we ignore FY07 and FY08 accessions, the share of non-citizen accessions that attain citizenship during our sample period is relatively stable over time. The exception is the Marine Corps, which experienced a more or less continuous decline in the share attaining citizenship over this period.
- The share of non-citizen accessions attaining citizenship is much higher—by a factor of 2—in the Air Force than in the other services. This is arguably because non-citizens in the Air Force can serve a maximum of one term; to reenlist, they must become U.S. citizens. Also, because of the Air Force service limit for non-citizens, non-citizen airmen have a greater incentive to make sure that their personnel files get updated to reflect their citizenship status once they become citizens.

As mentioned earlier, before 2007, the Army capped service at 8 years without citizenship. The data here suggest that this policy was not particularly binding, since we do not observe a large share of soldiers who accessed as non-citizens attaining citizenship before 2007.

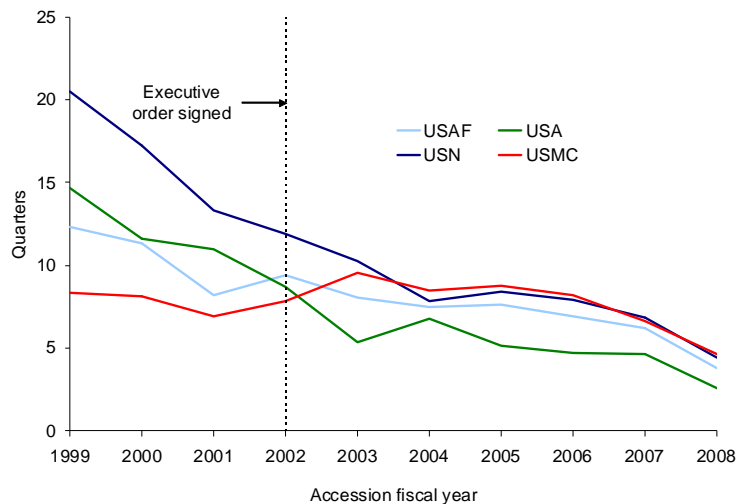
Determinants of citizenship attainment



We constructed a regression model to analyze what predicts whether a non-citizen recruit becomes a citizen. Similar to our attrition model, we estimate a logit regression model that uses demographic and service-related characteristics to explain variation in citizenship attainment. This figure contains the main results from that analysis across all four services. We draw four main conclusions:

- Being in the Air Force substantially increases the likelihood that a non-citizen recruit will attain citizenship. Relative to the Army (the base, or omitted, category), non-citizen recruits in the Air Force are 40.8 percentage points more likely to become citizens. This is consistent with the Air Force policy that allows a non-citizen to serve a maximum of one term without becoming a citizen.
- Minority (defined as being nonwhite or Hispanic) and female non-citizen recruits are more likely to become citizens relative to their non-minority and male counterparts. We posit that this might be driven by a desire to increase post-service opportunities in the private sector.
- Non-citizen recruits who are married or have dependents are more likely to become citizens; this could be driven by the desire to obtain familial citizenship benefits.
- Education and AFQT are positively related to attaining citizenship. This is consistent with the hypotheses that higher-quality non-citizen recruits want to transition to higher-skill occupations that are more likely to require security clearances, in which case citizenship is required.

Time-to-citizenship is decreasing



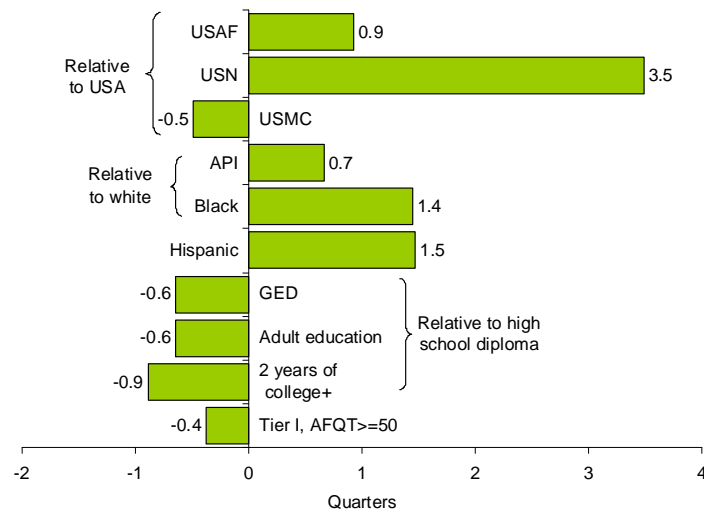
- Again, later years (2007, 2008) are likely to be incomplete
- Further declines likely: basic training naturalization programs; USCIS required to adjudicate all cases within 6 months (as of Apr 08)

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Among the FY99-FY08 non-citizen accessions who attained citizenship by June 2010, we estimate time-to-citizenship as the number of quarters between accession and the first time we observe a change in citizenship status. This figure shows our approximation of time-to-citizenship by accession cohort and by service. Note that the FY07-FY08 accessions are likely to be downwardly biased. Because our period of observation extends only through June 2010, we should expect to see lower times-to-citizenship among non-citizen recruits from these recent cohorts because they had a limited number of quarters in which to become citizens.

Time-to-citizenship generally trends downward over our sample time period. All else equal, time-to-citizenship by accession cohort should fall in the time leading up to the signing of the EO. To understand why, consider two groups of non-citizens who accessed in the years just before the signing of the EO. The first group is made up of people who, at the time the EO was signed, had already been LPRs for the requisite 3 years (i.e. up to 11 quarters, and therefore were already eligible to apply for citizenship). Since the EO affects time-to-citizenship through reducing the waiting period, it should not affect this group's time-to-citizenship. The second group, however, comprises recruits who, at the time the EO was signed, had *not* been LPRs for 3 years (and were *not* eligible to apply for citizenship). For this group, the EO shortened the waiting period, especially for recruits who accessed in the years just before July 2002. Indeed, as this figure shows, average time-to-citizenship fell dramatically among cohorts accessing right before the signing of the EO.

Determinants of time-to-citizenship

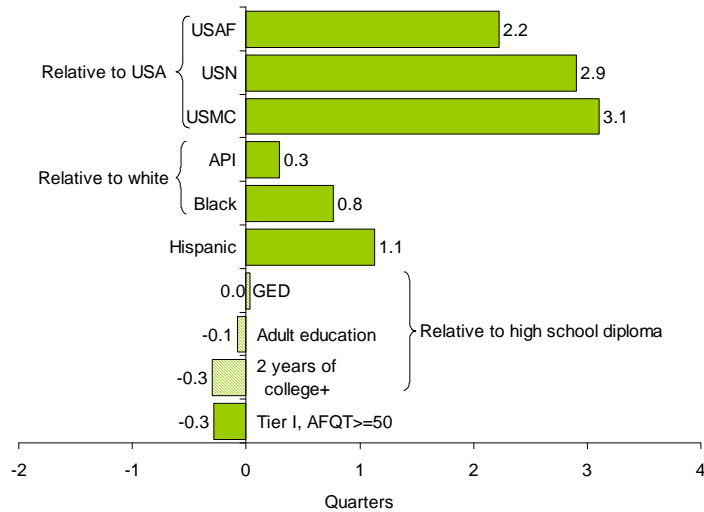


(Results are from a linear regression model of time-to-citizenship measured in quarters since accession; all effects are statistically significant at the 5 percent level)



To determine what is behind the differences we see from the previous slide in time-to-citizenship, we construct a linear regression model that, again, uses differences in demographic and service-related characteristics to explain the variation. This figure shows the main results from the time-to-citizenship analysis across all four services, where we narrow the sample to non-citizen recruits who have attained citizenship. We draw three conclusions from this figure. First, we see that being in the Navy substantially increases time-to-citizenship; it is longer in the Navy than the Army (the omitted category) by nearly a year (3.5 quarters). Also, relative to the Army, time-to-citizenship is longer by nearly 1 quarter in the Air Force, whereas it is shorter by 0.5 quarter in the Marine Corps. Second, we see that time-to-citizenship is longer, on average, for minorities, although we found earlier (on slide 16) that minorities are more likely than non-minorities to attain citizenship. Finally, we find that having a GED, having adult education, having at least 2 years of college experience, and being high quality (Tier I and scoring at least at the 50th percentile on the AFQT) are associated with shorter time-to-citizenship. For those who are college-educated or did well on the AFQT, this might reflect their desire to transition to higher skill occupations that are more likely to require security clearances, in which case citizenship is required.

Determinants of time-to-citizenship, post-EO



(Results are from a linear regression model of time-to-citizenship measured in quarters since accession among *post-Executive-Order* accessions; solid bars are statistically significant at the 5 percent level, crosshatched bars are not)



Since we would expect time-to-citizenship to be lower starting with FY03 accessions, owing to the EO, and since the relative ranking of the services with respect to time-to-citizenship changed with FY02 accessions (slide 17), we also run the time-to-citizenship regression on a post-EO sample (i.e., FY03-08 accessions). This figure contains the main results from this analysis across the services.

There are two main differences between these results and those for all accessions (shown in the previous slide). First, with the exception of the service branch variables, the effects for all other variables have the same sign as in the full sample regression, but they are attenuated—so much so for the education variables that they are now statistically insignificant (as shown by the crosshatched bars). Second, as we suspected, the change in the relative ranking of services in terms of time-to-citizenship that we observed in slide 17 has been borne out here as well. When considering all accessions from FY99 to FY08, time-to-citizenship was longest (by a considerable amount) for the Navy, followed by the Air Force, then the Army, and finally the Marine Corps. As this figure shows, among non-citizens who accessed after the Executive Order was signed, time-to-citizenship was longest for the Marine Corps, followed by the Navy, the Air Force, and finally (by a considerable amount) the Army.

Conclusions

- Non-citizens are a potentially valuable recruiting resource
 - A substantial number are eligible for enlistment
 - They are relatively diverse (race/ethnicity, language/cultural skills)
 - They are substantially less likely to attrite in the first term
- Citizenship attainment has risen, time-to-citizenship has fallen
 - Citizenship attainment is higher for Air Force, minorities, women, married/those with dependents, and those with more education/higher AFQT
 - Time-to-citizenship is longer for minorities, but shorter for more educated/higher AFQT
 - Since Executive Order, time-to-citizenship has been highest for Marine Corps, followed by Navy, Air Force, and (by a large margin) Army



Our analysis substantiates the three reasons we posited earlier as to why non-citizens are a potentially valuable enlisted recruiting resource. First, a substantial number are eligible for enlistment. We estimate that 1.2 million non-citizens (about half of whom are male) are in the desired age range (18 to 29) and have the requisite education, permanent resident status, and English-language ability for enlistment. This population will become increasingly important for recruiting in a couple of decades since decreasing fertility due to the economic crisis means that immigration will be the only source of population growth in the targeted recruiting ages. Second, we find that a substantial share of the recruitable U.S. non-citizen population comes from diverse backgrounds and potentially possesses language and cultural skills that are of strategic interest to the U.S. military. Third, non-citizen recruits are significantly and substantially less likely than citizen recruits to attrite in the first term. Therefore, even in a favorable recruiting environment, recruiters should be encouraged to continue to make the extra effort required to process the paperwork needed to access non-citizen recruits.

Given the recent policy changes that have streamlined naturalization for non-citizen servicemembers, we are not surprised to find that citizenship attainment has increased and time-to-citizenship has decreased over our period of observation. Our statistical analysis suggests that the rate of citizenship attainment is higher for the Air Force (likely because of the one-term limit without citizenship), for minorities, for women, for those who are married or have dependents, and for those who have more education or higher AFQT scores. We also find that time-to-citizenship is longer for minority recruits but shorter for recruits who have more education or higher AFQT scores. In addition, in the period following the Executive Order, time-to-citizenship has been longest for the Marine Corps, followed by the Navy, the Air Force, and the Army.

Recommendations

- Services should consider strategies to recruit non-citizens more effectively, especially once recruiting becomes more difficult
- DOD and USCIS would benefit from sharing administrative data
 - DOD: Who attains citizenship and when
 - USCIS: Who attains citizenship but fails to complete the first term
- Basic training naturalization programs have proven effective
 - Should be supported, and recruiter buy-in is highly desirable
 - Caveat: Once the nation is no longer engaged in the Global War on Terror, the Executive Order will expire and (without a change to current law) basic training naturalization programs will become irrelevant



We make the following recommendations from our analysis.

First, the services should consider developing strategies to recruit non-citizens more effectively, especially once the recruiting environment becomes more difficult. As our analysis shows, there is an ample pool of qualified non-citizen recruits, and such recruits often have lower first-term attrition rates than their citizen counterparts and possess language skills that are of strategic interest to the military.

Second, DOD and USCIS both would benefit from sharing their administrative data. If USCIS notified DOD when servicemembers' applications were approved, DOD would have more visibility on who attains citizenship and when (vice the current situation where these must be proxied for by changes in citizenship status recorded in personnel files). And, if DOD kept USCIS apprised of who has attrited from the military, USCIS would be better positioned to know whether basic training naturalization programs are working as intended.

Lastly, basic training naturalization programs have proved to be a viable option for quickly and efficiently naturalizing large groups of non-citizen servicemembers. The programs already in place at the Army, Navy, and Air Force basic training should be supported, and the Marine Corps should be encouraged to investigate further the possibility of adding such a program to its basic training. Of course, when the United States is no longer engaged in the Global War on Terror, the authority to naturalize at basic training will cease to exist, unless policies governing the naturalization of non-citizen servicemembers are changed yet again.

Areas for future research

- Explain differences in the effect of citizenship status at accession on attrition across the services
 - Country of origin? Need additional data
- Examine whether predictors of attrition are the same for citizen and non-citizen recruits
- Consider other measures of first-term performance (e.g., advancement)
- Explore whether certain observable characteristics are associated with lower first-term attrition among non-citizen recruits
 - Recruiters could use to focus on non-citizen recruits with especially low attrition likelihoods
- Explore alternate measures of time-to-citizenship that pick up on the variance, not just the mean
 - Ideally, SSN-level match between USCIS and DMDC data



We offer several areas for future research. First, it would be useful to test whether the differences in the effect of citizenship status at accession on attrition that exist across the services can be explained by characteristics we observed in our data. One potential explanation is differences in country of origin, but the information on country of origin in the DMDC data is incomplete.

Second, we could explore whether certain observable characteristics are more or less predictive of attrition for non-citizen recruits than they are for citizen recruits.

Third, we could explore other measures of first-term performance. For example, we could test whether non-citizen recruits advance more quickly, in addition to attriting less during the first term.

Fourth, we could examine whether certain observable characteristics are more closely associated with lower first-term attrition among non-citizen recruits than other characteristics. Knowing this could help the services determine which non-citizen recruits are particularly likely to remain in the service through the end of the first term and should be focused on for enlisted recruiting.

Fifth, we could consider other measures of time-to-citizenship—in particular, measures that capture the spread (or variance) in time-to-citizenship that is otherwise masked when looking at an average. This effort would be bolstered, of course, by data sharing between DOD and USCIS.

Back-up slides

CNA

The following slides contain additional information pertaining to the analysis we conducted.

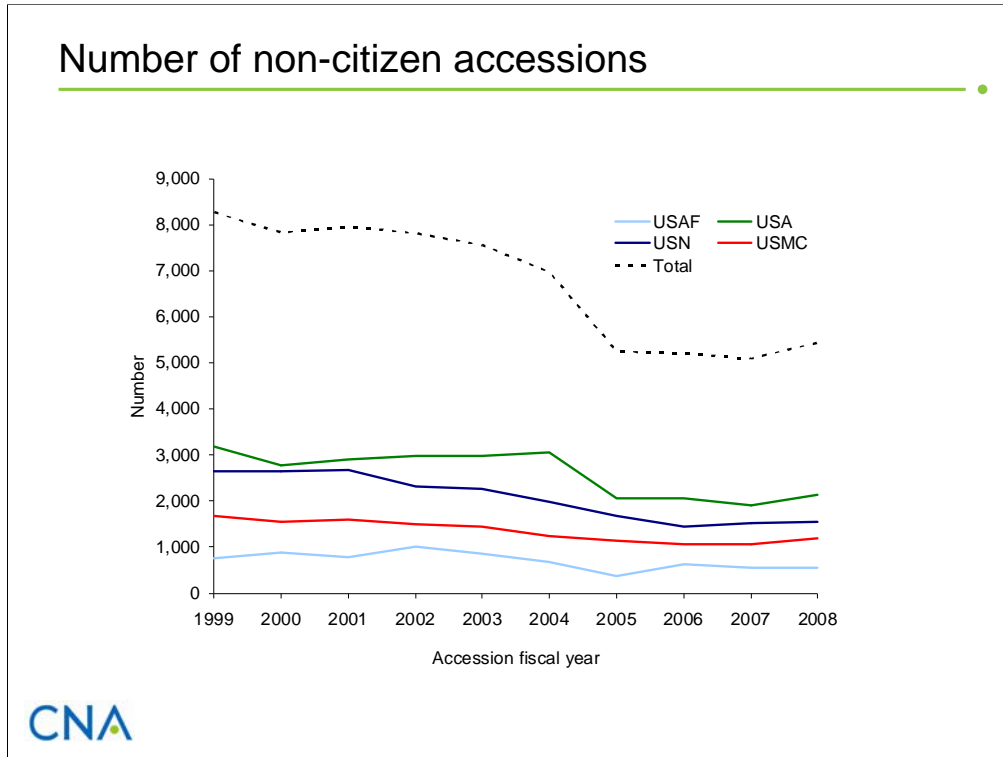
More information on MAVNI

- MAVNI
 - In Feb 2009, SecDef authorized a pilot program to recruit non-LPR non-citizens who hold critical healthcare professional, language, and cultural skills
 - Extended through Dec 2011, but currently on hold pending the development of security screening protocols



In Feb 2009, the Secretary of Defense authorized MAVNI as a pilot program (described in [4]), to recruit non-citizens who are not LPRs but who have healthcare professional, language, and cultural skills that are “vital to national interest,” through U.S. Code 504(b(2)).

After December 31, 2009, MAVNI was granted a series of 60-day extensions and was finally officially extended for an additional 2 years on August 17, 2010. With this extension, new recruiting totals were established. An additional 1,500 recruits were authorized for the program, including 1,000 for the Army (100 of whom are healthcare professionals), 250 for the Navy, and 125 each for the Air Force and Marine Corps. Also, given the United States’ recent heightened security concerns, the 2-year extension added new DOD requirements for the services to address in security screening procedures. MAVNI is currently on hold pending the development and approval of additional screening protocols.

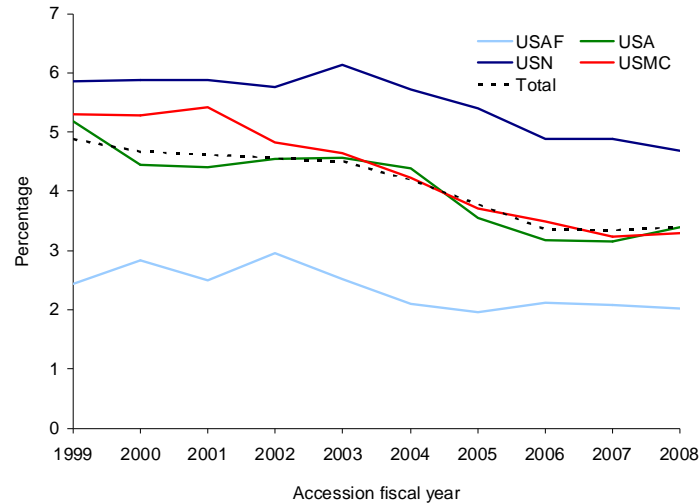


This figure shows the total number of non-citizen accessions by service and accession fiscal year. Across the whole sample, nearly 70,000 non-citizens enlisted between FY99 and FY08 across all four services. Over the sample time period, the total number of non-citizen accessions has fallen by about a third, from just over 8,000 in FY99 to about 5,500 in FY08. The decline has been more rapid for the Navy, which saw a larger decrease in the number of non-citizen accessions (41 percent between FY99 and FY08), than for the other services (which saw declines of 28 to 33 percent over this same period).

In our empirical analyses, the samples of non-citizen and citizen accessions are about 15 and 5 percent smaller, respectively, than the total number of non-citizen and citizen accessions found in the raw data. This is because we drop from the sample those recruits for whom we do not have complete information in terms of the demographic and service-related characteristics we incorporate into our empirical models.

As this figure shows, the Army accesses the largest number of non-citizens across all of the services, followed by the Navy, the Marine Corps, and finally the Air Force. However, when we scale non-citizen accessions by total accessions, shown in the next figure, the order changes.

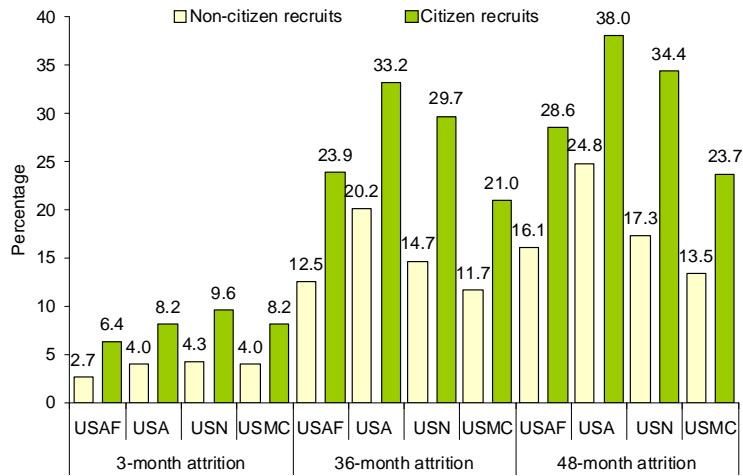
Non-citizens as a share of all accessions



CNA

This figure scales non-citizen accessions by total accessions. While non-citizens account for roughly 4 percent of accessions across all of the services and 4 percent of accessions for the Army and the Marine Corps, they account for 5 and 2 percent of accessions, respectively, for the Navy and the Air Force. As was the case for the total number of non-citizen accessions, the non-citizen share of accessions across all four services has declined over this time period by 30 percent, from just under 5 percent in FY99 to just over 4 percent in FY08. This decline has been particularly steep for the Army and the Marine Corps, which experienced declines in the non-citizen share of accessions of 35 and 38 percent, respectively, compared with the Air Force and Navy, which experienced declines of 17 and 20 percent.

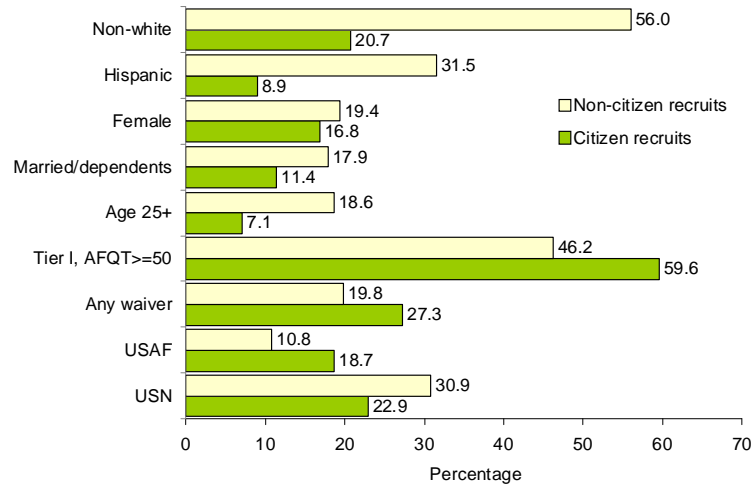
Non-citizens attrite at lower rates, by service



CNA

This figure shows 3-, 36-, and 48-month attrition rates by citizenship status at accession. As was the case across all services, non-citizen recruits in each service attrite at substantially lower rates than citizen recruits. However, there is a good deal of variation across services. Looking at absolute differences, the attrition rate gap is largest for the Navy. Looking at percentage differences instead, the attrition rate gap is smallest for the Army and the Marine Corps.

But, non-citizens differ from citizens in other ways

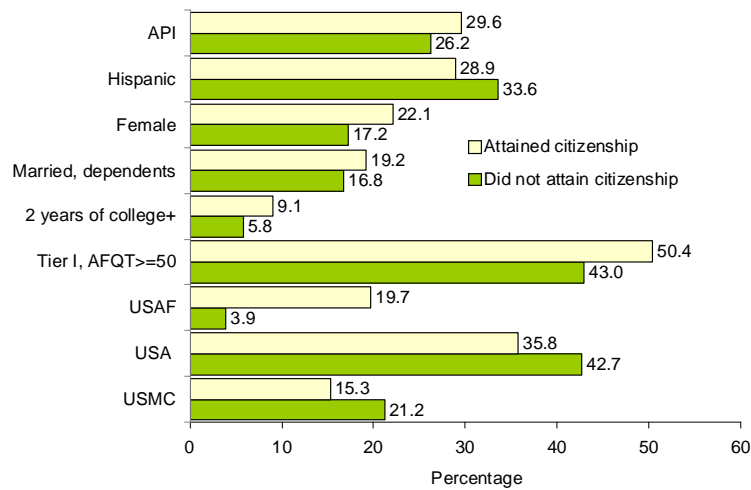


(All differences by citizenship status at accession are statistically significant at the 5 percent level)



As this figure shows, a substantially larger share of non-citizen than citizen recruits are minorities—56.0 and 31.5 percent of non-citizen recruits are non-white and Hispanic, respectively, compared with 20.7 and 8.9 percent of citizen recruits. Non-citizen recruits, compared with citizen recruits, also are more likely to be female (19.4 v. 16.8 percent), married or with dependents at accession (17.9 v. 16.8 percent), and age 25 or older at accession (18.6 v. 7.1 percent).

Characteristics by citizenship attainment

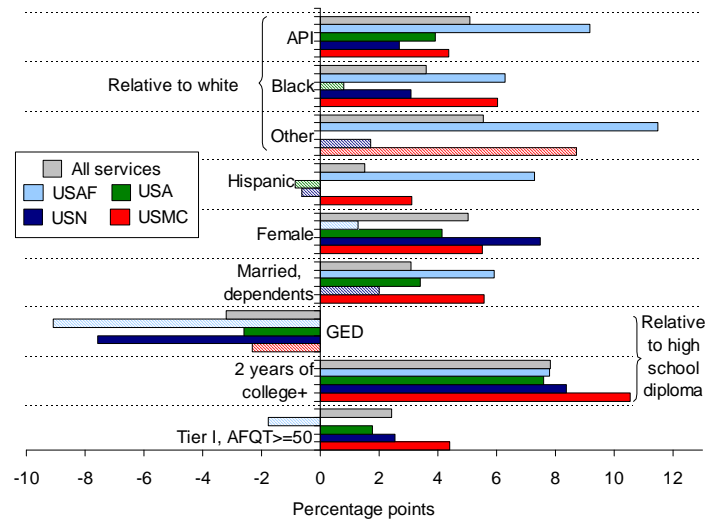


(All differences by citizenship attainment are statistically significant at the 5 percent level)



Before analyzing the determinants of citizenship attainment, we first consider how those who attain citizenship and those who do not differ in terms of demographic and service-related characteristics. This figure displays some of these differences. As we see here, non-citizen recruits who attain citizenship are more likely to be Asian/Pacific Islander (API) and less likely to be Hispanic than those who do not attain citizenship. Those who attain citizenship also are more likely to be female and to be married or have dependents. The former could be driven by a desire to increase after-service opportunities in the private sector, while the latter could be driven by the desire to obtain familial citizenship benefits. Those who become citizens also are more likely to have 2 or more years of college education and to be high quality (Tier I and scoring at least in the 50th percentile on the AFQT) than those who do not become citizens. This could be because higher-quality recruits have their sights set on higher skill occupations that are more likely to require security clearances, which in turn requires citizenship. Finally, we see that—across the services—non-citizen recruits who become citizens are substantially more likely to be in the Air Force than those who do not become citizens, which is consistent with the Air Force policy that caps service among non-citizens at one term.

Determinants of citizenship attainment, by service



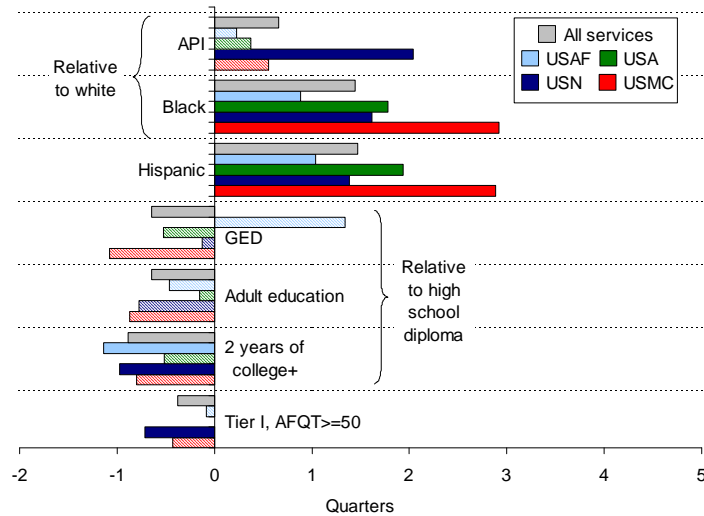
(Results are marginal effects from service-specific logit regression models of citizenship attainment; solid bars are statistically significant at the 5 percent level, crosshatched bars are not)



We suspected that the effects of demographics and service-related characteristics on citizenship attainment might vary across the four services, so we also ran the citizenship attainment regression separately for each service. The figure above shows the main results from these regressions, plus those from the service-wide regression. We group the service-specific regression results by characteristic (to ease the cross-service comparison of, say, the effect of race on citizenship attainment), but they can be differentiated from one another by the color of the bar.

As shown, across all services, the effect of having completed 2 or more years of college is comparatively large; these non-citizen recruits are between 8 percentage points (for the Air Force and the Army) and 11 percentage points (for the Marine Corps) more likely than non-citizen recruits with only high school diplomas to become citizens. For the other characteristics shown in the figure, we see substantial variation in the marginal effects across the services. Relative to the other services, race, ethnicity, and marital/dependent status have a relatively large positive effect on the likelihood that an Air Force non-citizen recruit will become a citizen. For the Navy, being female has a relatively large positive effect, while having a General Educational Development (GED) certificate has a relatively large negative effect on attaining citizenship compared with the other services. Finally, for the Marine Corps, being high quality (i.e., Tier I and scoring at least in the 50th percentile on the AFQT) and having completed at least 2 years of college stand out as having large positive effects relative to the other services.

Determinants of time-to-citizenship, by service



(Results are from service-specific linear regression models of time-to-citizenship measured in quarters since accession; solid bars are statistically significant at the 5 percent level, crosshatched bars are not)



We also ran the time-to-citizenship regressions separately by service, since we suspected, again, that the effects will vary across the services. The figure above shows the main results from these regressions, plus those from the service-wide regression. As in the previous slide, the results from the service-specific time-to-citizenship regressions are grouped by characteristic but are differentiated from one another by the color of the bar.

As this figure shows, for the Army, Navy, and Marine Corps, being black or Hispanic has a relatively large effect on time-to-citizenship—increasing it by roughly 1.5 to 3 quarters. For the Navy, being API has a similar effect. Most of the effects of education in the cross-service regression are not significant in the service-specific regressions. The exception is having at least 2 years of college, which decreases time-to-citizenship in the Air Force and Navy by roughly 1 quarter. Finally, time-to-citizenship in the Navy is significantly reduced (by nearly 1 quarter) for non-citizen accessions who are high quality (Tier I and scoring at least at the 50th percentile on the AFQT).

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- [3] Anita U. Hattiangadi et al. *Non-Citizens in Today’s Military: Final Report*. CNA Research Memorandum D0011092.A2/Final. Apr. 2005.
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