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Expedited citizenship for sale: estimating the effect of Executive Order 13269 on noncitizen military enlistments

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This article estimates the effect of offering an expedited citizenship application process to noncitizens for joining the US military. Executive Order (EO) 13269, enacted in July of 2002, allowed noncitizens to apply for US citizenship immediately upon joining the military, effectively reducing the waiting time that is required to apply for citizenship from 3 years to 1 day. We identify the effect of the policy by using administrative personnel data on the universe of military enlistees between 1999 and 2010 along with a difference-in-differences (DD) strategy that uses accessions amongst citizens as the control group. Overall, we find no effect of the offer of expedited citizenship on total accessions amongst noncitizens. However, this overall null effect masks significant shifts of noncitizen enlistments out of combat intensive services and into 'safer' services. These results provide the first empirical evidence about this important, and relatively costless, recruiting policy.

I. Introduction

A fully manned fighting force is vital to national security, yet is a costly necessity. For example, each year the US Department of Defense (DoD) must replace approximately 11% of military personnel (about 160 000 troops) due to normal workforce turnover, spending approximately $11 000 to recruit each new soldier (Department of Defense, 2013). Reducing these recruitment costs is the subject of much and varied policy debate, yet the vast majority of suggested policies involve considerable monetary outlay, whether through the use of signing bonuses, retention bonuses or general advertising campaigns. In this article, we study a unique recruiting policy that was intended to increase military enlistments with no direct monetary outlay: offering noncitizen permanent residents the ability to expedite the citizenship process by joining the military.

Specifically, we study EO 13269, which, on 3 July 2002, reduced the waiting time to apply for citizenship for military service members from 3 years of honourable service to 1 day of service (Department of Justice, 2013).

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That is, after 3 July 2002, a noncitizen could immediately apply for citizenship upon enlistment in the military. Using administrative data from the US military and citizens as a comparison group, we estimate the effect that EO 13269 had on noncitizen enlistments. EO 13269 is one of the most visible policies affecting noncitizens in the US military and can provide context for the ongoing, current debate on nonpermanent residents joining the military, as was recently proposed by the US Congress (although not yet not passed) as part of the Development Relief and Education for Alien Minors (DREAM) Act. Furthermore, while the data we use are for the US military, noncitizen soldiers are increasingly becoming an important component of many countries' armed forces around the world. Thus, our results are broadly applicable for recruiting policies in these countries as well.

Under current federal law, permanent residents (i.e., those holding green cards), but not undocumented aliens, are equally eligible for military service as citizens. Despite this parity with citizens, only about 0.03% of military-eligible noncitizens enlist each month, compared with an enlistment rate amongst military-eligible citizens of 0.06%.[1] Thus, noncitizens constitute a significant and potentially underutilized resource in fulfilling the US military's manpower needs. In addition, noncitizen soldiers have been shown to be better in many ways in comparison to their US citizen counterparts, particularly in their speed to promotion rates and the percentage of enlistees who complete their initial enlistment obligations (Hattiangadi *et al.*, 2005). As former Under Secretary of Defense David Chu stated, ' […] non-citizens are a vital part of our country's military [and] recruits continue to provide the Services with a richly diverse force in terms of race/ethnicity, language, and culture' (Chu, 2006).

EOs granting expedited US citizenship for military service are not novel – virtually every major conflict in the last century has seen one, including both World Wars, the Korean War, the Vietnam War and the Persian Gulf War (Immigration and Nationality Act, 2011a). Furthermore, at least 660 000 foreign nationals have received US citizenship for military service since the Civil War (Chu, 2006). However, despite the political (and public) popularity of EOs such as 13269, it is theoretically unclear as to what the effect on accessions might be. On one hand, there is a clear new benefit: a decrease in the amount of time needed to apply for citizenship. On the other hand, there could be informational content contained in the EO as well. For instance, noncitizens may view the EO as a signal of an increased possibility of future conflicts and/or future combat exposure. If this were true, then noncitizens may feel that they would receive the brunt of the costs of combat (i.e., difficult or dangerous

jobs and deployments), and the EO could have a negative effect on enlistments for noncitizen recruits.

Our empirical approach to uncover the causal effect of EO 13269 uses a DD model with citizen accessions serving as the counterfactual for noncitizen accessions. We use detailed cross sections of accessions data from the US military's personnel database covering all branches of service between 1999 and 2010. Under the assumption that the EO had no effect on the propensity for US citizens to enlist, citizen accessions in the military serve as a valid counterfactual for noncitizen accessions. This assumption is likely justified on the grounds that there was no associated benefit or cost of the EO for citizens.

Overall, we find little to no effect of the EO on the number of noncitizen accessions. However, this overall null effect masks significant heterogeneity across services and demographic characteristics of recruits. Specifically, we find evidence that the EO may have incentivized noncitizen recruits to join some of the less combat intensive services such as the Air Force and Coast Guard and discouraged them from joining the Marines, commonly known to be the most combat intensive service. Furthermore, we find that EO 13269 had a positive and significant effect on the number of highly educated noncitizen accessions and a negative, non-significant effect on less educated noncitizen accessions. There appears to be no difference in the effect of the EO on male and female noncitizen accessions. Finally, we find some evidence that the EO may have had a differential effect on the number of noncitizen accessions depending upon race.

This article adds to the literature on recruiting incentives. This literature has largely focused on pay bonuses and other monetary incentives (or disincentives) not related to expediting citizenship status (Goldberg and Warner, 1982; Dertouzos, 1985; Polich 1986; Warner and Asch, 1995; Warner et al., 2001; Hansen and Wenger, 2002, 2005; Hosek and Totten, 2002; Hogan *et al.*, 2005; Simon and Warner, 2007, 2009, 2010; Hosek and Martorell, 2009; Asch *et al.*, 2010; Simon *et al.*, 2010).

In a related article on the effect of information on accessions, Christensen (2011) finds that increases in causalities in a county leads to lower enlistments from that county. Two research reports have documented the characteristics and outcomes of noncitizens in the US military (Hattiangadi *et al.*, 2005; McIntosh *et al.*, 2011). However, to our knowledge, this is the first study to empirically estimate the effect of EO 13269 on noncitizen accessions in the US military.

The remainder of this article proceeds as follows. Section II provides institutional details about the process for obtaining US citizenship and EO 13269. Section III describes our data, Section IV outlines the identification strategy, Section V presents results and Section VI concludes.

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[1] We describe the calculation of these figures in detail in Section III.

II. Institutional Details

The process for attaining US citizenship

The most common paths to obtain US citizenship for foreign nationals are through family sponsorship and military service (US Citizenship and Immigration Services, 2011a). The Department of Homeland Security (DHS, 2011) oversees the application process. In 2010, DHS granted US citizenship to a total of 619,913 foreign nationals (Lee, 2011). A typical foreign national applying for US citizenship must meet several DHS requirements. The requirements include the following: being at least 18 years of age; holding a green card for at least 5 years; being able to read, write and speak the English language; being able to demonstrate a basic knowledge of US government and history; having continuous residence in the United States from the date of application until the time of naturalization and being a person of good moral character.

Foreign nationals often encounter delays in their quest for US citizenship, which is mainly due to the limited number of green cards that DHS issues per year.[2] US law, for example, caps the number of family-sponsored green cards at 480,000 per year (Immigration and Nationality Act, 2011b). Similarly, US law permits a maximum of 140,000 employment-sponsored green cards, plus any unused family-sponsored applicants from the previous year (Immigration and Nationality Act, 2011b). For example, there were 10,657 unused family-sponsored applicants from 2009, so 150,657 employment-sponsored green cards were available in 2010. Immediate relatives of US citizens (spouses and children, including orphans adopted abroad of US citizens and parents of adult US citizens aged 21 and over) are not subject to the family-sponsored cap of 480,000 green cards (Monger and Jankay, 2011). According to DHS figures, sponsorship by immediate relatives accounted for 46% of the 1 042 625 green cards issued in fiscal year 2010 (Monger and Jankay, 2011). In the vast majority of cases, DHS may not issue green cards for US military service.[3] Permanent residents must first obtain a green card through employment, family or humanitarian means before applying for US military service.

Following the receipt of a green card, foreign nationals applying for citizenship generally have the same requirements as all applicants: the major difference across applicants is the duration of the DHS-regulated waiting period. Specifically, employment-sponsored permanent residents must wait the full mandated 5 years, whereas individuals who are married to US citizens only have to wait 3 years to be eligible for US citizenship application (Lee, 2011). Other family member-sponsored applicants (such as sibling-sponsored applicants) usually have to wait 5 years.

The entire timeline for obtaining US citizenship, which includes the time to receive an initial green card, the 5-year waiting period and the final citizenship application process, can take decades to complete. The length of time to receive citizenship depends largely on the type of applicant and the eligibility requirements in place. Generally speaking, a family-sponsored applicant will wait about 17 years to become a US citizen, whereas the process for an employer-sponsored applicant takes roughly 8 years. The time to receive US citizenship for permanent residents serving in the military is similar to that of their civilian counterparts; DHS, however, does not require those serving in the US military to wait for the mandatory 5 years as described in E O 13269.

Executive order 13269

Prior to EO 13269, which became effective on 3 July 2002, permanent residents having served honourably at any time in the Armed Forces of the United States for at least 3 years were eligible to apply for US citizenship, in accordance with Sections 328 and 329 of the 1952 Immigration and Nationality Act (INA). EO 13269 modified this act to immediately make military members eligible to apply for citizenship after just 1 day of service.

Service members must still meet the other DHS requirements for citizenship, such as having the ability to read, write and speak the English language as well as having a basic knowledge of US government and history. Additionally, the EO did not change the naturalization process for military personnel's family members; DHS still requires military family members to go through the same process prior to the law change. The US president will determine the termination of the EO at a later date; currently, it is still in effect.

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[2] Foreign nationals may obtain green cards through a number of channels, including family sponsorship, employment and humanitarian means (e.g., being a victim of human trafficking, a refugee or an informant) (US Citizenship and Immigration Services, 2011b). The processing time varies greatly depending on the type of applicant. In general, however, family-sponsored green cards take about 11 years to process, whereas employer-sponsored green cards take roughly 2 years (US Department of State, 2011). According to 2010 DHS figures, after receiving their green cards foreign nationals applying for US citizenship spend a median of 6 years waiting for the completion of the citizenship application process (Lee, 2011).

[3] In 2009, the US Department of Defense (DoD) implemented a limited pilot programme involving 1000 recruits, which allowed nongreen card holders to join the US military in order to cover shortages in mission critical areas, such as medical care and language interpretation (Gilmore, 2008).

III. Data

Our data come from the US military's personnel database, stored at the Defense Manpower Data Center (DMDC). It contains the monthly aggregate numbers of accessions by both citizens and noncitizens, for all branches of the military and in various demographic categories. Specifically, we observe two observations per month – one for citizens and one for noncitizens – for the following variables: the total number of accessions to the military; the number of accessions to the Army, Navy, Air Force, Marine Corps and the Coast Guard; the number of accessions who are White, Black, Hispanic and of an 'other' race (i.e., not White, Black or Hispanic); the number of male and female accessions; and the number of accessions who had a high school diploma or less education and the number of accessions who were college attendees or had more education.[4]

Our data start in October 1999, the first month in which the citizenship of new accessions was recorded, and end in June 2010, the latest date for which data is available. Table 1 contains information on the monthly accession variables we use in our analysis, by citizenship status, pre- and post-EO 13269. Columns 1 and 4 summarize mean monthly accessions for citizens before and after the EO, while columns 2 and 5 summarize mean monthly accessions for noncitizens. Columns 3 and 6 show the number of noncitizen accessions as a percentage of the total number of accessions. It is immediately clear that far fewer noncitizens join the military than do citizens; for example, only 3.6% of all accessions in the post-EO period were by noncitizens.

The Army draws the most number of enlistees, amongst both citizens and noncitizens, followed by the Navy. Amongst noncitizens, the Marine Corps

Table 1. Summary statistics. Means of variables pre- and post-EO 13269, for citizens and noncitizens

	Pre-executive order			Post-executive order		
	Citizen	Noncitizen	(2)/[(1) + (2)]	Citizen	Noncitizen	(5)/[(4) + (5)]
	(1)	(2)	(3)	(4)	(5)	(6)
Total monthly accessions	15 459.2	688.0	0.043	14 566.5	546.6	0.036
	(4773.1)	(222.2)		(3851.4)	(159.1)	
Monthly accessions in subcategories:						
Army	5950.0	255.7	0.041	6143.5	235.5	0.037
	(2530.7)	(115.6)		(2162.4)	(95.7)	
Navy	3904.3	220.9	0.054	2997.6	154.0	0.049
	(1229.3)	(80.9)		(899.7)	(53.3)	
Air Force	2885.4	78.5	0.026	2484.2	52.6	0.021
	(599.7)	(20.2)		(598.7)	(18.7)	
Marine Corps	2370.3	128.9	0.052	2635.9	98.5	0.036
	(869.3)	(46.1)		(1006.3)	(38.1)	
Coast Guard	349.2	4.0	0.011	305.3	5.9	0.019
	(125.8)	(1.7)		(88.5)	(3.3)	
Whites	10 343.8	83.4	0.008	9552.3	72.9	0.008
	(3105.7)	(28.2)		(2568.7)	(22.4)	
Blacks	2824.9	156.7	0.053	1988.1	105.6	0.050
	(1058.0)	(47.9)		(555.5)	(30.8)	
Hispanics	1511.8	252.9	0.143	1812.1	206.8	0.102
	(496.8)	(99.4)		(521.9)	(71.7)	
Other races	778.8	195.0	0.200	1214.0	161.3	0.117
	(206.1)	(55.8)		(381.5)	(51.4)	
Males	12 711.1	554.1	0.042	12 227.0	443.3	0.035
	(3933.2)	(184.1)		(3253.7)	(131.8)	
Females	2748.1	133.8	0.046	2339.4	103.3	0.042
	(859.3)	(41.7)		(620.6)	(31.0)	
High school graduates or less education	14 157.8	619.2	0.042	12 941.8	442.4	0.033
	(4626.4)	(213.5)		(3557.2)	(142.4)	

(*continued*)

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[4] US nationals are defined as noncitizens in this database (see 8 U.S.C. Section 1408 (INA, 1996, Section 1408)), and they are eligible for expedited citizenship under Executive Order (EO) 13269.

Table 1. Continued

	Pre-executive order			Post-executive order		
	Citizen	Noncitizen	(2)/[(1) + (2)]	Citizen	Noncitizen	(5)/[(4) + (5)]
	(1)	(2)	(3)	(4)	(5)	(6)
College attendees or more education	719.1 (249.5)	40.8 (16.3)	0.054	842.4 (216.7)	64.5 (32.3)	0.071
Eligible military population	26 823 609.8 (255 256.4)	2 335 966.9 (152 245.2)	0.080	29 399 898.4 (1 724 775.4)	2 513 564.5 (65 617.5)	0.079
Observations	33	33		96	96	

Notes: (1) Data come from the Defense Manpower Data Center (DMDC) and is defined at the month-citizenship level. SDs in parentheses.
(2) EO 13269 was signed into law on 3 July 2002; post-EO is defined as July 2002 forward.
(3) The military-eligible population varies at the year-citizenship level; it is calculated from CPS data and is defined as the number of 18–29-year olds residing in the US with a high school degree or more education who are in the labour force and are not currently in the military.

draws more enlistees than does the Air Force in both the pre- and post-EO periods. A very small percentage of total accessions are to the Coast Guard, comprising an average of 2.1% of the total accessions for citizens and 1.1% of the total accessions for noncitizens in the post-EO period.

Roughly two-thirds of citizen enlistees are White in both the pre- and post-EO periods, followed in descending prevalence by Blacks, Hispanics and other races. Amongst noncitizens, Whites are the least prevalent race in both the pre- and post-EO periods, perhaps not surprisingly given recent trends in immigration to the US. Rather, Hispanics are the most prevalent amongst noncitizen enlistees, followed by other races and then Blacks. The vast majority of both citizen and noncitizen enlistees are male and do not have more than a high school education.

In order to estimate the effect of the EO on the likelihood of enlisting, we normalize the number of accessions with estimates of the military-eligible population amongst both citizens and noncitizens. While it is not clear as to what the precise military-eligible population is, we follow Hattiangadi *et al*. (2005) in defining 18–29-year olds residing in the United States with a high school degree or more education who are in the labour force and

there were, on average, 26.8 million eligible citizens and 2.3 million eligible noncitizens living in the United States per month prior to July 2002. On average, 0.06% of eligible citizens and 0.03% of eligible noncitizens accessed into the US military per month prior to the EO. We note that all of our results below are robust to various other definitions of the military-eligible populations (results available upon request).

Figure 1 plots the numbers of accessions per month by citizens and noncitizens over the time period of our study; noncitizen accessions are labelled with the vertical axis on the left and citizen accessions are labelled with the vertical axis on the right. It is clear to see that there is seasonality associated with accessions, with large increases in the summer months (after high school graduation) and large decreases in the winter. In our empirical specification below, we control for this seasonality with month fixed effects (FE).

IV. Identification Strategy

We estimate the effect of the EO on accessions into the military by noncitizens with a standard DD model:

$$\left(\frac{Accessions}{Eligible\ population\ in\ millions}\right)_{it} = \beta_0 + \beta_1 NonCitizen_i + \beta_2 POST_t + \beta_3 (NonCitizen * POST)_{it} + \delta Time_t + \gamma (Time * POST)_t + \mu_t + \varepsilon_{it} \tag{1}$$

are not currently in the military as military eligible. We estimate this population using the Current Population Survey (CPS); unfortunately, monthly data is not available and thus our measure varies at the year-citizenship level. Using this measure of the military-eligible population,

where i indexes citizenship status (citizens or noncitizens), t indexes the year-month, $\left(\frac{Accessions}{Eligible\ population\ in\ millions}\right)_{it}$ is the number of accessions in group i divided by its population base in millions in the United States in year t, $NonCitizen_i$ is an indicator for noncitizen accessions, $POST_t$ is an
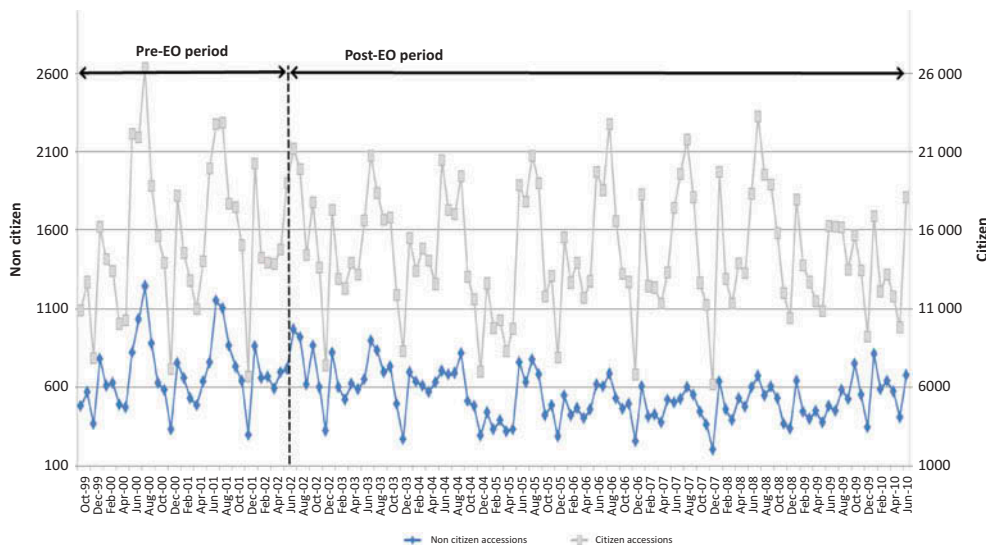
Fig. 1.   Accessions amongst citizens and noncitizens, pre- and post-EO 13269

indicator equal to one for observations in July 2002 and later (after the EO date), $Time_t$ is a linear time trend and μ_t is a vector of month FE. We express the eligible population in millions for ease of interpretation of the estimated coefficients.

The coefficient of interest is β_3. Under the assumptions that (i) the EO did not have any effect on citizen accessions and (ii) there are no time-varying factors other than the EO that differentially affect noncitizens and citizens, β_3 identifies the effect of EO 13269 on monthly noncitizen accessions as a fraction of the eligible population (in millions). For example, $\beta_3 > 0$ implies that the EO increased noncitizen accessions relative to citizen accessions. In our preferred specification, we include month FE to control for the seasonality in accessions to the military (and other common shocks over time), as well as pre-and post-EO 13269 linear time trends that control for differential trends in the number of accessions before and after the EO.[5]

The expected sign of β_3 is ambiguous, given that there are different channels through which the EO can affect one's likelihood to join the military. One theory suggests that β_3 is positive. Predicated on the fact that becoming a US citizen has positive lifetime utility, the reduction in the costs of becoming a citizen (i.e., a reduced waiting time) will induce noncitizens to join the military. On the other hand, there is certainly information content in the EO. It is possible that this overt inducement to join the military may be interpreted as a signal that more soldiers and sailors are needed and that noncitizens (relative to citizens) may view the EO as a signal of an increase in the possibility of going into combat and/or combat exposure. Previous EOs such

as 13269 for non-US citizen military personnel in World War I, World War II, Korea, Vietnam and the Persian Gulf War (Immigration and Nationality Act, 2011a) have been implemented during times of increasing tensions throughout conflicts and may be viewed as a harbinger for heightened combat activities. If the EO is viewed as a negative signal for things to come, then it is possible that it could act as a deterrent for potential noncitizen recruits.

It is possible that potential citizen recruits may also see informational content in the EO. If this were the case, then we would expect to see a shift in their behaviour as well. Conversations with military recruiters, however, lead us to believe (as one would likely suspect) that recruiters did not discuss the new citizenship benefits with citizens, as they do not receive any benefits from the order. Furthermore, informal discussions with citizen service members suggest that citizen recruits were unaware of the expedited citizenship policy at the time of their enlistment. It is unlikely, therefore, that the EO impacted citizen accessions in the manner previously described. However, if one believes that the information content from the EO increased the number of citizen accessions, then our estimates would understate the effect of the EO on noncitizen accessions. On the other hand, if one believes that the EO decreased citizen accessions, then our estimates would overstate its effect on noncitizen accessions.

Finally, our DD identification strategy relies on there being no other policies differentially affecting noncitizen accessions that take place at the same as EO 13269. For instance, if the US military decided to increase monetary bonuses for non-US citizen recruits starting around the

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[5] Of note, in regressions not shown, we find no statistically significant difference in the linear trends of citizen and noncitizen accessions prior to implementation of the EO.

same time as EO, then our estimates would not isolate the independent effect of the EO. We find no evidence in the literature or through personal discussions with recruiters that there were any other policies that changed at the same time as the EO and would have differential effects on foreign nationals in comparison to US citizens. Furthermore, any recruitment policies that affected both US citizens and noncitizens would not bias our results, as the effects of such a policy are absorbed by the inclusion of time FE.

V. Results

Total accessions

We first explore the effect of expedited citizenship on total accessions to the military and later explore the heterogeneous effects on various subgroups in the population. Table 2 contains a series of estimates of Equation 1, testing the robustness of the inclusion of various time controls. As noted above, the denominator in Equation 1 is expressed in millions to make the results easier to read. Column 1 contains no time controls and shows that the effect of EO 13269 on noncitizen accessions is an insignificant increase of 0.000229 precentage points in the proportion of eligible noncitizens joining the military. This represents an increase of about 1% of the pre-EO accession rate of noncitizens (which was 0.03% of the eligible population).

Given the large SE of the estimate, we cannot reject the hypothesis that EO 13269 had no effect on total noncitizen accessions into the US military.

Column 2 includes separate linear time trends pre- and post-EO 13269, column 3 includes month FE to control for the seasonality of recruiting into the military, and column 4 includes both the time trends and the month FE. Comparing across columns, it is clear that the inclusion of time controls shrinks the SEs of the main effect but does not, as expected, change the point estimate, as the time controls do not vary with citizenship status. Even our preferred estimate in column 4, with the tightest SEs, does not signal a significant change in the proportion of noncitizen recruits into the military as a result of the offer of expedited citizenship.

Heterogeneous effects

The overall null effect of the policy shown in Table 2 masks considerable heterogeneity in who is joining the military and to which branches. Table 3 separates accessions by the five branches of service: Army, Navy, Air Force, Marine Corps and Coast Guard. All of the regressions control for month FE and pre- and post-EO time trends. The outcome variable for this table is the monthly number of accessions to a specific service divided by the eligible military population (in millions) in that year. Ideally, this denominator would vary with the eligibility requirements of the different services; for example, the

Table 2. The effect of Executive Order 13269 on accessions by non citizens into the US military

Outcome =	Total monthly accessions/(eligible population (in millions))	Total monthly accessions/(eligible population (in millions))	Total monthly accessions/(eligible population (in millions))	Total monthly accessions/(eligible population (in millions))
	(1)	(2)	(3)	(4)
Noncitizen × POST	2.291	2.291	2.291	2.291
	(38.32)	(21.35)	(38.05)	(21.06)
POST	−79.30**	−89.73***	33.02	1.883
	(33.83)	(18.81)	(51.34)	(32.22)
Noncitizen	−281.6***	−281.6***	−281.6***	−281.6***
	(35.07)	(18.71)	(35.00)	(18.72)
Constant	576.6***	652.8***	549.3***	628.9***
	(30.82)	(21.31)	(43.60)	(29.41)
Year-month fixed effects			Yes	Yes
Pre- and post-EO linear time trends		Yes		Yes
Observations	258	258	258	258
R^2	0.606	0.856	0.625	0.869

Notes: *** $p < 0.01$, ** $p < 0.05$.
(1) Column 4 estimates Equation 1 (see text). Columns 1 through 3 estimate Equation 1 as well, but sequentially exclude the year-month fixed effects and the pre- and post-EO linear time trends. Robust SEs in parentheses.
(2) POST equals one for months after and including July 2002, the month in which EO 13269 was signed into law.
(3) The military-eligible population varies at the year-citizenship level; it is calculated from CPS data and is defined as the number of 18–29-year olds residing in the US with a high school degree or more education who are in the labour force and are not currently in the military.

Table 3. Effects of Executive Order 13269 by branch of service

Outcome = Montly accessions to the .../(Eligible population (in millions))	Army	Navy	Air Force	Marines	Coast Guard
	(1)	(2)	(3)	(4)	(5)
Noncitizen × POST	−2.654	9.557	9.879**	−17.69***	3.201***
	(12.15)	(6.052)	(4.147)	(3.396)	(0.748)
POST	10.17	−25.68***	4.372	12.88***	0.141
	(19.35)	(8.148)	(6.780)	(4.516)	(1.168)
Noncitizen	−112.6***	−50.71***	−73.91***	−32.99***	−11.30***
	(10.59)	(5.419)	(3.472)	(2.663)	(0.684)
Constant	218.7***	183.0***	102.9***	110.3***	13.95***
	(17.34)	(8.652)	(5.382)	(4.943)	(1.381)
Observations	258	258	258	258	258
R^2	0.778	0.797	0.850	0.860	0.824

Notes: ***$p < 0.01$, **$p < 0.05$.
(1) Robust SEs in parentheses. All regressions include year-month fixed effects and pre- and post-Executive Order linear time trends.
(2) POST equals one for months after including July 2002, the month in which EO 13269 was signed into law.
(3) The military-eligible population varies at the year-citizenship level; it is calculated from CPS data and is defined as the number of 18–29-year olds residing in the US with a high school degree or more education who are in the labour fore and are not currently in the military.

education requirement is higher in the Air Force and the physical requirement is higher in the Marines than other services and the eligible population could be adjusted to reflect these differences. However, the CPS does not contain enough detail, and the eligibility requirements are not precise enough to make such a calculation practical.

The effect of EO 13269 on accessions into the Army and the Navy are insignificantly different from zero; however, the point estimates are of opposite signs, with a decrease in accessions in the Army and an increase in the Navy. Interestingly, there are strong and significant effects for the Air Force, Marines and Coast Guard: accession rates amongst non-citizens increased by 0.000988 percentage points for the Air Force, increased by 0.000320 percentage points for the Coast Guard and decreased by 0.00177 percentage points for the Marines. A clear pattern emerges from these results: the EO seems to have increased accessions into the noncombat intensive services (the Navy, Air Force and Coast Guard) while decreasing accessions into combat intensive services (the Army and Marines).

These results are consistent with a signalling component in the EO for noncitizens: the increased need for recruits prompted an inducement for a specific group (noncitizens) and also coincides with the time period of increased combat intensity for ground forces, the Army and Marines. We cannot, however, tell whether the EO induced switching between services amongst noncitizens who would have joined anyway, or whether those induced to join the less combat intensive branches were different from those induced to join the more combat intensive branches.

We observe more of these differential effects when looking at accessions by members of different racial/ethnic groups, males versus females and those with more education versus less education, as shown in Table 4. The outcome is again the monthly accessions amongst each group divided by the eligible population in millions. Again as before, the CPS does not allow us to identify the eligible population amongst each specific demographic group, and we continue to normalize by the eligible population that varies at the year-citizenship level. Looking at columns 1 through 4, we see that there are strong and opposite effects of the EO for accessions by White and Black noncitizens compared to Hispanic noncitizens and noncitizens of other races. For example, White noncitizen accessions as a percentage of the eligible population increase by 0.00528 percentage points, while the ratio for Hispanic accessions decreases by 0.00311 percentage points.

Columns 5 and 6 of Table 4 show that there are small and insignificant effects of expedited citizenship on male and female noncitizens; however, the point estimates are consistent with a story in which males know that they have a much higher chance than females of being placed in combat intensive positions. Finally, columns 7 and 8 show the effect of the EO for noncitizens with different levels of education. There is a small negative and insignificant effect on those with a high school degree or less. For those who have attended any college of more education, there is a significant effect of 0.000659 percentage points. Again, these results are consistent with the fact that the more educated are more likely to take skilled jobs that are not on the front lines, leaving the combat intensive jobs, such as infantry in the Army or Marine Corps, to the less educated.

Table 4. Effects of Executive Order 13269 by race, gender and level of education

Outcome = Montly accessions to the .../(Eligible population (in millions))	Whites	Blacks	Hispanics	Other races	Males	Females	High school or less	College attendees or more
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Noncitizen × POST	52.78***	12.09**	–31.08***	–31.50***	–4.001	6.286	–3.539	6.591***
	(16.13)	(5.634)	(5.076)	(3.625)	(17.20)	(4.235)	(20.38)	(1.709)
POST	4.708	–38.89***	22.83***	13.23***	12.86	–10.98*	5.282	0.243
	(23.28)	(8.854)	(5.555)	(4.574)	(26.08)	(6.524)	(31.22)	(2.830)
Noncitizen	–350.2***	–37.91***	51.96***	54.64***	–236.6***	–45.00***	–262.2***	–8.539***
	(14.46)	(5.295)	(4.575)	(2.986)	(15.16)	(3.858)	(18.45)	(1.124)
Constant	395.1***	123.6***	69.32***	40.89***	515.4***	113.5***	586.2***	20.95***
	(20.72)	(7.893)	(5.069)	(4.056)	(23.98)	(5.794)	(29.13)	(1.626)
Observations	258	258	258	258	258	258	258	258
R^2	0.914	0.728	0.748	0.707	0.873	0.820	0.876	0.453

Notes: ***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.
(1) Robust SEs in parentheses. All regressions include year-month fixed effects and pre- and post-Executive Order linear time trends.
(2) POST equals one for months after and including July 2002, the month in which EO 13269 was signed into law.
(3) The military-eligible population varies at the year-citizenship level; it is calculated from CPS data and is defined as the number of 18–29-year olds residing in the US with a high school degree or more education who are in the labour force and are not currently in the military.

Robustness checks

It is possible that the 11 September 2001 attacks may have differentially affected the propensity to serve between citizen and noncitizen recruits (see, for example, Asch *et al*., 2007, p. 1085). As suggested by Asch *et al*. (2009), these effects may vary by race, which, if there are differences in the racial composition of citizens and noncitizens, might drive some of the heterogeneous effects by race seen in Table 4. One way to investigate these issues with our data is to include in Equation 1 a 9/11 'treatment' in addition to the EO 'treatment'; that is, to include an indicator for the 9/11 to July 2002 period (the date the EO was signed) and study the interaction between this indicator and noncitizen. In doing so, we find no statistically significant coefficients on the noncitizen cross 9/11 interaction, for any of the racial groups, while the EO cross noncitizen interactions remain very similar to those in Table 4. These results suggest that the racial composition of the treatment and control groups are not driving the results as one might suspect.

Furthermore, the Afghanistan campaign also may have differentially affected the propensity of citizens and noncitizens to serve. However, the Afghanistan campaign began only one month after 9/11, so it is hard to separately address the effect of Afghanistan from 9/11. In fact, when we run the specification described above to explore the effect of 9/11, but move the 'treatment' to October 2001 (the month the Afghanistan campaign began), we (not surprisingly) find very similar results as for the 9/11 'treatment'.

VI. Conclusion

In this article, we have provided the first empirical estimates of the effect of offering expedited citizenship to noncitizens who join the US military. We study EO 13269, which decreased the waiting time to apply for citizenship from 3 years to 1 day upon joining the military, and find that it had no significant effect on the overall number of noncitizen accessions as a percentage of the military-eligible population.

However, this null effect masks important and significant heterogeneity in the effect of the EO across accessions into various service branches. Specifically, the EO appears to have induced fewer accessions by noncitizens into combat intensive services and more accessions into the 'safer', less combat intensive services. In addition, we find differential effects of the policy across races and levels of education including evidence that the EO induced more accessions by White and Black noncitizens, fewer accessions by noncitizen Hispanics and other races and more accessions by noncitizens with a college education. These results are consistent with the theory that the EO (overtly) signalled an increased demand for noncitizens in the military, while (perhaps less overtly) signalling that these noncitizens would be placed in combat intensive situations.

While there is certainly a moral argument to be made for the expedited citizenship of permanent residents in the US military, it does not appear that the EO had any noticeable effect on overall noncitizen accessions. These results

suggest that if the government would like to induce more noncitizens into service, then it will likely have to provide larger benefits in terms of monetary compensation or possibly even consider offering more nontraditional benefits such as those discussed in the DREAM Act, which would allow nonpermanent residents to enlist.

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