



# The importance of race, gender, and religion in naturalization adjudication in the United States

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**This study presents an empirical investigation of naturalization adjudication in the United States using new administrative data on naturalization applications decided by the US Citizenship and Immigration Services between October 2014 and March 2018. We find significant group disparities in naturalization approvals based on applicants' race/ethnicity, gender, and religion, controlling for individual applicant characteristics, adjudication years, and variation between field offices. Non-White applicants and Hispanic applicants are less likely to be approved than non-Hispanic White applicants, male applicants are less likely to be approved than female applicants, and applicants from Muslim-majority countries are less likely to be approved than applicants from other countries. In addition, race/ethnicity, gender, and religion interact to produce a certain group hierarchy in naturalization approvals. For example, the probability of approval for Black males is 5 percentage points smaller than that of White females. The probability of approval for Blacks from Muslim-majority countries is 9 percentage points smaller than that of Whites from other countries. The probability of approval for females from Muslim-majority countries is 6 percentage points smaller than that of females from other countries. This study contributes to our understanding of the nature of inequalities present in agency decision-making in the naturalization process.**

citizenship | naturalization | immigration law | agency decision-making | inequality

Naturalization—the acquisition of US citizenship—grants immigrants a host of new rights, privileges, and opportunities. It also protects them from deportation, which the US Supreme Court has recognized as “a drastic measure” that can constitute “the equivalent of banishment or exile” (1). Because of its critical importance in shaping the life chances and outcomes for immigrants and their family members, a large body of research exists on naturalization in the United States. This literature has focused on such issues as who is willing to naturalize and why, barriers to seeking naturalization, and the impact of obtaining citizenship on the social, economic, and political integration of immigrants (2–5). However, we still know relatively little about government determinations of who is approved or denied once a naturalization application is submitted to the US Citizenship and Immigration Services (USCIS). This lack of knowledge represents an important gap in our understanding of the naturalization process given that not all immigrants who seek naturalization are granted citizenship. In 2015, for example, 9.4% of nonmilitary applications resulted in denial, which increased to 10.3% in 2016 (6).<sup>\*</sup> Behind these statistics are tens of thousands of individuals. For example, in 2015, 75,117 total applications were denied naturalization, which increased to 85,364 in 2016 (6).

Yet, the agency decision-making component of the naturalization process has escaped public and scholarly scrutiny largely because of a lack of publicly available data. This study draws on new administrative data obtained from the USCIS through a Freedom of Information Act (FOIA) litigation to examine whether there are group disparities by race/ethnicity, gender, and religion in the likelihood of approval among nonmilitary applications.<sup>†</sup>

Race/ethnicity and gender are two principal axes of inequality in many aspects of American life (7). Of immediate relevance to this study, race/ethnicity and gender have long served as enduring bases of exclusion for citizenship in the United States (8–11). For example, the first US citizenship statute, the Naturalization Act of 1790, limited naturalization to “free White” persons (12). In 1870, the law was amended to grant naturalization rights to persons of “African nativity and ... descent” but continued to deny the right to all other groups of non-Whites. Racial restrictions were lifted for selected groups in the 20th century (12). Beginning in 1855 and for decades thereafter, a married woman’s citizenship status followed that of her husband’s (13). Among other things, this meant that an American woman who married a noncitizen could lose her US citizenship, and an immigrant woman could not become a US citizen unless her noncitizen husband naturalized (14, 15). It was not until 1952 that Congress legally prohibited denials of naturalization on the basis of race, sex, or marital status (9).

Religion has also functioned as an important axis of inequality in the history and politics of American citizenship. In particular, the treatment of Muslims or individuals perceived as Muslim warrants special scrutiny. Until 1944, judges in naturalization cases generally treated Islam as defining an ethno-racial

## Significance

**This study examines group disparities in naturalization approvals by race/ethnicity, gender, and religion. We find that all else being equal, non-White applicants and Hispanic applicants are less likely to be approved than non-Hispanic White applicants, male applicants are less likely to be approved than female applicants, and applicants from Muslim-majority countries are less likely to be approved than applicants from other countries. In addition, we find that race/ethnicity, gender, and religion combine to produce a certain group hierarchy in terms of approval probabilities. For example, Blacks from Muslim-majority countries are much less likely to be approved than Whites from other countries. These findings underscore the continuing importance of race, gender, and religion in the making of US citizens.**

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<sup>\*</sup>Consistent with USCIS reporting practices, all references to “year” in this article are to fiscal year. A given fiscal year begins on October 1 of the preceding calendar year and ends on September 30 of the subsequent calendar year.

<sup>†</sup>Naturalization through military service is beyond the scope of this study, as the requirements and process differ for applicants who are serving or have served in the US armed forces. Delays in adjudication is a topic that we address in a separate study.

identity, and Muslims were presumed to be non-White, rendering them ineligible for naturalization (16). In contrast, Christianity functioned as a hallmark of Whiteness, and the presumption of non-Whiteness against Muslims could be overcome only if the presiding judge could be persuaded that they were bona fide Christians. This judicial interpretation was eventually invalidated, but Muslims have faced renewed challenges to attaining US citizenship in the post-9/11 era. For example, in 2008, USCIS created a clandestine program known as the Controlled Application Review and Resolution Program (CARRP) for the purposes of identifying, screening, and adjudicating applications for immigrant benefits—including naturalization—from individuals considered a “national security concern” (17). Class-action litigation challenging CARRP has revealed that it disproportionately and unjustifiably affects Muslims and individuals from Muslim-majority countries (18).

Formal legal restrictions based on race/ethnicity, gender, and religion no longer govern eligibility for naturalization in the United States. Moreover, Congress has established a uniform rule of naturalization as required by the US Constitution (19). Nonetheless—or perhaps especially given this context—whether and to what extent de facto agency decision-making results in disparities along these axes remains an important unanswered question. Research on contemporary immigration enforcement suggests that facially neutral immigration laws continue to create or reproduce systems of social stratification. For example, studies have long documented how the purportedly color-blind US immigration enforcement regime subjugates Latinos and other racialized communities of color (20, 21). Golash-Boza and Hondagneu-Sotelo have described the modern deportation regime in the United States as a “gendered racial removal program” that disproportionately targets working-class men from Latin America and the Caribbean (22). Hernández has shown how contemporary immigration detention practices function as “institutionalized racism” against immigrants of color and Muslim immigrants (23).

Furthermore, studies of intersectionality suggest that these social categories do not operate in isolation to produce social stratification (24, 25). Instead, they work in overlapping and mutually constitutive ways to generate complex social inequalities (26). For example, a growing number of studies highlight the importance of understanding how American racism and Islamophobia generate a “racial-religious hierarchy” (27), one that subjects Muslims to combined effects of both racial and religious prejudice (28). According to Corbin, the prevailing narrative is that “terrorists are always (brown) Muslims ... [but] ... white people are never terrorists” (29). Other scholars have emphasized the importance of examining oppression or marginalization stemming from intersectionality of Muslim and gender identities (30–32). Studies show that Muslim women have experienced unique forms of post-9/11 discrimination owing to their wearing of hijab, which visibly marks them as dual threats—as a group assumed to support “misogyny and antifeminist values that are viewed as inherently un-American” (33) and “sympathetic to the enemy, presumptively disloyal, and forever foreign” (34).

The foregoing discussion of existing research suggests that race/ethnicity, gender, and religious identities (and their intersections) of naturalization applicants may play an important role in producing similar social hierarchies in naturalization adjudication outcomes as those identified in extant research on immigration enforcement and studies of intersectionality. The replication of such social hierarchies in the naturalization adjudication context is especially likely if USCIS operates in practice primarily as a vetting agency focused on immigration enforcement and national security priorities rather than as a benefits agency that serves integration needs of immigrant communities (35).

A brief overview of the naturalization process and requirements is in order to set the context for our empirical analysis. As shown in *SI Appendix, Fig. S1*, an aspiring noncitizen begins the process by filing an application called Form N-400 with one of the USCIS field offices located throughout the United States (*SI Appendix, Fig. S2*). High application fees prevent many low-income immigrants from filing even if they desire naturalization (3). The detailed information solicited on the N-400 form and its length (~20 pages) reflects increasing agency concerns about the integrity of the naturalization process (19). To be eligible to naturalize, in most cases, a noncitizen must have been a lawful permanent resident for a specified period of time, be of at least 18 y old, demonstrate a required knowledge of English and of US history and government, and be of “good moral character” (36). Once an application is filed, USCIS conducts an investigation of the applicant, including a criminal background check. USCIS will also conduct an interview during which an immigration officer will administer an oral examination that tests the applicant’s English literacy and civics knowledge. Failure to satisfy all of these requirements will result in the application being denied.<sup>‡</sup> For some noncitizens, denial means exclusion from the benefits of citizenship, while for others, denial can have more devastating consequences, including removal from the United States (19). The stakes are thus extraordinarily high for individual applicants and their families.

## Materials and Methods

The main source of data for this study is the set of administrative records on N-400 applications filed with USCIS (N-400 Data). The agency produced the N-400 Data in response to two requests filed by the first author in August 2018 and October 2019, respectively, under FOIA.<sup>§</sup> After exhausting administrative appeals, a legal complaint against USCIS was filed in the US District Court for the District of Columbia in July 2020. The data resulting from this litigation contains a variety of information from individual N-400 applications submitted to USCIS. We also collected information on the applicants’ places of residence (Applicant Contextual Data) by matching each applicant’s ZIP Code to their corresponding ZIP Code Tabulation Area (ZCTA). This step was necessary because ZIP Codes relate to mail delivery routes and do not map directly to spatial units (37). We then merged a variety of ZCTA-level information about the applicants’ places of residence from the American Community Survey.

Our analysis examines nonmilitary naturalization applications submitted by individuals 18 y or older that USCIS field offices in the United States adjudicated between the start of the first quarter of fiscal year 2015 (October 1, 2014) and the end of the second quarter of fiscal year 2018 (March 31, 2018). After cleaning the data and implementing listwise deletion, we analyze 2,687,101 nonmilitary applications adjudicated during the study period. For detailed information on our data collection, preparation, and coding strategy, see *SI Appendix, SI Appendix, Table S1* summarizes all of the variables described next. A replication package containing all data and code used in this study’s analysis are available online.

**Variables.** The outcome variable in our analysis is whether the N-400 application was approved or denied (0 = denied; 1 = approved). The study focuses on three key independent variables of interest. The first independent variable is “Race/Ethnicity,” which captures the applicant’s self-reported race/ethnicity on the N-400 form and has the following categories: Non-Hispanic White, Non-Hispanic Black, Non-Hispanic Asian Pacific Islander, Non-Hispanic Other,

<sup>‡</sup>The applicant can administratively appeal the decision by requesting a rehearing before a different immigration officer; a decision on administrative appeal affirming the application’s denial may be appealed to a federal district court. The appeal process is beyond the scope of this study, as the data that we analyze in this study does not contain information about appeals.

<sup>§</sup>The FOIA requests sought anonymized, individual-level data on every person who filed an application for naturalization with USCIS between September 13, 2003, and the data extraction date. The agency, however, claimed exemptions under FOIA on some of this information and represented that a variety of information submitted through the N-400 forms are not entered into their computerized databases. This study utilizes as much information as possible that we have been able to obtain through the FOIA litigation.

and Hispanic (of any race).<sup>4</sup> The treatment of Hispanic as a separate category is consistent with the increasingly dominant view of Hispanics as a separate racial group, though there is continuing debate about whether Hispanic is more appropriately characterized as an ethnic identity (38). For ease of reference, we use the following shorthand for the race/ethnicity categories: White, Black, Asian, Other, and Hispanic. The second independent variable is “Female,” which is an indicator for whether the applicant is female (0 = no; 1 = yes). The third independent variable is “Muslim-Majority Country,” which is an indicator for whether the applicant’s country of origin is a Muslim-majority country. Following the prevailing convention, we coded an origin country as a Muslim-majority country if more than 50% of the country’s population is Muslim; as of 2010, there were 49 such countries around the world (39).

Our regression models include the following control variables, each of which might confound the relationship between any given independent variable and the outcome of interest. The “Concentrated Disadvantage Index” (CDI) captures the degree of socioeconomic disadvantage associated with each applicant’s neighborhood (40). The N-400 Data does not contain a direct measure of applicants’ socioeconomic status, and therefore, we use CDI as a rough and albeit imperfect proxy for class status. We constructed this index measure using the Applicant Contextual Data (component variables are in *SI Appendix, Table S1*). The higher the CDI value, the greater the level of disadvantage. The index is centered such that the average CDI of all ZCTAs in the United States is zero. “Eligibility” indicates the applicant’s basis of eligibility for naturalization. “Marital Status” captures the applicant’s marital status. “Age” indicates the applicant’s age in years. “Has Children” is an indicator for whether the applicant has one or more (minor or adult) children. “English-Speaking Country” is an indicator for whether English is an official or dominant language in the applicant’s country of origin as indicated in the World Factbook (41). “Year” indicates the fiscal year in which USCIS adjudicated the application.

**Analytic Strategy.** First, we present univariate statistics on the variables described above. We then examine the results of a regression analysis that predicts approval. Given that the outcome of interest—whether the application was approved or not—is a binary variable, we conduct binary logistic regression analyses. We begin by examining a baseline model that contains only the independent variables of interest. We then add to that model all of the control variables discussed above to generate a full model. Both the baseline model and the full model control for year of adjudication and include field-office fixed effects that leverages only within-field-office variations. By including the year of adjudication, we control for changes that commonly affect all applications but vary over time. Field-office fixed effects allow us to address omitted variables bias by controlling for baseline differences between field offices.<sup>5</sup>

Next, we consider the possibility that the probability of approval might vary with combined characteristics of an applicant. We do so by examining logistic regression models containing two-way interactions between the independent variables of interest. These models include the following interaction terms: a) Female × Race/Ethnicity (Gender × Race Model), b) Muslim-Majority Country × Race/Ethnicity (Muslim × Race Model), and c) Muslim-Majority Country × Female (Muslim × Gender Model). Each of these logistic regression models is a field-office fixed effects model that includes all of the independent variables and control variables described earlier. We do not present regression coefficients or odds ratios from these models because coefficients and odds ratios in nonlinear models do not necessarily provide accurate information about the interaction effects of interest (42). Instead, we present adjusted predicted probabilities of approval for different subgroups and results of the tests of statistical significance of interaction effects.

Finally, we consider the possibility that “administrative closures” are effective denials. The USCIS Policy Manual describes administrative closure as follows: “An applicant abandons his or her application if he or she fails to appear for his or her initial naturalization examination without good cause and without notifying USCIS of the reason for non-appearance within 30 days of the scheduled appointment. In the absence of timely notification by the applicant, an officer may administratively close the application without making a decision on the merits” (43). In addition, an earlier study of naturalization treated what appeared to be administrative closures as effective denials based on evidence that the predecessor agency to USCIS, the Immigration and Naturalization Services, would convince applicants that they should withdraw their applications to avoid being formally denied (44). In a supplemental analysis, we thus examine whether our main analysis results are robust to the treatment of “administrative closures” as denials.

<sup>4</sup>The N-400 form uses the term “Hispanic or Latino.” We thus treat the two terms interchangeably and refer to this group simply as Hispanic in this article.

<sup>5</sup>In a separate study, we consider the extent, nature, and correlates of field-office variations in adjudication outcomes.

## Results

Table 1 presents univariate and bivariate statistics on all of the variables used in the analysis. As shown in Table 1, about 92% of all applications in the analytic sample were approved. About 18% of the applicants were White, about 31% were Asian, about 13% were Black, about 0.1% were Other, and Hispanics constituted about 38% of the sample. More than half of all the applicants were female (about 56%). About 12% of the sample originated from a Muslim-majority country. Sample statistics on the control variables provide a more in-depth portrayal of the overall population under study. The average CDI among applicants was 0.455, which indicates that overall, applicants in the sample resided in ZCTAs that were somewhat more disadvantaged than the average ZCTA in the United States. Most of the applicants (about 88%) satisfied the basic eligibility criteria for naturalization by having maintained lawful permanent residency in the United States for 5 y or more. A majority of the applicants were married (about 64%), and just under two-thirds of the applicants had children (about 65%).

The bivariate statistics in Table 1 suggest that certain racial/ethnic groups and applicants from Muslim-majority countries are overrepresented among those who were denied, whereas female applicants are underrepresented. These differences are generally reflected in the baseline model (Model 1a) results shown in Table 2. These results, however, do not adjust for demographic differences between groups that may be systematically related to varying odds of approval. For example, Whites are less likely to reside in socioeconomically disadvantaged communities than all other racial/ethnic groups (we find that Whites have the lowest average CDI score). Socioeconomic disadvantage, in turn, is associated with lower odds of approval. The full model (Model 1b of Table 2) partials out the shared explanatory power of these types of confounders.

Model 1b of Table 2 shows that all else being equal, the odds of approval are consistently smaller for non-White and Hispanic applicants than White applicants. For example, the odds of approval are about 41% smaller for Blacks compared to Whites [ $(1 - 0.591) \times 100$ ]. Table 2 also shows that male applicants are at a disadvantage compared to female applicants and so are applicants from Muslim-majority countries compared to applicants from other countries. Specifically, the odds of approval are about 18% larger for female than male applicants. For applicants from Muslim-majority countries, the odds of approval are about 43% smaller than those of their counterparts from other countries.

Next, we examine the results of a series of regression analyses that each include two-way interactions described earlier. *SI Appendix, Table S2* shows the statistics for model fit for the full model that was presented in Table 2 (see Model 1, “No Interaction Model,” in *SI Appendix, Table S2*) as well as for each of the interaction models (see Models 2 to 4 in *SI Appendix, Table S2*). The Akaike’s information criterion (AIC) and Bayesian information criterion (BIC) assess the overall fit of models. All else being equal, the smaller the AIC and the BIC, the better the model fit (45). The results summarized in *SI Appendix, Table S2* thus suggest that we should prefer the interaction models. The full set of adjusted predicted probabilities for each subgroup resulting from the interactions are shown in *SI Appendix, Tables S3–S5*. Consistent with the prevailing method for testing interaction effects in logistic models (42, 46), we estimated the adjusted predicted probabilities conditional on relevant subsamples (e.g., White, Black, Asian, Other, and Hispanic). For example, to calculate the “Muslim Gap” for Whites shown in *SI Appendix, Table S4*, which is the average marginal effect among Whites of originating from a Muslim-majority country, we estimated the difference in average predicted probabilities among Whites for when Muslim-Majority Country is set to 1 versus when Muslim-Majority Country is set to 0.

**Table 1. Descriptive statistics**

Variable	Total sample (n = 2,687,101)		Approved	
	Mean/proportion	SD (min/max)	No	Yes
Dependent variable				
Approved	0.918	(0, 1)	–	–
Independent variable				
Race/Ethnicity				
Non-Hispanic White	0.183	(0, 1)	0.144	0.186
Asian	0.310	(0, 1)	0.283	0.312
Black	0.131	(0, 1)	0.156	0.129
Other	0.001	(0, 1)	0.001	0.001
Hispanic	0.376	(0, 1)	0.417	0.372
Female	0.559	(0, 1)	0.530	0.562
Muslim-majority country	0.117	(0, 1)	0.152	0.114
Control variable				
CDI	0.455	0.914 (–1.677, 6.365)	0.726	0.431
Eligibility				
Lawful permanent resident for 5 y or more	0.876	(0, 1)	0.911	0.873
Married to US citizen and US resident for 3 y or more	0.124	(0, 1)	0.089	0.127
Other	0.000	(0, 1)	0.000	0.000
Marital status				
Single	0.215	(0, 1)	0.189	0.217
Divorced	0.042	(0, 1)	0.075	0.039
Married	0.643	(0, 1)	0.597	0.647
Widowed	0.098	(0, 1)	0.122	0.096
Other	0.002	(0, 1)	0.017	0.001
Has children	0.645	(0, 1)	0.718	0.639
Age (y)	42.503	14.739 (18, 109)	47.854	42.025
English-speaking country	0.236	(0, 1)	0.149	0.244
Year				
2015	0.284	(0, 1)	0.257	0.287
2016	0.298	(0, 1)	0.309	0.297
2017	0.279	(0, 1)	0.276	0.280
2018	0.138	(0, 1)	0.158	0.137

Two sets of results are worth highlighting from the interaction models. First, *SI Appendix, Tables S3–S5* show that there are statistically significant interactions between the Race/Ethnicity, Female, and Muslim-Majority Country variables (see “contrast” columns in each table). Second, the adjusted predicted probabilities shown in *SI Appendix, Tables S3–S5* suggest that there are approval hierarchies among subgroups. To visually depict the nature of these hierarchies, Figs. 1–3 present each subgroup’s adjusted predicted probabilities of approval and respective 95% CIs. The extreme ends (the lowest and the highest probabilities of approval) in these hierarchies are marked in darker shades, and we focus our discussion on those given the large number of subgroups.

Fig. 1 shows that the adjusted predicted probability of approval for Black males is only about 89% compared to that of White females at 94%. Fig. 2 shows even greater subgroup disparities at the extreme ends of the approval hierarchy: Blacks from Muslim-majority countries have only about an 86% predicted probability of approval, whereas Whites from non-Muslim-majority countries have about a 96% predicted probability of approval. The interaction between gender and Muslim-country origin also reveals significant group disparities. Fig. 3 shows that females from Muslim-majority countries have only about an 87% predicted probability of approval compared to 93% for females from non-Muslim-majority countries.

Finally, our supplemental analysis results show that our main analysis results are robust to combining administrative closures with denials. As shown in *SI Appendix, Table S6*, the results of the logistic regression analysis in which we treated administrative closures as denials are substantially similar to the main logistic regression analysis results presented in Table 2.

### Discussion

There is a broad understanding that historically, “American law had long been shot through with forms of second-class citizenship, denying personal liberties and opportunities for political participation to most of the adult population on the basis of race, ethnicity, gender, and even religion” (47). However, over the decades, Congress has sought to eliminate ascriptive inequality in naturalization (48). By ascriptive inequality, we mean stratification based on “traits present at birth (e.g., sex, race, ethnicity, parental wealth, nationality)” that “influence the subsequent social standing of individuals” (49, 50). Yet, our study findings suggest that ascriptive inequalities continue to persist. Specifically, our analysis shows that there are significant disparities in naturalization adjudication outcomes by race/ethnicity, gender, and Muslim-country origin. The intersection of these identities forms hierarchies of various subgroups that experience different levels of advantage in the adjudication process.

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**Table 2. Logistic regression analysis of approvals (odds ratios)**

Variable	Approved	
	Model 1a: Baseline	Model 1b: Full
Race/ethnicity <sup>†</sup>		
Asian	0.715***	0.620***
Black	0.560***	0.591***
Other	0.727***	0.589***
Hispanic	0.569***	0.764***
Female	1.132***	1.183***
Muslim-majority country	0.553***	0.571***
CDI		0.784***
Eligibility <sup>‡</sup>		
Married to US citizen and US resident for more than 3 y		1.006
Other		0.528***
Marital status <sup>§</sup>		
Divorced		0.942
Married		1.278***
Widowed		1.020
Other		0.077***
Has children		0.858***
Age (y)		0.975***
English-speaking country		1.839***
Year <sup>§</sup>		
2016	0.858***	0.868***
2017	0.899***	0.920**
2018	0.763***	0.772***
Field-office fixed effects	√	√
<i>n</i>	2,687,101	2,687,101

\*\*\**P* < 0.01; \*\*\*\**P* < 0.001 (two-tailed tests).

<sup>†</sup>Reference category is "White."

<sup>‡</sup>Reference category is "lawful permanent resident for 5 y or more."

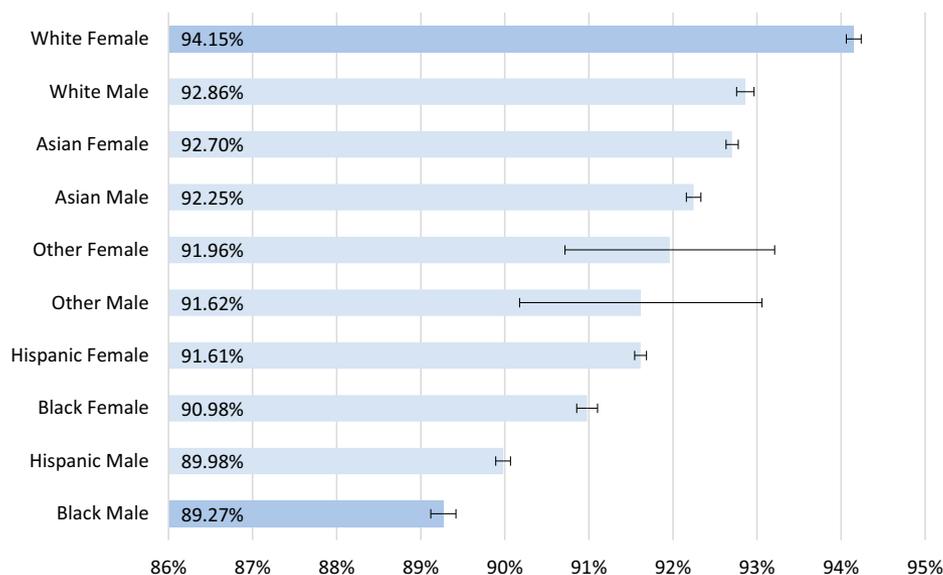
<sup>§</sup>Reference category is "single."

<sup>§</sup>Reference category is "2015."

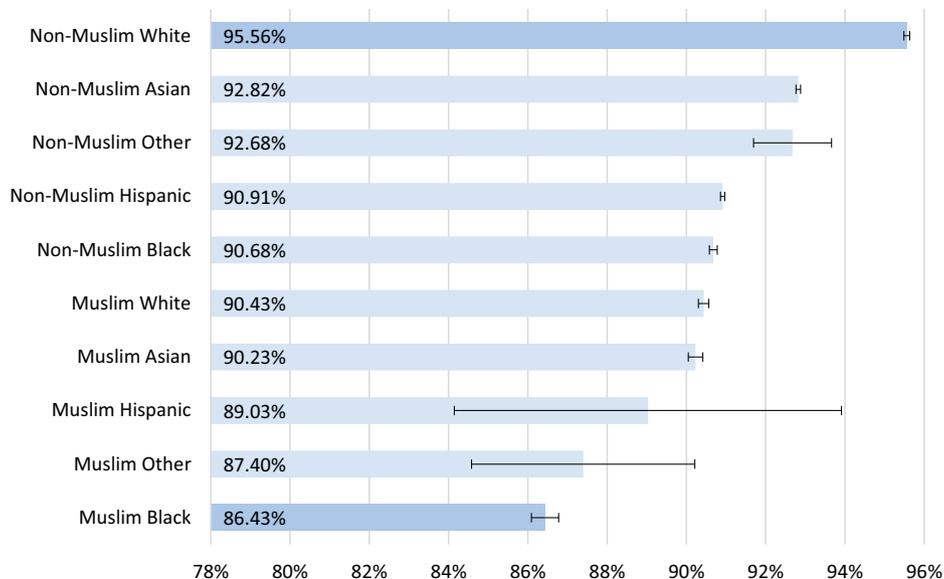
Overall, we generally find that applicants of color, particularly men and those from Muslim-majority countries, are at a disadvantage. These results are not only generally consistent with findings of disparate impact in research on immigration

enforcement and on intersectionality discussed in the Introduction but also studies examining outcomes in immigration adjudication other than naturalization. For example, Rottman and colleagues have demonstrated that asylum claims of applicants from Arabic-speaking or Muslim-majority countries are more likely to be denied than those of other applicants in the post-9/11 era (51). Although some of the subgroup differences in approval rates in the current study may appear relatively small in the abstract, they translate into a large substantive impact when considered in light of the sheer number of individuals seeking naturalization. For example, a difference of 5 percentage points for Black males means that almost 8,000 additional Black males could have obtained approval during the study period had their approval rate been equal to that of White females. A difference of 9 percentage points for Blacks from Muslim-majority countries means over 3,600 additional Blacks from Muslim-majority countries could have obtained approval during the study period had their approval rate been equal to that of Whites from non-Muslim-majority countries. Finally, a difference of 6 percentage points for females from Muslim-majority countries means that more than 9,600 additional females from Muslim-majority countries could have obtained approval during the study period had their approval rate been equal to that of females from non-Muslim-majority countries.

One possible explanation for the disparities uncovered here might stem from discretionary components of naturalization adjudication. For example, a growing number of scholars have highlighted inconsistent, biased, or discriminatory enforcement of the good moral character provision of the naturalization law (17, 52–54). As Bishop has noted, "In the end, naturalization cases are decided by individual people who arrive at their determination from a whole host of experiences that may lead to intentional or unintentional biases and preferences" (55). Another possible explanation might relate to persistent structural inequalities in other domains of American social life. For example, if higher denial rates are associated with certain types of criminal history (a hypothesis we cannot test given the lack of reliable data on applicants' criminal history), the group disparities we have presented here may be reflective in part of policing and other criminal justice practices that disproportionately impact certain groups, such as Black and Latino immigrant men (20) and Black Muslims (56).



**Fig. 1.** Predicted probabilities of approval from Gender × Race model. The results are from the full model with field-office fixed effects that contains the independent variables, control variables, and an interaction term for Female × Race/Ethnicity.



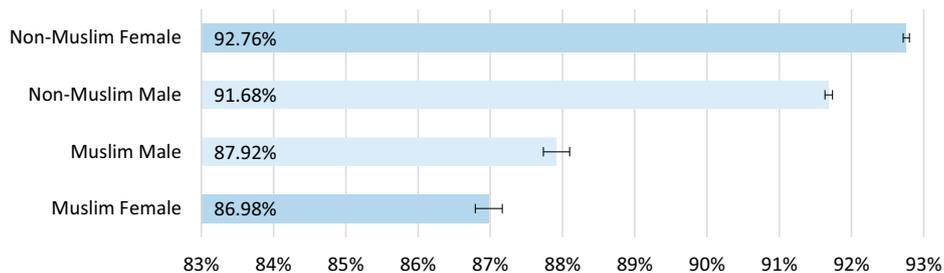
**Fig. 2.** Predicted probabilities of approval from Muslim  $\times$  Race model. The results are from the full model with field-office fixed effects that contains the independent variables, control variables, and an interaction term for Muslim-Majority Country  $\times$  Race/Ethnicity. Muslim refers to Muslim-Majority Country.

A comprehensive understanding of the sources of these disparities requires (at a minimum) an analysis of the agency's stated reasons for the denials. The law requires USCIS to include explanations of the basis for denial in decision notices issued to applicants (57). However, denial reasons are not reliably and systematically captured in the N-400 Data. For example, over 20% of denials in our analytic sample are missing on adjudication reason. Another 7% of denials have the adjudication reason of "Other." Many of the other categories are equally uninformative. For instance, 7% of denials have the adjudication reason of "Secondary Evidence." Although it bears noting that officially stated reasons for denial may not offer a full or even an accurate picture of why a particular application may have been denied, information about why an application was denied and at what stage of the adjudication process it was denied is an important first step in investigating why ascriptive inequality continues to exist in naturalization adjudication. That such critical information with clear policy implications is not being collected by USCIS in a comprehensive and standardized way underscores the need for greater transparency and accountability in the naturalization adjudication process.

Another important question raised by this study that warrants future investigation is the extent to which administrative denials are judicially appealed and the outcomes of those judicial appeals. Although naturalization decisions were historically the province of courts, the Immigration Act of 1990 transferred the exclusive power of naturalization from the judiciary to the Attorney General, making the process an almost exclusively

administrative system. As one scholar has noted: "With the lesser role of courts in naturalization post-1990, inconsistencies and bias in citizenship adjudication may have become harder to identify and check as adjudication lies in the hands of a single administrative officer" (17). Yet, insofar as judicial review continue to serve as a procedural safeguard for unfair or arbitrary administrative decision-making, we need to understand how often denied applicants engage this process and if not, why not. Other related questions that are also of critical importance include: Which groups are more or less likely to judicially appeal adverse agency decisions, and why? Do the appellants have lawyers, and does legal representation matter in obtaining favorable outcomes in such appeals? If the agency decisions are reversed, what are the bases for the reversals? Addressing these questions will ensure a fuller understanding of the nature and scope of barriers to naturalization and the role of courts in resolving contested questions of citizenship (58, 59).

Finally, this study underscores the need for research on the broader consequences of naturalization denial on immigrants and their family members. A growing body of research has explored what naturalization means for immigrants in terms of their social, economic, and political belonging and integration (60–63). Studies also show that the fates and rights of citizens and noncitizens are closely linked (64, 65), which means that naturalization has far wider and radiating effects than the individual to whom citizenship has been granted. Conversely, naturalization denial likely has far-reaching consequences that go



**Fig. 3.** Predicted probabilities of approval from Muslim  $\times$  Gender model. The results are from the full model with field-office fixed effects that contains the independent variables, control variables, and an interaction term for Muslim-Majority Country  $\times$  Female. Muslim refers to Muslim-Majority Country.

beyond the individual whose application has been denied. Future research on naturalization should attend to these broad short- and long-term impacts of naturalization denials for families and communities and how disparities in naturalization approval rates may be shaping divergent social and economic outcomes for families and communities.

**Data Availability.** Administrative data and code used in this study are posted at openICPSR (<https://doi.org/10.3886/E158741V1>) (66).

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