

# **The Long-Run Effect of 9/11: Terrorism, Backlash, and the Assimilation of Muslim Immigrants in the West**

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ABSTRACT: This paper investigates whether the 9/11 attacks will have a long-term impact by altering the fertility and assimilation rate of immigrants from Muslim countries in the United States. Terror attacks by Islamic groups are likely to induce a backlash against the Muslim community, and therefore, tend to raise the costs of assimilation for Muslims in the West. We test this hypothesis by exploiting variation across states in the number of hate crimes against Muslims in the wake of the 9/11 attacks. Our results show that Muslim immigrants living in states which experienced the sharpest increase in hate crimes also exhibit: (i) greater chances of marrying within their own ethnic group; (ii) higher fertility; (iii) lower female labor force participation; and (iv) lower English proficiency. Importantly, the state-level increase in hate crimes against Muslims after the 9/11 attacks was not correlated with the pre-existing state-level trend in any of these assimilation outcomes. Moreover, we do not find similar effects for any other immigrant group after the 9/11 attacks. Overall, our results show that the backlash induced by the 9/11 attacks increased the ethnic identity and demographic strength of the Muslim immigrant community in the U.S. These findings shed light on the increasing use of terror attacks on Western countries, with the concurrent rise in social and political tensions surrounding the assimilation of Muslim immigrants in several European countries.

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## 1. Introduction

The terror attacks on the United States in 2001 impacted the world in many ways. The shock and the loss of life were the most acute and immediate effects. Soon after, the economy was affected by the damage, disruption of air travel, and increasing uncertainty in the security situation and world financial markets. Major military campaigns were subsequently launched in Afghanistan and Iraq, creating new tensions and alliances between countries. It is safe to say that the 9/11 attacks transformed the economic and diplomatic landscape on a global scale. In this paper, we examine how the 9/11 attacks affected the Muslim community within the United States.

In particular, we investigate the general idea that terror attacks by radical Islamic groups are likely to induce a backlash against the Muslim community as a whole, raising their costs of assimilation. Evidence for a backlash after 9/11 is supported by the data on hate crimes against Muslims, which went from 28 to 481 reported incidents from the year 2000 to 2001. We empirically examine whether this backlash slowed the rate of assimilation by exploiting variation across states in the number of hate crimes against Muslims in the wake of the 9/11 attacks. Using individual-level data from the Census and American Community Surveys from 1990-2010, our results show that Muslim immigrants living in states which experienced the sharpest increase in hate crimes after 9/11 also exhibit: (i) greater chances of “intra-marriage” (marrying someone who also originates from a Muslim country); (ii) higher fertility; (iii) lower female labor force participation; and (iv) lower English proficiency. Interestingly, the higher rate of intra-marriage is coming at the expense of marrying outside of the ethnic group, rather than a general increase in the marriage rate. All of these patterns are consistent with a less-assimilated outcome, since Muslim countries are characterized by very low rates of female labor force participation and high fertility rates compared to natives in the United States.

Overall, our findings show that the 9/11 attacks induced a backlash which made the Muslim community in America larger and more traditional. In order to attribute a causal interpretation to our results, it is important to note that the state-level increase in hate crimes against Muslims after the 9/11 attacks was not correlated with the pre-existing state-level trend in any of the assimilation outcomes, or with the characteristics of Muslim immigrants living in the state prior to the 9/11 attacks. In addition, the results are robust to the inclusion or exclusion of a rich set of personal and state-level characteristics, including state-level hate crimes against blacks, Jews, and homosexuals. These findings support our identifying assumption that variation in the extent of the backlash across states can be considered exogenous. Moreover, we do not find similar results for older Muslim immigrants who most likely already made their marriage decisions before the 9/11 attacks, nor did we find similar patterns for any other immigrant group. These findings lend even more support for a causal interpretation for our findings that the 9/11 attacks increased the ethnic identity and demographic strength of the Muslim community in the United States.

There is no systematic empirical research on the question of whether the backlash against Muslim Americans after 9/11 affected their rate of assimilation in the U.S. The lack of research on this subject is surprising given the increasing social and political tensions surrounding the assimilation of a large influx of Muslim immigrants to Western European countries and North America, and a concurrent increase in the use of large-scale terror attacks on Western cities. The most related literature has been conducted by historians, sociologists, journalists, and Islamic scholars, who claim that Muslims and their communities in the United States underwent substantial changes after the 9/11 attacks (Abdo, 2006; Bakalian and Bozorgmehr, 2009; and Barrett, 2008).<sup>1</sup> These studies argue that

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<sup>1</sup>There is also a large literature studying the immigration of Muslims to Western European countries and the potential for clashes with the native population. Some of these studies speculate that the backlash in the aftermath of terror attacks is associated with the radicalization of Muslim immigrants, but do not conduct a systematic analysis of that connection (Murshed and Pavan, 2009; Sniderman and Hagendoorn, 2007). Others studies focus on the increasing political power of

American Muslims, who felt under attack by the government, general public, and the media in the aftermath of 9/11, sought refuge in their religion and community to withstand the backlash. According to these authors, the 9/11 attacks spurred a renewed sense of solidarity among Muslims and a religious revival in the face of widespread criticism of Islam.

However, the existing literature suffers from several shortcomings. The main empirical issue is that the evidence is based on a small number of selected interviews, rather than a systematic analysis of a large, representative sample of Muslims in the U.S. Individuals who agreed to be interviewed may not have opinions which reflect the average person's experience, and an individual's thoughts and opinions may not match their actions. In addition, the existing literature does not attempt to establish a causal connection between the backlash and assimilation, and therefore, cannot determine whether the changes in the Muslim community after 9/11 were due to the attacks themselves or were part of a pre-existing trend in their assimilation patterns.

Our paper is the first systematic empirical analysis of how the Muslim community in the U.S. reacted to the 9/11 attacks. We are the first to show that the backlash against Muslims slowed their rate of assimilation, as reflected by higher rates of intra-marriage and fertility, and lower rates of female labor force participation and English proficiency. In this manner, our findings suggest that terror attacks against Western targets may have a long-term political and socio-economic impact, by creating a larger and more ethnically cohesive Muslim community in this generation and also the next.

The idea that terror groups instigate a backlash is not new in the theoretical literature on political conflict (Baliga and Sjöström, 2011; Bueno de Mesquita and Dickson, 2007; Rosendorff and Sandler, 2004 and 2010; Siqueira and Sandler, 2006). However, this literature focuses on the backlash against the country or territory where the perpetrators reside. In the context of 9/11, this is

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Muslim immigrants in European countries as a major source of conflict between immigrants and the native European population (Dancygier, 2010).

consistent with the U.S. attacking Afghanistan. Our findings raise the possibility that terror groups may also intentionally induce a backlash on persons of a similar ethnic origin in the targeted country, in order to decrease their rate of assimilation.

The remainder of the paper is organized as follows. The next section briefly surveys the literature on Muslim immigrants to the United States, focusing on their experiences before and after the 9/11 attacks. Section 3 presents the data on Muslim assimilation and hate crimes. Section 4 presents our empirical strategy, followed by our main results for “intra-marriage” in Section 5 and other assimilation outcomes in Section 6. Section 7 examines other immigrant groups and Section 8 concludes with a discussion of the broader implications of our results.

## **2. Background and Related Literature**

According to a recent survey by the Pew Research Center (2011), the vast majority of Muslims in the United States were born abroad, with only 37 percent native-born. (Peck (2004) finds a very similar number -- 66 percent are foreign born.) Among Muslim immigrants, 71 percent arrived after 1990. So, the Muslim population in America is relatively new and mostly foreign-born, with almost all of the immigrants arriving after the repeal of country-based immigration quotas in 1965. This policy change created a strong positive selection regarding the characteristics of immigrants that were allowed into the United States. Consequently, Muslim immigrants to America, mostly from the Middle East and South Asia, were substantially more educated and wealthier than their counterparts that immigrated to Europe. These characteristics, along with their pragmatism and drive to succeed, led to a relatively fast integration into the labor market and suburban communities of the U.S. (Abdo, 2006).

Although Muslim immigrants in the West tend to be less assimilated than other immigrant groups (Bisin et. al., 2008), several scholars noted that Muslims in the U.S. were on the path of

assimilation or “Americanization” before the 9/11 attacks (Hadad and Esposito, 2000; Abdo, 2006). These immigrants, while still religiously identified as Muslims, started to view traditional practices in their home country as outdated and out of place, and adopted customs more similar to their American peers (Hasan, 2000). Some of them even anglicized their names, intermarried with non-Muslims, and began to speak Arabic less frequently (Goldwasser, 2000; Kulczycki and Lobo, 2002).

Several scholars argue that the 9/11 terror attacks brought this process of Americanization to a sudden halt. They suggest that the substantial increase in hate crimes, harassment, racial profiling, and discrimination against Muslims in the immediate aftermath of 9/11 started a process of re-Islamization. At the individual level, Muslim Americans renewed their interest in the Quran and traditional Islamic practices (Abdo, 2006; Bryan, 2005). One example is the growing number of young women wearing the *hijab* (headscarf) as an icon of Islamic pride and defiance to a hostile environment (Haddad, 2007). Another example is the growing demand for Islamic educational and recreational programs for children and young adults, which led to the creation of numerous Islamic day schools and Sunday schools across the United States (Schmidt, 2004), as well as the spread of additional chapters of the Muslim Students Association at numerous universities (Abdo, 2006).

These studies also claim that Muslims in search of community and a safe haven from a more hostile environment started to attend mosque services more frequently (Bakalian and Bozorgmehr, 2009; Haddad, 2007). In turn, mosques and Islamic community centers took a more central role in the lives of Muslims after 9/11, as they ceased to be only places of worship and became social centers. Women’s groups began to flourish (Haddad, 2007). Mosques and Islamic centers also started to play a more active political role, with the Muslim community increasing their participation in electoral politics in every election since 2001 (Bakalian and Bozorgmehr, 2009).

While the studies cited above present a poignant picture of how 9/11 affected the Muslim community in the U.S., the conclusions are based entirely on anecdotal evidence collected from

extensive interviews. It is possible that individuals who agreed to be interviewed hold views and underwent experiences that were not representative of the Muslim community at large. In addition, these studies do not attempt to establish a causal connection between the backlash and assimilation, nor do they address whether the changes in the Muslim community after 9/11 were due to the attacks themselves or were part of a pre-existing trend.

Our contribution is to examine this issue with standard econometric tools and with a large, representative sample of Muslim immigrants obtained from the U.S. Census and American Community Surveys. In particular, we control for the aggregate trends in the assimilation rate of Muslim immigrants, and exploit the geographic variation in hate crimes across states to explain the changes in the state-level assimilation rate of Muslim immigrants.

Although this paper is the first systematic analysis of the assimilation patterns of Muslims in the aftermath of 9/11, several papers have examined whether terrorism increased discrimination against Muslims in the labor market. Overall, the evidence is mixed. Some studies find that terror attacks affected the earnings and employment of Muslims living in the targeted country (Rabby and Rodgers, 2010), while others report a significant effect only on earnings (Kaushal et al., 2007; Dávila and Mora, 2005). A third group of studies finds no effect on any labor market outcome for Muslims (Braakmann, 2010; Åslund and Rooth, 2005). Importantly, this literature focuses exclusively on labor market outcomes in the immediate aftermath of terror attacks. In contrast, we focus on assimilation outcomes measured up to nine years after the attacks, and since these outcomes are difficult to reverse (marital status, fertility, etc), they are much more likely to have long-term implications.

### 3. The Data

#### 3.1 Data on the Assimilation Outcomes of Muslim Immigrants

Information about the assimilation of immigrants from Muslim countries over time is obtained from the U.S. Census in 1990 and 2000, as well as the American Community Surveys (ACS) for 2007-2010.<sup>2</sup> We used the four most recent years of the ACS in order to obtain a large sample of Muslim immigrants after the 9/11 attacks in 2001. Therefore, our main analysis is broken down into two time periods: the pre-attack period of 2000 and the post-attack interval of 2007-2010 (which is referred to as the 2010 period throughout the text). In addition, the 1990 Census is used to examine pre-existing trends. Since many of our measures of assimilation concern marriage and fertility decisions which are typically made in early adulthood, our sample of interest is restricted to immigrants between the ages of 20 and 40.

Although it is possible to determine whether someone is an immigrant in the Census and ACS data using information on their country of birth, it is not straightforward to identify who is a Muslim. The Census and the ACS contain no information on a person's religious affiliation. Therefore, we use information on the respondent's self-reported "country of ancestry" to infer whether the person is likely to be a Muslim. Specifically, individuals reporting an ancestry from the predominantly Muslim countries in the Middle East, Northern Africa, and Asia were classified as Muslims. A similar set of countries was used by Kaushal, Kaestner, and Reimers (2007) to examine the effect of the 9/11 attacks on the labor market outcomes of Arab and Muslim residents.<sup>3</sup> However, Kaushal et al. (2007) based their definition on the respondent's country of birth, not the respondent's ancestry. For foreign-born individuals, these two variables are almost always the same. However, when the two pieces of

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<sup>2</sup> The sample size of Muslims in the General Social Survey is too small to analyze (about 10 self-identified Muslims per year).

<sup>3</sup> The only exceptions are that we did not include Lebanon and Malaysia, since we believe most Lebanese immigrants in the U.S. are Christian, and it was not clear that Malaysia is mostly Muslim. However, our results are robust to changing the definition to include or exclude these countries.



information differ, we believe the “ancestry” variable is likely to be more accurate, since some individuals are born in foreign countries when their parents lived abroad for a brief period of time. More importantly, basing our definition on ancestry allows us to categorize native-born individuals as having a Muslim background as well. This is important in order to estimate the size of the Muslim population in each state, and also to provide a more accurate measure of whether an immigrant who is married to a native has in fact married someone of the same background or not. If we used country of birth to determine whether a person is likely to be Muslim, any immigrant who is married to a native would be considered to have married outside of his/her group. Since this is one of our main measures of assimilation, we based our definition of being a Muslim on the country of ancestry.

Appendix Table 1 lists the 20 countries of ancestry used in our definition of being a Muslim. The most common countries are Pakistan and Iran, followed by Turkey, Egypt, and Bangladesh. As discussed below, there is considerable variation across the different countries of origin in terms of their assimilation outcomes, and the extent to which each group experienced a backlash in the wake of the 9/11 attacks.

Using the Census and ACS data, we constructed several standard measures of assimilation for each Muslim immigrant in the sample. Our first measure is whether the person is “intra-married” in the sense of being married to someone whose ancestry is coded as one of the Muslim countries described above.<sup>4</sup> This measure is widely used to capture the strength of one’s ethnic identity and level of assimilation (Bisin et al., 2008; Bisin, Topa, and Verdier, 2004; and Bisin and Verdier, 2000). There are two alternatives to being “intra-married”: being single or being “inter-married” in terms of marrying someone whose ancestry is not one of the Muslim countries described above. Since someone who is single may eventually be “intra-married”, as opposed to someone who is currently

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<sup>4</sup> The spouse is considered a Muslim if he/she meets the ancestry criterion, regardless of whether the spouse was born in the U.S. or not, and regardless of whether the spouse meets the age requirements to be included in our empirical analysis (between 20 and 40 years of age).

“inter-married” (unless they divorce and remarry), we will also examine the rate of “inter-marriage” as a relevant assimilation outcome.

The rates of intra-marriage and inter-marriage over time are presented in Table 1. In the 2000 Census, 43.4 percent of the sample is intra-married, while 13.5 percent are inter-married. Among the 69 percent that have ever been married, 63 percent are married within the Muslim community according to our measure, while 37 percent are married outside of the community. So, although intra-marriage is the most common type of family formation within this community, there does appear to be a significant level of integration into the rest of society as measured by the rate of inter-marriage.

However, as seen in Appendix Table 1, the rate of intra-marriage varies considerably across the different countries of origin. For example, individuals from Pakistan and Bangladesh have very strong ethnic identities (their rate of intra-marriage is 53 percent and 57 percent respectively), while individuals with a background from Egypt, Iran, and Turkey are much more assimilated (the rate of intra-marriage is 46 percent, 36 percent, 38 percent respectively).

Our other measures of assimilation include the respondent’s fertility, labor force participation, and proficiency in English. Fertility is measured by the respondent’s number of children, or alternatively, by the number of children below the age of 5. A higher level of fertility is consistent with a stronger ethnic identity. This can be seen in Appendix Table 1 which shows that immigrants from Pakistan and Bangladesh, which have a high rate of intra-marriage compared to other countries (e.g., Egypt, Iran, and Turkey), also tend to have much higher rates of fertility. (Egypt is the exception, with a comparable level of fertility to Bangladesh).

Female labor force participation is also a useful measure of assimilation, since families with a higher sense of ethnic identity are more likely to adhere to traditional family roles whereby women are less likely to participate in the labor market. Again, evidence for this notion is seen in Appendix Table 1, which shows that women from countries with a higher intra-marriage rate (Bangladesh and

Pakistan) have much higher rates of being in the “home sector” (47 percent and 52 percent respectively) than women from countries that have much lower intra-marriage rates (31 percent from Turkey and 24 percent from Iran). Being in the “home sector” is defined as not being in the labor force and not being enrolled at school. It is worth noting that there are no differences in the rate of being in the “home sector” for men across these countries of origin, which is consistent with the idea that the differences across groups represent different rates of assimilation choices rather than opportunities.

Similar patterns are also seen with our remaining measures of assimilation which capture the respondent’s proficiency in English. Our first measure is whether the respondent speaks English at home (only 7.5 percent in 2000), and the second measure is whether the respondent speaks English well (65 percent in 2000). A respondent was classified as speaking well if he/she was coded as speaking “only English” or speaking “very well.” Again, we see a consistent pattern whereby immigrants from a more assimilated background (Iran and Turkey) have lower intra-marriage rates, higher female labor force participation, lower fertility, and a higher chance of speaking English at home or speaking very well (11 percent and 76 percent respectively for Iran, 11 percent and 63 percent for Turkey). In contrast, immigrants with less assimilated outcomes (Bangladesh and Pakistan) tend to have higher intra-marriage rates and fertility, with lower rates of female labor participation, speaking English at home, and speaking English well (4.5 percent and 47 percent for Bangladesh on the last two outcomes, and 6.6 percent and 69 percent for Pakistan). The consistency of these measures across groups supports the idea that they are portraying an accurate picture of the assimilation rate of each group, and therefore, justifies their use as meaningful outcomes in our empirical analysis.

The U.S. Census and ACS surveys also contain a rich set of demographic information such as: gender, age, education level, and notably, the state of residence for each respondent. This geographic

information is particularly important for our identification strategy since we do not want to rely on aggregate time trends to identify the causal effect of anti-Muslim hate crimes on assimilation behavior. Rather, we control for aggregate time trends and exploit the geographic variation in hate crimes across states to explain the changes in the assimilation outcomes across locations. To do this, we need variation in the location of Muslims across the U.S., which is shown in Appendix Table 2.

### **3.2 Data on Hate Crimes Against Muslims**

Our goal is to estimate the effect of the anti-Muslim backlash on the assimilation outcomes of Muslim immigrants. However, it is not straightforward to measure the extent of the backlash in an accurate and consistent way across states. To do this, we use information on the reported number of “hate crimes” against Muslims as a proxy for the extent of the backlash felt across states by immigrants from Muslim countries. Since 1992, the FBI Uniform Crime Reporting Program (UCR) has been collecting data on crimes motivated by racial, religious, ethnicity/national-origin, sexual-orientation, and disability bias. A hate crime is not defined as a separate type of crime. Rather, hate crimes are typical types of crime like assault or burglary, but are defined as a hate crime if the offender’s motive is based on a bias against the victim’s gender, race, etc. That is, a crime can be classified as a hate crime only if the police obtain additional information about the motives of the perpetrator, and using their judgment, determine that a biased motivation exists.

Hate crimes are reported to the FBI for eleven categories of offenses, but the most common type by far is “intimidation.” In Appendix Table 3, we present the number of hate crimes against Muslims in 2001 for all eleven categories. The largest categories are “intimidation” with 53.4 percent of the total, “destruction/vandalism” with 24.2 percent, the two types of assault (simple and aggravated) with 16.2 percent, and arson with 3.3 percent. According to the UCR Hate Crime Report 2001, “hate crimes touch not only the individual victim, but they also affect the entire group

associated with the particular bias motivation.” For this reason, the reported number of hate crimes against Muslims is likely to be a good proxy for how Muslims are accepted by the wider public in their locality. To the extent that this measure provides an inaccurate portrayal of the relationship between the Muslim community and the rest of society, our results should be biased towards zero.

Since more populous states will tend to have larger numbers of hate crimes, we divide the number of hate crimes against Muslims in each state by the number of Muslims (individuals with an ancestry from a Muslim country as defined above) found in the 2000 Census in each state. We normalize by the state-level Muslim population from the 2000 Census, and not the earlier or later years, for a few reasons. The main drawback of normalizing by the 1990 Census is that this census does not include the large wave of immigration during the 1990’s (Table 1 shows that share of the state population represented by Muslim immigrants almost doubled from 1990 to 2000). There are two advantages of using the 2000 Census over the ACS Surveys from 2007-2010. First, the 2000 Census is a much larger sample than the ACS samples for 2007-2010. More importantly, it is possible that the distribution of Muslims across states in 2007-2010 is endogenous to the extent of the local backlash in the wake of the 9/11 attacks, so that estimates of the Muslim population for each state after 9/11 should not be considered exogenous. For these reasons, we normalize the number of hate crimes against Muslims by the 2000 state-level estimate of the Muslim population size, which we refer to as “hate crimes per capita.”

Appendix Table 2 presents the number of hate crimes against Muslims per capita for each state in the post-9/11 period. The table displays considerable variation in hate crimes against Muslims across states. For example, hate crimes per capita were much higher in Michigan, Ohio, Massachusetts, and New Jersey relative to Virginia, Maryland, Texas, Pennsylvania, California, Illinois, Florida, and New York. Therefore, a high intensity of hate crimes against Muslims was not limited to the largest states or to any particular region of the country.

For this study, it is important to note that there was a dramatic increase in hate crimes against Muslims in the wake of the 9/11 attacks. With only four months remaining in the calendar year after the incident, the reported total number of hate crimes against Muslims increased 1,600 percent from 2000 to 2001. This sudden jump is displayed in Figure 1, which also shows that the number of hate crimes against Muslims decreased after the surge following the 9/11 attacks, but settled down to a yearly mean of 139.5 incidents after 2001 compared to 23.3 prior to 2001. It is worth noting, however, that even the peak year of anti-Muslim hate crimes does not approach the levels of attacks against other groups (Blacks, Jews, Gays and Lesbians), as seen in Figure 2. Even on a per capita basis, Table 1 shows that hate crime against blacks after 2001 is considerably more prevalent than hate crime against Muslims.<sup>5</sup>

Although the number of hate crimes against Muslims never approached levels experienced by other groups, it is clear that the 9/11 attacks caused an unexpected surge in anti-Muslim sentiment, which led to a permanent shift in sentiment thereafter. The goal of this paper is to examine whether the change in sentiment towards Muslims strengthened their ethnic identity. To do this, our strategy is to examine whether changes in the assimilation patterns of Muslims across states since 2001 are associated with the size of the local backlash. Figure 3 presents a first look at whether changes in the state-level intra-marriage rate between 2000-2010 (“2010” refers to the four year interval of 2007-2010) are correlated with the state-level changes in Muslim hate crimes per capita. For both men and women, there is a statistically significant positive relationship, suggesting that the assimilation rate of Muslim immigrants was indeed slower in places which experienced a more intensive backlash. This preliminary analysis will be explored extensively throughout the remainder of the paper, but it is important to note that post-9/11 backlash was not higher in places that were already experiencing

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<sup>5</sup> The Census data do not provide information on the size of the Jewish or homosexual community. Hence, we cannot normalize hate crimes for those groups by their population sizes.

slower rates of assimilation. Figure 4 shows that the change in the state-level intra-marriage rate between 1990 and 2000 was not significantly correlated with the backlash felt by Muslim immigrants in the wake of the attacks in 2001. For women, the relationship even appears to be negative. In the next section, we describe our empirical strategy to establish these results more extensively, while providing support for a causal interpretation of the results.

#### 4. Empirical Strategy

Our empirical strategy is designed to identify the causal effect of hate crimes against Muslims on the assimilation outcomes of Muslim immigrants. Our unit of observation is the individual, and we model his/her outcome as a function of his/her personal characteristics, state of residence, survey year, and the level of hate crimes per capita in the individual's state of residence. Specifically, we estimate the following model:

$$outcome_{ist} = \alpha \cdot Muslim\ Hate\ Crimes\ PC_{st} + \beta \cdot x_{ist} + \gamma_t + \mu_s + \varepsilon_{ist} \quad (1)$$

where  $outcome_{ist}$  represents the assimilation outcome of individual  $i$  who lives in state  $s$  in year  $t$ ;  $Muslim\ Hate\ Crimes\ PC_{st}$  is the number of hate crimes against Muslims per capita in state  $s$  in year  $t$ ;  $\gamma_t$  is a fixed-effect for each survey year  $t$ ;  $\mu_s$  is a fixed-effect unique to state  $s$ ; and  $x_{ist}$  is a vector of individual and state characteristics which include the individual's gender, age, years of schooling, and years living in the United States. In some specifications, the  $x_{ist}$  vector will also include characteristics which vary at the state-year level (computed from the same Census and ACS Surveys) such as the female "home sector" rate (not enrolled in school or in the labor force) for native women in state  $s$ , the unemployment rate of native men in the state, and the mean log wage for native men in

the state. Unobserved determinants of the individual's assimilation outcome are captured by the error term,  $\varepsilon_{ist}$ .

As indicated earlier, *Muslim Hate Crimes PC<sub>st</sub>* is the total number of hate crimes in state  $s$  at year  $t$ , divided by the total number of individuals reporting an ancestry from a Muslim country in state  $s$  in the year 2000. When  $t$  equals the year 2000, the total number of hate crimes in that state refers to the sum of the hate crimes in that state from 1992 (the first year that the FBI started collecting hate crime data) to the year 2000. When  $t$  refers to a year after 2001 (2007-2010), the total number of hate crimes in that state refers to the sum of hate crimes against Muslims between 2001 and 2008. We use the sum of hate crimes across years in order to obtain a more precise measure of the level of anti-Muslim sentiment, since the number of hate crimes are quite low, particularly in the pre-2001 period. In this manner, our measure of hate crimes per capita is designed to capture the extent to which Muslims felt an increase in hate crimes after 2001 within each state.

The goal of the proposed econometric specification is to identify  $\alpha$ , which represents the causal effect of anti-Muslim hate crimes on an individual's assimilation outcome. There are several reasons why hate crimes against Muslims may affect their rate of assimilation. It is likely that hate crimes, which may be accompanied by increased discrimination, harassment, racial profiling, and hostile rhetoric against Muslims in general, create a barrier between the Muslim community and the rest of society. By increasing the isolation of the Muslim community, hate crimes raise the costs of assimilation and perhaps increase the return to investing in social capital within their own community, thus leading to lower rates of integration. As mentioned above, these forces have been highlighted in the existing literature (Abdo, 2006; Bakalian and Bozorgmehr, 2009; Barrett, 2008). However, hate crimes also increase the cost of being publicly identified as a Muslim, and therefore, might lead some Muslims to shed their identity and blend into society at large. Given these two conflicting predictions, the goal of our analysis is to determine which hypothesis is supported by the data.



By including fixed-effects for each state and survey year, we are essentially examining whether changes over time in hate crimes against Muslims within a state are correlated with the changes over time in the assimilation rate of Muslims within that state, after controlling for the national trend and a rich set of personal and state-level characteristics. Our identifying assumption in equation (1), therefore, is that hate crimes against Muslims at the state level are not correlated with omitted variables that affect the local assimilation rate, and that changes in Muslim hate crimes at the state level are not caused by changes in the assimilation rate within the state (i.e. no reverse causality).

We address these issues in several ways. First, as depicted in Figures 3 and 4, we show that changes in the number of hate crimes per capita against Muslims are positively correlated with concurrent changes in intra-marriage, but not with pre-existing trends in intra-marriage. We observe a similar pattern for each assimilation outcome in simple graphs and regressions (Figures 3-16), and in our empirical analysis which controls for many other factors. Second, we perform a set of balancing tests to examine whether there is a systematic relationship between the local level of anti-Muslim hate crimes and observable characteristics of the local Muslim population which are likely to affect the local trends in assimilation. If there is no relationship between hate crimes and observable factors which affect assimilation patterns at the local level, then it seems reasonable to assume that local hate crimes are not correlated with unobservable factors which are affecting the local trend in assimilation -- the condition needed in order to obtain a consistent estimate of  $\alpha$ .

Table 2 presents the balancing tests which regress various characteristics of Muslim immigrants on the extent of the Muslim backlash within the state. For example, the upper two panels use data from 2000 and 2010, and each coefficient comes from a regression of the person's characteristic (college graduate, etc.) on a state fixed-effect, year fixed-effects, and *Muslim Hate Crimes PC<sub>st</sub>*, as defined above. The bottom two panels use data only on Muslim immigrants that arrived after 2001, so a state-fixed effect cannot be included since only the 2007-2010 data is used.

The first column of the upper panel indicates that states which experienced the largest increase in Muslim hate crimes per capita after the 2001 attacks also became less-educated in terms of the local population of Muslim men, but did not change at all in terms of the education levels of local Muslim women. The second column indicates that states which experienced larger increases in hate crimes also attracted new immigrants (fewer years in the U.S.). Taken together, these results do not give a clear picture of whether the local population was changing systematically in a way that is correlated with local hate crimes and the local assimilation rate. In terms of the education levels, hate crimes are associated with lower education levels of men – which would lead to higher rates of assimilation (i.e. lower intra-marriage, higher inter-marriage), since less-educated men are more assimilated than college graduates.<sup>6</sup> This pattern would bias our estimates away from the relationship depicted in Figure 3, which shows that hate crimes are associated with stronger intra-marriage behavior. The results in the second column point to a bias in the other direction – states that experienced a higher backlash also had more recent immigrants, which should lead to more intra-marriage since newer immigrants are less likely to have found a partner outside of their ethnic group. But, this is the only variable which points to a potential bias in this direction, while the education variable points to a potential bias in the other direction.

The remaining columns investigate whether hate crimes within a state are correlated with the type of immigrants which tend to assimilate less in terms of intra-marriage, fertility, etc. As discussed previously, immigrants from certain countries display much stronger tendencies to be assimilated versus others (Turkey and Iran versus Bangladesh and Pakistan). To see if hate crimes are associated with changes in the composition of immigrants according to their country of ancestry, which we know is correlated with the outcome measures, we assign to each individual the mean of the assimilation

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<sup>6</sup> In 2000, the intra-marriage rates for men with and without a college degree were 36.5 percent and 26.0 percent respectively. Bisin et al. (2008) show a similar pattern for Muslims in the United Kingdom, whereby assimilation is negatively correlated with income.

outcome for that person's country of ancestry in the year 2000, and regress that variable on the state level of hate crimes against Muslims.

The ten coefficients in the upper panel of Table 2 do not show any systematic evidence that immigrants from countries with lower assimilation rates tended to concentrate in areas with more hate crimes. Only one of the ten coefficients is significant at the ten percent level (which is likely to occur even if the true parameter is zero in all ten regressions). The sign of this coefficient indicates that hate crimes are associated with a higher rate of assimilation for Muslim women (more likely to speak English well) – which is the opposite direction of our main findings. The other coefficients are not significant, and their signs portray an inconsistent pattern across men and women. In particular, hate crimes are associated with immigrant females who tend to be more assimilated (less likely to intra-marry and more likely to speak English) according to their country of origin, while men seem to be (insignificantly) less assimilated in areas with higher levels of hate crimes.

Since hate crimes are associated with newer immigrants, the bottom panel performs a similar analysis focusing only on those immigrants that arrived after the 9/11 attacks. The results show that new immigrants did not settle down across states in a way that produced a correlation between hate crimes and any of the other observable characteristics (except for years in U.S.) which are correlated with assimilation outcomes (education or country of origin). Therefore, there is no evidence that new immigrants with observable tendencies to assimilate less settled down in states with a higher intensity of hate crimes against Muslims. These findings support our identifying assumption that immigrants with a particularly low unobserved propensity to assimilate did not choose to live in places that experienced more hate crimes against Muslims.

To summarize, we present several arguments in favor of our identifying assumption that local hate crimes are not correlated with unobserved factors which affect the assimilation rate at the local level. First, we find that changes in hate crimes are associated with concurrent trends in the local

assimilation outcome, but not with pre-existing trends (Figures 3-16). Second, we show in Table 2 that local hate crimes are not correlated with observable factors which are strongly associated with lower assimilation outcomes (education, country of origin tendencies). These patterns were found for all Muslim immigrants and those that arrived after 2001, which justifies our assumption that hate crimes were not correlated with unobservable factors which affected the local trend in assimilation outcomes. Further support for our identifying assumption is provided later when we show the robustness of the results across different assimilation outcomes, and also to the inclusion or exclusion of a vast array of personal and state-level control variables. In addition, we perform a placebo analysis on other groups (older Muslims and members of other ethnic groups) which should not be affected by the anti-Muslim backlash after 2001. Finally, it is important to note that the 9/11 attacks were a total surprise, which resulted in a sudden and unexpected surge in anti-Muslim hate crimes which were uncorrelated with any observable trend in assimilation patterns, and therefore, unlikely to be correlated with unobservable factors which affect the assimilation rate.

Taken as a whole, these results suggest that it is safe to regard the backlash against Muslims in the wake of the 9/11 attacks as an exogenous surge in anti-Muslim sentiment, with variation across states that can be exploited to examine whether the backlash affected the assimilation rate of local Muslim immigrants.

## **5. The Effect of Anti-Muslim Hate Crimes on Intra-Marriage Rates**

We now analyze the effect of anti-Muslim hate crimes on our main assimilation outcome variable: being “intra-married” in the sense of marrying someone with a similar background from a Muslim country. Table 3 presents the main results for immigrant Muslim men, while Table 4 presents a similar analysis for immigrant Muslim women. In the first column of both tables, the “intra-marriage” status of each individual is regressed only on Muslim hate crimes per capita and dummy

variables for each sample year, with the reported coefficients representing the marginal effects evaluated at the means from a probit analysis. For both men and women, the intra-marriage rate increases with the number of hate crimes against Muslims per capita, but is significant only for men. In the second column of each table, “basic controls” for personal characteristics (age, number of years in the U.S., education, country of origin fixed-effects) are added to the specification. The coefficients are virtually unchanged, although both are now very significant since the standard error for women became much smaller. State fixed-effects are added to the specification in the third column of Tables 3 and 4. Again, the coefficients for men and women remain statistically significant.

In the next column of both tables, we examine whether the strong results for hate crimes against Muslims are simply capturing a more widespread atmosphere of animosity to minorities in general. To do this, we add the number of hate crimes against blacks per capita (normalizing by the state-level size of the black population according to the 2000 Census), and the log number of hate crimes against Jews and homosexuals (we cannot normalize by the size of the Jewish and homosexual populations since this information does not exist). Although hate crimes against these groups are much more prevalent than anti-Muslim hate crimes, the estimated effects of anti-Muslim hate crimes on the rate of intra-marriage become even larger after controlling for other types of hate crimes. These findings suggest that the intra-marriage rates of Muslim immigrants are responding very specifically to the level of animosity towards Muslims, regardless of the overall level of bigotry to other minorities which typically suffer much higher rates of hate crime.

Since our main variable of interest, anti-Muslim hate crimes, varies at the state level for each time period, we now test whether the coefficient on this variable is robust to the inclusion of other variables which vary at the state-year level. These variables include measures for the state-level marriage market conditions for Muslims (percent Muslim in the state and the percent male among Muslims in the state) and for state-year economic conditions (percent native-born females in the home

sector, the unemployment rate of native-born men, and the mean log wage for native-born men). In principle, these variables could be endogenous to the level of hate crime against Muslims, particularly the marriage market variables. However, in column 5 of Tables 3 and 4, the estimated effect of anti-Muslim hate crimes on the intra-marriage rate of men and women remains statistically significant, and virtually of the same magnitude after including these additional state-year controls. It is worth noting that the gender composition of the local Muslim community is significant and displays the expected sign – a higher percentage of men versus women in the state decreases the likelihood that a Muslim male will intra-marry while increasing the chances for Muslim females to do the same. The fact that the intra-marriage rate is responding in expected ways to factors which should be relevant justifies the use of this measure as an accurate and meaningful assimilation outcome.

In column 6 of Tables 3 and 4, we use an alternative measure of anti-Muslim hate crimes which considers only the hate crimes that occurred before the 2001 attacks and those that occurred right after the attacks (only 2001 and 2002). In other words, we ignore anti-Muslim hate crimes that occurred after 2002, since it could be the case that hate crimes after 2002 were responding endogenously to changes in the local Muslim community's behavior and characteristics, while the sudden burst of anti-Muslim activity after the 9/11 attacks was more of an unexpected, exogenous shock. Column 6 shows that the results are still very significant after discarding the hate crime information after 2002.

So far, the results show that anti-Muslim hate crimes led Muslim immigrant men and women to a less-assimilated marriage outcome, and these findings are robust to specifications which include very few controls or a vast array of personal and state-level characteristics. The robustness of the results to the inclusion of virtually any control variable provides support for the identifying assumption that anti-Muslim hate crimes are not correlated with an omitted variable which affects assimilation outcomes. The estimated coefficients are not only statistically significant and robust

across different specifications, but also substantial in magnitude. The average number of hate crimes per capita after 9/11 is equal to 0.028, which implies an increase in the intra-marriage rate of 2 percentage points for men and 4.3 percentage points for women, according to the coefficients in column 5. These numbers constitute a 6.4 percent and a 7.3 percent increase in the intra-marriage rate of Muslim men and women respectively, relative to their means in the 2000 Census (0.31 for men and 0.60 for women).

We now address whether these findings are due to Muslim immigrants simply getting married at younger ages, or whether they are choosing to marry within their community at the expense of marrying someone outside of their ethnic group. The last two columns of Tables 3 and 4 show very clearly that anti-Muslim hate crimes are significantly lowering the rate of marrying outside of the group (inter-marriage) for men and women, while increasing the chances of being married only for women. In particular, for an individual experiencing the mean rate of Muslim hate crimes after 9/11, the estimated coefficients imply a decrease of 8.3 percent and 13.1 percent in the inter-marriage rate of men and women, relative to their respective means in 2000. Therefore, the increasing rate of intra-marriage for men is coming at the expense of a declining rate of inter-marriage, while the increasing rate of intra-marriage for women is coming from both the declining rate of inter-marriage and the increasing probability of being married. For both men and women, the results point to a striking phenomenon whereby immigrants from Muslim countries are increasing their ethnic identity in response to the backlash in the wake of the 9/11 attacks.

We now examine whether our main findings stem from a correlation between the state-level backlash against Muslims and state-level trends in unobserved factors which affect their assimilation rate. First, we perform a similar analysis with data from the pre-2001 period, and test whether the state-level backlash against Muslims after the 2001 attacks was correlated with changes in the intra-marriage rate before the attacks (between 1990 and 2000). This “placebo” analysis is presented in

column 7 of Tables 3 and 4 where we estimate the effect of anti-Muslim hate crimes between 2000-2010 (“Lead Muslim Hate Crimes PC”) on the intra-marriage outcomes between 1990 and 2000. A comparison between columns 3 and 7 of both tables reveals that hate crimes against Muslims during the 2000-2010 period are very significant and positive determinants of intra-marriage during the same period, but are insignificant (for men) or significantly negative (for women) for intra-marriage during the pre-9/11 period between 1990-2000. Figures 3-6 show similar results for the state-level means in the intra-marriage and inter-marriage rates, but contain no other controls in the regression.

A further placebo analysis is presented in Table 5 for all Muslim immigrants, and for only those that are married. A simple comparison of columns 1 and 7 shows that our main results tend to be stronger for men when the sample is restricted to married individuals, but smaller in magnitude (still significant) for women because hate crimes had a much larger effect on the marriage rate for women versus men. In the second column for each group in Table 5, we exploit the idea that older Muslims are less able to respond to the sudden backlash after 9/11 in terms of intra-marriage, since they most likely already made their marriage decisions prior to the attacks. However, they are likely to be affected by unobserved determinants shaping the local trends in assimilation. Therefore, a second “placebo” strategy is to perform a similar analysis on Muslim immigrants who were most likely too old to respond to the 9/11 backlash in the marital outcome. In particular, the sample in the second column of Table 5 is restricted to Muslim immigrants who were older than 40 in the survey year. That is, the youngest people in this sample were 31 at the time of the attacks (those that are 41 in the 2010 ACS Survey).

The results indicate that the intra-marriage rate for this sample was indeed unaffected by the state-level backlash against Muslims after 9/11. The differential results for those that were young enough to be affected by the backlash versus those that were older, provides further evidence that the changes in the local assimilation rate was a response to the backlash and not due to unobserved factors



which should affect young and old alike. The remaining columns in Table 5 pool both samples together, and show that the differential effect is significant. In addition, using the older group as a control group within each state, Table 5 shows that these patterns are significant after pooling both age groups together and controlling for state-specific time trends. This later specification is essentially a triple differences specification, and the results demonstrate that the local backlash caused younger individuals to increase their intra-marriage rate relative to older Muslim immigrants in the same state. The last two columns show similar results, but instead of using a somewhat arbitrary threshold age for being “too old” to be affected, we simply interact the treatment variable (hate crimes) with the person’s age. Again, the results show a significant positive effect of hate crimes on intra-marriage (even after controlling for state-specific time trends), but the effect weakens dramatically with age.

Along with Figures 3-6, Tables 3-5 show that the local backlash against Muslims in the wake of the 9/11 attacks was not correlated with any pre-existing tendency for local Muslims to become less assimilated over time, and that hate crimes led younger Muslim immigrants to a less-assimilated outcome relative to older Muslims in the same state, even after controlling for the state-specific trends of all unobserved factors affecting the marriage decisions of both groups. These findings support a causal interpretation of our main results in Tables 3 and 4.

Table 6 examines whether the effect of the backlash on the intra-marriage rate varies across different segments of the Muslim immigrant population. Of notable interest is the robustness of the main results to the sample that includes only those immigrants who have been in the U.S. for at least nine years – meaning that everyone in this sample was in the U.S. before the 9/11 attacks in 2001. This finding once again demonstrates that our main results are not due to the placement of new immigrants across locations according to the local upsurge in hate crimes. The results are similar for those that arrived before or after the age of 20, and for different education groups (with or without a

college degree) – although the effects appear to be stronger for the less educated immigrants (who tend to be more assimilated) than those with more education. Overall, the evidence indicates that the backlash against Muslims in the wake of the 9/11 attacks led all segments of the Muslim population to a less assimilated marriage outcome. The next section examines whether these findings are robust to using other assimilation outcomes, which would lend further support to the causal interpretation of our intra-marriage results.

## **6. The Effect of Anti-Muslim Hate Crimes on other Assimilation Outcomes**

We now perform a similar analysis with other assimilation outcomes measured by the individual's fertility, labor market participation, and English proficiency. For each outcome, we first present results from a core specification, and then test the robustness of the results to the inclusion of additional control variables. We also examine whether our findings are possibly due to pre-existing state-specific trends.

Table 7 examines whether anti-Muslim hate crimes affected the fertility level of Muslim immigrants. Fertility is measured by the total number of children in the household, or alternatively, by the number of children less than five years of age. The advantage of the latter measure is that we know that children under the age of five in the 2007-2010 period were conceived after 2001, and therefore, were the product of decisions taken in the aftermath of the attacks.

The first column for each group in Table 7 presents the core specification which includes individual controls and fixed-effects for each year and state.<sup>7</sup> Using either measure of fertility, the results show that anti-Muslim hate crimes led men and women to increase their fertility. The results are a bit stronger when other hate crimes (against blacks, Jews, and homosexuals) and other state-year

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<sup>7</sup> The core specification is detailed in column 3 of Tables 3 and 4.

controls (related to the marriage market and economic conditions) are added to the specification in the second and third columns for both men and women. The estimated coefficients imply that the number of children in a Muslim household increased by 5.7 percent and by 4.5 percent for males and females, respectively, as a consequence of the mean level of hate crimes against Muslims in the aftermath of 9/11. If we measure the anti-Muslim backlash by the unexpected surge in hate crimes occurring right after the 9/11 attacks (i.e. anti-Muslim hate crimes in 2001-2002 only), the results are still significant (columns 4 and 9 of Table 7).

The last column for both groups in Table 7 uses the sample prior to the 9/11 attacks (1990-2000), and shows very clearly that the surge in hate crimes against Muslims after 9/11 was not correlated with pre-existing state-level trends in fertility rates. These findings are illustrated very simply (without any additional control variables) in Figures 7-10, which show that hate crimes against Muslims from 2000-2010 are strongly correlated with the changes in fertility during the 2000-2010 period, but uncorrelated with fertility in the previous period from 1990-2000.

Since the previous section showed that hate crimes against Muslims affected marriage patterns, it is natural to wonder whether the fertility results are coming indirectly from changes in the propensity to get married. Table 8 investigates this issue, and also presents results for different segments of the Muslim immigrant population. In general, the results are stronger for married men versus all men, but the reverse pattern holds for women. These findings are consistent with our previous results that anti-Muslim hate crimes affected the marriage rate for women but not for men, so the indirect channel of affecting fertility through the marriage rate should be larger for women versus men. Furthermore, Table 8 displays similar results, although not always significant, across a broad spectrum of the Muslim immigrant population according to their education, when they arrived in the U.S., and whether they were in the U.S. at the time of the 9/11 attacks.

Overall, the unexpected increase in hate crimes against Muslims after the 9/11 attacks appears to have made the Muslim community more insular in terms of increasing the rate of intra-marriage, while at the same reinforcing traditional customs by increasing their fertility and subsequent demographic strength.<sup>8</sup> Once again, these findings are robust to the inclusion or exclusion of a broad array of control variables, and the surge in hate crimes against Muslims did not occur in states which were already undergoing an increase in fertility.

Our next assimilation outcome is measured by being in the “home sector”, which is defined as a person who is not enrolled in school and not participating in the labor market. Table 9 shows that hate crimes against Muslims increased the probability that females stayed at home, with no effect on immigrant men from Muslim countries. The magnitude of the coefficient implies that the mean level of hate crimes in the wake of 9/11 increased the probability that Muslim women stayed at home by 7.6 percent relative to its mean in 2000. Furthermore, although the state-level of hate crimes against Muslims is positively related to the change in the “home sector” for females in the aftermath of the 9/11 attacks, the state-level surge in anti-Muslim activity after 2001 was not positively correlated with pre-existing trends in the labor market behavior of females (the correlation is actually negative in column 5 of Table 9). These results are robust to the inclusion of several control variables (see also Figures 11 and 12 for no controls), and are found across many segments of the female Muslim population (Table 10). The finding that anti-Muslim hate crimes led women, and not men, to be in the home sector, is consistent with a reinforcement of traditional gender roles, thus providing additional support for the idea that the backlash in the aftermath of 9/11 attacks intensified the ethnic identity of Muslim immigrants.

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<sup>8</sup> These results are consistent with an increasing preference by American Muslim immigrants for having children that religiously identify with Islam. Bisin et al. (2004) label this the “relative intolerance” parameter. Their dynamic analysis shows that small changes in this parameter have substantial and long lasting effects on the religious composition of the population.

Our last assimilation outcome is based on the individual's level of English proficiency. The two measures of English proficiency are whether the respondent speaks English at home and whether the individual speaks English "well." An affirmative answer to either one is indicative of a more assimilated outcome. The results for both measures are presented in Table 11, while Figures 13-16 present a similar analysis without any additional controls. Comparing the first four columns for each group with the fifth column, Table 11 shows that anti-Muslim hate crimes decreased the use and proficiency of English for both men and women, and these patterns were not consistent with pre-existing trends before 2001. These findings are robust across both measures of English proficiency and to the inclusion of many controls. Table 12 shows that the results are similar across many segments of the Muslim immigrant community, including those that were in the U.S. prior to the 9/11 attacks (at least nine years in the U.S.). Overall, the findings for English proficiency are a bit weaker than previous outcomes in terms of statistical significance, but are consistent with previous findings that the anti-Muslim backlash in the wake of the 9/11 attacks led to a more insular Muslim community.

## **7. The Assimilation Outcomes of Other Immigrant Groups**

The analysis in the previous sections showed that anti-Muslim hate crimes after 9/11 created a more closed, less-assimilated Muslim community of immigrants in the U.S. These findings are consistent across a variety of specifications, across men and women, and for several different assimilation outcomes. Even when we control for the level of hate crime activity against other often-persecuted groups, the analysis shows that Muslim immigrants are responding particularly to the hate crimes against their own group. As a further "placebo" analysis, this section examines the assimilation outcomes of other immigrant groups to see if they are responding to anti-Muslim hate crimes in a similar way.

Table 13 presents estimates for the effect of anti-Muslim hate crimes on six assimilation outcomes for the following immigrant groups: Hispanics, Chinese, Japanese, and Koreans. Our previous results for Muslim immigrants are also presented using the same specification for comparison purposes.

Consistent with a causal interpretation of our previous results, Table 13 shows that Muslim immigrants were the only group that became systematically less assimilated in response to the surge in anti-Muslim sentiment after 2001. For men and women, Muslim immigrants are responding in a significant way for each assimilation outcome towards a more insular and traditional way of life. For the other immigrant groups, most of the coefficients are not significant, and the ones that are significant often point to a more assimilated outcome. The group with the most significant coefficients is the Koreans, but two of the four significant coefficients are pointing to increased assimilation. While it is a priori conceivable that the assimilation behavior of other immigrants could respond to the overall level of bigotry against their group or even other groups, the consistent pattern pointing to less assimilation is found only for Muslim immigrants. By showing that our findings for Muslim immigrants are not part of a general pattern found for other groups, the results in this section support a casual interpretation of our previous findings showing less assimilation by Muslim immigrants in response to the unexpected surge in anti-Muslim sentiment after the 2001 attacks.

## **8. Conclusions**

Our analysis shows that the 9/11 attacks induced a backlash against the Muslim community which, in turn, increased the ethnic identity and demographic strength of the Muslim immigrant community in the United States. The results are not due to pre-existing trends in the assimilation outcomes of Muslim immigrants across states, and are found to be robust to the inclusion or exclusion of a wide array of personal and state-level characteristics. Notably, we show that Muslim immigrants

are reacting specifically to hate crimes against Muslims, after controlling for the level of hate crimes against other groups. Further support for a causal interpretation comes from our findings that other groups (Hispanics, Chinese, Japanese, Koreans, as well as Muslims who already made their marital decisions before the 9/11 attacks) did not respond in a similar way to the anti-Muslim backlash. In this manner, our analysis supports the idea that 9/11 may have a long-term political and socio-economic impact, by creating a larger and more ethnically cohesive Muslim community in this generation and also the next.<sup>9</sup> Although we have no evidence that Muslims in the United States have become more radical in their religious or political views and behavior, our findings are consistent with the anecdotal evidence in the current literature which argues that the 9/11 attacks led to a galvanized and more observant Muslim community.<sup>10</sup>

Overall, our analysis highlights a new type of “backlash” that has been ignored in the literature on political conflict. Existing models argue that extremist groups commit terror attacks with the goal of provoking a backlash in order to radicalize moderate supporters that reside in the same country as the perpetrators (Baliga and Sjöström, 2011; Bueno de Mesquita and Dickson, 2007; Rosendorff and Sandler, 2004 and 2010; Siqueira and Sandler, 2006).<sup>11</sup> Despite differing mechanisms and modeling assumptions, most of these models analyze how the counter-terror response by the targeted country affects the local political support for the terrorist group and their aims, and the subsequent recruitment

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<sup>9</sup> While we show that hate crimes against Muslims lead to an increase in the demographic strength of the American Muslim community, Adida et al. (2011) show that Muslim demographic strength leads to more discrimination against Muslims. Hence, the combination of both results suggests the existence of a potential feedback loop between Muslim demographic strength and discrimination against Muslims that reinforces itself over time.

<sup>10</sup> Although Westerners tend to link a heightened Islamic identification with radicalization and violence, there is no consistent and systematic evidence of such a link. For example, whereas Chen (2006) uncovers a strong relationship between Islamic religious intensity and social violence during the Indonesian financial crisis of 1997, Clingingsmith et al. (2009) find that participation in the Hajj among Pakistanis causes an increase on the observance of Islamic practices, together with an increase on more tolerant attitudes towards fellow Muslims and non-Muslims, and beliefs of harmony and peace among different religions.

<sup>11</sup> In addition to a strategy of backlash, the related literature mentions a myriad of other goals behind a terror campaign. See, for example, the analyses of Benmelech and Berrebi (2007), Benmelech et al. (2011), Berman and Laitin (2008, 2005), Berrebi and Klor (2006), Bloom (2005), Bueno de Mesquita (2005), Gould and Klor (2010), Kydd and Walter (2006, 2002), Lapan and Sandler (1993), and Rohner and Frey (2007).

of members from the local population to commit terror attacks in the future.<sup>12</sup> The predictions of these models are consistent with the idea that Al Qaeda provoked the United States to invade Afghanistan.

Our findings, however, suggest that terror groups may try to provoke a backlash against their own ethnic or religious group in the targeted country, in order to increase their demographic strength by slowing their rate of assimilation. To be sure, we found little evidence suggesting that this was among Al Qaeda's strategic goals for carrying out the 9/11 attacks (Byman, 2003). It is clear from Al Qaeda's statements that one of their goals was to cause a disproportionate military response from the United States, hoping to create a clash between the U.S. and the Muslim world (Benjamin and Simon, 2002; Hoffman, 2002). This clash, Al-Qaeda hoped, would force Muslims to take sides against America (Benjamin and Simon, 2002, pages 157-158), and "help the Islamic nation to wake from its slumber" (Blanchard, 2007, page 10). To the extent that the "Islamic nation" includes Muslims living in the West, this would be the most direct evidence that the planners of the 9/11 attacks intended to somehow bolster the Muslim community in the United States. However, there is more direct evidence that Muslim leaders are generally concerned about the assimilation rate of Muslim immigrants in the West.<sup>13</sup>

Although our analysis uses data from the United States, our results are likely to be relevant for Europe for several reasons. First, the 9/11 attacks in the United States produced a backlash against Muslims in several countries throughout Europe (Åslund and Rooth, 2005). Second, there were

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<sup>12</sup> The empirical evidence on the effectiveness of provoking a military response to gain political support at home is limited. Focusing on the Israeli-Palestinian conflict, Jaeger et al. (2012) show that Palestinian fatalities cause the short-run radicalization of the Palestinian population, but the effect is fleeting and disappears within ninety days. Jaeger et al. (2012) also show that more critical events of the conflict, like the occurrence of the first Palestinian uprising or the signing of the Oslo accords, do have a long lasting effect on Palestinians political attitudes, an effect that remains substantial even over twenty years after the event. For other empirical studies on the effects of terrorism and political violence on the political attitudes of the affected population, see Karol and Miguel (2007), Berrebi and Klor (2008), Gardeazabal (2010), Gould and Klor (2010), Montalvo (2011), and Shayo and Zussman (2011).

<sup>13</sup> For example, Turkish Prime Minister Tayyip Erdogan warned Turkish immigrants in Germany that assimilation is "a crime against humanity" during "a tense visit to Germany" (The Telegraph, February 12, 2008).



subsequent attacks by Al Qaeda on major European cities after the 9/11 attacks (Madrid in 2004 and London in 2005), which may have induced a further backlash. Third, Muslim immigrants in Europe tend to be less assimilated than other immigrant groups, even before the 9/11 attacks (Bisin et. al., 2008). In general, the assimilation of Muslim immigrants is a much larger public issue in Europe than in the United States, most likely because of the larger scale of the immigration wave and perhaps due to the lower education levels of Muslims who migrated to Europe versus the United States. Therefore, our findings shed new light on our understanding of the increasing use of terror attacks on Western countries, with the concurrent rise in social and political tensions surrounding the assimilation of Muslim immigrants in Europe and the United States.

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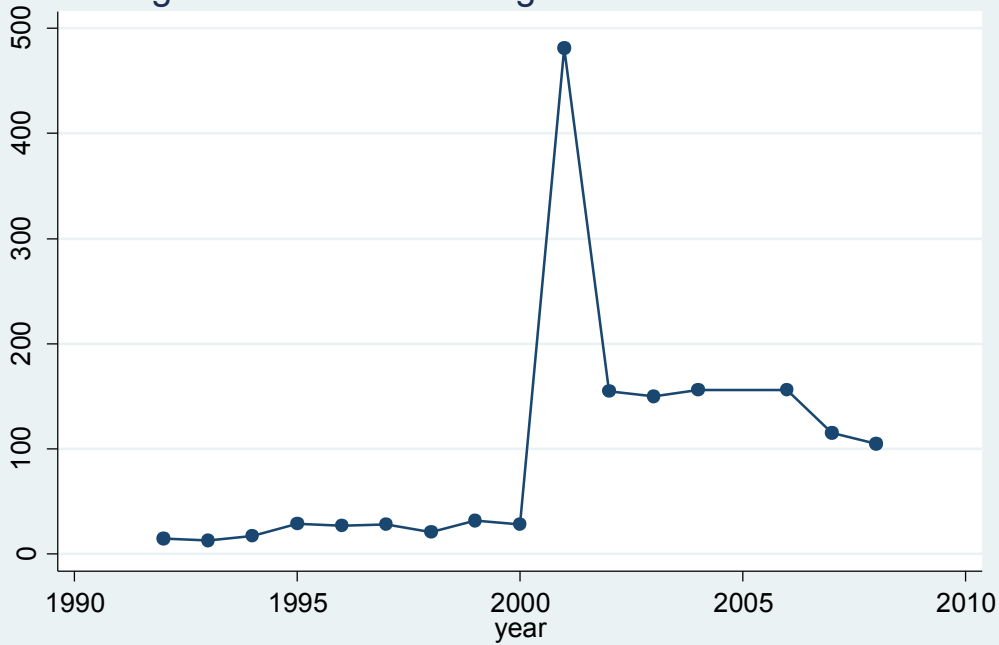
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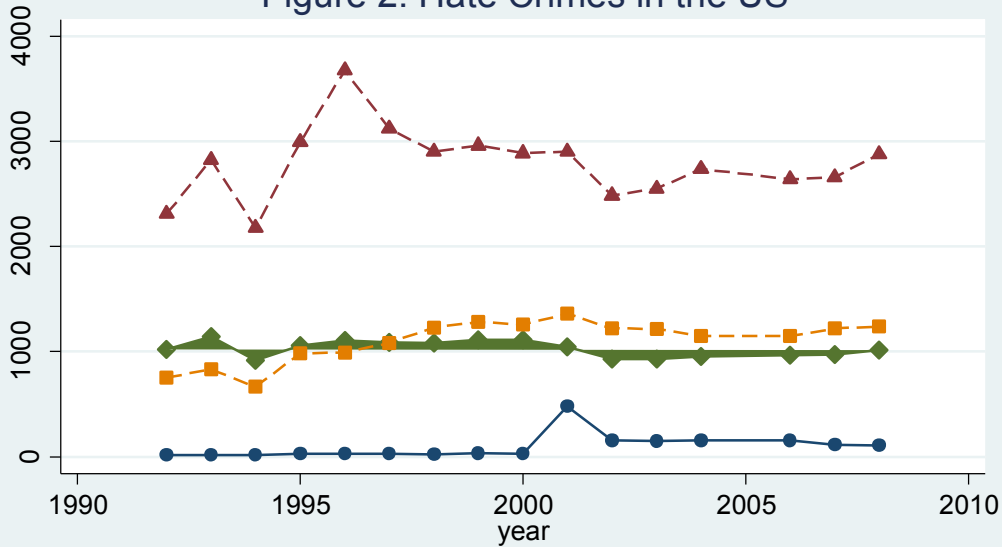
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Figure 1: Hate Crimes against Muslims in the US



Source: FBI Uniform Crime Reporting (UCR) Program

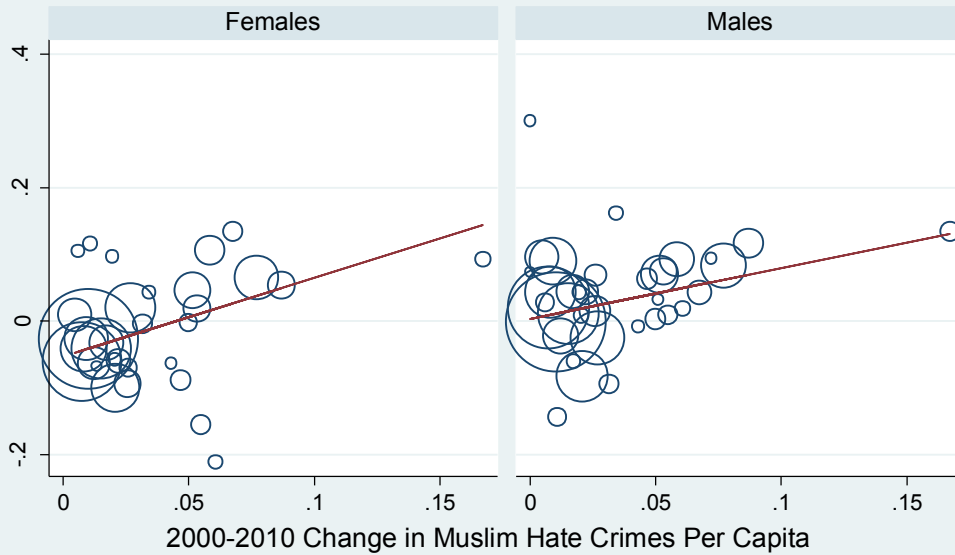
Figure 2: Hate Crimes in the US



Anti-Muslim
  Anti-Black  
 Anti-Jew
  Anti-Gay

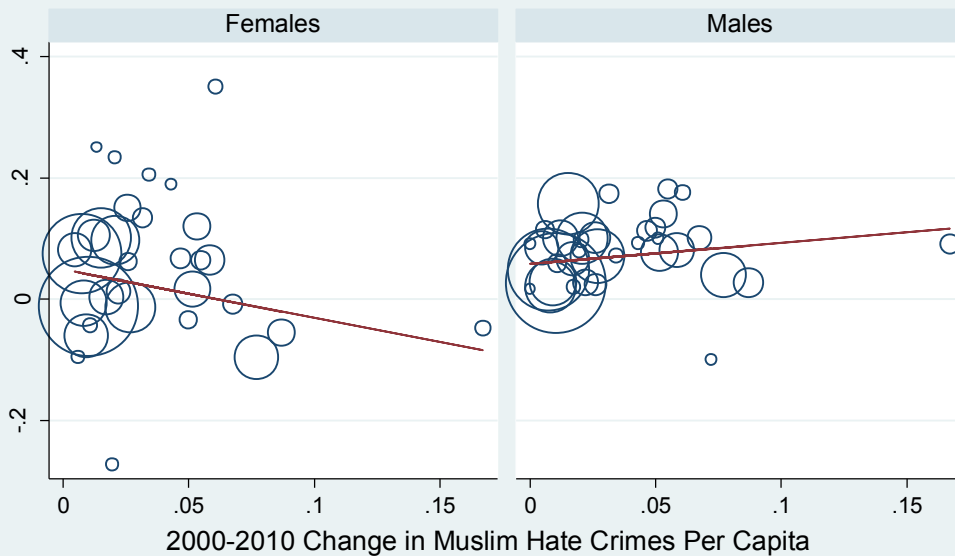
Source: FBI Uniform Crime Reporting (UCR) Program

Figure 3: State Analysis of Intra-Marriage, 2000-2010  
Means by State



Notes:  
Female Slope = 1.177 (tstat=3.56); Male Slope = .764 (tstat=2.31)  
Regressions are weighted by state sample size, represented by the size of each circle.

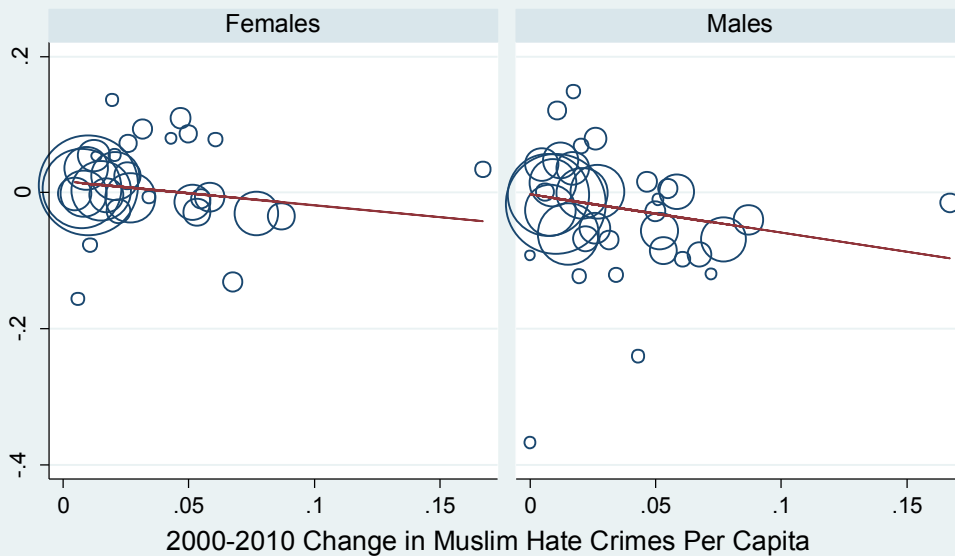
Figure 4: State Analysis of Intra-Marriage, 1990-2000  
Examining Pre-Existing Trends



Notes:  
Female Slope = -0.797 (tstat=-1.60); Male Slope = 0.345 (tstat=1.05)  
Regressions are weighted by state sample size, represented by the size of each circle.

Figure 5: State Analysis of Inter-Marriage, 2000-2010

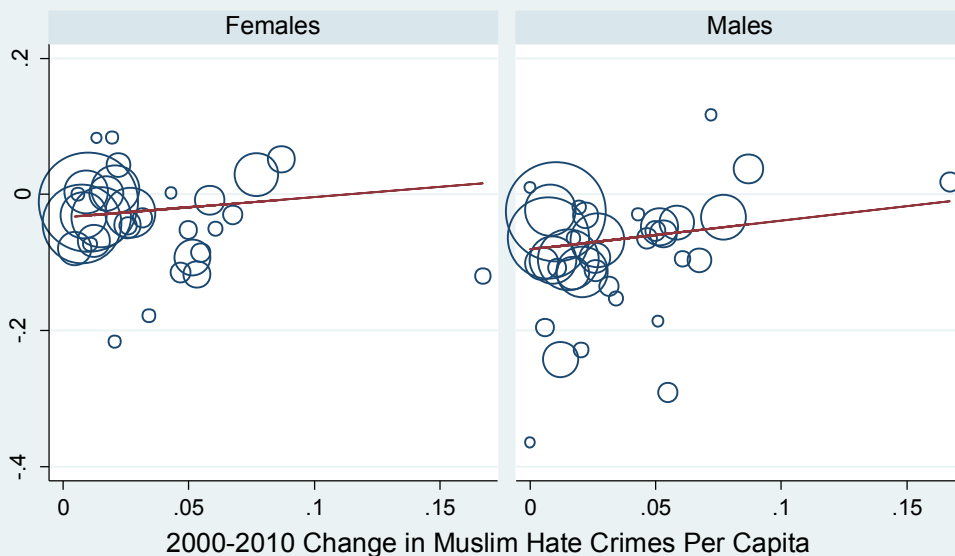
Means by State



Notes:  
Female Slope = -0.352 (tstat=-1.35); Male Slope = -0.562 (tstat=-1.98)  
Regressions are weighted by state sample size, represented by the size of each circle.

Figure 6: State Analysis of Inter-Marriage, 1990-2000

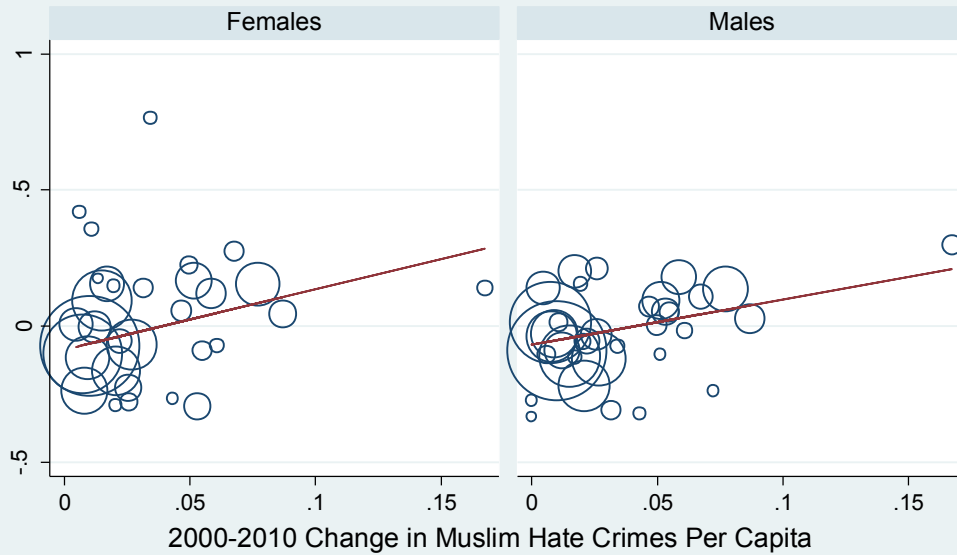
Examining Pre-Existing Trends



Notes:  
Female Slope = 0.300 (tstat=0.98); Male Slope = 0.421 (tstat=1.20)  
Regressions are weighted by state sample size, represented by the size of each circle.

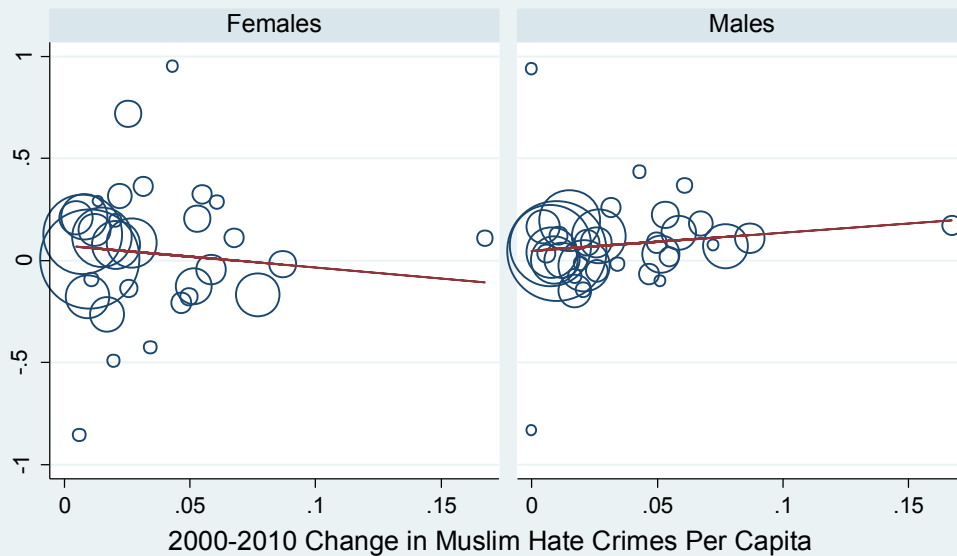


Figure 7: State Analysis of Number of Children, 2000-2010  
Means by State



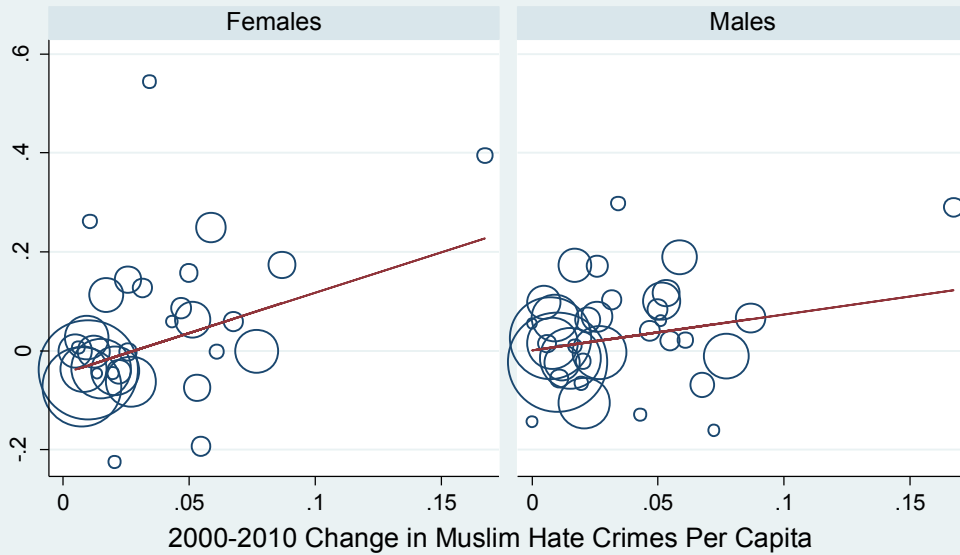
Notes:  
 Female Slope = 2.226 (tstat=2.42); Male Slope = 1.669 (tstat=2.67)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 8: State Analysis of Number of Children, 1990-2000  
Examining Pre-Existing Trends



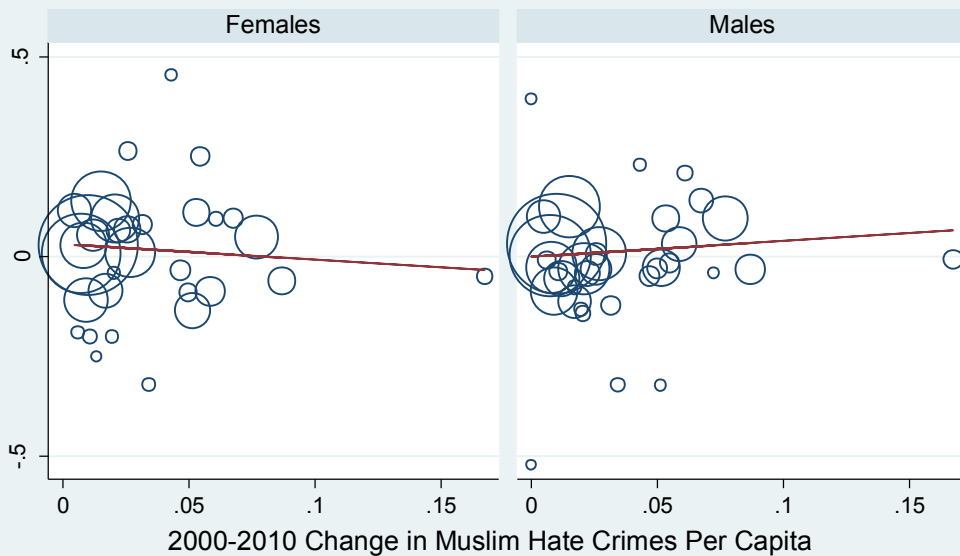
Notes:  
 Female Slope = -1.065 (tstat=-0.90); Male Slope = 0.882 (tstat=1.40)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 9: State Analysis - Children Less Than Age 5, 2000-2010  
Means by State



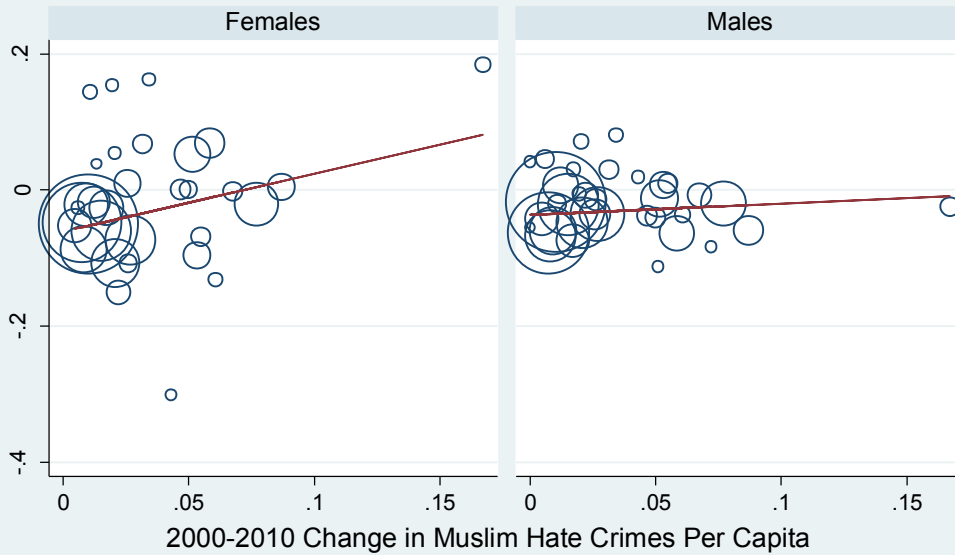
Notes:  
 Female Slope = 1.634 (tstat=2.95); Male Slope = 0.725 (tstat=1.75)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 10: State Analysis - Children Less Than Age 5, 1990-2000  
Examining Pre-Existing Trends



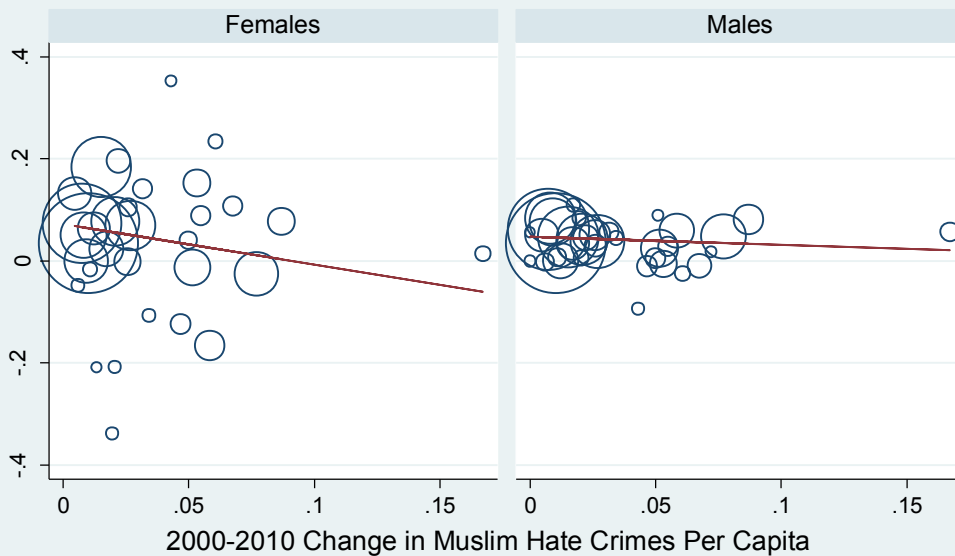
Notes:  
 Female Slope = -0.390 (tstat=-0.68); Male Slope = 0.400 (tstat=0.81)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 11: State Analysis of Being at Home, 2000-2010  
Means by State



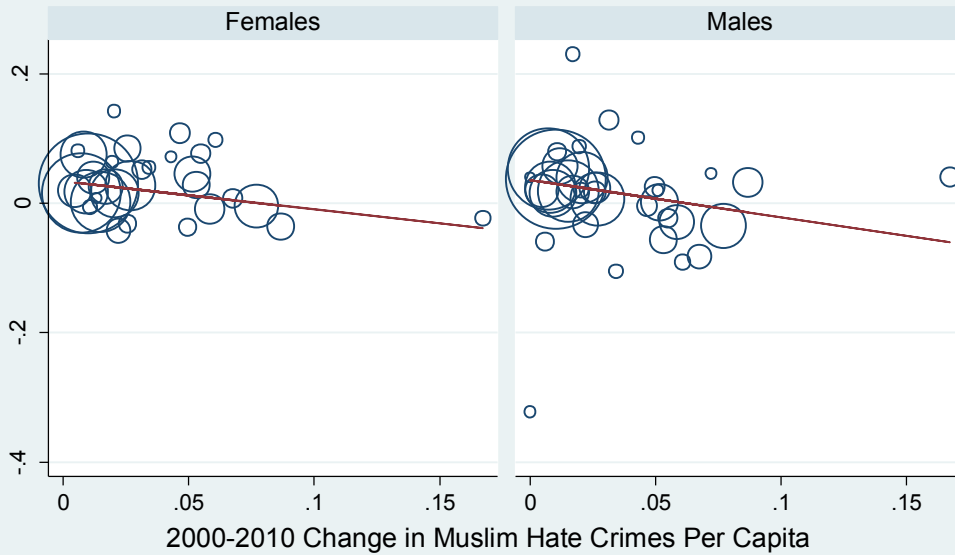
Notes:  
Female Slope = 0.855 (tstat=2.68); Male Slope = 0.168 (tstat=0.930)  
Regressions are weighted by state sample size, represented by the size of each circle.

Figure 12: State Analysis of Being at Home, 1990-2000  
Examining Pre-Existing Trends



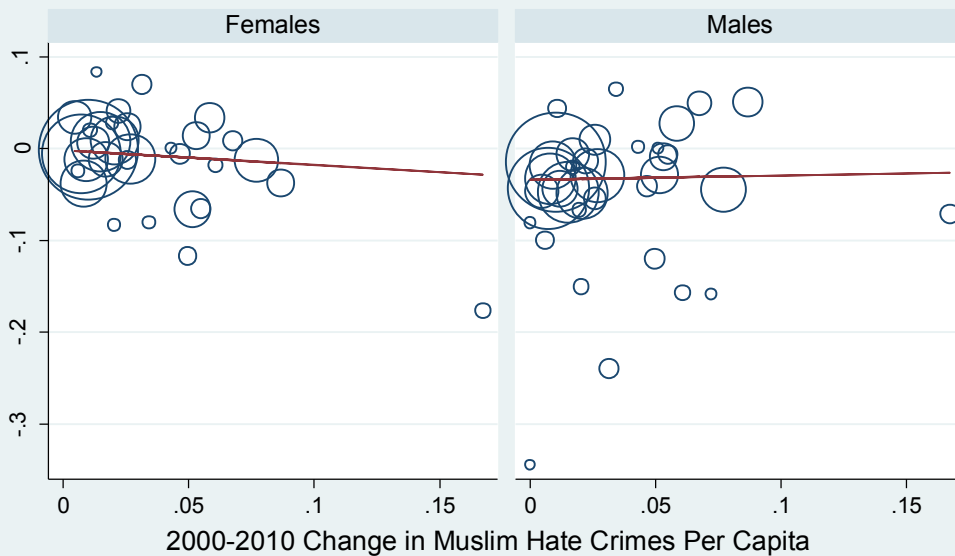
Notes:  
Female Slope = -0.791 (tstat=-1.68); Male Slope = -0.155 (tstat=-1.05)  
Regressions are weighted by state sample size, represented by the size of each circle.

Figure 13: State Analysis of English at Home, 2000-2010  
Means by State



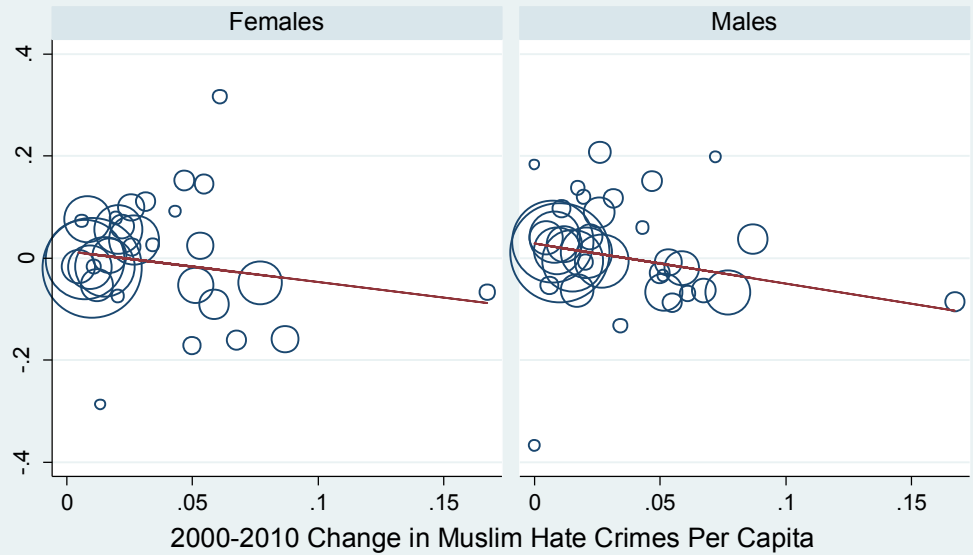
Notes:  
 Female Slope = -0.434 (tstat=-2.15); Male Slope = -0.578 (tstat=-2.58)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 14: State Analysis of English at Home, 1990-2000  
Examining Pre-Existing Trends



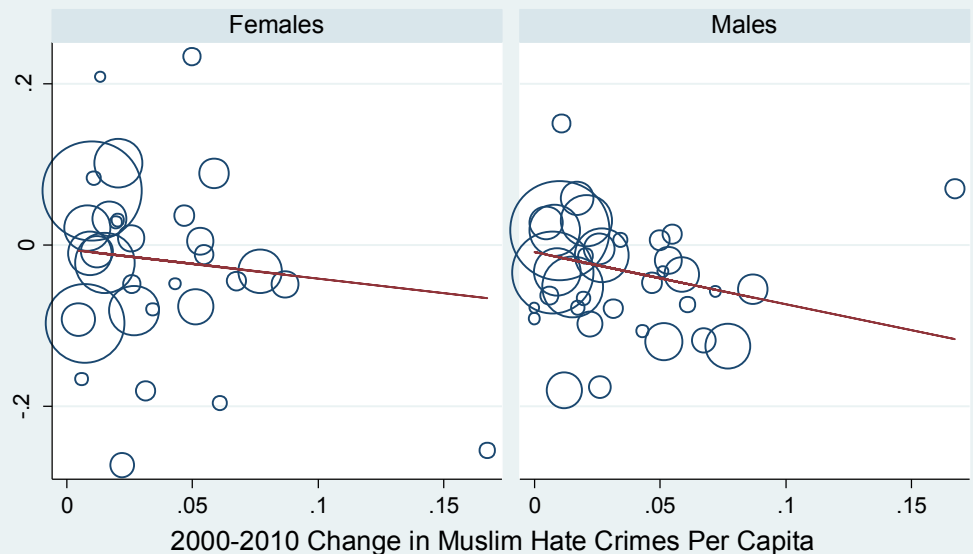
Notes:  
 Female Slope = -0.159 (tstat=-0.68); Male Slope = 0.048 (tstat=0.19)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 15: State Analysis of Speak English Well, 2000-2010  
Means by State



Notes:  
 Female Slope = -0.609 (tstat=-1.51); Male Slope = -0.782 (tstat=-2.65)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Figure 16: State Analysis of Speak English Well, 1990-2000  
Examining Pre-Existing Trends



Notes:  
 Female Slope = -0.361 (tstat=-0.65); Male Slope = -0.645 (tstat=-1.85)  
 Regressions are weighted by state sample size, represented by the size of each circle.

Table 1: Descriptive Statistics of Immigrants from Muslim Countries and Number of Hate Crimes Against Muslims

	1990		2000		2007-2010	
	Mean	SD	Mean	SD	Mean	SD
<u>Assimilation Outcomes</u>						
Intra-Married	0.370	0.48	0.434	0.50	0.451	0.50
Inter-Married	0.186	0.39	0.135	0.34	0.131	0.34
Ever Married	0.681	0.47	0.690	0.46	0.688	0.46
Number of Children	0.896	1.25	0.992	1.31	1.002	1.30
Number of Children Less than Age 5	0.400	0.68	0.425	0.71	0.442	0.71
Home Sector (not in Labor Force or School)	0.171	0.38	0.237	0.43	0.220	0.41
Speak English at Home	0.098	0.30	0.075	0.26	0.098	0.30
Speak English Well	0.672	0.47	0.649	0.48	0.647	0.48
<u>Demographic Characteristics</u>						
Male	0.626	0.48	0.570	0.50	0.514	0.50
Years in the U.S.	8.849	5.94	10.790	7.81	11.280	8.30
Age	30.550	5.64	31.145	5.84	31.106	5.85
High School Dropout	0.071	0.26	0.074	0.26	0.063	0.24
High School Graduate	0.194	0.40	0.217	0.41	0.191	0.39
Some College	0.284	0.45	0.258	0.44	0.250	0.43
College Graduate	0.451	0.50	0.451	0.50	0.495	0.50
Home Sector Rate for Women within State	0.218	0.02	0.222	0.02	0.192	0.02
Male Unemployment Rate within State	0.058	0.01	0.055	0.01	0.087	0.03
Male Mean Log Wage within State	10.264	0.11	10.567	0.11	10.823	0.12
Percent Male within State (Muslims)	0.604	0.03	0.560	0.03	0.512	0.05
Percent Muslim within State	0.005	0.00	0.008	0.00	0.009	0.00
<u>Hate Crimes Against Muslims</u>						
Muslim Hate Crimes (since last period)			14.549	14.58	78.966	62.49
Muslim Hate Crimes Per Capita			0.004	0.00	0.028	0.03
Muslim Hate Crimes Per Capita (excl. 2002-2008)			0.004	0.00	0.014	0.01
Hate Crimes Against Blacks Per Capita			0.052	0.06	0.037	0.05
Log Hate Crimes Against Homosexuals			6.084	1.42	5.884	1.25
Log Hate Crimes Against Jews			5.997	1.76	5.519	1.69
Number of Observations	13467		20139		17558	

Notes: Hate crime data come from the FBI Uniform Crime Reporting (UCR) Program. All other variables are computed from the United States Census (1990 and 2000) and the American Community Surveys (2007-2010). The sample is restricted to immigrants from Muslim countries, as detailed in Appendix Table 1.

Table 2: Relationship between Muslim Hate Crimes and Personal Characteristics of Immigrant Muslims

	Country of Origin Means in Year 2000						
	College Graduate	Years in U.S.	Intra-Married	Number of Children	Number of Children Less Than Age 5	English at Home	Speak English Well
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2000-2010 Analysis with All Immigrants and State Fixed-Effects							
<u>Males</u>							
Muslim Hate Crimes PC	-0.560** (0.240)	-9.424 (5.713)	0.051 (0.057)	0.308 (0.192)	0.096 (0.089)	-0.019 (0.031)	-0.050 (0.077)
Sample Size	20,485	20,485	20,422	20,422	20,422	20,422	20,422
<u>Females</u>							
Muslim Hate Crimes PC	-0.308 (0.328)	-14.416*** (5.104)	-0.125 (0.101)	0.218 (0.328)	0.069 (0.070)	0.007 (0.034)	0.136* (0.068)
Sample Size	17,162	17,162	17,108	17,108	17,108	17,108	17,108
2007-2010 Analysis with Immigrants Arriving After 2001							
<u>Males</u>							
Muslim Hate Crimes PC	0.116 (0.402)	-4.116*** (1.253)	-0.131 (0.130)	0.538* (0.308)	0.192 (0.118)	0.007 (0.070)	-0.053 (0.202)
Sample Size	3,042	3,042	3,019	3,019	3,019	3,019	3,019
<u>Females</u>							
Muslim Hate Crimes PC	0.113 (0.662)	-4.131*** (1.398)	-0.241 (0.209)	0.885 (0.897)	0.192 (0.118)	0.011 (0.054)	0.188 (0.195)
Sample Size	3,038	3,038	3,014	3,014	3,019	3,014	3,014

Notes: Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. In the upper panel, which uses data from 2000-2010, the OLS regressions include as control variables: state fixed-effects, year fixed-effects, age, age-squared, and age-cubed. Using data from 2007-2010 in the bottom panel, the OLS regressions include as control variables: year fixed-effects, age, age-squared, and age-cubed.

Table 3: Marriage Patterns of Immigrant Muslim Men

	Intra-Married							Inter-Married	Ever Married
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Muslim Hate Crimes PC	0.684** (0.296)	0.642** (0.257)	0.688*** (0.214)	0.867*** (0.264)	0.697*** (0.240)			-0.472** (0.232)	-0.075 (0.325)
Muslim Hate Crimes PC, 2001-02						1.756*** (0.563)			
Lead Muslim Hate Crimes PC							0.300 (0.266)		
Age		0.295*** (0.065)	0.299*** (0.066)	0.299*** (0.066)	0.299*** (0.067)	0.298*** (0.067)	0.133** (0.061)	0.229*** (0.044)	0.241*** (0.048)
Age-squared		-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)	-0.007*** (0.002)	-0.002 (0.002)	-0.006*** (0.001)	-0.004*** (0.002)
Age cubed		0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000 (0.000)	0.000*** (0.000)	0.000 (0.000)
Years in US		0.001 (0.002)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)	0.000 (0.002)	0.004 (0.003)	0.006*** (0.001)	0.009*** (0.003)
Years in US squared		-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000*** (0.000)	-0.000** (0.000)	-0.000*** (0.000)
High School Graduate		-0.022* (0.013)	-0.022 (0.014)	-0.022 (0.014)	-0.023 (0.014)	-0.023 (0.014)	-0.017 (0.016)	0.062*** (0.017)	-0.003 (0.024)
Some College		-0.055*** (0.011)	-0.055*** (0.010)	-0.055*** (0.009)	-0.056*** (0.010)	-0.056*** (0.010)	-0.060*** (0.016)	0.113*** (0.019)	-0.021 (0.022)
College Graduate		0.022** (0.011)	0.020* (0.011)	0.020* (0.011)	0.018 (0.011)	0.018* (0.011)	0.013 (0.014)	0.063*** (0.012)	-0.040 (0.026)
Black Hate Crimes PC				0.206 (0.225)	-0.046 (0.190)	-0.001 (0.172)		-0.363** (0.149)	-0.246 (0.224)
Log Homosexual Hate Crimes				-0.049** (0.020)	-0.022 (0.018)	-0.021 (0.018)		0.012 (0.014)	0.015 (0.017)
Log Jewish Hate Crimes				0.023 (0.019)	0.007 (0.017)	0.009 (0.017)		-0.024 (0.023)	-0.036 (0.028)
State Percent Male Among Muslims					-0.739*** (0.113)	-0.748*** (0.114)		0.145* (0.084)	-0.504*** (0.112)
State Percent Muslim					-19.206*** (5.598)	-17.950*** (6.000)		1.124 (6.123)	-26.847*** (8.229)
State Female Percent Home (Native-born)					-0.909 (0.718)	-1.037 (0.695)		-0.629 (0.421)	-1.286 (0.874)
State Male Unemp. Rate (Native-born)					0.889** (0.425)	0.840** (0.398)		0.194 (0.447)	0.473 (0.438)
State Male Mean Wage (Native-born)					0.038 (0.174)	-0.040 (0.169)		0.090 (0.169)	-0.151 (0.194)
Years	2000-2010	2000-2010	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000	2000-2010	2000-2010
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Basic Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country of Origin Fixed Effects	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other State-Year Controls	No	No	No	No	Yes	Yes	No	Yes	Yes
Observations	19,940	19,940	19,940	19,940	19,940	19,940	19,393	19,918	20,485

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. The "basic controls" include the personal characteristics added to the specification in column (2) relative to column (1), while the countries included in the "country of origin" fixed-effects are listed in Appendix Table 1.



Table 4: Marriage Patterns of Immigrant Muslim Women

	Intra-Married							Inter-Married	Ever Married
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Muslim Hate Crimes PC	0.532 (0.507)	0.511* (0.282)	1.235*** (0.264)	1.385*** (0.263)	1.543*** (0.282)			-0.462*** (0.173)	0.567** (0.288)
Muslim Hate Crimes PC, 2001-02						3.363*** (0.842)			
Lead Muslim Hate Crimes PC							-0.838** (0.418)		
Age		0.482*** (0.088)	0.485*** (0.088)	0.488*** (0.089)	0.485*** (0.088)	0.486*** (0.088)	0.355*** (0.061)	0.098*** (0.036)	0.217*** (0.054)
Age-squared		-0.012*** (0.003)	-0.012*** (0.003)	-0.012*** (0.003)	-0.012*** (0.003)	-0.012*** (0.003)	-0.008*** (0.002)	-0.002** (0.001)	-0.004** (0.002)
Age cubed		0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000** (0.000)	0.000 (0.000)	0.000 (0.000)
Years in US		-0.013*** (0.001)	-0.014*** (0.002)	-0.014*** (0.002)	-0.014*** (0.002)	-0.014*** (0.002)	-0.009*** (0.002)	0.003*** (0.001)	-0.009*** (0.001)
Years in US squared		-0.000* (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000 (0.000)	-0.000*** (0.000)	0.000 (0.000)	0.000** (0.000)
High School Graduate		-0.037** (0.017)	-0.038** (0.018)	-0.038** (0.018)	-0.038** (0.018)	-0.038** (0.018)	-0.026* (0.015)	0.047*** (0.018)	-0.010 (0.014)
Some College		-0.160*** (0.017)	-0.158*** (0.016)	-0.158*** (0.017)	-0.158*** (0.017)	-0.158*** (0.017)	-0.150*** (0.015)	0.075*** (0.016)	-0.107*** (0.020)
College Graduate		-0.193*** (0.013)	-0.189*** (0.012)	-0.189*** (0.012)	-0.190*** (0.013)	-0.190*** (0.013)	-0.172*** (0.016)	0.074*** (0.011)	-0.148*** (0.017)
Black Hate Crimes PC				0.542* (0.285)	0.465 (0.316)	0.495* (0.287)		-0.242** (0.123)	0.271 (0.223)
Log Homosexual Hate Crimes				-0.015 (0.024)	-0.025 (0.022)	-0.019 (0.022)		0.011 (0.012)	0.025* (0.013)
Log Jewish Hate Crimes				0.007 (0.023)	0.015 (0.024)	0.019 (0.026)		-0.011 (0.013)	-0.043** (0.017)
State Percent Male Among Muslims					0.381*** (0.141)	0.350** (0.138)		-0.106* (0.061)	0.062 (0.115)
State Percent Muslim					0.592 (9.604)	2.958 (9.720)		-13.243*** (3.810)	-12.332** (5.760)
State Female Percent Home (Native-born)					-1.836** (0.849)	-2.063** (0.828)		1.045** (0.434)	0.257 (0.562)
State Male Unemp. Rate (Native-born)					0.537 (0.658)	0.449 (0.601)		-0.310 (0.249)	-0.617 (0.438)
State Male Mean Wage (Native-born)					0.016 (0.242)	-0.188 (0.227)		-0.204** (0.100)	-0.428*** (0.156)
Years	2000-2010	2000-2010	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000	2000-2010	2000-2010
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Basic Controls	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country of Origin Fixed Effects	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other State-Year Controls	No	No	No	No	Yes	Yes	No	Yes	Yes
Observations	16,749	16,749	16,749	16,749	16,749	16,749	13,393	16,741	17,156

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. The "basic controls" include the personal characteristics added to the specification in column (2) relative to column (1), while the countries included in the "country of origin" fixed-effects are listed in Appendix Table 1.

Table 5: Intra-Marriage for Immigrant Muslims with Interactions with Age, 2000-2010

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	<u>All Men</u>						<u>Married Men</u>					
Muslim Hate Crimes PC	0.688*** (0.214)	-0.055 (0.273)	0.864*** (0.163)		2.239*** (0.493)		1.156*** (0.345)	-0.186 (0.294)	0.824*** (0.169)		2.368*** (0.501)	
Muslim Hate Crimes PC * Above Age 40			-0.986*** (0.307)	-0.980*** (0.297)					-0.823*** (0.263)	-0.834*** (0.253)		
Muslim Hate Crimes PC * Age					-0.045*** (0.013)	-0.045*** (0.013)					-0.047*** (0.014)	-0.047*** (0.013)
Sample Size	19,940	21,427	41,342	41,342	41,342	41,342	11,911	20,299	32,185	32,185	32,185	32,185
	<u>All Women</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	1.235*** (0.264)	0.124 (0.454)	0.823*** (0.235)		1.459*** (0.377)		0.806*** (0.251)	0.247 (0.434)	0.700*** (0.251)		1.377*** (0.390)	
Muslim Hate Crimes PC * Above Age 40			-0.401 (0.265)	-0.408 (0.268)					-0.345* (0.179)	-0.361** (0.180)		
Muslim Hate Crimes PC * Age					-0.021** (0.010)	-0.021** (0.010)					-0.021*** (0.007)	-0.022*** (0.007)
Sample Size	16,749	13,932	30,615	30,615	30,615	30,615	13,078	13,354	26,366	26,366	26,366	26,366
Age Ranges	20-40	41-70	20-70	20-70	20-70	20-70	20-40	41-70	20-70	20-70	20-70	20-70
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
State Specific Time Trends	No	No	No	Yes	No	Yes	No	No	No	Yes	No	Yes

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3, in addition to those indicated at the bottom of each column. State-specific time trends are defined as state fixed-effects interacted with period, whereby the first period is for 2000 and the second period is for the post-9/11 period (2006-2010). The samples which include those above the age of 40 are restricted to those that are not widows.

Table 6: Intra-Marriage for Muslim Immigrants by Subgroups, 2000-2010

	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	<u>Men</u>						<u>Women</u>					
Muslim Hate Crimes PC	0.867*** (0.264)	0.601* (0.319)	0.553* (0.286)	0.894* (0.461)	1.023*** (0.218)	0.515 (0.540)	1.385*** (0.263)	0.897* (0.478)	1.898*** (0.433)	0.827*** (0.305)	1.650*** (0.381)	0.851** (0.385)
Sample Size	19,940	11,396	9,662	10,243	10,227	9,679	16,749	8,989	7,680	9,044	9,036	7,701
	<u>Married Men</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	1.303*** (0.434)	0.974** (0.423)	0.808 (0.521)	1.404* (0.727)	1.614*** (0.552)	0.962 (0.615)	0.835*** (0.256)	0.679* (0.403)	1.347** (0.551)	0.526* (0.273)	0.923** (0.394)	0.592** (0.234)
Sample Size	11,911	7,495	4,737	7,162	5,636	6,258	13,078	6,909	4,903	8,140	7,116	5,944

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors appear in parentheses, which are clustered by state. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3.

Table 7: Effect of Hate Crimes on the Number of Children for Immigrant Muslims

	Men					Women				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Number of Children					Number of Children				
Muslim Hate Crimes PC	1.399** (0.546)	1.647** (0.641)	1.482** (0.603)			1.322** (0.643)	1.560*** (0.567)	2.133*** (0.715)		
Muslim Hate Crimes PC, 2001-02				3.397** (1.269)					4.455** (2.105)	
Lead Muslim Hate Crimes PC					0.438 (0.492)					-0.492 (0.596)
	Number of Children Under Age 5					Number of Children Under Age 5				
Muslim Hate Crimes PC	0.678* (0.391)	0.722* (0.410)	0.821** (0.406)			1.157* (0.616)	1.075 (0.682)	1.441** (0.667)		
Muslim Hate Crimes PC, 2001-02				2.387** (0.908)					2.595 (1.899)	
Lead Muslim Hate Crimes PC					0.219 (0.446)					-0.201 (0.579)
Sample Size	20,485	20,485	20,485	20,485	19,891	17,162	17,162	17,162	17,162	13,664
Years	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000
Year and State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Hate Crimes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
Other State-Year Controls	No	No	Yes	Yes	No	No	No	Yes	Yes	No

Notes: The reported coefficients are from OLS regressions. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3, in addition to those indicated at the bottom of each column. The "other state-year" controls are those added to the specification in column (5) of Table 3: percent male among of those of Muslim origin, percent with Muslim origin, percent females in the "home" sector, male unemployment rate among natives, male mean wage among natives.

Table 8: Effect of Hate Crimes on the Number of Children for Muslim Immigrants by Subgroups, 2000-2010

	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<u>Dependent Variable: Number of Children</u>												
	<u>Men</u>						<u>Women</u>					
Muslim Hate Crimes PC	1.647** (0.641)	1.298 (0.873)	0.722 (0.637)	2.035** (0.817)	1.147 (0.971)	1.958** (0.837)	1.560*** (0.567)	3.779*** (1.075)	3.180*** (0.911)	0.533 (0.812)	1.207 (0.773)	2.157** (0.847)
Sample Size	20,485	11,714	9,937	10,548	10,581	9,904	17,162	9,178	7,894	9,268	9,318	7,844
	<u>Married Men</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	2.415** (0.990)	2.216** (1.076)	1.354 (1.014)	2.880** (1.301)	2.091 (1.915)	2.647** (1.065)	0.983* (0.497)	3.901*** (1.186)	2.940** (1.296)	-0.379 (0.867)	0.835 (0.859)	1.535* (0.885)
Sample Size	12,456	7,816	4,989	7,467	5,974	6,482	13,491	7,095	5,114	8,377	7,404	6,087
<u>Dependent Variable: Number of Children under Age 5</u>												
	<u>Men</u>						<u>Women</u>					
Muslim Hate Crimes PC	0.722* (0.410)	0.886 (0.737)	0.491 (0.577)	0.812* (0.466)	0.362 (0.461)	0.998 (0.665)	1.075 (0.682)	1.695** (0.804)	1.711** (0.821)	0.965 (0.620)	0.675 (0.980)	1.714** (0.656)
Sample Size	20,485	11,714	9,937	10,548	10,581	9,904	17,162	9,178	7,894	9,268	9,318	7,844
	<u>Married Men</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	1.150* (0.575)	1.432 (0.973)	0.781 (0.937)	1.359** (0.597)	0.815 (0.882)	1.527* (0.895)	0.746 (0.691)	1.598** (0.792)	1.153 (0.980)	0.673 (0.664)	0.278 (1.072)	1.384** (0.677)
Sample Size	12,456	7,816	4,989	7,467	5,974	6,482	13,491	7,095	5,114	8,377	7,404	6,087

Notes: The reported coefficients are from OLS regressions. Standard errors, which are clustered by year, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3.

Table 9: Effect of Hate Crimes on Being in the Home Sector for Muslim Immigrants

	(1)	(2)	(3)	(4)	(5)
	<u>Men</u>				
Muslim Hate Crimes PC	0.149 (0.168)	0.131 (0.166)	0.031 (0.178)		
Muslim Hate Crimes PC, 2001-02				0.120 (0.511)	
Lead Muslim Hate Crimes PC					-0.288* (0.155)
<u>Sample Size</u>	<u>20,462</u>	<u>20,462</u>	<u>20,462</u>	<u>20,462</u>	<u>19,714</u>
	<u>Women</u>				
Muslim Hate Crimes PC	0.757** (0.360)	0.987** (0.405)	1.152*** (0.372)		
Muslim Hate Crimes PC, 2001-02				3.261*** (0.812)	
Lead Muslim Hate Crimes PC					-1.120*** (0.389)
<u>Sample Size</u>	<u>17,154</u>	<u>17,154</u>	<u>17,154</u>	<u>17,154</u>	<u>13,657</u>
Years	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000
Year and State FE	Yes	Yes	Yes	Yes	Yes
Other Hate Crimes	No	Yes	Yes	Yes	No
Other State-Year Controls	No	No	Yes	Yes	No

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3, in addition to those indicated at the bottom of each column. The "other state-year" controls are those added to the specification in column (5) of Table 3: percent male among those of Muslim origin, percent with Muslim origin, percent females in the "home" sector, male unemployment rate among natives, male mean wage among natives.

Table 10: Being in the Home Sector for Muslim Immigrants by Subgroups, 2000-2010

	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	<u>Men</u>						<u>Women</u>					
Muslim Hate Crimes PC	0.131 (0.166)	0.142 (0.211)	-0.084 (0.206)	0.219 (0.267)	0.214 (0.241)	0.027 (0.243)	0.987** (0.405)	0.340 (0.626)	1.087** (0.535)	0.709 (0.447)	1.705*** (0.655)	0.047 (0.470)
Sample Size	20,462	11,635	9,752	10,515	10,532	9,780	17,154	9,151	7,873	9,265	9,309	7,836
	<u>Married Men</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	0.379** (0.159)	0.271* (0.161)	0.001 (0.223)	0.515* (0.265)	0.684*** (0.193)	-0.041 (0.247)	0.655* (0.397)	0.215 (0.646)	0.457 (0.664)	0.624 (0.451)	1.307** (0.646)	-0.227 (0.588)
Sample Size	12,386	7,635	4,812	7,352	5,827	6,406	13,484	7,075	5,098	8,375	7,395	6,072

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3.

Table 11: Effect of Hate Crimes on English Proficiency for Immigrant Muslims

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Men					Women				
	Speak English at Home					Speak English at Home				
Muslim Hate Crimes PC	-0.526*	-0.484	-0.356			-0.244*	-0.361***	-0.407***		
	(0.290)	(0.301)	(0.239)			(0.125)	(0.139)	(0.148)		
Muslim Hate Crimes PC, 2001-02				-1.017**					-0.810***	
				(0.486)					(0.274)	
Lead Muslim Hate Crimes PC					0.111					-0.189
					(0.175)					(0.147)
Sample Size	20,461	20,461	20,461	20,461	19,856	17,103	17,103	17,103	17,103	13,492
	Speak English Well					Speak English Well				
Muslim Hate Crimes PC	-0.730**	-0.713*	-0.933**			-0.406	-0.622**	-0.657*		
	(0.359)	(0.385)	(0.402)			(0.309)	(0.315)	(0.373)		
Muslim Hate Crimes PC, 2001-02				-1.427*					-1.177	
				(0.790)					(0.910)	
Lead Muslim Hate Crimes PC					0.153					-0.096
					(0.317)					(0.465)
Sample Size	20,485	20,485	20,485	20,485	19,883	17,154	17,154	17,154	17,154	13,644
Years	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000	2000-2010	2000-2010	2000-2010	2000-2010	1990-2000
Year and State FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other Hate Crimes	No	Yes	Yes	Yes	No	No	Yes	Yes	Yes	No
Other State-Year Controls	No	No	Yes	Yes	No	No	No	Yes	Yes	No

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3, in addition to those indicated at the bottom of each column. The "other state-year" controls are those added to the specification in column (5) of Table 3: percent male among those of Muslim origin, percent with Muslim origin, percent females in the "home" sector, male unemployment rate among natives, male mean wage among natives.



Table 12: Effect of Hate Crimes on the English Proficiency for Muslim Immigrants by Subgroups, 2000-2010

	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad	All Immigrants	At Least Nine Years in U.S.	Arrived Before Age 20	Arrived after Age 20	Not a College Grad	College Grad
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<u>Dependent Variable: Speak English at Home</u>												
	<u>Men</u>						<u>Women</u>					
Muslim Hate Crimes PC	-0.484 (0.301)	-0.622 (0.475)	-0.690** (0.289)	-0.308 (0.365)	-0.666** (0.325)	-0.298 (0.391)	-0.361*** (0.139)	-0.910*** (0.334)	-0.676** (0.296)	-0.171 (0.151)	-0.313* (0.168)	-0.338 (0.242)
Sample Size	20,461	11,679	9,912	10,519	10,501	9,890	17,103	9,136	7,865	9,178	9,151	7,769
	<u>Married Men</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	-0.586 (0.452)	-0.987 (0.638)	-1.197 (0.757)	-0.199 (0.399)	-0.554 (0.500)	-0.526 (0.540)	-0.423*** (0.144)	-0.908*** (0.292)	-0.889*** (0.262)	-0.174 (0.160)	-0.433** (0.195)	-0.429* (0.232)
Sample Size	12,429	7,785	4,963	7,332	5,921	6,454	13,436	7,054	5,095	8,234	7,268	5,973
<u>Dependent Variable: Speak English Well</u>												
	<u>Men</u>						<u>Women</u>					
Muslim Hate Crimes PC	-0.713* (0.385)	-0.884** (0.388)	-0.931*** (0.221)	-0.212 (0.618)	-1.018** (0.473)	-0.351 (0.394)	-0.622** (0.315)	-0.778** (0.395)	-1.311*** (0.349)	-0.045 (0.410)	-1.118** (0.538)	-0.099 (0.645)
Sample Size	20,485	11,696	9,914	10,534	10,576	9,889	17,154	9,165	7,884	9,263	9,312	7,822
	<u>Married Men</u>						<u>Married Women</u>					
Muslim Hate Crimes PC	-0.452 (0.538)	-0.894 (0.564)	-0.810* (0.482)	0.030 (0.625)	-1.195** (0.503)	0.121 (0.546)	-0.730** (0.347)	-1.285** (0.526)	-1.891*** (0.444)	-0.192 (0.437)	-1.115** (0.563)	-0.306 (0.626)
Sample Size	12,450	7,789	4,943	7,460	5,962	6,473	13,485	7,085	5,104	8,372	7,397	6,062

Notes: The reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (3) of Table 3.

Table 13: The Effect of Muslim Hate Crimes on the Assimilation Outcomes of Various Immigrant Groups, 2000-2010

	Men						Women					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Intra-Married	Number of Children	Number of Children Less than Age 5	Home Sector	Speak English at Home	Speak English Well	Intra-Married	Number of Children	Number of Children Less than Age 5	Home Sector	Speak English at Home	Speak English Well
<b>Muslims</b>												
Muslim Hate Crimes PC	0.867*** (0.264)	1.647** (0.641)	0.722* (0.410)	0.131 (0.166)	-0.484 (0.301)	-0.713* (0.385)	1.385*** (0.263)	1.560*** (0.567)	1.075 (0.682)	0.987** (0.405)	-0.361*** (0.139)	-0.622** (0.315)
Sample Size	19,940	20,485	20,485	20,462	20,461	20,485	16,749	17,162	17,162	17,154	17,103	17,154
<b>Hispanic</b>												
Muslim Hate Crimes PC	0.192 (0.148)	0.679 (0.448)	0.097 (0.230)	0.522*** (0.130)	0.143 (0.108)	0.238 (0.238)	-0.013 (0.134)	0.173 (0.272)	0.014 (0.123)	0.272* (0.140)	0.111 (0.092)	0.020 (0.274)
Sample Size	308,461	319,234	319,234	319,234	319,234	319,234	260,817	269,866	269,866	269,866	269,866	269,866
<b>Chinese</b>												
Muslim Hate Crimes PC	0.200 (0.278)	0.976** (0.390)	0.603*** (0.224)	0.284 (0.184)	-0.124 (0.129)	-0.081 (0.340)	-0.278 (0.310)	0.489 (0.651)	0.371 (0.246)	0.389** (0.189)	-0.133 (0.167)	0.106 (0.447)
Sample Size	23,599	24,196	24,196	24,088	24,169	24,196	27,468	28,216	28,216	28,216	28,136	28,216
<b>Japanese</b>												
Muslim Hate Crimes PC	0.616 (0.410)	0.006 (0.763)	-0.498 (0.547)	-0.194 (0.323)	0.297 (0.383)	-0.697 (0.586)	-0.191 (0.336)	-0.392 (0.778)	-0.970* (0.520)	-0.582 (0.504)	-0.064 (0.304)	0.365 (0.567)
Sample Size	4,035	4,147	4,147	3,863	4,120	4,121	6,394	6,678	6,678	6,672	6,677	6,670
<b>Korean</b>												
Muslim Hate Crimes PC	-0.600 (0.385)	0.461 (0.504)	-0.046 (0.361)	-0.069 (0.213)	0.396** (0.171)	0.965* (0.540)	0.127 (0.344)	0.779 (0.494)	0.453* (0.260)	0.501** (0.246)	0.301 (0.223)	0.225 (0.437)
Sample Size	12,041	12,233	12,233	12,109	12,233	12,222	15,609	15,993	15,993	15,959	15,993	15,968

Notes: The reported coefficients from regressions using the number of children are from OLS regressions. In the other columns, the reported coefficients are the marginal effects from a probit, computed at the means of the independent variables. Standard errors, which are clustered by state, appear in parentheses. Significance levels are indicated by one, two, or three stars which represent 10 percent, 5 percent, and 1 percent levels, respectively. Each regression includes the set of control variables in the core specification described in column (4) of Table 3.

Appendix Table 1: Mean Characteristics and Outcomes by Country of Origin, 2000-2010

Country of Ancestry	Number of Observations, 2000-2010	Intra-Married	Inter-Married	Ever Married	Number of Children	Number of Children below Age 5	Home Sector Men	Home Sector Women	Speak English at Home	Speak English Well	Years in U.S.	Male	College Grad	Muslim Hate Crimes PC
Afghan	1516	0.473	0.061	0.638	1.137	0.427	0.096	0.356	0.057	0.621	13.822	0.490	0.242	0.013
Algerian	117	0.365	0.191	0.692	0.923	0.479	0.079	0.296	0.128	0.564	8.744	0.538	0.487	0.027
Arab	1697	0.440	0.143	0.726	1.240	0.542	0.095	0.518	0.067	0.642	10.702	0.617	0.377	0.016
Arabic	2443	0.436	0.146	0.726	1.325	0.588	0.114	0.532	0.067	0.567	10.620	0.602	0.300	0.019
Bangladeshi	2631	0.570	0.049	0.742	0.956	0.396	0.078	0.466	0.045	0.470	8.701	0.506	0.454	0.011
Bengali	441	0.460	0.127	0.705	0.980	0.324	0.055	0.417	0.068	0.560	11.129	0.494	0.435	0.015
Egyptian	2909	0.457	0.144	0.699	1.006	0.478	0.083	0.397	0.116	0.672	10.773	0.579	0.622	0.016
Indonesian	1533	0.277	0.240	0.596	0.663	0.305	0.055	0.305	0.146	0.575	8.954	0.416	0.491	0.015
Iranian	6349	0.363	0.140	0.606	0.671	0.286	0.067	0.241	0.107	0.761	14.506	0.499	0.578	0.011
Iraqi	1065	0.433	0.098	0.628	1.139	0.462	0.158	0.437	0.059	0.481	9.232	0.553	0.266	0.030
Jordanian	1050	0.522	0.144	0.768	1.358	0.625	0.080	0.527	0.071	0.706	11.221	0.581	0.428	0.015
Kashmiri	19	0.421	0.158	0.632	0.737	0.316	0.000	0.375	0.263	0.947	9.579	0.579	0.737	0.002
Middle Eastern	944	0.421	0.156	0.702	1.070	0.460	0.069	0.360	0.131	0.755	12.989	0.550	0.544	0.021
Moroccan	1276	0.267	0.276	0.707	0.672	0.374	0.074	0.322	0.114	0.595	7.937	0.645	0.354	0.016
Other Arab	479	0.345	0.166	0.630	0.814	0.443	0.082	0.432	0.113	0.589	6.023	0.662	0.478	0.034
Pakistani	7175	0.527	0.082	0.727	1.135	0.474	0.068	0.519	0.066	0.687	10.626	0.538	0.496	0.014
Palestinian	1273	0.511	0.178	0.793	1.605	0.679	0.079	0.531	0.065	0.687	13.182	0.586	0.367	0.015
Syrian	1074	0.485	0.152	0.740	1.253	0.533	0.089	0.518	0.088	0.656	11.710	0.525	0.424	0.014
Turkish	3349	0.379	0.173	0.655	0.660	0.310	0.072	0.311	0.105	0.631	8.300	0.566	0.561	0.017
Yemeni	357	0.529	0.081	0.840	1.695	0.700	0.070	0.771	0.025	0.398	10.790	0.597	0.154	0.030

Notes: The sample and data sources used for these calculations are described in Table 1.

Appendix Table 2: Number of Hate Crimes Against Muslims by State after the Year 2000

	Number of Muslims in 2000 Census	Hate Crimes, 2001-2008	Hate Crimes in 2001-2002	Hate Crimes Per Capita (2001-2008)	Hate Crimes Per Capita (2001-2002)
Wyoming	9	3	2	0.333	0.222
Minnesota	293	54	23	0.184	0.078
Vermont	14	2	2	0.143	0.143
Nebraska	91	12	4	0.132	0.044
Maine	46	6	1	0.130	0.022
New Hampshire	79	8	4	0.101	0.051
Montana	20	2	0	0.100	0.000
Arizona	599	59	29	0.098	0.048
Michigan	2014	186	68	0.092	0.034
Idaho	56	5	5	0.089	0.089
Tennessee	385	30	12	0.078	0.031
Utah	137	10	6	0.073	0.044
Delaware	97	7	2	0.072	0.021
Ohio	1129	78	48	0.069	0.043
Colorado	449	30	18	0.067	0.040
Kentucky	214	14	7	0.065	0.033
Missouri	347	21	15	0.061	0.043
Washington	715	40	21	0.056	0.029
Massachusetts	1204	64	34	0.053	0.028
Oregon	381	20	9	0.052	0.024
North Dakota	20	1	0	0.050	0.000
Alaska	40	2	2	0.050	0.050
Kansas	209	10	1	0.048	0.005
South Carolina	176	7	2	0.040	0.011
New Jersey	3291	124	66	0.038	0.020
Nevada	286	10	5	0.035	0.017
West Virginia	94	3	2	0.032	0.021
Wisconsin	254	8	6	0.031	0.024
Oklahoma	244	7	3	0.029	0.012
Indiana	386	11	6	0.028	0.016
Connecticut	495	14	9	0.028	0.018
North Carolina	584	15	9	0.026	0.015
Virginia	2215	51	27	0.023	0.012
District of Columbia	174	4	1	0.023	0.006
Maryland	1397	29	18	0.021	0.013
Texas	2955	60	38	0.020	0.013
New Mexico	128	2	2	0.016	0.016
Rhode Island	202	3	2	0.015	0.010
Pennsylvania	1155	17	10	0.015	0.009
Arkansas	75	1	0	0.013	0.000
Illinois	2179	28	12	0.013	0.006
California	13756	173	87	0.013	0.006
Louisiana	281	3	2	0.011	0.007
Iowa	109	1	0	0.009	0.000
Florida	2586	23	13	0.009	0.005
New York	7302	55	0	0.008	0.000
Alabama	169	1	0	0.006	0.000
Georgia	862	4	3	0.005	0.003
South Dakota	37	0	0	0.000	0.000
Mississippi	89	0	0	0.000	0.000
Hawaii	67	0	0	0.000	0.000

Note: Data sources used for these calculations are described in Table 1.

Appendix Table 3: Muslim Hate Crimes by Type of Crime in 2001

	Number of Reported Offenses	Percent
Intimidation	257	53.43
Destruction/ Vandalism	116	24.12
Simple Assault	57	11.85
Aggrevated Assault	21	4.37
Arson	16	3.33
Burglary	4	0.83
All other Larceny	4	0.83
Robbery	2	0.42
Weapon Law Violations	2	0.42
Shoplifting	1	0.21
Motor Theft	1	0.21
<b>Total</b>	<b>481</b>	<b>100</b>

Notes: Hate crime data come from the FBI Uniform Crime Reporting (UCR) Program.